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

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

PUBLIC INQUIRY

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1000, WEDNESDAY, 14 AUGUST 2024

DAY 19

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**

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EXHIBIT LIST

Date: 14/08/2024

Number	Description	Page No
	EXHIBIT 54A - DEFENCE STATMENT OF D5 DATED 29/11/23	2716
	EXHIBIT 54B - INQUIRY STATEMENT (ADDENDUM) OF D5, TOGETHER WITH SECTION 23 NOTICE QUESTIONS, DATED 24/07/24	2716
	EXHIBIT 55 - STATEMENT OF D16, INCLUDING ANNEXURES A TO M, DATED 06/08/24	2767

WITNESS LIST

Date: 14/08/2024

Name Of Witness	Page No.
D6, on former affirmation	2596
EXAMINATION-IN-CHIEF BY FLTLT ROSE, continuing	2596
HEARING ADJOURNED	2661
HEARING RESUMED	2662
CROSS-EXAMINATION BY LCDR GRACIE	2662
CROSS-EXAMINATION BY LCDR TYSON	2678
CROSS-EXAMINATION BY COL GABBEDY.....	2691
CROSS-EXAMINATION BY SQNLDR NICOLSON.....	2692
HEARING ADJOURNED	2707
HEARING RESUMED.....	2707
CROSS-EXAMINATION BY COL THOMPSON	2707
RE-EXAMINATION BY FLTLT ROSE	2708
WITNESS WITHDREW	2712
D5, Affirmed	2712
EXAMINATION-IN-CHIEF BY COL STREIT	2712
CROSS-EXAMINATION BY LCDR GRACIE	2756
CROSS-EXAMINATION BY COL GABBEDY.....	2759
CROSS-EXAMINATION BY SQNLDR NICOLSON.....	2766
CROSS-EXAMINATION BY COL THOMPSON	2762
WITNESS WITHDREW	2763
D16, Affirmed	2764
EXAMINATION-IN-CHIEF BY COL STREIT	2764
WITNESS WITHDREW	2767

MS McMURDO: Yes, COL Streit.

5 COL STREIT: Good morning, Ms McMurdo, AVM Harland. Briefly, by way of update in terms of witnesses to be called for the remaining days of the sittings, we've made some slight adjustments in relation to the order of witnesses. I just wanted to update the Inquiry and Counsel representing in relation to those matters.

10 We will anticipate finishing D6's evidence this morning, or early afternoon. We'll then be calling D5. Following D5, who should be shorter than D2 and D6, will be D16.

15 On Thursday, Thursday's witnesses remain unchanged, with D14 and D9 being called.

On Friday, D1 will be called and D13 will be called, subject to time. And potentially D21 will be called again, subject to some other matters.

20 Dr Smith will not be called in these sittings. I've asked Dr Smith and he's available to give evidence in the October sittings, which is actually better in one sense, because he'll have the opportunity to hear all the evidence we've asked him to hear before he gives evidence in relation to the matters upon which he is called.

25 That's just briefly by way of updates. Thank you.

MS McMURDO: Thank you, COL Streit. Yes, FLTLT Rose.

30 <D6, on former affirmation

<EXAMINATION-IN-CHIEF BY FLTLT ROSE, continuing

35 FLTLT ROSE: Could the witness please be given Exhibits 53A and B, his statements?

40 MS McMURDO: Yes.

45 FLTLT ROSE: D6, if you could turn to your Inquiry statement at paragraph 55? I'm going to ask you some questions now about your role in 6 Aviation Regiment from 2021 to 2023. At paragraph 55 you set out your responsibilities as the Squadron QFI, or the Qualified Flying Instructor, and that this involved a high rate of flying as a major part of your role was to

conduct qualifications and training of other pilots and to conduct their flight assessments. So you were easily meeting the minimum flight hours set out in Army Standing Instructions?

5 D6: That is correct.

FLTLT ROSE: You state it was not so easy, however, for other pilots to achieve that minimum flying rate which was essential for their maintaining competence and proficiency because their secondary roles took up much of their time.

10 D6: That's correct.

FLTLT ROSE: One of your roles was to monitor each of the aircrew's currency and proficiencies within the Regiment?

15 D6: That's correct.

FLTLT ROSE: Is it solely within the Squadron or was it wider than that?

20 D6: It's a shared responsibility between the Squadron, and Standards, and Regiment Headquarters, I guess.

FLTLT ROSE: At paragraph 57 you state that there are a number of pilots who are fulfilling the Troop Commander role, Executive Officer, Operations Officer and Adjutant roles that were flying well below the annual flying rate.

25 D6: As examples of those jobs, yes. There are other jobs within the Regiment that other pilots were performing, but – yes.

30 FLTLT ROSE: Those other jobs, they were also flying below the minimum flying rate?

35 D6: Correct.

FLTLT ROSE: Did this include CAPT Lyon?

40 D6: Correct.

FLTLT ROSE: Did it include LT Nugent?

D6: No, it did not.

FLTLT ROSE: Did you have any awareness of how often or what CAPT Lyon's flying rate was in 2022 or 2023?

5 D6: Not that I recall; however, it was increasing.

FLTLT ROSE: Efforts were being made, were they, to increase CAPT Lyon's flying rate?

10 D6: Correct.

FLTLT ROSE: Were the Officer Commanding and the Commanding Officer of 6 Aviation Regiment aware that pilots in those particular roles were not meeting the minimum flying rate?

15 D6: Correct.

FLTLT ROSE: Were they themselves both flying below the minimum flying rate?

20 D6: For the Officer Commanding, yes. I'm not completely sure about the OC; I don't recall.

25 FLTLT ROSE: Sorry, I think you said the Officer Commanding was flying below the flying rate. Did you mean that you're not sure of the CO?

D6: Sorry, the CO of the Regiment was definitely flying below the rate. However, it's pretty standard for a CO to not really maintain a high flying rate within a Regiment. The Officer Commanding, I don't recall the exact number of hours he was flying at the time.

30 FLTLT ROSE: At paragraph 58 you state that the secondary roles were actually full-time jobs, and that maintaining flying currency and proficiency were seen as a secondary priority?

35 D6: Correct. A lot of the roles that members within the Regiment held are essentially full-time jobs, whether it be ops, whether it be the Executive Officer. Those roles require a huge amount of time within a week, and a lot of them were essential for running of a Regiment.

40 FLTLT ROSE: Is it the case that those persons that were fulfilling those roles, roles that we've already discussed – the Troop Commander, Executive Officer Operations, et cetera – were they assessed in their annual performance reviews on their performance within the secondary role, in fact, with the administrative role, rather than on their piloting performances?
45

5 D6: Correct. The way that reporting within the Army Officer continuum works is you are reported on as an Army Officer. It's not really designed to be reported on as a pilot. There's no real area in there where you discuss their competency. A lot of people write it in, the roles or the responsibilities they had as a flying pilot, but they're reported on, on the role that they're posted into. So if you're posted into an ops position, you are reported on as an OPSO or an S35 or an S33, for example. You're not really reported on as a pilot.

10 FLTLT ROSE: Is that not the case if you're a line pilot, however?

D6: Correct.

15 FLTLT ROSE: You've already stated that you don't have any secondary duties in your current civilian employment, and at paragraph 60 you note that they employ – this is in your current role – non-flying employees to perform the administrative tasks required of your company.

20 D6: Correct.

25 FLTLT ROSE: But in Army, the pilots have arguably a higher-risk tactical workplace, where they are flying complicated aircraft in close proximity to each other, close proximity to the terrain, in reduced weather, at night using NVDs. However, the emphasis of this as their primary duty has been lost. Their career progression as an Army Officer is being placed above their progression as an Army pilot, which you state you think is skewed.

30 A pilot takes years from first joining a Squadron and progressing through the Category and Unit Training System before reaching a level of competency and proficiency that makes them usable as a reliable Aircraft Captain in the context of a tactical mission, and they often reach this level of professional competence as they reach a time and rank. As an Army Captain, they are required to take additional roles for career advancement and development.

D6: Correct.

40 FLTLT ROSE: Is there a particular year, D6 , where members start to be promoted into these secondary roles?

D6: I think it depends on the members that are in the Squadron, how many people are in the Squadron at the time. But, in my experience, it's roughly that three to five-year Captain mark that people start becoming available or

are experienced enough as an Army Officer to be relied upon in those additional roles required for running of a Squadron or running a Regiment.

5 FLTLT ROSE: When is it, do you think – I'm sure every pilot is different – when do you think a pilot can reach that proficiency and competence that makes them a reliable Aircraft Captain?

10 D6: In my opinion, it's within about two to three years of being in a Squadron, which also, in my experience, is roughly the sort of timeframes that I'm talking about members being taken away from a higher flying rate and concentrating on flying, to now having to concentrate on another appointment within the Regiment.

15 FLTLT ROSE: Is it fair to say that once somebody has this secondary role that's quite demanding, the OPSO, for example, or Troop Commander, that their proficiency as a pilot stagnates in a way? It may not lessen but it may not improve whilst they're performing those burdensome roles.

20 D6: It's difficult to say unless you sort of look at the individual. But I would say that it would be difficult to do these roles, in my opinion, and be able to put the amount of effort required in to maintain and improve on a level of competency and proficiency on an aircraft such as the MRH-90, but like other aircraft that are flown around Avn Command. It's also worth noting that I don't think that this is a problem that is specific to 6 Aviation
25 Regiment.

It's also worth noting that the aircraft that we're flying currently are complicated aircraft. The Flight Manuals and the Standardisation Manuals are massive. There is so much information and so much technology in these
30 aircraft for a pilot to be all over; and that's the expectation, that you are proficient and competent when you're going to do these roles. Then being taken away from that, expecting to continue to perform at the standard that they might have been before they were removed from full-time sort of line pilot, I'll call it, into an ops position, or an XO position, or a Troop
35 Commander position. I think it's reasonable to expect that there will be some sort of drop off or stagnation, like you described, in their performance.

40 It's also worth noting that it's not in every case; it's individual, and it's how much effort the individual puts in. But it's my opinion that it is very difficult to do that without putting a huge amount of effort in.

45 FLTLT ROSE: So you just noted that the aircraft the Army are flying are becoming more complicated. However, you believe that Army Aviation is flying less than it was 10 years ago?

D6: That's my opinion, yes. I think if you looked at the historical data on how much a regular pilot is flying now versus how much a pilot was flying 15, 20 years ago, even, I think you would note that there would be a decrease in your overall average 12-monthly flying rate.

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FLTLT ROSE: You've put that down to things such as governance and compliance increasing, aircraft becoming more complex so there's more down time to maintain them, and because there's no longer any Squadron support personnel and there's more general Army administration and bureaucracy?

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D6: Correct. What I mean by that, there is a lot of stuff that happens within the Army or within the Regiment that requires a lot of effort. I don't think people appreciate how much time is taken out of a day, even if you wanted to do a two-hour sortie, for example. It's not just a matter of two hours of my day in an aircraft. There is the mission planning that goes before it. There is the authorisation process that goes before it. I've got to go through ALSE to get my equipment. I've got to go through flight line to be briefed on the aircraft. Then I've got to go to the aircraft and pre-flight it, and in some instances the aircraft can take 20 to 40 minutes to start, depending on what the aircraft is in the fleet. I then go flying. I then come back from flying. There is debriefs.

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And that is just a two-hour sortie, which is probably, I estimate, maybe five hours or more out of a working day, which I also estimate is roughly how much work a normal person does during a working day anyway, who is not flying. So what I'm saying is there is not a huge amount of time in a day, if you're going to go flying, to do everything else.

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FLTLT ROSE: You also state, in 62 of your Inquiry statement, that you think the Air Force has a better model, in that they train people to specifically fulfil the Executive Officer and Operations Officer roles, and that Flight Commanders, which are the Major equivalent, are fulfilling those particular roles.

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D6: It's my opinion, yes. Particularly noting the ops stream. There is a dedicated ops stream for people to be trained on how to do that job, and it is a job that is typically not filled by pilots, in my understanding. With the note that the rank structure being one-up within Army, it's not very often that Captains manage Captains or other officers in such large groups. I think it's not really widely understood by the rest of Army, we don't really fit the Regular Army model when it comes to that sort of Troop structure.

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That's why I feel that the Air Force and the Navy, who both do the one-up structure, it's more appropriate. It takes longer for that person to get that

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5 extra rank. They've probably had more time within the Squadron; they've developed those skills. They've had more time to develop the proficiencies and competencies, and probably have more experience to rely on in those positions. And a Major managing Captains and Lieutenants makes more sense, in my opinion.

10 FLTLT ROSE: I'd like to ask you some questions now about your role as the Squadron Safety Officer, and that's set out from paragraph 65. You state that you were responsible for the oversight of the safety and reporting system in the Squadron, which includes creating or supervising any Aviation Safety Reports for Aviation incidents, and that the Regiment Safety Officer would then classify what level the event or incident was and assign it to someone to investigate. So there could be Class A, B, C or D incidents?

15 D6: Correct.

20 FLTLT ROSE: The differences between those classes you outline in paragraphs 66 and 68 of your statement, so I won't lead them from you here. But at paragraph 69 you state that the only Class A events you ever saw in your career in the Army occurred in 2023.

D6: Correct.

25 FLTLT ROSE: And that was the Jervis Bay ditching was one of them?

D6: Correct.

30 FLTLT ROSE: And the other was the incident with Bushman 83 on TALISMAN SABRE?

D6: Correct.

35 FLTLT ROSE: Were there any Class B events in 6 Aviation Regiment in 2021 to 2023?

40 D6: There were. Class B, like, without the definition in front of me to clarify, but one instance that I do recall was a SERABAM failure in the MRH, which was essentially a structural – sorry, a non-structural part of the transmission mounting that broke. So it was a significant event. So that gives you an example, I guess, of what a Class B would be; like, a significant event.

45 FLTLT ROSE: Did that break mid-flight or on the ground?

D6: It broke in flight.

FLTLT ROSE: That was investigated by the DFSB or was it investigated within your Squadron?

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D6: Initially we referred it to the DFSB. I don't recall where it was investigated. But it ended up being a maintenance investigation, from my recollection.

10 AVM HARLAND: How would you describe the reporting culture within 6 Aviation Regiment for safety incidents?

15 D6: It's my impression the reporting culture was actually reasonably good. We were reporting quite a lot of Class D and C events which, in my mind, gives an indication that potentially over-reporting is a good thing because people feel comfortable putting the report in with no concern for repercussions, I guess, or any kind of stigma attached to putting a report in. I feel – I'd like to think that the unit had a good safety culture, in that people could put their hand up and admit to something or talk about it, and then we could look at whether it needed to be a safety event and report it or not.

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But I feel that people were willing to talk about issues that they felt that occurred during flights. So it's my impression that the safety culture within the Regiment and 173 was good.

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AVM HARLAND: And did that translate into – as the Safety Officer, did you feel that all the incidents that were happening out there were being reported, and accurately so?

30 D6: Yes. It was my impression that if something happened in a sortie, that people were willing to come back and report it. I didn't get the impression that people were holding anything back or weren't willing to discuss anything, for whatever reason. It was my impression that if something happened, it would be spoken about.

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AVM HARLAND: In terms of response to either the individual reports or, in a more aggregated sense, at your Safety Committee meetings, did you feel that Command were engaged in a process of addressing the hazards and risks appropriately?

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D6: In my opinion, yes.

AVM HARLAND: Thank you.

FLTLT ROSE: Is my understanding correct that Class A and Class B incidents are investigated by the DFSB, and Class C and D are investigated, potentially, within the units?

5 D6: Typically. Class A and B would be referred to DFSB and they would determine whether, particularly for a Class B, whether it was appropriate for the unit to look at it, in my experience. And then a Class C and D, D for data tracking, C for something that required some sort of analysis, they were generally held at a Squadron or unit level.

10 MS McMURDO: You told the Air Vice-Marshal that these things were properly investigated. Did you see positive outcomes come through?

15 D6: In the Class D and C events that I observed, I believe so.

MS McMURDO: What about others?

D6: The only others I mentioned were the two Class A events, and I'm yet to see any - - -

20 MS McMURDO: You didn't have Class B ones. Thank you.

25 FLTLT ROSE: I'll ask you some questions now about your relationship with the members of Bushman 83. Paragraph 70 of your statement you set out that you met CAPT Lyon in 2021 and that you called him Dan or Diesel. You flew with him often in the MRH-90 and observed him from within a formation. You also conducted two of his category assessments. You thought he was a good pilot, and a very caring and proactive Troop Commander, who put his subordinates' welfare first.

30 D6: Correct.

35 FLTLT ROSE: Paragraph 71, you met LT Nugent at the beginning of 2023. And you flew with him a few times on his SOQC in June 2023, and you conducted one category assessment for him. You said he was a good junior pilot who was eager to gain experience, and generally had a positive attitude.

40 D6: Correct.

FLTLT ROSE: At paragraph 72, you met WO2 Laycock in 2013, and you flew with him regularly on both Black Hawk and MRH-90. Did you call him "Phil" or "Joe"?

45 D6: Phil.

FLTLT ROSE: You said he was a highly skilled and well-respected Aircrew Instructor, and a Standards Warrant Officer.

5 D6: Correct.

FLTLT ROSE: At paragraph 73, you met CPL Naggs when he posted to 6 Aviation Regiment, and flew with him often in the MRH-90. You said that he was hard-working, a very likeable aircrewman, whose confidence in the aircraft had been developing very positively in his time in the unit.

D6: Correct.

FLTLT ROSE: I want to ask you some questions now about fatigue, and this starts from paragraph 74 in your statement. So in June 2023 you and your fellow QFI, D2, conducted a condensed version of the SOQC because you wanted to trial a new structure.

D6: The word “condensed”, it was run over a shorter period of time than we’d previously run the SOQCs, but the amount of flying and the events were roughly the same as previous SOQCs. But – yes.

FLTLT ROSE: And this was the SOQC that LT Nugent was on?

25 D6: Correct.

FLTLT ROSE: Now, at paragraph 75 you set out that you and D2 both worked 76 hours over the six days of that SOQC.

30 D6: Correct.

FLTLT ROSE: And half of that, or just under half of that, was flying hours and the rest – was it administrative work and planning?

35 D6: Correct.

FLTLT ROSE: Were you living-in on barracks for that SOQC?

D6: Correct.

40 FLTLT ROSE: Paragraph 76, you said you filed a fatigue report in Sentinel recording that you’d worked 76 hours over that six days.

D6: Correct.

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FLTLT ROSE: And you've provided the Inquiry with a copy of that fatigue report. It's Annex A of your statement.

D6: Correct.

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FLTLT ROSE: Was this sent to the Regiment Standards Officer?

D6: It was, yes.

10 FLTLT ROSE: Is that D14? If you just - - -

D6: Correct.

15 FLTLT ROSE: Was it supposed to be sent to the Regiment Standards Officer, and was that the only person who was meant to see it, or did it also – was it meant to be seen by the OC and CO?

20 D6: So it's my understanding with the Sentinel reporting for a fatigue report, you have to pick a supervisor. I picked the most appropriate supervisor for where I thought the fatigue report had to go. It's also my understanding that it's hard to see the fatigue report within Sentinel if you're not directly attached to it, so it works differently to a normal Sentinel report.

25 However, I discussed with the OC my concerns around the tempo that had just been run on that SOQC, and it was his recommendation to put the fatigue report in as a way to track it, and also potentially influence the design of the next SOQC based on what we had just experienced.

30 FLTLT ROSE: Who makes the ultimate decision about how long the SOQCs are meant to be for, or when they're programmed into the schedule?

D6: The SOQC design is in the number of sorties to be conducted. It was influenced by myself and D5, so how many events. However, the - - -

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FLTLT ROSE: D5 or D2?

40 D6: Sorry, D2. Apologies. The actual programming and length of the course was controlled by Regiment Ops. So the design to do it in a more condensed period came from Regiment Ops as a concept to do it as a live-in course. One of the things that I felt was it didn't particularly work for myself and the other instructor, D2, being the only two instructors on the course. So that was part of the fatigue report, was sort of pushing back that the way that it had been designed was not necessarily effective for fatigue management.

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FLTLT ROSE: Was D14 also supposed to instruct on this course, but for various reasons couldn't?

5 D6: Yes, that's correct.

FLTLT ROSE: So generally you would have three QFIs on an SOQC?

10 D6: The number of QFIs would be a result of how many trainees we were attempting to get through, and how many QFIs were available, and that would vary.

AVM HARLAND: Could I just confirm, the planned hours that you worked over that 25 to 30 July – and I'm assuming that's inclusive?

15 D6: There was, I think, one or two days in that block that were not flying days, so they were shorter days but they were still at work days.

AVM HARLAND: So could I confirm that you planned to work – by virtue of the plan of the course, you'd planned to work that 76 hours and fly about 30 hours? Or was that work rate and the length of working days as a result of things going wrong during the day and you having to extend?

25 D6: So the plan would've been slightly shorter than that, as in less hours and less flying rate. However, it ended up being that higher flying rate due to – I believe we had to move a day due to weather. Like, things of that nature, and that's what it ended up. And that was one of the reasons I put the fatigue report in, to sort of, I guess, capture the fact that we worked harder than what was programmed or anticipated.

30 AVM HARLAND: Yes, so are you indicating that the plan for the course really didn't have any margin in it to account for things that typically happen, like weather issues?

35 D6: There was some margin, but there was a lot of reduced margin for, like, I guess, contingencies of weather and all that sort of stuff, like, based on the timeline that it was programmed over.

AVM HARLAND: Okay.

40 D6: And we found those issues, and that was one of the reasons why, I guess, we were sort of reporting. And also in parallel to that, post-activity reports were completed and that information was recorded in that as well to, I guess, account for those contingencies that did appear.

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5 AVM HARLAND: So in addition to the conduct of the course, the administration of the course, as in reporting and the like, were you also having to carry your normal workload that you would in your other Squadron secondary duties, or did you suspend them for the period of the course?

10 D6: Typically for an SOQC or any sort of, like, I guess, planned instructional period like that, those sort of workloads are reduced for someone like myself. However, I still hold the Safety Officer appointment, so if something was to happen on a course, then I would probably still be involved in, like, the initial reporting to the Regiment Safety Officer. So typically students would be completely removed from any of their additional duties and, as an instructor, you're kind of just doing your normal job, but just I guess, like, at a dedicated training period.

15 AVM HARLAND: When you say those secondary duties are removed, does somebody else in the Squadron or Regiment do those duties while you're conducting the SOQC, or do you have to play catch-up at the end of the course?

20 D6: A bit of both, to be honest, from my experience.

25 AVM HARLAND: How is your tempo at the end of the course, when you go back into your normal seat in the unit?

30 D6: So I haven't had to experience it, I guess, as the QFI because I'm sort of still in the training sort of period, but at the end of the course, for me, there is still a lot of admin to catch up on for the completion of the course that we sort of don't get a chance to do during those working days. It would be my impression that people who were in other appointments would probably be playing catch-up as well.

AVM HARLAND: Okay, great. Thank you.

35 FLTLT ROSE: You provided another fatigue report which you completed at the end of 2022. That's at Annex B of your statement, and that was after - that was also an SOQC where the OC had cancelled, or terminated, a night sortie because he was concerned about the cumulative fatigue of the members in the formation.

40 D6: Correct.

45 FLTLT ROSE: Can I take it from that evidence that the OC and yourself were aware of the fatigue report process for Sentinel?

D6: Correct.

FLTLT ROSE: And the Regiment Standards Officer?

5 D6: Correct.

FLTLT ROSE: Were the other members of 6 Aviation Regiment, or your Squadron, aware that they should be, or could be, putting in fatigue reports on Sentinel?

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D6: It's my recollection that it was spoken about on safety days. Like, the awareness of the fatigue report side of Sentinel, I think, would have been within the Regiment. That fatigue report that I put in in November 2022 was actually the first fatigue report I had ever put in, and I was unfamiliar with the process when I did it. So anyone else, I guess, would probably still have the same – like, you know, discovering how to go through the process the first time they would go through it.

15

FLTLT ROSE: Had you worked more than 55 hours in a working week prior to November 2022?

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D6: My recollection, I probably had, yes.

FLTLT ROSE: But you weren't aware that you could file a fatigue report, or should file a fatigue report after those weeks?

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D6: I was aware that I probably should. But at the end of working somewhere in the vicinity of a 55-hour week, it's probably the last thing that I was thinking about doing.

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FLTLT ROSE: You were too fatigued to file the fatigue report.

D6: I was ready to have a break, I guess, yes.

35 FLTLT ROSE: And who was tracking the fatigue reports?

D6: I do not know, to be honest. So it's my understanding that it goes through Sentinel, and it would be somewhere within the Safety Cell in the Regiment. But I do not know who has visibility of it, and I do not know what is done with the data that is captured from a fatigue report. I haven't seen any kind of outcome from one.

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FLTLT ROSE: So did you receive any outcome from the one that you filed after the SOQC in June 2023?

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D6: Aside from seeing that it had been progressed by the Regiment Standard Officer at the time, no, I haven't seen any kind of feedback or closing of the loop, or anything like that.

5 FLTLT ROSE: And is that because of the incident that happened on TALISMAN SABRE? Do you think that it was, essentially, not acted on because it didn't need to be acted on?

10 D6: I don't know whether it would have been acted on. I don't know if it was just a reporting thing, so trend monitoring. I don't know.

15 FLTLT ROSE: At paragraph 79 you state that you think the OC and the Operations Officer were actively trying to manage fatigue in the Squadron. Can you just confirm from the pseudonym list who the Operations Officer was?

20 D6: In the period I'm referring to, we went through many Operations Officers and TACOPSOs as well. What I mean by that statement is, like, I guess anyone in those positions I think was actively trying to monitor the fatigue. Specifically in 2023 - bear with me - it's my recollection that D15 is who I'd probably be referring to for the start of 2023.

25 FLTLT ROSE: And by managing fatigue in the Squadron, is it that they were trying to take certain elements or tasks out of the program to relieve the members?

30 D6: Correct, or I guess actively shield the Squadron from other stuff that wasn't deemed, I guess, essential, or, like, something that had to happen outside of flying-related as well.

FLTLT ROSE: Would it also be trying to shorten days by having less sorties per day?

35 D6: Correct. There were periods where we had, I guess, reduced flying windows to try and manage accumulative fatigue.

40 MS McMURDO: Do you think the fact that you were the Squadron Safety Officer and were aware of these procedures and having to teach others made it more likely that you would put in one of the Sentinel fatigue reports than others in the Squadron?

D6: Yes, that would be possible.

45 MS McMURDO: Thank you.

FLTLT ROSE: At paragraph 83 you state that Phil Laycock made you aware of the DFSB's Aviation Fatigue Management Guidebook in 2022.

D6: Correct.

5

FLTLT ROSE: Could the witness be shown Exhibit 39?

MS McMURDO: Yes.

10

D6: Thank you.

FLTLT ROSE: Is this the guidebook you were referring to?

D6: Correct.

15

FLTLT ROSE: And when he showed it to you, did he explain it to you or encourage you to read it, or what was the context of him showing it to you?

20

D6: I don't recall the exact conversation, but the context was we were having a conversation in and around accumulative fatigue and fatigue management. He'd previously been a part of DFSB and had obviously been familiar with the document, so we were having discussions in and around fatigue.

25

FLTLT ROSE: And he was in the Warrant Officer Standards position when he was having that conversation with you?

D6: Correct.

30

FLTLT ROSE: Was it something that Phil took seriously and wanted to make changes in the Squadron or the Regiment?

D6: It's something I think we all took seriously, which is why we were having the conversation about it.

35

FLTLT ROSE: And was he having the conversation with you as the Safety Officer or generally as a QFI?

40

D6: I think, between the two of us, we were having a conversation about fatigue and how much the instructional staff were working.

FLTLT ROSE: Was he also a QAI?

D6: Correct.

45

FLTLT ROSE: Was he doing instructional tasks in 2023/2022?

D6: Correct.

5 FLTLT ROSE: Could I also have the witness shown Exhibit 37?

MS McMURDO: Yes.

10 FLTLT ROSE: Have you seen this Fatigue Risk Awareness Tool before?

D6: I have.

FLTLT ROSE: I understand there's also an image that can be placed on the screen. Where have you seen it?

15

D6: It is part of the Fatigue Management Guidance Handbook that you've just shown me, and I have seen it subsequently, after 28 July, being used within the 6 Aviation Regiment.

20 FLTLT ROSE: So you weren't aware that anyone in the Squadron was using this tool prior to the incident and TALISMAN SABRE?

D6: I wasn't aware of anyone in Army Aviation – as in any of the other units using the Fatigue Risk Management Tool. But, no, we were not using it in the 6 Aviation Regiment, to the best of my knowledge.

25

FLTLT ROSE: I understand you went on leave fairly soon after the incident, but in that short time when you were still in the Squadron, were any aviators using this tool?

30

D6: Not immediately after, no.

FLTLT ROSE: Do you know if they're using it now?

35 D6: It's my understanding they're using it now. That's what I was referring to before. So earlier this year, I had to go back to 6 Aviation Regiment, and as part of the conversations with members that were there, they were showing me that this was now something that they were being encouraged to use prior to – a self-assessment prior to flying.

40

FLTLT ROSE: And do you use a similar type of tool in your current civilian employment?

D6: Not exactly, but there is a Fatigue Management Tool that is used by my employer which essentially tracks our fatigue or gives us a fatigue score, so we're aware prior to commencing a shift.

5 FLTLT ROSE: At paragraph 91 of your statement you state that you've come to trust the results of this Fatigue Management Tool, which you use in your civilian employment, which tells you when you're fatigued even if you do not feel it yet?

10 D6: Correct.

FLTLT ROSE: And what happens if the results indicate that you are fatigued?

15 D6: So the tool gives me a score based on how much duty I've done over my previous shifts, or which accumulates over a two-week period, to the best of my understanding. The higher the score, obviously the higher the fatigue. It also takes into account circadian low periods of operations.

20 So it forecasts at the start of a shift what your highest score would be if you've worked for the entire shift. So I've come to trust it because I believe it's reasonably accurate, as much as it can, I guess, without sort of knowing exactly how much you've slept, for example. If the score is elevated, I have to step through different levels of risk management prior to accepting a job
25 in my current role. And above a certain score, it's either a Chief Pilot call or a rejection of a job.

FLTLT ROSE: In terms of managing it, is one of the ways that you could manage your fatigue is to have a strategic use of coffee?

30 D6: I think everyone does. But managing the fatigue, I think, is more about, like, effective rest and how much you're actually working, your working rates.

35 FLTLT ROSE: Is there a place for you to nap at your current workplace?

D6: There is, yes.

40 FLTLT ROSE: Was there a place for any persons to nap at 6 Aviation Regiment?

D6: Not dedicated, no.

45 FLTLT ROSE: And I take it if you were in the highest of ranges, you would come off the flight altogether?

D6: Correct.

5 FLTLT ROSE: At paragraph 86 you state that Army Aviation could benefit from a similar system, although it would be harder to implement with multiple people working across different shifts and on multiple ships.

10 D6: Correct. I think the tool that we specifically use by my employer is reasonably complicated, particularly with the way it forecasts – and I’m only sort of taking into account two crew members on a single aircraft platform. I think it would be very, very hard to implement a very similar tool across multiple shifts, multiple aircrafts, run by the same unit. However, I do believe something like you’ve shown me, the Fatigue Risk Awareness Tool would be a good starting point for self-awareness
15 prior to going flying.

FLTLT ROSE: I take it this is a much simpler tool than the one that you use currently in your civilian employment?

20 D6: Correct.

25 FLTLT ROSE: At paragraph 87 you state that you think fatigue management in Army Aviation has been poorly managed for years and that the policy is deliberately vague to make it possible to allow crews to surge when required or necessary, such as operations or exercise, and that higher tempos have been normalised in Aviation Command. And that nothing has really changed with the Fatigue Management Policy during your time in Army Aviation.

30 D6: Correct.

FLTLT ROSE: You state at 88 that:

35 *The tendency to work long hours is also exacerbated because Army Aviation is full of high-achieving individuals who want to complete the task they are given. Having an objective Fatigue Awareness Tool could be beneficial to warn aircrew that they are approaching a fatigue state, rather than relying on individual members to assess their own fatigue levels subjectively.*

40 D6: That is my opinion.

45 FLTLT ROSE: The tool that you were just shown, is that what you think is subjective enough, or objective enough, to meet those needs?

5 D6: Potentially. I think one of the key things, though, is empowering or educating people within Army Aviation to, when they use that tool, actually effectively use it. So if someone, for example, got a score that they were amber or red, there would be the support in place to be able to put their hand up and say, “Yes, this is my fatigue score. I need to manage my fatigue effectively based on this”. So I think there’s the education piece and the support behind the use of it. I think it would be a beneficial tool.

10 FLTLT ROSE: What do you think if aircrew were filling that out perhaps orally as opposed to filling it out with a pencil, and just sharing the results with each other? Do you think that’s less effective than if they were filling it out on paper and having it recorded in the system somewhere?

15 D6: I think if you had to record the fatigue score prior to, say, authorisation for a sortie, it would probably be more meaningful than just filling it out and verbally acknowledging it.

20 FLTLT ROSE: What do you think if aircrew were simply being asked to fill the tool out and yet weren’t being briefed on how to actively manage their fatigue when they were hitting those amber and red levels?

D6: I guess that’s the education piece that I’m referring to that needs to happen.

25 AVM HARLAND: If we consider operations and exercises versus just your normal operations back at barracks, was there a different approach to fatigue and risk management in that case? Particularly in exercises, were you expected to, I guess, go the extra mile, as it were?

30 D6: Not necessarily go the extra mile, but I think there’s an understanding when you go onto an exercise that it’s one of those sort of periods of a higher tempo – or a higher period of work. For example, you may not get weekends off, which is typical during a working year within the Regiment construct.

35 I guess, probably the thing that stands out to me though is that quite often a Monday to Thursday flying schedule could often resemble similar sort of working hours per day that you might be experiencing on an operation or an exercise. What I mean by that is the use of a 12 to 14-hour day becoming almost the norm versus that becoming sort of the abnormal when going on an exercise and surging for a smaller period of time.

40 AVM HARLAND: In your experience on exercises, did you consider that fatigue risk management and safety culture was satisfactory? Did you feel comfortable with it in your period of operating on exercises with Army?

45

5 D6: I felt comfortable with the design or the constructs that were put in place. But, again, I think there's an education piece for individuals about effectively managing their own fatigue as well as, I guess, the structure that's put around an exercise. So you might be able to give someone an adequate rest period, but the actual effective use of that rest period is something that needs to be, I guess, emphasised or supervised to make sure that people are adequately getting the rest prior to commencing duty.

10 AVM HARLAND: Yes. Now, you talked about:

The tendency to work long hours is exacerbated because Army Aviation is full of high-achieving individuals who want to complete tasks they are given –

15 which is clearly good for the organisation. During your experience, did you feel some pressure not to be the first person to put their hand up?

20 D6: I personally didn't. I'm personally more than willing to put my hand up. However, I think others would feel that pressure on different roles and I think a lot of time it's personal pressure that they put on themselves to make sure that they're doing their job effectively. Everyone, I guess, is reported on. Everyone wants to be seen as the person who is doing the best that they can.

25 I don't think there was any pressure to not put your hand up. I definitely don't think Command, whether it be at the Squadron level or the Regiment, was pressuring people actively to do these things. I think it's almost like an inherent human quality or flaw that they want to achieve and would be, I guess, reluctant, or could be reluctant, to put their hand up.

30 I definitely think that within the Regiment there were efforts – and that's what I'm referring to with fatigue management in a lot of cases – of our Command to try and make it aware that it's more than okay to say no, because at the end of the day, you need to keep yourself safe.

35 AVM HARLAND: Thank you.

40 MS McMURDO: The reason that you were more likely to put your hand up to allow a fatigue report, was that in large part because, as Safety Officer, you had educated yourself and you'd been educated in fatigue and the effect it could have on safety and flying?

45 D6: I guess so, ma'am, or experience. But I've also – yes, I guess so.

MS McMURDO: You were going to say something else. Feel free to say it.

5 D6: I guess I was comfortable in my position and my role that if I put my hand up and said, “No”, that I was not going to have, I guess, any – I was happy that people would listen to me and go, “Yep, that person is obviously fatigued. They’ve done as much as they possibly can”. I was comfortable in myself to be able to do that. I didn’t feel any kind of pressures outside of – whether it be the organisation or any need for myself to perform any
10 harder than I already had.

MS McMURDO: But, again, I’m sort of going around in circles, I suppose, but you didn’t feel that because you understood fatigue, because you had been well-educated in it?

15 D6: I guess so, ma’am, yes.

MS McMURDO: So education is an important role, not only for those who are being asked to put their hands up, but for those managing it right across the organisation, right up to the top?

20 D6: Correct.

MS McMURDO: Thank you.

25 FLTLT ROSE: Did you receive any particular briefings when you were in 6 Aviation Regiment about how to manage your own fatigue and how to effectively use your rest periods?

30 D6: I believe I can – I recall during safety days over my time at 6 Aviation Regiment, the theme was fatigue. I don’t recall the specifics of those briefs, but I’m certain that they would have included those things.

35 FLTLT ROSE: I want to ask you some brief questions now about the Jervis Bay ditching in March 2023. That starts at paragraph 92 of your statement. You were flying during the night that led to the MRH-90 ditching in Jervis Bay?

40 D6: Correct.

FLTLT ROSE: You were about two miles away from Bushman 82, which is the aircraft that ditched, when you heard a mayday call?

45 D6: Correct.

FLTLT ROSE: You immediately flew to the scene and saw the aircraft floating upright on the water?

D6: Correct.

5

FLTLT ROSE: Then you assisted throughout that evening with the search and rescue mission.

D6: Correct.

10

FLTLT ROSE: At paragraph 100 you state that a week after the incident the SO2 Standards Officer informed you that there was a known defect with the high-pressure turbine in the engines of the MRH-90 that had ditched.

15

D6: Correct.

FLTLT ROSE: Is the SO2 Standards a position within 16 Aviation Brigade?

20

D6: Correct.

FLTLT ROSE: I understand that person doesn't have a pseudonym and you mention them at paragraph 100 of your statement.

25

D6: Correct.

FLTLT ROSE: Because of the reluctance of checking whether that person – confirming whether they have a pseudonym – the Inquiry has that name. We don't need to mention them in the public hearing.

30

D6: Thank you.

FLTLT ROSE: Did he tell you when you were alone, or was this in a brief to the rest of the unit?

35

D6: No, this was in a conversation between the two of us following up on events, I guess, after the incident. It was my impression that he had just become aware of it himself, and then had mentioned to me that there was this high-pressure turbine issue.

40

FLTLT ROSE: Did he also tell you that the ditching was caused by the catastrophic engine failure due to the defect in the engine?

45

D6: No, he didn't. I subsequently found out afterwards that it was confirmed that that was likely the cause. However, there was no doubt from

any of the aircrew who were either in the aircraft, too, or saw it, that it was a catastrophic engine failure.

5 FLTLT ROSE: And you state that you later learned of a Service Bulletin that Airbus issued in May 2017 about the need to modify the MRH-90 HP1 turbine blades.

D6: Correct.

10 FLTLT ROSE: And that it was a known defect within certain parts of Aviation Command.

15 D6: It was a known defect within the MRH engines as there was a number of MRH engines at the time of the incident and the second decision brief that had already been modified, but there were a number of engines that had not been modified.

20 FLTLT ROSE: So you became aware that these decision briefs – they're from 2018 and 2020 - - -

D6: Correct.

FLTLT ROSE: - - - were made by the MAO AM - - -

25 D6: Correct.

FLTLT ROSE: - - - as the Military Air Operator?

30 D6: Correct. I'd have to check the acronym, but - - -

FLTLT ROSE: Do you understand who that was?

D6: No, I do not.

35 FLTLT ROSE: Did you read the decision briefs?

D6: I did, yes.

40 FLTLT ROSE: Were they provided to everyone in the unit, or just to you?

D6: No, they were eventually provided to everyone in the unit.

45 FLTLT ROSE: Did those decision briefs include a risk and cost benefit analysis comparing the risk of the engines failing to the cost of modifying them all at once?

D6: That's my understanding of it, yes.

5 FLTLT ROSE: You understand that Army Aviation, or the MAO, decided to modify the engines one by one at their next engine overhaul.

10 D6: Correct. It was my understanding that essentially it was to be risk managed, and that the engines would be, when they went to their overhaul, put through the modification to rectify the issue.

15 FLTLT ROSE: So those decision briefs for 2018 and 2020, I understand then that because the Bushman 82 that ditched in Jervis Bay had unmodified engines, that by 2023 there were still a number of engines that your unit was flying that hadn't been modified.

15 D6: Correct.

20 FLTLT ROSE: You also were informed that Navy had taken a different approach and modified all of their engines - - -

20 D6: Correct.

FLTLT ROSE: - - - when they became aware of the defect.

25 D6: Correct. It's worth noting though that Navy only operated six MRH-90s.

FLTLT ROSE: How many did Army Aviation operate?

30 D6: We had a total of 47 MRH-90s; 46 by the time we – prior to the Jervis Bay ditching.

35 FLTLT ROSE: So I take it this is the first you'd heard of the engine defects with the turbine blades, and that was after March 2023?

D6: Correct.

FLTLT ROSE: Was your OC aware of the issue prior to that?

40 D6: No, he was not. Sorry, he was aware of it after the incident. Yes.

FLTLT ROSE: Not prior?

45 D6: Correct.

FLTLT ROSE: Was your Commanding Officer aware of it prior to the incident?

5 D6: To the best of my knowledge, he was not.

FLTLT ROSE: The MRH-90 fleet was grounded for a period of time after the ditching in Jervis Bay. Was that to allow the remaining engines in the fleet that your Squadron was flying to be modified?

10 D6: I think initially the grounding was to determine the cause of the ditching, and then subsequently we didn't return to flying until our aircraft were modified. However, both 6 Avn and 5 Avn returned to flying, and AAvnTC returned to flying. AAvnTC and 5 Avn were able to fly the aircraft with non-modified engines, but due to the role in 6 Avn, we only
15 began flying aircraft with modified engines.

FLTLT ROSE: So there was a period of time where there were less aircraft available until those engines had been modified?

20 D6: Correct.

FLTLT ROSE: At 102 of your statement you said that 6 Aviation Regiment then re-wrote its Mission Risk Profiles so that certain types of operations were not allowed to be undertaken unless the aircraft had those
25 modified engines.

D6: Correct.

FLTLT ROSE: Do you think that you would have conducted operations differently in 6 Aviation Regiment had you known of the engine defects prior to March 2023?

30 D6: It's my opinion that the Mission Risk Profiles that we're referring to, as in the Risk Management Plans, the overall score of risk probably would have increased. The likelihood – sorry, the likelihood would have
35 increased potentially of the engine failure. The outcome is still catastrophic.

40 So it's my impression that the MRPs would have probably been a higher level of risk, requiring a higher level of sign-off, than what they were at the time. I do not think it would have changed how 6 Avn undertook those profiles, but I definitely believe it would have required a higher level of authorisation to do that.

FLTLT ROSE: So you still would have been flying low, conducting extractions overwater, those types of tasks?

D6: I believe so, yes.

5

AVM HARLAND: Just a question. In para 102 of your statement you say:

10 *However, after the Jervis Bay ditching, the MRPs were re-written to include that certain types of operation were not allowed to be undertaken unless the aircraft involved was fitted with engines that had received the HP1 modification.*

D6: Correct. So, essentially, what we did was the MRPs had a level of risk for those operations because there is always risk of an engine failure in an aircraft engine. What we did was incorporate that for that level of risk to remain the same, we had to be operating with post-modified engines. If we were operating with the pre-modified engines, that level of risk would have increased. So we re-wrote the MRPs to essentially reflect the direction that we'd been given, which was that 6 Avn was not to undertake those operations unless we had those modified engines.

20

AVM HARLAND: So if I'm to just, I guess, restate that to make sure I've got that right. With knowledge of the HP1 blade issue, the MRPs – the Mission Risk Profiles – were reconsidered and, as a result, certain types of operations were not allowed to be undertaken?

25

D6: Incorrect. So as a result of taking into consideration the modification of the high-pressure turbine blades, we were able to continue operating the way we were. What I meant by that was if we had unmodified engines, we would not be able to undertake those profiles, is the way the MRP was rewritten.

30

AVM HARLAND: I guess that's what I was trying to establish. So with knowledge of the engine issue, risk profiles were reconsidered. The risk was elevated, so a decision was made that certain operations wouldn't have happened. But before the Jervis Bay incident, you were conducting those operations with engines that were not modified. Is that a correct statement?

35

D6: That second statement is correct. Like, we cannot risk mitigate against something we're not made aware of. So it wasn't accounted for in the Mission Risk Profiles. We were just accounting for a risk of an engine failure, not the fact that there was a known issue that could cause an engine failure.

40

AVM HARLAND: How did you feel about that?

45

D6: Reasonably annoyed. As I said, you can't risk mitigate against something that you weren't made aware of.

5 AVM HARLAND: So, in essence, after the Jervis Bay incident, so after we had an outcome, it was "Okay, we're going to have to reconsider the way we manage our risk", and it was changed, and certain operations without modified engines were not allowed. And 6 Avn, with modified aircraft, were allowed to continue with those operations.

10

D6: That's correct.

AVM HARLAND: Okay. Thank you.

15 MS McMURDO: And could you just clarify for me, prior to the Jervis Bay incident, do you now know whether any of the 6 Aviation Regiment MRH-90s had been modified at that time?

20 D6: It is my understanding that there were some modified engines, and it's also my understanding that they weren't necessarily in the same aircraft. So to do these tasks, we required two modified engines, i.e., to eliminate the risk of this failure. I believe that the engines were – there were engines within the fleet, within 6 Aviation Regiment, but they weren't necessarily in the same aircraft.

25

MS McMURDO: So some of them may have had one engine modified. Some may have had two engines modified?

D6: Correct.

30

MS McMURDO: And I guess if you'd known about that, then for risky operations you would have prioritised the ones with two – the use of the ones with two modified engines?

35

D6: Correct.

MS McMURDO: Thank you.

40 AVM HARLAND: Just a philosophical question about risk management: it is better off to apply it proactively or reactively?

D6: Proactively.

45

AVM HARLAND: Thank you.

5 FLTLT ROSE: At paragraph 105 you state that you were confident to return to flying after this incident and the engines had been modified, but you'd lost confidence in Aviation Command and the airworthiness chain, and the way that the MRH-90 had been managed.

5 D6: Correct.

10 FLTLT ROSE: I take it that confidence hadn't returned to you by the time you posted out of 6 Aviation Regiment?

10 D6: No, it had not.

15 FLTLT ROSE: Is this the first issue that you became aware of after the ditching of the MRH-90, of Aviation Command not sharing with aircrew information about defects in componentry of the MRH-90?

20 D6: The other instance that I refer to in my statement is the modification of the tail rotor bonding strap – or an issue with the tail rotor bonding strap, which required modification. I think – it's my understanding that a similar decision brief and a similar risk management, I guess, strategy was undertaken.

25 And then I believe – I think my statement says “2018”, but I believe it's actually 2019 – I think it was a TALISMAN SABRE, which would have been an odd year – that a 5 Aviation Regiment aircraft had a near catastrophic failure of the tail rotor as a result of that issue that had been known.

30 FLTLT ROSE: It had been known to some people at Army Aviation, but not to the aircrew that were flying the aircraft.

D6: It's my understanding. I was flying the MRH at the time and the first I heard of the issue was after it happened.

35 FLTLT ROSE: Do you think the aircrew should be made aware of all service releases that come from the Original Equipment Manufacturer for an aircraft, or other equipment that they're using?

40 D6: I think the aircrew should be aware of any issue that's inherent with the aircraft of the platform that they're flying.

FLTLT ROSE: That could be recorded in CAMM2?

45 D6: Correct.

AVM HARLAND: So this particular defect wasn't recorded in CAMM2, so that you had visibility of it before accepting an aircraft?

5 D6: Not that I'm aware of it, no.

FLTLT ROSE: Do you know if this information was deliberately kept from aircrew or whether it was an oversight?

10 D6: I wouldn't be able to comment on that.

FLTLT ROSE: I take it that it's not just the aircrew that you think should be made aware of this, but the OC and the CO of the flying unit?

15 D6: Correct. Because they inherently own a level of risk in operating an aircraft and sit in a higher level of authorisation responsible for other members who are flying the aircraft. So I feel that any operator of the aircraft should be made aware of any kind of risk management that is put in place around it.

20 FLTLT ROSE: I'm going to turn now to Exercise TALISMAN SABRE. This is starting from 107 of your statement. So after you finished the SOQC in June '23 where you had that 76-hour week in six days, you had a week off?

25 D6: I believe there was a reduced tempo period, which I recall was a reduced tempo period for about two weeks. I spent a week of that on leave.

FLTLT ROSE: Then you deployed on TALISMAN SABRE on 24 July?

30 D6: Correct.

FLTLT ROSE: You left about 8 or 9 in that morning?

35 D6: Roughly. I don't recall the exact time.

FLTLT ROSE: So you have set out, to the best of your memory, when you went to sleep and when you woke up on Exercise TALISMAN SABRE.

40 D6: Correct.

FLTLT ROSE: At 109, you set out that you went to sleep at about 2300 on the 24th. So that was a fairly long working day if you were lift off at 8 or 9 in the morning and then asleep at 2300.

45 D6: A reasonably standard day.

FLTLT ROSE: Standard day even at Holsworthy, or standard day for an exercise?

5 D6: I would say it would be a reasonably standard day for an exercise.

FLTLT ROSE: The next day you woke up at 7 and then you went to sleep at 1.30 the next morning?

10 D6: Correct.

FLTLT ROSE: Is that because you were trying to shift cycles?

D6: Correct.

15 FLTLT ROSE: So you were going from a day cycle to a night cycle.

D6: We were also planning in the evening. So it was sort of naturally happening with that shift. The entire exercise we were expecting we'd be up and then into nights. So I was actively trying to sort of stay awake longer and try and sleep in the following days as much as I could.

20 MS McMURDO: How did you fly from Holsworthy to Proserpine? Were you in a helicopter or did you - - -

25 D6: Yes, I was the Aircraft Captain of one of the aircraft.

MS McMURDO: So that's quite a lot of flying in a helicopter.

30 D6: It was, I think, roughly 8.2 hours, which is less than the maximum in a day. It's a lot for a single day, but it's also not necessarily unreasonable to fly that amount in a helicopter every now and then.

MS McMURDO: Sure.

35 FLTLT ROSE: I take it you took over flying duties with your co-pilot in transit?

40 D6: I don't recall exactly, but I believe we did share legs on the way up and shared responsibilities to try and sort of, I guess, manage what we were doing.

FLTLT ROSE: Was it the intention that you were going to fly sorties on 25 July, but it was cancelled due to weather?

45

D6: I don't recall. I wasn't meant to be flying 25 or 26 July, anyway. But I don't recall whether there was a sortie cancelled or not.

5 FLTLT ROSE: Then, by 26 July, you slept slightly later, to 9 am, and you went to sleep at 1 am that following morning. Then, on 27 July, you woke up at 8 am and went to sleep at 12.30 am that following night.

D6: Yes. That's to the best of my recollection.

10 FLTLT ROSE: Were you napping during the day?

D6: I was attempting to, or at least attempting to sort of have reduced activity periods to try and manage my own fatigue.

15 FLTLT ROSE: Did you take any sleeping pills?

D6: I did not.

20 FLTLT ROSE: Have you done a ground trial for any of the sleeping tablets?

D6: I've done a ground trial for Stilnox and Temazepam.

25 FLTLT ROSE: You chose not to, on this exercise?

D6: Correct.

FLTLT ROSE: It was available though to you, should you have wished to?

30 D6: One of them was. I don't recall which one it was. But I made the decision not to use it.

FLTLT ROSE: Is that because you were sleeping sufficiently?

35 D6: It's because I had previously used both of those to try and shift my work period and I personally didn't have an experience that I – I personally did not find it helpful to try and shift that period. And drugs work on people different ways, so I just decided that I wasn't really keen on using it.

40 FLTLT ROSE: Did you have earplugs?

D6: I did, yes.

45 FLTLT ROSE: Sleeping mask?

D6: No, I did not.

FLTLT ROSE: Were the earplugs effective in stopping the noise from the camp?

5

D6: I tend to snore, so I think I create my own block of noise from the camp.

FLTLT ROSE: I understand. You were sleeping in a tent, with a number of other people?

10

D6: Correct.

FLTLT ROSE: On stretchers?

15

D6: Correct.

FLTLT ROSE: And the tent was next to an active runway?

D6: It was located on an airfield. It wasn't directly adjacent to an active runway.

20

FLTLT ROSE: Could you hear the aircraft taking off and landing throughout the day?

25

D6: You could, yes.

FLTLT ROSE: And throughout the night?

D6: When there were aircraft operating.

30

FLTLT ROSE: Were they operating at night?

D6: We were typically operating at night. So I imagine we were keeping other people up. So I didn't really notice, to be honest, particularly in the early hours of the morning.

35

FLTLT ROSE: Could you hear noises from other persons in the camp that were potentially working on different shifts to the shifts you were working on?

40

D6: Correct.

FLTLT ROSE: Were they in close proximity to your sleeping tent?

45

D6: Tent's sort of, I guess, located either side of our tents.

FLTLT ROSE: Was there a fire station nearby?

5 D6: There was, yes.

FLTLT ROSE: Were the sirens going off?

10 D6: Not that I recall.

FLTLT ROSE: Had you received any training prior to the exercise about how your unit was going to manage their sleep on the exercise?

15 D6: Not specifically that I recall, other than what I've discussed with, like, the fatigue management with safety.

FLTLT ROSE: Were you and your unit briefed about what to bring with you on the exercise to assist, such as earplugs, eye masks?

20 D6: Not that I recall.

FLTLT ROSE: So you brought earplugs just out of your personal experience of having been on exercises before?

25 D6: Correct.

FLTLT ROSE: There may have been junior aircrew who weren't aware that that was a good idea?

30 D6: There may have been. There also may have been a brief by the Troop Commanders talking to that. I'm unsure, because I guess I don't sit at that level – or I wasn't sitting at that level in the Squadron.

35 FLTLT ROSE: So you're not part of a Troop. As the Squadron QFI, you sit outside that structure?

D6: Sit inside the Squadron Headquarters, yes.

40 FLTLT ROSE: At 110, you state that on the morning of 26 July you noticed some aircrew up and about at 7 or 8 am making breakfast and coffees?

D6: Correct.

45 FLTLT ROSE: Why were you concerned to observe that?

5 D6: The majority of the people in the tent I was staying in were actively trying to sleep in and shift their cycle. The people in the tent that I observed, the one adjacent to us, predominantly more of the junior crews, I guess, were like already actively up and having coffees, and all that sort of stuff. My concern was that there was a sortie planned for late that night/early next morning and that some of those members would be involved in it. So I guess what I observed concerned me, that those members were not actively trying to sort of manage their fatigue effectively – or they could be more effectively managing their fatigue.

10 FLTLT ROSE: Of that group of people you observed, did that include CPL Naggs?

15 D6: I don't recall.

FLTLT ROSE: LT Nugent?

20 D6: I don't recall.

FLTLT ROSE: Phil Laycock?

25 D6: Phil Laycock was sleeping in a tent with myself, but I did not observe whether he was up or not in that period.

FLTLT ROSE: And CAPT Lyon?

30 D6: Again, he was sleeping in the tent with me, opposite me, but I don't recall observing him there, but I do not recall specifically making note of it.

MS McMURDO: Were you also concerned that they would disturb the people in the next tent who were trying to sleep in?

35 D6: Not so much that, but yes, I guess most of what I saw I was sort of just – I guess, heightened my awareness to, like, the issue of fatigue - - -

MS McMURDO: Sure.

40 D6: - - - which was why I then raised it.

MS McMURDO: But the reality was that they were making some noise that could be a disturbance to those who were trying to sleep in, in the next tent.

D6: To be honest, there were probably enough levels of noise, or other people around in the other tents or, like, the FOB that we were operating out of. I don't think they would specifically have been the thing that would've woken up people.

5

MS McMURDO: So there was a lot of other ambient noise around for those who were trying to sleep in at that point?

D6: Correct.

10

MS McMURDO: Thank you.

FLTLT ROSE: And "FOB" stands for Forward Operating Base?

15

D6: Correct.

FLTLT ROSE: You talked about what you'd observed with other persons in the chain of command, and a decision was made to move the flight program forward so that the sorties that evening were earlier.

20

D6: Correct.

FLTLT ROSE: Who made that decision?

25

D6: I can't talk to who made the decision to bring the sortie forward. However, I raised my concerns with D10, being the Officer Commanding, and D20, being the Troop Commander, pretty much for separate reasons. D10, because I wanted him aware of what I'd observed, and that I thought that there was enough in it that he should be aware of it; and D20, effectively, so like they were aware of it for the education piece to, I guess, reiterate that we need to be managing our own fatigue effectively.

30

I'm not aware of the discussions that happened after that, and who made the decision to bring the sortie forward. However, I do recall that the sortie was programmed for after midnight, and I do recall that it was brought back prior to midnight.

35

FLTLT ROSE: You described that as a good decision; whoever it is that made that decision. What about briefing the junior aircrew on sleep management after that decision was made? Do you recall specifically having that education piece?

40

D6: Yes, I recall that was part of the conversation with D20, and I was – I don't recall actually being there for the start brief, but I recall being told

that they would be informed in the start brief – or reminded to be more positive in managing their own personal fatigue.

5 FLTLT ROSE: How hot was it during the day on the exercise?

D6: I do not recall, but I recall it being humid.

10 FLTLT ROSE: And at night, when you were trying to sleep in the tents, do you recall it being uncomfortable or comfortable?

D6: I recall it being humid.

FLTLT ROSE: Was there any air-conditioning in the tents?

15 D6: No, there was not.

FLTLT ROSE: Had you been told in advance that there would be air-conditioning in the tents?

20 D6: I do recall being told that there'd be power and air-conditioning in the tents. However, when we got there, the tents could be fitted with it, however, they were not.

25 FLTLT ROSE: And no explanation was provided?

D6: I believe that the air-conditioning equipment was prioritised – or food was prioritised being brought up to Proserpine over the air-conditioning equipment.

30 FLTLT ROSE: So the air-conditioning equipment was left back wherever it was initially from?

D6: That was my understanding, yes.

35 FLTLT ROSE: We've asked you some questions yesterday about the HMSDs and how they were stored when they were at 6 Avn, back in Holsworthy Barracks. I take it you took HMSDs with you up to Proserpine?

40 D6: Correct.

FLTLT ROSE: Where were they stored?

45 D6: I do not recall exactly where they were stored. We had an ALSE tent for the HMSD, so controlled stores, I guess. So I don't know if they were

stored in the ALSE tent overnight, or whether they were stored in the planning tent, which was air-conditioned.

5 FLTLT ROSE: Do you know if the ALSE tent was air-conditioned?

D6: I don't recall, no.

10 FLTLT ROSE: And it wasn't the case though that those particular items of equipment were kept in the aircraft overnight?

D6: No, they were not.

15 FLTLT ROSE: Was there anywhere to check the alignment when you were at Proserpine?

D6: No, there was not, aside from the pilot check that I referred to yesterday, and physically checking it when you put it on your head.

20 FLTLT ROSE: Paragraph 22 of your Defence statement now, if we turn back to that, you said that you and CAPT Lyon flew a sortie together on 27 July in an MRH-90 formation with some other aircraft.

D6: Correct.

25 FLTLT ROSE: And you did that to do an approach to Lindeman Island, so that you could see the flight path of the next night's sortie. And that it was not strictly required to do this rehearsal, but D10 decided that all aircraft Captains should at least see Lindeman Island prior to that sortie.

30 D6: Correct.

35 FLTLT ROSE: Then you state, at paragraph 26, that a number of aircrew, including CAPT Lyon, LT Nugent, WO2 Laycock, and CPL Naggs, stayed up on 27 July 2023 to do mission planning prior to going to bed at about 12.30.

40 D6: I went to bed at 12.30. I did not observe when the other members went to bed. However, the mission planning had been completed by the time I went to bed.

FLTLT ROSE: Were you in bed before you saw them leave the planning tent?

45 D6: No, I saw them leave the planning tent, prior to going to bed.

FLTLT ROSE: At 28, you state that you woke up at about 8 am on 28 July.

D6: That's my recollection.

5 FLTLT ROSE: Do you recall if CAPT Lyon, or LT Nugent, or Phil Laycock, or Alex Naggs, were up before you?

D6: I do not recall.

10 FLTLT ROSE: And duty start was 1 pm that day?

D6: Correct.

FLTLT ROSE: And orders were about 2.30?

15

D6: I believe the orders were meant to be for 2; however, they slid to 2.30, and were complete by about 3.30.

FLTLT ROSE: Was D1 the member that gave mission orders?

20

D6: Correct.

FLTLT ROSE: At paragraph 31 you state that the briefed minimum visibility required for the mission was 3000 metres, with a cloud base of 1000 feet above ground level.

25

D6: Correct.

FLTLT ROSE: When you say "above ground level" in this instance, do you also mean above sea level?

30

D6: Correct.

FLTLT ROSE: If you could turn back to paragraph 118 of your Inquiry statement, you state that the orders stated that the formation was to make a right-hand turn from the initial point towards the target, and that there was no plan to conduct a hold at the IP because you were going to become airborne on order for extraction from the Ground Force.

35

40 D6: That is correct.

FLTLT ROSE: You were in Bushman 82 for the sortie?

D6: Correct.

45

FLTLT ROSE: Who was your co-pilot, by reference to the pseudonym list?

D6: D5.

5

FLTLT ROSE: And your aircrewman senior?

D6: D8.

10

FLTLT ROSE: And your aircrewman junior?

D6: D7.

15

FLTLT ROSE: Were you sitting on the right-hand seat in the cockpit?

D6: I was.

20

FLTLT ROSE: At paragraph 114 you state that you did not have any concerns about CAPT Lyon and LT Nugent being crewed together for the mission in Bushman 83.

D6: That's correct.

25

FLTLT ROSE: And you had no concerns because you were aware of both of their capabilities and proficiencies?

30

D6: I had no concerns because of the context of the mission. So the mission was reasonably straightforward, and that point was a non-Special Operations profile. CAPT Lyon was an experienced MRH-90 pilot, so I had no real reason to be concerned, to the best of my recollection.

35

FLTLT ROSE: In terms of the timeline – I'm going to jump between your Defence statement and the Inquiry statement – but paragraph 34 of your Defence statement, at 6 pm you signed for the aircraft, conducted pre-flight checks until starting the Auxiliary Power Unit at about 1955, or 7.55 pm.

D6: Correct.

40

FLTLT ROSE: Could you turn to Annex C of your Inquiry statement? These are your handwritten notes. This is your handwriting?

D6: Correct.

45

FLTLT ROSE: If you turn to page 4 of these handwritten notes, the last page, they're dated 30 July 2023.

D6: Correct.

5 FLTLT ROSE: So it's effectively a day and a half after the incident.

D6: Correct.

10 FLTLT ROSE: At paragraph 136 you set out that you wrote these notes on 30 July 2023 in response to some questions that QPS had sent to Aviation Command for aircrew to fill out about the incident?

15 D6: That's incorrect. So the notes that are written were written specifically for the DFSB investigation, or questioning that I was anticipating to happen in or around 1 or 2 August.

FLTLT ROSE: So had the DFSB sent you any questions in advance, or had you just taken it upon yourself to write down the details of the sortie?

20 D6: We were encouraged to write down the details of the sortie as we recalled them. So I made these, essentially, dot point notes to prompt me to be able to talk to when I went through the DFSB investigation.

25 FLTLT ROSE: Did you have these notes before you during that DFSB interview?

D6: Yes.

MS McMURDO: So who encouraged you to make these notes?

30 D6: I don't recall.

FLTLT ROSE: Do you recall if other aircrew involved in the sortie were similarly taking notes themselves of their own recollections?

35 D6: I believe it was a Direction that all of us were to make notes, independent of each other, so that we could provide them to DFSB as part of our interview.

40 FLTLT ROSE: The Direction was from someone in your chain of command?

D6: I believe so, yes.

45 FLTLT ROSE: Was it oral or a written Direction?

D6: My recollection is that it was an oral Direction. I don't recall exactly when or who it was given by.

5 MS McMURDO: Was there any discussion about speaking – taking notes for the Queensland Police?

D6: There was, yes.

10 MS McMURDO: When was that?

D6: Within a week or two weeks after the event. We'd been provided a list of questions that we were told was to go to QPS, which my understanding is the majority of the aircrew did complete the list of questions, which to the best of my recollection were questions about what
15 the weather conditions were, what my position was in the formation; like, points of fact, I guess.

MS McMURDO: Before you left Proserpine, were you given any Directions about whether to speak to QPS or not?
20

D6: No, I don't recall any Direction at all, one way or another.

MS McMURDO: Thank you.

25 FLTLT ROSE: Those notes that you took in response to the QPS questions, who did you hand those notes to?

D6: I don't recall who I handed them to; however, they were collected within the Regiment, because I was under the impression that they were
30 going to be all collated and handed to QPS once everyone had completed those questions.

FLTLT ROSE: Do you know if they were provided to QPS?

35 D6: It's my understanding that they were not.

FLTLT ROSE: Do you know why?

D6: I believe there was discussion about whether we were compelled to
40 give evidence to QPS or not. And I believe the Direction ended up being that, until we were given some sort of compulsion to give a statement, that the advice was that we don't.

45 FLTLT ROSE: Did you take a copy of those responses prior to them being collected for the QPS?

D6: I did not.

5 FLTLT ROSE: Were those notes returned to you when you were preparing your statement for the Coroner?

D6: No, they were not.

10 FLTLT ROSE: I take it you obviously took a copy of the notes that you took with you into the DFSB interview?

D6: I did not. I requested it after my second DFSB interview.

15 FLTLT ROSE: Was that sometime this year?

D6: That was at the tail-end of last year, I believe.

FLTLT ROSE: They gave these notes back to you, or a copy of the notes back to you?

20 D6: Correct.

FLTLT ROSE: But not the originals?

25 D6: No.

MS McMURDO: So could you just remind me, when did you make those notes that were handed to the Queensland Police – that you understand were handed to the Queensland Police?

30 D6: I understand that they were not handed to the Queensland Police.

MS McMURDO: Okay. The notes that you made for the Queensland Police that were not handed to the Queensland Police, when did you make them?

35 D6: Within a week or two after the - - -

MS McMURDO: A week or two afterwards.

40 D6: Correct.

MS McMURDO: And you think all the aircrew involved in the sortie made notes, made similar notes at that time?

45

5 D6: It's my recollection that we were all provided the same Word document template with the same questions on it and asked to provide them back with the intent that they were to – these were the questions that had been asked. And it's my understanding that the majority of the aircrew had completed that prior to us being told that they weren't going to be provided.

10 MS McMURDO: Thank you. Then, as time progressed, before you made the Defence statement on 30 November, did you talk to your colleagues who were involved in the sortie on 28 July about what had happened?

D6: Yes.

MS McMURDO: Can you remember who you spoke to?

15 D6: I obviously spoke specifically with my crew after the event about what had happened. I do also recall talking to D2, specifically, about what I had seen and, more predominantly, about what had happened in the post-event actions. But that's pretty much the majority of what I recall.

20 MS McMURDO: Thank you.

25 FLTLT ROSE: In fairness to you, you do set out, at 135 of your Inquiry statement, that you were interviewed for the first time by the DFSB on 1 August.

D6: Correct.

30 FLTLT ROSE: At paragraph 135 you say you were interviewed by them again on 23 October 2023.

D6: Correct.

FLTLT ROSE: You'd left 6 Aviation Regiment by this stage.

35 D6: Correct.

FLTLT ROSE: Your statement to the Coroner is dated 29 November 2023.

40 D6: Correct.

FLTLT ROSE: Did you have these written notes? Had a copy been provided to you prior to you completing your Coroner's statement?

45 D6: I believe I requested them for my reference to complete the Coroner's statement.

MS McMURDO: Just to clarify, that's Exhibit C we're talking about, the notes - - -

5 FLTLT ROSE: Annex C?

MS McMURDO: In Annex C, rather, yes. Not the notes that never got to Queensland Police, no.

10 FLTLT ROSE: Would you say that the information that's contained within these handwritten notes in Annex C, which you made on 30 July 2023, are more accurate than potentially your memory of certain times that things happened on the day that you've included in your Defence statement or your Inquiry statement?

15 D6: I'd say that when I wrote a lot of these notes I was very fatigued; however, it was to the best of my recollection at the time. And then the previous notes – sorry, the other notes that you referred to that I have compiled have either come from – or based on this handwritten notes that I
20 made on the 30th, text message timings, other stuff that I had subsequently recalled. So I would say that at the time I wrote it on the 30th, that was the best of my recollection.

25 And then subsequently, when I've written all my other statements, it's either been with reference to this or other material such as text messages for timings or mission packs or whatever else that I had available to me. So each time I've written a statement, it's to the best of my recollection.

30 FLTLT ROSE: Understood. I might need your help just to understand some of your – reading your writing in some of the notes.

D6: Yes.

35 FLTLT ROSE: So if we go to the Annex C on page 1, you see at about a third of the way down it says, "82", and then an arrow.

D6: Correct.

40 FLTLT ROSE: And it says, "Formation" something. Could you read what the rest of that sentence says?

D6: "Formation approach was stack left."

45 FLTLT ROSE: And then "stack L", is that - - -

D6: The abbreviation for stack left.

FLTLT ROSE: Is stack left different to heavy left?

5 D6: Correct.

FLTLT ROSE: What is a stack left?

10 D6: I don't think I can talk about that, other than talking, sorry, at an "Official" level.

FLTLT ROSE: So was the formation in a stack left or was it in a heavy left?

15 D6: The intent was the formation to change from the IP to target.

FLTLT ROSE: The Inquiry has heard evidence that for the transit to the IP from Proserpine Airport, the formation was in a heavy left. Is that correct?

20 D6: It is correct.

FLTLT ROSE: And is that why, at the bottom of page 1, the final arrow, it says, "Form initially 400 feet" – arrow – "heavy left".

25 D6: Correct.

FLTLT ROSE: And you've drawn a diagram.

30 D6: Correct. That is the formation and the rough, like, positions that the aircraft should be in, for flying heavy left.

FLTLT ROSE: At the time of the crash, the formation was flying in a heavy left?

35 D6: Correct, because the formation had not passed through the IP to the target.

40 FLTLT ROSE: You say at about point four of the page on page 1, you've got, "Biggest concerns for sortie", and then an arrow. Could you read out your handwriting there?

D6: Yes.

45 *Weather rolling through during the afternoon trending better.*

FLTLT ROSE: And the next point?

D6:

5 *FARP Plan: multiple movements out of order to facilitate priority.*

10 So my biggest concern for the sortie was when we started the APUs we were rolling through the FARP but we were not doing it in a 1 through 4 chalk order, based on the priority of the aircraft and the fuel load we required to complete the sortie. My concern at the time was that, like, FARP Plans can be convoluted and movements in and around the taxiing aircraft can be convoluted. That was legitimately the biggest concern I had for the sortie. I have noted that as the concern for the sortie, because I was trying to list all the things prior to, that I was thinking.

15

FLTLT ROSE: What does FARP stand for?

D6: Forward arming and refuelling point.

20 FLTLT ROSE: So we've heard reference to a hot refuel; is that interchangeable?

D6: Correct, correct.

25 FLTLT ROSE: Then of course the first one is the weather.

30 D6: So that note with the weather, my concern was during the afternoon because there were multiple showers rolling through, but as I note there, it was trending better, like, throughout the evening. So my biggest concerns prior to commencing the sortie were going to be those two things. When I say "concerns" though, like, they are the things that I'm thinking about or focusing on prior to a sortie, not that I was concerned about flying in that weather.

35 FLTLT ROSE: Paragraph 35 of your Defence statement: engine start was at 9.15 pm.

D6: That's what it says in the Defence statement; however – so, yes, that is correct.

40

FLTLT ROSE: Is that APU start, or - - -

45 D6: No, that is engine start. So the APU is the Auxiliary Power Unit. It is an engine in itself; however, it's not the aircraft engines. So I'm referring to we started the APUs and sat with the aircraft powered from 9.55 through

to 9.15, when we started the aircraft engines prior to moving through the hot point.

5 FLTLT ROSE: I think your evidence was 7.55 was APU start, and then - - -

D6: Apologies, yes. 1955, yes.

10 FLTLT ROSE: Sorry, we are switching between different clocks. So after the engine start, that's when you do the FARP – go through the FARP?

D6: That was in this plan, correct.

15 FLTLT ROSE: Did that have any incidents arising?

20 D6: There was one where, as one of the aircraft was about to leave the FARP, the next aircraft had already commenced moving, but it was deconflicted on the radio. And that was exactly the reason why I sort of looked at it and went – the FARP Plan had multiple movements, so that was one of my concerns for the sortie. But it was deconflicted before it actually became a concern.

25 FLTLT ROSE: Which two aircraft were involved in that conflict – potential conflict?

D6: I believe it was 84 and potentially 81, but I don't recall, unless it's written in the notes. Sorry, it is written in the notes. So Bushman 81 and Bushman 84.

30 FLTLT ROSE: Paragraph 36, at 10 pm, that's when the call for extraction came from the Ground Force, and all four aircraft took off in formation at about 10.15 pm?

35 D6: Approximately, yes.

FLTLT ROSE: You state that there was low cloud over terrain along the mission route, so D2 elected to go around the weather, over the water, clear of the cloud.

40 D6: Correct.

FLTLT ROSE: And then you rejoined the planned route overwater, prior to the initial point.

D6: Correct. There was scuddy low cloud in and around the coastline, so the decision was made to avoid it, to fly in clearer air.

5 AVM HARLAND: Just a question, just before we go on to the actual sortie itself. I'm just curious to understand what's going on in the time from 6 pm, when you signed for the aircraft. You conduct your walkaround, then you start the APU at 7.55. So, you know, almost two hours has elapsed since you signed for the aircraft. Then, further on, another hour and a quarter before engines are started and you go to the hot refuel point. So, by 10 my kind of calculations, it's four hours between when you signed for the aircraft and you take off. Could you elaborate on what's going on? That seems like an awfully long time.

15 D6: So we typically wouldn't have had that amount of time between the finishing of orders, signing for the aircraft and then starting. It actually was kind of a nice change to have a little bit more, I guess, decompressed timeline prior to starting the mission. Once I'd signed for the aircraft, I sort of, I guess, took things at my own pace. But we had to walk down to the aircraft, which was, I think, approximately just less than a kilometre, with 20 all our equipment, and then do the pre-flight. So it would've taken in and around 20 to 30 minutes, so it would've been part of that timing.

25 And then I recall sort of sitting around for about 30 or 40 minutes at the aircraft, talking to other aircraft crews, and my own crews, prior to starting the APU. The reason why the APU started at 1955 is because we were on order for extraction. So anywhere between or after 1955 we were on the hook to become airborne. So the plan was that if we had not been called for extraction prior to the 2115 time of the engine start, we would then start the engines and become ready to extract on a subsequent timing.

30 So we were on order to a point. And then after a time, we were then starting to go anyway.

35 AVM HARLAND: Okay, thank you.

FLTLT ROSE: Were you in a mission bubble at any time during that four-hour period?

40 D6: Yes, I would describe that whole thing as a mission bubble. The idea of the OC's hour, or mission bubble, is for you to be able to achieve whatever you want to achieve prior to, I guess, commencing the sortie, like, to give you free space so you're not rushed going into the sortie.

I'd describe that as being, like, probably the biggest mission bubble. So we had plenty of time to be able to have something to eat, do what we needed to, without feeling compressed prior to going into the sortie.

5 FLTLT ROSE: Did you have your RADALT, or your radar altimeter, engaged from the commencement of the flight?

D6: So the RADALT would've been engaged in my aircraft, to the best of my recollection, the moment we went overwater. Typically, you do not use
10 RADALT overland because of the undulating terrain and the way the RADALT works.

FLTLT ROSE: You did describe that to the Inquiry yesterday, in terms of how it works, but in specifics, if you can remember about this sortie, do you
15 remember what you set it at?

D6: So just a point of clarification, the RADALT is set at whatever height that you want to maintain. It's an autopilot function. Are you referring to the DH and what height that I'd set that?
20

FLTLT ROSE: Yes, thank you.

D6: So that is clear, the RADALT is an autopilot function which holds the height of the aircraft. The decision height is an indication that gives a visual and audible warning if you descend below that height. The systems are
25 completely separate. I set the DH to 180 feet, which was 10 per cent below the minimum authorised altitude for the sortie, which is standard. So we were authorised "not below 200 feet", so I set 180 foot.

FLTLT ROSE: Do you recall what your co-pilot set their decision height at?
30

D6: I do not recall specifically what he set; however, it would've been my expectation that I checked that he set 180.
35

FLTLT ROSE: Do you specifically recall that being part of your pre-flight checks, or is that a standard part of your pre-flight checks?

D6: It's standard.
40

MS McMURDO: So did you set the decision height as well at that time?

D6: Yes, that's what I just referred to. So the decision is set prior to departure to that 20 per cent – sorry, that - - -
45

MS McMURDO: To 180?

D6: Yes.

5 MS McMURDO: So you engaged the RADALT once you were overwater. So the RADALT was engaged at 200, was it, or 180?

10 D6: The RADALT was engaged at whatever height I was when I went overwater, and I believe it was four to five hundred feet. So the RADALT will hold the aircraft at whatever height that I engage it. The decision height just lets me know when I descend below whatever I've set the decision height reference to.

15 MS McMURDO: Sure. I understand.

FLTLT ROSE: In terms of the moon illumination, at paragraph 38 of your Defence statement, you state that is was about 60 per cent.

20 D6: Correct.

FLTLT ROSE: And then on Annex C, your handwritten notes on page 1, you note that it was about 50 per cent.

25 D6: Correct.

FLTLT ROSE: And you say, "Not bad illumination".

D6: Correct.

30 FLTLT ROSE: So was it 50 or 60 per cent?

35 D6: I don't recall the number, but I recall it being between 50 and 60 per cent, and the reason why I didn't specifically put something was 50 to 60 per cent is actually quite good moon illumination for NVD flying. So I didn't recall the specific number in hindsight. I just recalled that at the time, the illumination of the sortie – sorry, at the time the sortie was planned for, the illumination was good.

40 MS McMURDO: Could I just clarify? So you're overwater at four to five hundred feet, was where you would initially set the RADALT. Then you say, in paragraph 39, "We descended to 200 feet".

D6: Correct.

MS McMURDO: So does the RADALT adjust automatically or do you have to reset at that point?

5 D6: So it depends on how you're using the system, but we would reset it to maintain the height that the aircraft is stabilised at. So descending from four to five hundred feet to 200, I would re-engage – or I'd have it engaged the entire time and re-reference it at the new height that I'm maintaining.

10 MS McMURDO: New height. Thank you.

FLTLT ROSE: If you can turn to those handwritten notes, but page 2 of them? You've got "82" and then an arrow. Can you read out your writing there?

15 D6:

Co-pilot had some difficulties with position overwater with station-keeping.

20 FLTLT ROSE: And the next arrow?

D6:

25 *I monitored and coached. Tended to be slightly high or missing altitude changes.*

FLTLT ROSE: Can you explain what you mean by that?

30 D6: So my co-pilot was maintaining a reasonably good position when it came to the spacing and the forward or aft line in the station-keeping. However, a few times during the sortie I noted that they were maintaining a position that was slightly higher than what they should have been. It was high enough for me to note it because I figured the flight data would probably also support that, and that I actually had to actively monitor it.
35 And a few times we spoke about reasons why he would have been high and just I, essentially, coached him back down onto the plane of reference that he needed to be at.

40 FLTLT ROSE: If your contract, as 82, is to keep to your appropriate distance from 81, and 83 has the contract with 82, if you were high in 82, is it reasonable to say that 83 would also have been high?

45 D6: Yes or no; it depends on how high, I guess. As 83, if I was watching 82 and every now and then they were sort of deviating to be slightly high and then coming back down – which we were in the first part of the sortie

– I would be trying to hold a reference and just let them do that. I would be maintaining my height with reference to position A1. It depends on the size of the deviations.

5 There was only one deviation that we had on a descent because we missed a descent – as in, like, we missed the commencement of the descent, so we were slightly higher. That would probably have led them to be slightly higher than us because they probably would have missed the start of the descent as well. That was descending from 500 feet to 200 feet, and that
10 was approximately five to 10 minutes before we reached the IP.

FLTLT ROSE: Was that missed because you were going through a shower at that stage?

15 D6: I believe it was missed because we were going through a shower at the stage and we were – while you’re flying formation, you don’t announce every single manoeuvre; like, whether it’s a climb, or descent, or decel, or speed increase. So I think part of it was that my co-pilot wasn’t expecting it initially and just missed the attitude change, and part of it was that we
20 were going through a shower at the time, which sort of reduced the contrast in that period, which I think made it just a little bit harder to pick up on the cue of 81 for the descent.

FLTLT ROSE: Did you ever lose visual of 81?

25 D6: No, we had 81 the entire time. I was flying across cockpit; that is, I was in the right-hand seat. I had looked next to me, my co-pilot, and the 81 was on the left-hand side of the aircraft, so I was looking across the remainder of the cockpit. We were in a position where we were slightly
30 high, but not high enough that I lost sight. So we wouldn’t have been that high at all, really, compared to 81. If we’d been much higher or started losing sight, then I probably would have taken over to try and correct that prior to us losing contact with the formation.

35 FLTLT ROSE: So you didn’t take over as the flying pilot at any stage from lift-off until the crash with 83?

D6: Correct.

40 FLTLT ROSE: When you mentioned “low contrast” just then, can you explain what you mean by “low contrast” and how that affects situational awareness?

45 D6: So low contrast is – like, contrast is the ability to distinguish features on NVD, is what I’m referring to. So the ability to make out terrain, the

ability to make out a horizon or other features. A low contrast is a lower ability to do that. So when we were passing through the showers, I'm comfortable that the visibility was more than 3000 metres based on other things that I could see, and other points of terrain. However, the contrast
5 had reduced, so it appeared slightly darker when we passed through those showers. So slightly more difficult to make out terrain or, in the case that I'm referring to, probably the reason why we were high on the descent was it was slightly more difficult to make out the horizon.

10 FLTLT ROSE: And did that contrast improve once you passed through those showers?

D6: It did, yes.

15 FLTLT ROSE: Did D5 mention that to you as a concern for him as to why he perhaps was high?

D6: Yes, he did. So mentioned that, and also where his horizon line was sitting in the symbology versus the actual horizon line, though we had
20 discussed ways to, I guess, manage it and re-reference his position so he could maintain the right plane of reference.

FLTLT ROSE: Do you think that you gave him the opportunity to correct that issue and you coached him back into the correct station-keeping
25 because you were QFI? Was that your instinct?

D6: Correct. But it's also part of being, like, an experienced Aircraft Captain flying with a junior pilot. So the ability for them to experience something that they may not have experienced before – because it's
30 important to keep in mind the context of, like, I guess, a Squadron. We're not – while everyone is qualified, everyone may not have done something for the first time at some point. No one gets qualified in "formation". There's no tick in the box for "formation, overwater, at night, on NVD". So all these things are once you are qualified, you are given the ability to
35 experience them for the first time, and part of that is doing it with experienced pilots.

So there has to be some sort of ability, I guess, for a pilot to experience it, potentially make a mistake or to be coached back into a position. That's
40 kind of what a Squadron is. It's a varying level of experiences. And in 2023, we had quite a lot of people who had not experienced stuff like that, and that was part of what we were trying to do, was give people an opportunity to sort of fly in different conditions and get exposed to different things.

45

FLTLT ROSE: So was your expectation that if someone was an Aircraft Captain but not a QFI, they would also give a co-pilot similar to D5's abilities, and in that situation, the ability to rectify it themselves?

5 D6: Correct. I was not acting as a QFI on the night, but I was acting as an experienced Aircraft Captain. As a QFI, I'm teaching something, so there's a lesson plan. I'm going about my instructional techniques. There is usually some form of, like, demonstration and monitoring. What I'm describing is Aircraft Captaincy and mentoring.

10 FLTLT ROSE: At paragraph 41 you state that you heard D2 and D10 discussing some changes to the route, so the formation would hold at the initial point until the showers near the initial point had passed. And then that D2 announced that you would enter the hold via a non-standard left-hand turn?

15 D6: Correct.

FLTLT ROSE: So you heard all of that over the comms.

20 D6: So the discussion could only take place over the radio because obviously D10 and D2 were in two separate aircraft. As we approached the IP, we could see the showers that were essentially going to be in the way. And it wasn't just that they were going to be in the way for the route, it was also going to be in the way for us coming back out. The showers needed to have completely moved out of the way, and that was part of the discussion that was taking place.

25 So D2 recommended that we hold so that we could wait for the showers to pass, so that we had a clear route to the objective area. D10 agreed. I thought it was a good decision because approaching the IP, you could see that those showers were something that we were probably going to have to pass through if we continued on that route. So instead of making the right-hand turn, as had been briefed in orders, it was briefed on the radio, after that discussion, that we would turn left and then enter a hold to wait for those showers to pass.

30 FLTLT ROSE: I am going to list some factors and you can tell me whether you agree or disagree whether the changes in these factors cause difficulties during the sortie. So we've heard evidence that there were some unexpected events, including some changes to the briefed route; and they were that you commenced flying overwater earlier than expected, to avoid some weather that was over terrain. Is that correct?

35 D6: I agree that that happened.

5 FLTLT ROSE: That happened. Just agree that these factors happened and then you can tell me you agree or disagree with the proposition at the end. Then you went into a hold instead of flying from the IP straight on to target?

D6: Correct.

10 FLTLT ROSE: You conducted some left-hand turns instead of turning right?

D6: Correct.

FLTLT ROSE: You passed through some showers?

15 D6: Correct.

FLTLT ROSE: You'd had an issue with your co-pilot maintaining the correct height in the formation when commencing the descent from 500 to 200 feet?

20 D6: Correct.

FLTLT ROSE: And your co-pilot had some difficulty seeing the horizon due to a low contrast.

25 D6: Correct.

FLTLT ROSE: Had the combination of these factors caused additional stress for you or your co-pilot in the cockpit?

30 D6: I don't believe so because they all happened in isolation after each other. And each one of them individually, I don't think, was actually a significant event.

35 FLTLT ROSE: Was it fatiguing to have to depart from the briefed plan mid-flight?

D6: No, that's standard. It's part of, I guess, being in a military aircraft, having to either manage a plan or come up with a new plan. It's no less fatiguing than remaining on the plan, in my opinion.

40 FLTLT ROSE: At paragraph 43 you state that the contrast was low. Is this when you were conducting the left-hand turns in the hold?

45 D6: No, the contrast was low in vicinity of the showers.

FLTLT ROSE: So prior to conducting the turns?

D6: Correct.

5

FLTLT ROSE: Were you able to maintain a horizon when you were conducting the turn?

D6: We were, yes.

10

FLTLT ROSE: If you can turn back to page 2 of the handwritten notes, there's just something else I can't quite make out the handwriting? If you can assist me? It's at about point 7 of the page. It says, "Form commenced left turn", and then an arrow.

15

D6: "15 degrees angle of bank, 200 feet AGL" – above ground level.

FLTLT ROSE: Then the next line, "Approaching, rolling out"?

20

D6: "Approaching rolling out, heard 83, 'Come up, come up, come up'", which, in hindsight, I think was, "Pull up, pull up, pull up". However, it caught me by surprise, so when I wrote it, all I heard was something "up". As in what I expected – sorry, what I heard, the way I interpreted it was 84 telling 83 to essentially pull up.

25

FLTLT ROSE: You said "rolling out"?

D6: Correct.

30

FLTLT ROSE: We've heard some evidence – the Inquiry has heard evidence that it was like a racetrack, where you were doing a left-hand turn, then a straight part, then a left-hand turn, then a straight part.

D6: Yes, that is exactly what a hold is.

35

FLTLT ROSE: And what's the "rolling out"?

40

D6: Rolling out of the turn. So we're in the second turn, so the second 180 degree turn, when I heard 84 call over the radio, "Pull up, pull up, pull up". It was roughly halfway through the turn, or beyond halfway through the turn. And as we had sort of commenced the roll-out, that was when I witnessed the explosion off the side of my aircraft.

45

FLTLT ROSE: So it was not on the straight section of the hold, it was on – coming out of one of the turns.

D6: Correct. Rolling out to commence a straight section of the turn – sorry, of the hold.

5 FLTLT ROSE: How many rotor diameters were you to 81?

D6: My recollection was that my aircraft was level, approximately two to three rotor di, but in a stable position on 81. So we were – we hadn't, since the showers, had any issues maintaining the height. And D5 was, as I
10 mentioned before, doing a pretty good job of maintaining an even spacing and position fore and aft on 81.

FLTLT ROSE: Had you briefed to be two to three rotor di's prior to reaching the initial point?

15 D6: We had briefed that the rotor diameter minimum distance for the sortie was two rotor diameter. There was another rotor diameter briefed that was minimum for flare dispense. I believe it was either seven to nine rotor di. I would have to refer to the Flight Manual to see what that was. I don't
20 recall exactly what it was. But the point is that it was an extended rotor diameter. And that once we had gone through the IP, it was that we would be pinching up, so moving back up to two rotor di.

FLTLT ROSE: Was the flare dispense planned to be after you'd extracted the Ground Force?

D6: Correct. So the flare dispense sequence was going to be after the extraction and then announced over the radio. There were only two aircraft in the formation that were carrying flares: 81 and 82.

30 FLTLT ROSE: Were your flares armed?

D6: At the time, I don't recall whether they were armed or not. However, after the event, I confirmed that they were unarmed.

35 AVM HARLAND: Could you just clarify? The seven rotor diameter spacing – or seven to nine, as you called it – for carrying flares, was that related to the flare dispense or when the flares were armed?

40 D6: So it was the minimum distance for the flare dispense. So because we weren't actually planning to do the flare dispense, I had no issue moving up into the two rotor diameter. It was just physically for the flares to be dispensed off the aircraft ahead of you.

45 AVM HARLAND: Okay.

D6: If you're any closer than that, then you could potentially conflict with the flare.

5 AVM HARLAND: Thank you.

FLTLT ROSE: In the heavy left formation, you're 82, so you're the furthest to the right?

10 D6: Correct.

FLTLT ROSE: When you're conducting a turn, is it the case that you have to increase your airspeed or increase power to keep the formation as you're conducting the turn?

15 D6: You have a few different things that you can do. But if you maintain your position, then you will probably have to increase your speed slightly to match, I guess, the extended ground track. And you have to increase power the moment you change your attitude in the MRH-90.

20 The other option you've got is you could sort of turn in a little bit tighter to 81, if you so chose to, which meant that you could probably maintain a closer speed. You'd still have to increase power to do that. In this turn, for example, what I recall is that we maintained our position, so our speed would have had to have increased by a couple of knots just for the additional ground track.

25 FLTLT ROSE: So you hadn't moved within your arc of freedom closer, pinching into the formation during the turn?

30 D6: No, we had not. My recollection is that we were maintaining our position wide on the arc – like, the formation position.

35 FLTLT ROSE: You don't know what 83 was doing on the turn, whether it was also maintaining its position or whether it was moving within its arc of freedom?

D6: I can't physically see 83 when I'm flying in 82.

40 FLTLT ROSE: At paragraph 128 of your Inquiry statement you set out that the weather on the night was challenging but certainly not the worst you've experienced, nor was it unsafe to operate in.

45 D6: Correct. The more challenging part of the night, in my opinion, was actually after the event. The moon went down. It was more overcast,

although the showers had disappeared. So it's my recollection that the conditions actually got worse about an hour or so after the event, when I was conducting my search.

5 FLTLT ROSE: When the cloud comes over, does that also – it reduces the illumination, I take it?

D6: Reduces either the illumination you get through the – from the moon, or from ambient or starlight, I guess. So I guess both those things
10 happened. The moon had gone down by the time we were in the search and there was, to my recollection, a little bit more cloud cover, so it became darker.

FLTLT ROSE: Does that mean that the contrast is lower?
15

D6: It's my recollection that it was, yes.

FLTLT ROSE: And that makes it more difficult to find a horizon?

D6: It can do, yes.
20

FLTLT ROSE: Do you think that D5 found the weather challenging prior to the crash?

D6: I believe he did. He was also focusing on flying the formation. So, like, that can be quite a heavy workload, to maintain your position. And you also don't have a huge amount of situational awareness outside of sort of following the aircraft in front of you. And based on sort of, I guess, maintaining that – or the work he was doing to maintain a descent position,
30 and occasionally being higher, I would say that he was working hard.

FLTLT ROSE: So the flying pilot, in that situation, descending and you're coming up to the initial point conducting the hold, that would've been potentially a higher workload for the flying pilot than the non-flying pilot, in that situation?
35

D6: In that situation, yes. So particularly for my co-pilot, like, maintaining the position, versus what I was doing, which was observing, I had a lot more situational awareness and I was not physically on the controls. So, in our
40 aircraft, I would say that the flying pilot was working harder.

FLTLT ROSE: After you heard 84 say words to the effect of, "83, come up, come up, come up", you saw a bright flash on the right side of the aircraft, and then you heard 84 say, "Knock it off, knock it off. Fallen
45 angel. 83 has hit the water".

D6: Words to that effect, yes.

5 FLTLT ROSE: Did you say you saw a bloom through your HMSD?

D6: No, I saw my side of the aircraft physically illuminate outside, underneath my goggles. So it was a lot of bright yellow, like, explosion.

10 FLTLT ROSE: And you state in 47 of your Defence statement that you took over flying as the flying pilot at that point.

D6: Correct.

15 FLTLT ROSE: Why was that?

D6: Quite a few reasons, but mostly because I had the situational awareness, I was the more experienced pilot, and something terrible had just happened. And I wanted to be able to fly because I knew that I had the capacity to fly and take in some of the information, and confirm with my crew what they had just seen and how they were all going.

20 FLTLT ROSE: At paragraph 48 you state that 84 instructed 81 and 82 to land on Lindeman Island.

25 D6: So initially we were instructed – sorry, initially I don't recall if we were instructed, or not, to hold. But I followed 81 further to the east, clear of the showers that were in the vicinity of the IP. I believe it was further to the north-east. Obviously, the ground track will tell us exactly where that would be in the flight data. However, we held for what I recall to be approximately five minutes or so, as a two-ship packet, while 84 initially commenced a search over the impact area. Then 84, during that, instructed us to proceed to Lindeman Island.

30
35 Lindeman Island, separate to the objective area that we were going to land at, had an airfield – an old, grassed airfield. So we proceeded an extended pathway around where the showers were, and landed at the airfield as a two-ship packet, and waited on the ground for further instructions.

40 FLTLT ROSE: You state that you were on the ground for about 10 minutes before 84 instructed 82, your ship, to return to Proserpine to refuel?

D6: Correct. At the time, 81 and 82, we'd started talking between the two of us about potentially returning to Proserpine either as a two-ship packet, or individually, doing instrument approaches. So separately, two independent call-signs. As we were sort of looking at what those options

were, I was instructed by 84 to return for fuel and 81 was to remain on the ground at Lindeman Island, ready to take over the search from 84. So I was instructed to go hot refuel and have as much fuel as I possibly could, given my aircraft performance, to enable a search, if required.

5

FLTLT ROSE: So the sequence was that 81 took over from 84 over the impact site. You refuelled and then, after a period of time, you replaced 81 on top of the debris field - - -

10 D6: Yes.

FLTLT ROSE: - - - to continue search and rescue.

15 D6: So I returned to Proserpine via what was going to be our return route, which was a lot further south, away from the terrain, because the majority of the weather was still over the coastline. I landed at Proserpine and conducted a hot refuel. Once I'd completed the hot refuel, I called 84 to tell him that I'd completed the hot refuel. He had already, in that time – I heard vaguely in the background – but in that time had already asked 81 to replace
20 him, and he was returning or about to return to Proserpine.

I told him which way I'd gone back, and he instructed me to head to Lindeman Island, to land, to wait for further instructions, and essentially, I guess, support 81. So I did; I returned again via the reverse of the return
25 route that I'd just taken. I passed 84 as they were on the way back to Proserpine, and landed at Lindeman Island. We were approximately there for about 15 minutes. I got out of the aircraft to let the ground party on Lindeman Island know that we were not going to be extracting them, and essentially updated what had happened.

30

And when I got back in the aircraft, I believe we had about five minutes or so, I guess, prior to us taking over our search of the impact area.

35 MS McMURDO: Yes, we were about to have the lunch break anyway.

D6: I'm happy to continue for a second. We conducted the search for approximately three hours. In that time, once we replaced 81 and started our search, 81 returned to Proserpine and got a hot refuel. I believe they went down to the APU and essentially waited for us. We searched for about
40 three hours over the impact area. There was a coordination piece between the ground party, other aviation assets, and boat assets. I continued to update D10, who at that point had shut down and was in the Headquarters.

45 When I got closer to a lower state of fuel, D5 had been sort of, I guess, keeping tabs on fuel and return routes. At our last safe possible moment,

we gave 81, like, our remaining time on-station, and they replaced us in the search. We landed, hot refuelled again at Proserpine, and then shut down to the APU and essentially covered 81 for another hour and 45 minutes, until they subsequently handed over the search to a civilian fixed-wing platform. And we shut down once they were effectively safe, on the way back from the search themselves.

FLTLT ROSE: And that was about 5 am that morning, on the 29th?

D6: Yes. My recollection is that we landed somewhere in the vicinity of about 3 to 4 o'clock, and spent about an hour and 45 on the APU. And by about 5 o'clock, I'd shut down and had gone into the Headquarters element to, I guess, back brief what we had just done.

FLTLT ROSE: The fixed-wing civilian aircraft that took over the search and rescue, was that an Australian Maritime Safety Authority aircraft?

D6: Yes, it was an AMSA aircraft.

FLTLT ROSE: Did the ADF have a search and rescue team stationed at Proserpine for TALISMAN SABRE, specifically to respond to incidents that might occur on the exercise?

D6: I believe that they were there for specific parts of the exercise. So it's my understanding that Capricorn Rescue helicopter, which did respond at points during the night, was there to cover at different times of the activity, higher risk parts of TALISMAN SABRE. So, for example, I think if there was any live fire would be an example, but parachuting, that sort of thing. They weren't specifically there to cover the Aviation asset.

FLTLT ROSE: Were they at Proserpine on the 28th?

D6: I can't recall if they started at Proserpine. I believe they might have already been on some other job. They first appeared in the vicinity – or in and around the time 81 and 82 did the first handover. And I ended up sort of deconflicting with them for, like, the search. They disappeared to Mackay, I believe, for fuel at one point, and then came back towards the tail-end of my time in the search.

FLTLT ROSE: Then you left Proserpine on 29 July. Do you recall what time of day you left Proserpine?

D6: It was sometime in the late afternoon.

FLTLT ROSE: That was on a Hercules, back to Richmond?

D6: It was, yes.

5 FLTLT ROSE: Did you see any QPS Officers at Proserpine prior to you leaving?

D6: Not that I recall, but I at that point was pretty exhausted and not particularly interested in what was going on, I guess, in the periphery.

10 FLTLT ROSE: Did you know whether the camp was being collapsed around you?

15 D6: The camp was already being collapsed prior to – or there was movements in and out prior to the event. But I don't specifically recall that the camp was being totally collapsed as a result of the event.

FLTLT ROSE: Had you been able to recover your personal items from the sleeping quarters prior to getting on the Hercules?

20 D6: I had, yes.

FLTLT ROSE: And the sleeping quarters hadn't been collapsed by the time you left.

25 D6: No, it had not.

FLTLT ROSE: The Operations tent?

30 D6: I believe the Operations tent had been quarantined. So all of the planning documents, all of the documents associated with the control of the search had been quarantined. So I guess in that regard it had been collapsed.

35 FLTLT ROSE: You state that you didn't get to sleep until early on 30 July?

D6: Yes. Like, early in the morning.

FLTLT ROSE: So you'd been awake for 44 hours straight by that point?

40 D6: That's what I worked out, in hindsight.

FLTLT ROSE: Did you go into Holsworthy on 30 July?

45 D6: Yes, later in the morning I paraded at Holsworthy.

FLTLT ROSE: That's when you wrote these notes?

D6: Correct.

5 FLTLT ROSE: You state that you were required to parade at Holsworthy for the next seven or eight days?

10 D6: Correct. I believe at the time the Regiment was trying to, I guess, update us on what was going on with the search, but also I guess monitor and provide support services to us. There was obviously the interviews and all that sort of stuff that was going on in that period as well.

15 FLTLT ROSE: Then you asked if you could take some time off, and you did take a week off?

D6: My wife was not in the state, so it was important to me, after that, to go home.

20 FLTLT ROSE: Do you think it would have been better if you'd been allowed to take off some time immediately after the incident?

25 D6: For my – I guess, for me personally in the situation I was in, it probably would have been better. However, given all the things that needed to be achieved, as in interviews and all that sort of stuff initially, potentially not. I was also in a unique position where my wife was not in the same state, so – yes.

FLTLT ROSE: Those are my questions.

30 MS McMURDO: Thank you. There will be applications to cross-examine, I gather. Could you just indicate who will be wishing to cross-examine, and the timeframe?

35 LCDR GRACIE: I'd be 10 to 15 minutes.

LCDR TYSON: Ma'am, I'd be a similar time.

MS McMURDO: Any other applications to cross-examine?

40 SQNLDR NICOLSON: Same time.

MS McMURDO: Sorry?

45 SQNLDR NICOLSON: Same time.

COL GABBEDY: Five minutes, ma'am.

COL THOMPSON: Five minutes.

5 MS McMURDO: That's all? Yes. So that gives you some idea of cross-examination after lunch. So we'll adjourn now and resume at 1 o'clock.

10 **HEARING ADJOURNED**

HEARING RESUMED

MS McMURDO: Yes.

5

<CROSS-EXAMINATION BY LCDR GRACIE

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

15 D6 , my name is LCDR Malcolm Gracie. I represent the interests of
CAPT Danniell Lyon. Could I ask you, just as an ancillary matter, to go to
your addendum statement, Exhibit 53B, paragraph 94 at the top of page 19?
And you may have an answer to this. If you don't, no problem. But you
said, after one minute 20 seconds, when you made it over to Bushman 82's
position – this is in relation to the Jervis Bay incident in March '23 – you
said:

20 *I was surprised to see it upright on the water and floating with
rotors stopped.*

Can you explain what caused that surprise?

25 D6: When I responded to the Bushman 82 ditching, what triggered me to
respond to that was a mayday call. The mayday call was, "Mayday.
82 going in". I took that to mean that the aircraft was crashing into the
water. I thought the entire crew would be dead and I thought the entire
aircraft would have entered the water and it had disappeared, or be at least
30 upside down.

If you Google any helicopter ditching, I guarantee you that nine out of
10 findings will be a picture of a helicopter upside down. So I was
surprised to see that it was upright and floating, because my initial
35 assessment was that that aircraft had crashed.

LCDR GRACIE: That's really the source of my question. Because the
fact that it was upright suggests that the usual HUET training that you do
means – sorry, I'll withdraw all that. The HUET training you do is for the
40 underwater egress of an overturned or – an aircraft that's ditched, that's
overturned.

D6: Correct.

LCDR GRACIE: And that is the conventional design feature of the floats, that the aircraft is to roll and float upside down?

5 D6: I wouldn't say that. I would say that the floats are designed to keep the aircraft as close to the surface in any condition, whether it be upright or upside down. I think obviously upright, as this case showed, is ideal. And the HUET training goes upside down because that's probably the most likely outcome. It's also the worst outcome. So the training is tailored to the worst outcome.

10 Lcdr GRACIE: So the floats, when they're engaged, don't force the aircraft upside down?

15 D6: No, they do not.

LCDR GRACIE: That's by reason of the impact or something, is it?

20 D6: Correct. In this case, the aircraft was controlled onto the surface of the water and was able to stay upright, versus an aircraft that was out of control or rolling as it hits the water.

25 Lcdr GRACIE: Thank you, that's helpful. Could I ask you to just go to your notes, Annex C to the same statement? And I appreciate the sensitive nature of this, so if you can't answer it, that's fine. You've mentioned that the formation approach was, as far as the mission plan was to go to, to stack left?

D6: Correct.

30 Lcdr GRACIE: It became a heavy left.

D6: It didn't become a heavy left. We never got to the point where the formation was going to change into the landing formation.

35 Lcdr GRACIE: Is that – and again, just be careful here – is that the difference between a standard formation and a Special Ops formation, that there's a change from one to another at a particular point?

40 D6: Not necessarily. And I just want to point out that obviously we were not doing a Special Operations mission on the night.

LCDR GRACIE: So not even at the IP point, it doesn't change into a Special Ops at that point?

45 D6: No, it does not.

LCDR GRACIE: If you just go over the page to 2 of 4, and at about point 3 on the page, it says “Form” for formation? What’s that word there?

5 D6: Are you talking about the second time I wrote “Form”?

LCDR GRACIE: Sorry, yes.

D6: “Form descended straight line to 200 feet.”

10

LCDR GRACIE: This is before the hard left turn?

D6: There was no hard left turn; there was a formation turn. It was prior to us reaching the IP where I briefed that we descended from four to five hundred feet down to 200 feet.

15

LCDR GRACIE: But this was effectively a holding pattern, wasn’t it?

D6: What are you referring to, the descent?

20

LCDR GRACIE: No, the turn that was subsequent to this descent to 200.

D6: The descent to two happened – sorry, the descent to 200 feet happened five to 10 minutes prior to reaching the IP.

25

LCDR GRACIE: Yes.

D6: And, as I described in my statement, the turn to the left was effectively entering a hold which had been pre-briefed, prior to reaching that point, by the flight lead.

30

LCDR GRACIE: And did that pre-brief require that hold to descend from 500 to 200?

35

D6: No. We were descending from 500 to 200 feet prior to the decision to enter the hold. The mission was to be conducted – the mission run-in, from IP to target, was to be conducted at 200 feet.

LCDR GRACIE: So it’s on the approach to the IP, and then, for various reasons that have been explained, the formation went into the hold?

40

D6: It was prior to reaching the IP that we decided to enter the hold and not continue with the approach to the target, yes.

45

LCDR GRACIE: You were waiting, effectively, for?

D6: The weather to move out of the direct line between where we had the IP and where the target run-in was.

5 LCDR GRACIE: And so was any part of the decision to go from 500 down to 200 at that point, as far as you're aware, weather-related?

D6: No, it was not. It was going to happen at some point during the sortie, anyway. The altitude that was briefed in mission orders to conduct the
10 approach to the target was at an altitude of 200 feet.

LCDR GRACIE: And in terms of the seven rotor di's, was the formation, prior to going into the hold, at seven rotor di's and then it pinched up, or was it always at something less? You said between two to three?
15

D6: So my aircraft had pinched up two to three, in vicinity of when we passed through those first showers prior to the descent.

LCDR GRACIE: And do you mean pinched up from seven to two to three?
20

D6: We were approximately – we were – I'm trying not to use terms in a document – we were looser or we were wider than two to three initially, but I elected to get my co-pilot to become closer to 81, to make it easier for him to hold the formation position.
25

LCDR GRACIE: When you said you were "looser", does that mean that 82 had drifted away from 81?

D6: Pre-briefed in the mission orders, after the departure we had a distance that we could operate in; it was "no closer than two rotor di". It was a wider distance than that.
30

LCDR GRACIE: Was it seven, though?

D6: Seven was the briefed – it was either seven or nine. As I pointed out, I can't recall. That was the "no closer" distance for us to dispense flares.
35

LCDR GRACIE: And just let me get this right, if I can. You've mentioned that, at the start of the descent there was a little bit of a lag in terms of the visual cue that was observed by the flying pilot?
40

D6: Correct.

LCDR GRACIE: And was it also at this time that 82 was a bit loose in terms of its distance from 81?
45

5 D6: No. By that point, we were already at the three rotor di mark – like, two to three rotor di. So we’d already moved into that closer position, and that’s where we stayed for the remainder of the sortie.

LCDR GRACIE: And was it moving into the two to three rotor di distance that enabled you to keep that visual contact with 81, or was - - -

10 D6: That was - - -

LCDR GRACIE: - - - 81 always within visual contact?

15 D6: 81 was always within visual contact. You can’t fly formation without being in visual contact with each other. It was to get closer to the aircraft in front of me, to better pick up the attitude changes and visual cues when flying in formation.

LCDR GRACIE: So can I just tease this out a bit? You could go as far out as seven, but - - -

20 D6: No.

LCDR GRACIE: No?

25 D6: I’m not going to talk to the distance that we were authorised or we were briefed to go out to, but I was no closer than two rotor di. And when we were going to do the flare dispense, it was no closer than the seven or nine – that I can’t remember – whatever the number was, but it was a pre-briefed “no closer than” for the flare dispense.

30 Lcdr GRACIE: But the two to three rotor di’s that 82 was flying, relative to 81, was to assist in the visual cue of observing 81?

35 D6: Yes. As the pilot in command of the aircraft, I – we’re given a range to fly. So, in orders, we were briefed distances, but that included a “no closer” distance. As I approached – sorry, as we went through the sortie and as I was assessing what was going on, I elected to use my authorised and briefed distances to close up to my “no closer than” distance, to make it easier for my aircraft to maintain my position.

40 Lcdr GRACIE: And you mentioned that when you were rolling out of that second 180 degree turn and you heard D10 saying, “Pull up. 83, pull up”, were you aware, from anything from the lead pilot in 81, whether or not that hold was to be continued, or was that end of the hold?

45

5 D6: So that was the second 180 degree turn. We would've been going inbound towards the target at that point, so further north than where the initial point was. We would've found out, if we were going to continue in the hold, if we'd started a third left-hand turn to continue in the racetrack. So there'd been no indication that we were going to continue. However, based on where the weather was, it was my expectation that we were probably going to hold for another five to 10 minutes.

10 So there was a reasonable expectation that I was going to be doing more left-hand turns – or, like, right-hand turns, depending on what was going on with the weather, but continuing doing right-hand – sorry, continuing doing racetrack patterns, holding in that general location, clear of weather.

15 LCDR GRACIE: I just want to ask you something about what you referred to – sorry, just give me a moment. You referred, in your evidence, to – this is in the same statement. If you want to look at it, please? At paragraph 31 you say – sorry, it's 31 –

20 *The heavy-left formation is the standard formation for Army. I think it is the safest formation to fly when four ships are transiting.*

Does that assessment also relate to whether or not you're going to do a left or a right turn in a hold?

25 D6: Correct.

LCDR GRACIE: And your view is that the left turn is the safest for a formation in a hold?

30 D6: No, that's not my view, and I didn't state that at any point. It's my opinion that the heavy-left formation is the best formation for having four aircraft flying and transiting and turning in any direction.

35 LCDR GRACIE: In any direction?

D6: Correct.

40 LCDR GRACIE: Thank you. And so why is it that the standard turn is a right?

D6: The standard turn is not a right. You can turn left or right in a formation at any time.

45 LCDR GRACIE: So if there's a reference to a "non-standard turn to the left", that doesn't mean - - -

5 D6: What I mean by the “non-standard turn to the left” is that we had been briefed – so our track was roughly easterly, we were turning right, from the IP, to go to the target. So I’m expecting a right-hand turn and I’m expecting that we’re not going to hold, because we were on order for extraction. We’d already received that order. So if there had been no weather in vicinity of that IP to target run, we would’ve continued with a right-hand turn.

10 But because there was weather, we did a – probably a better term for that, in my statement, would be a “non-briefed” – or a “non-pre-briefed in orders turn to the left”. Noting that the flight lead announced it to the formation. So everyone in the formation acknowledged that turn as well. So everyone – all the Aircraft Captains in the formation were tracking that we were going to be turning left and entering a holding pattern.

15 LCDR GRACIE: And in terms of illumination, if you go to your Defence statement, as it’s called, Exhibit 53A, paragraph 38, in particular, you say, “Moon illumination was approximately 60 per cent”, and you’ve said before lunch “50 to 60 per cent”. I didn’t quite get it, but I did hear you say
20 that at the time of the search and rescue efforts the moon had disappeared. Had the moon disappeared at the time that you were completing that second right 180 degree turn?

25 D6: Left-hand turn.

LCDR GRACIE: I’m sorry, yes.

30 D6: No. The moon was still – to the best of my recollection, the conditions were as stated: reasonably good illumination in the target and objective area.

LCDR GRACIE: Just still on paragraph 38, you say there the visibility did not drop below 3000. I take it that’s metres.

35 D6: That’s what the “m” is for, yes.

LCDR GRACIE: Yes. “Briefed minima at any point during the sortie.” Does the symbology or any other avionics tell you what the lumen is that you’re flying at?

40 D6: As in what the moon illumination is?

LCDR GRACIE: Yes.

45 D6: No, the moon illumination is like a forecast met condition.

LCDR GRACIE: Or the millilux?

5 D6: No, we don't have anything in the aircraft which detects the millilux.

LCDR GRACIE: So you couldn't say if the aircraft was flying at, below
or above two millilux. You don't have that information?

10 D6: No, I don't have anything that registers what the millilux is for the
given position of the aircraft at any point.

LCDR GRACIE: All right. Thank you.

15 MS McMURDO: Do you know how far 83 was behind you at the time of
the accident?

D6: No, I don't, ma'am. It's difficult for you to see an aircraft behind you
in formation.

20 MS McMURDO: Understand. You'd expect it to be somewhere between
two and nine rotors?

D6: I'd be expecting the aircraft behind me to be a similar distance to the
distance I am off the aircraft in front of me.

25 MS McMURDO: Which by that stage was between three and two?

D6: Yes, two to three rotor diameters, that would have been my
expectation.

30 Lcdr GRACIE: Thank you. I'm sorry to jump between statements, but
if you go back to your original statement, the Defence statement, I just want
to ask you a couple of things about paragraph 47, please. You say you were
35 aware of the test report that noticed there's a potential error when using
version 5.10 in regards to making a change in attitude and looking off-axis
which could be confused for a turn. Can you just explain that, in practical
terms, what your understanding is as to the contents of that report?

40 D6: So my understanding is that if the pilot looks off-axis while making a
pitch input, the change in pitch as it moves with you in your field of view
versus the horizon line can appear to have an angle, so it appears that you're
in a turn, I guess.

45 Lcdr GRACIE: So does the symbology, if it's identifying, let's say, a
10 degree pitch, represent as an angle of bank?

D6: That's not my understanding, no.

5 LCDR GRACIE: Can you just explain it again for me, when you say there's changes in pitch which could be confused for a turn, how does that happen?

10 D6: So my understanding is that if we put the pitch input in, so the pitch changes on the ladder - - -

LCDR GRACIE: Let's say 10, 10 degrees.

15 D6: Let's call it 10 degrees. Then as we deal it off to the side where it sits reference to the horizon line, it creates an angle between the symbology. That's my understanding of the error.

20 LCDR GRACIE: When you say you didn't find this an issue because you didn't make pitch changes using the symbology, was that because of that potential problem?

25 D6: No, as I stated yesterday, I don't like making pitch or roll or attitude changes using the symbology because I found it easier and more effective to do so on the aircraft's Primary Flight Display, predominantly because it would be difficult to see an exact degree of roll or pitch in the symbology. Whereas if I glance down, I can set an exact figure with the Primary Flight Display. The way pilots use symbology is the information is presented in front of you and you can choose what to, I guess, draw your attention to or ignore.

30 In the case of using the HMSD symbology, because I don't pay attention to the pitch information in it, as in I don't actively look for it, I can almost sort of see through it and, like, I guess, it doesn't bother me and I don't see the error because I'm not actively looking for it.

35 LCDR GRACIE: That's what I was going to ask. You don't actually disconnect it, you just divert your eyesight to the Primary Flight Display?

40 D6: So I will continue to have my head out to the front or left or right, wherever I need to be looking. If I make a pitch change, I will do it by diverting my eyes inside while I make the change and then I'll look back outside. If I want to not look at something in the symbology, I can change the brightness of the symbology. I can have it set at a level that it's not overtly in my face, so it's the only thing I can focus on. I'll have it set so I can choose to focus on what information is presented in the symbology

when it's relevant to me, but also at a level that I can then look past it and see past the symbology when I want to look at visual references.

5 LCDR GRACIE: You said in your evidence before lunch that it's hard to distinguish between pitch and roll on the symbology. Is that because of what you've just explained?

10 D6: It's hard – I'd find it – hard is probably the wrong word but the pitch and roll symbology, like, as it's displayed doesn't necessarily show you exact numbers. So it doesn't exactly say, "10 degrees here", and "20 or 30 degrees of roll", or whatever. So if I'm making pitch changes, it's just lines at 10 degree intervals. I find it easier to set an exact number of, like, closer to the number I want because the Primary Flight Display actually shows 10 degrees nose down, 30 degrees nose down, 10 degrees nose up, 15 20 degrees nose up. So if I want to set a decelerative attitude – which in the MRH, from memory, was about six degrees nose up in level flight – I could look down, see that I was above the five-degree point, exactly on the Primary Flight Display, set it and then look back outside. There would be a corresponding position on the symbology.

20 I just found it more difficult to actually set that exact position on the symbology, which is why I recommended to anyone I instructed or flew with to make an attitude or a roll change on the Primary Flight Display and then reference the symbology for what you needed.

25 LCDR GRACIE: When you say there was a corresponding position on symbology, are you aware that sometimes the symbology did not replicate what was shown on the primary flight data?

30 D6: Yes, there are instances where that could be correct.

LCDR GRACIE: If that's the case and you're using, as your main visual reference, the primary flight data, and your co-pilot is using the symbology, is there a contradiction in what the two of you are observing in terms of attitude? 35

40 D6: I suppose there could be, but you're talking about minute differences of degrees. I guess the thing to keep in mind with, I guess, using either a Primary Flight Display or symbology, there's no real difference to driving a car with a Head-Up Display. You can look through the Head-Up Display and get the information as you're driving.

45 You still have to focus on that while you're driving and then focus on the outside world versus looking inside for a second, registering your speed and then looking at the outside world. So it's not a huge difference. We don't

reference and set exact figures of attitude in formation you are matching the aircraft ahead of you for that attitude information for the decel. If you're making attitude changes, you're generally doing it visually with reference to the aircraft in front of you anyway. If 81 wants to slow down, it's going to raise its nose so it starts to slow down.

I'm not going to look and set – I'm not going to estimate that they set the two degree nose up decel and then try and set two degrees myself. I'm going to watch them change the nose and then I will change the nose at the same rate and amount that they have and I will, therefore, get a corresponding decrease. That's how you fly formation.

LCDR GRACIE: So, in one sense, you've got three cues on attitude. One is the Primary Flight Display. Is that one?

D6: Correct.

LCDR GRACIE: Yes. Two is the symbology, if you want to use it.

D6: Correct.

LCDR GRACIE: And three is your visual cue on the aircraft in front, if you're in a formation?

D6: Correct. It's also – there's a fourth which is the actual attitude of the aircraft versus the horizon, which is where the definition of "attitude" comes from. So when I'm flying, I'm setting a nose up or nose down attitude, reference the horizon. That's what the attitude is. That's how pilots fly. That's visual flying. If I want to set an exact attitude, the Primary Flight Display it's representing what the horizon is showing me and where my aircraft attitude is, reference the horizon. It's just in a condensed format with accurate information.

So there are multiple places that a pilot can see attitude information. You can use any of them to build the picture and fly the aircraft.

LCDR GRACIE: And the one thing that you would expect is that those four different cues would all be relatively consistent with each other?

D6: They're all based on the same reference, which is the horizon. There are instances where the horizon line may not match, like the symbology, for example, as stated. But it is an aid to visual reference. It's not designed to be used as the sole visual reference.

LCDR GRACIE: It can be that the horizon line does not match the symbology?

5 D6: And as per the instances that you just spoke about, you could also not have aligned the – sorry, “aligned” is the incorrect term – you could have not foresighted your HMSD in a pre-flight correctly in which the reference might be slightly off as to where the actual horizon is. But, yes, the symbology could be different to the horizon.

10 LCDR GRACIE: And, therefore, different to the Primary Flight Display as well.

D6: Correct.

15 LCDR GRACIE: Thank you.

20 MS McMURDO: So given that 83 was probably at least three to two, possibly more, rotor di’s behind you, is it possible that their illumination, their field of vision, would not have been the same as yours? It could perhaps have been – well, it could have been worse.

25 D6: It absolutely could have been, ma’am. It’s likely that it was different to where I was looking. Because we were in the left-hand turn and my aircraft was on the right-hand side of the formation, both myself and the co-pilot were looking forward and left at 81 versus 83, which is on the opposite side of the formation. They would’ve been in the left-hand turn, but looking forward and right in the left-hand turn referencing 81 and 82, who were ahead of them in the turn. If that makes sense.

30 MS McMURDO: Yes. And the weather was unsettled that night, so it’s possible that there might have been some light rain or a shower that they’re in but you weren’t in?

35 D6: The flight path of the formation is generally the same. So if 81 goes through a shower, 82, 3 and 4 will go through the shower. It’s reasonably unlikely that they would have gone through a shower and the other aircraft in the formation wouldn’t have been aware of it. In the case – because we had just tracked to the initial point and turned left and then left again, I was aware of the only weather, like, in that area, being off to the right-hand side, south of our initial point, and we were turning away from it to avoid it. I think it’d be unlikely that 83 had encountered something else that the rest of the formation had not seen where we were turning.

45 MS McMURDO: But, nevertheless, you agree that their field of illumination may not have been the same or necessarily as good as yours?

D6: Correct.

MS McMURDO: Thank you.

5

LCDR GRACIE: Ma'am.

10 Sorry, D6, I just want to come back to something else that I'd asked you previously about the two millilux. You said in your evidence that there were occasions when you did fly less than two millilux.

D6: I said in my evidence that I was unsure.

15 LCDR GRACIE: So there's no way to tell from the aircraft itself. If there is a limitation, or there is an expectation in a mission brief to fly no less than two millilux, how do you know that? What is - - -

20 D6: The forecast tool that can be used in one of the flight planning programs to forecast the millilux in the area that you're operating – it is a forecast.

LCDR GRACIE: And so that can change obviously, as observed on the 28th?

25 D6: Yes. It could change for any number of reasons, including the moon going down and changing the conditions.

LCDR GRACIE: Was there anything in the flight mission brief about the level of illumination in terms of millilux?

30

D6: Not that I recall.

LCDR GRACIE: It was done in metres. I think you said 5000.

35 D6: No, it was done – illumination was done in percentage of the moon illumination – like, the 50 to 60 per cent, whatever the number was. The metres is in visibility. So it's a different requirement for a minimum visibility requirement.

40 LCDR GRACIE: And I just want to talk to you about the angle of bank in a turn, whether it be left or right. You say in paragraph 35 of this same statement, your addendum statement, that most formation turns are done at about 15 to 20 degrees angle of bank.

45 D6: That's correct.

LCDR GRACIE: And forgive me if I missed it, but the angle of bank in relation to the holding pattern on the night of 28 July was what? Can you tell?

5

D6: In my handwritten notes?

LCDR GRACIE: Yes.

10

D6: I have:

Form conducted a left-hand turn 15 degrees angle of bank.

15

So it's my evidence that we were conducting 15 degrees angle of bank left turns.

LCDR GRACIE: So just for the transcript reference, that was page 2 of 4 of Annexure C, at about point eight on the page.

20

D6: Correct.

LCDR GRACIE: So 200 feet above ground and 15 degree angle of bank.

D6: Correct, sir.

25

LCDR GRACIE: And does that mean that the pitch is constant too? I think you said flying at about – did you say a six degree pitch?

D6: No, the example I gave in six degree pitch was a deceleration as an example. So the pitch that we were likely flying would have been close to zero, maybe one or two degrees nose up based on the speed that we were flying.

30

LCDR GRACIE: And just in terms of the scenario that you mentioned where – again, sorry to jump around – you mentioned in your evidence about the degree of looseness in the height of 82 relative to 81 which you said was not significant – not significant enough for you to take over – was that at 500 feet or 200 feet?

35

D6: So it was on the descent from 500 feet to 200 feet. It's my recollection that when we were in the holding pattern, that my aircraft was on the same plane of reference as 81, so the same height as 81.

40

LCDR GRACIE: Which you say is about 200?

45

D6: 200 feet AGL, yes.

LCDR GRACIE: Thank you, ma'am. Thank you, sir. I have nothing further.

5

Thanks, D6 .

MS McMURDO: Thank you LCDR Gracie. LCDR Tyson.

10 AVM HARLAND: Just a quick question while LCDR Tyson gets up there. When you're turning in formation – so in this case in a left-hand formation – do you turn in plane or are you basically co-altitude belly up in the - - -

15 D6: So you would turn in plane in a tactical formation, sir. If you're staying on the same – you'll reference the horizon like you were staying on that same plane. If you turn – so you're on the same plane of reference as the aircraft. So, like, fixed-wing is what we would refer to that, or welded wing. It's more of a display formation. A tactical formation would be
20 turning on the same horizon line, like so.

AVM HARLAND: Is that co-altitude?

25 D6: Co-altitude. And you would see the environment in the left-hand turn, and 82. I would see more of 81's belly during that turn.

AVM HARLAND: So the aircraft on the inside of a turn would be belly up?

30 D6: Correct. Well, they would see the aircraft on the inside of the turn. So 83 would probably see slightly more of the top of the other aircraft, but it has the ability to use their arc to manoeuvre in positive if they need to. That's the reason why you have freedom of movement in a tactical formation. So the ability to sort of move to where you've got good
35 references or avoid terrain if you need to.

AVM HARLAND: Your co-altitude, the aircraft on the inside of the formation would be belly up through a turn to the aircraft on the outside of a formation?

40

D6: Correct.

AVM HARLAND: So they wouldn't be able to see those aircraft on the outside of the formation?

45

D6: No, it should be able to maintain visual reference the entire time in the turn because you're all slightly staggered behind each other.

AVM HARLAND: Yes.

5

D6: So, as you turn, you still have the references; the references are just tilted in plane, I guess.

AVM HARLAND: So if you're an aircraft in front and you roll out, you're trusting that the wingman is clear of you?

10

D6: Yes. So the entire time in the formation – and this is what I refer to in my statement as an “arc of freedom”. Part of my, I guess, clearance from 81, I'm maintaining that rotor diameter clear in my arc of freedom. So I've got freedom to manoeuvre in and around, and behind, clear of them.

15

AVM HARLAND: Yes.

D6: So as we turn, I'm using that arc of freedom as required to maintain references. As we roll out, I should still be behind. I shouldn't be conflicting with them because I'm turning at the same time and using that arc to maintain the position.

20

AVM HARLAND: Yes. And 83 is behind?

25

D6: Correct. So 83 would be on the inside. They're still using their arc and they are staggered back from 82. They've got an arc of freedom which is well behind and clear of 82. They could move all the way over, if they really wanted to.

30

AVM HARLAND: And they would do that to maintain visual on 82 at all times?

D6: They would use the arc, if required, to maintain position, yes.

35

AVM HARLAND: And visual?

D6: Sorry, maintain visual, yes.

AVM HARLAND: Okay, thank you.

40

<CROSS-EXAMINATION BY LCDR TYSON

5 LCDR TYSON: D6 , my name is LCDR Matthew Tyson. I represent the interests of CPL Alex Naggs. Just in relation to those questions that sir was putting to you just then about the arcs, that's assuming, isn't it, that Bushman 83 was on the same plane as 81 and 82 in the turn? Is that correct?

10 D6: That's at the same sort of height, reference the horizon, correct.

LCDR TYSON: Correct. If it were the case that Bushman 83 were abnormally high in the plane on the second turn, the distances would, in fact, be – rotor diameters and so forth would be quite different, wouldn't they?

15 D6: They'd be different. One of the, I guess, key points would be that, like, whether they were still, I guess, behind or not and they had the arc, and whether they still had visual reference. If they were potentially higher, it might be harder to see the visual references, I guess, of 81 and 82.

20 LCDR TYSON: Plainly, as you've indicated, you didn't see Bushman 83. Did you become aware after the accident, in conversation with other people, for example, who might have been on Bushman 84, that Bushman 83 became abnormally high in the plane?

25 D6: I don't think it's appropriate for me to sort of speculate on what other people have potentially said.

30 LCDR TYSON: No, and I'm not asking you to speculate. But did you have a conversation with someone else after the accident about the position of Bushman 83 in the second turn?

D6: Yes, I do recall hearing people talk about it.

35 LCDR TYSON: All right, that's fine. The principal topic that I want to ask you about is the RADALT hold function and the decision height function on an MRH-90 helicopter in the context of the sortie on 28 July 2023. Do you understand?

40 D6: Yes.

LCDR TYSON: So if you can focus on that topic. You've said, haven't you, that you set the decision height for Bushman 82 prior to take-off on 28 July, didn't you? You set that prior to take-off?

45

D6: That's correct. You can set it on the ground. It's an indication. So pretty much the moment you have power to the aircraft you can set what the reference is going to be.

5 LCDR TYSON: And in one of the answers you gave this morning, you said that you set the decision height to 180 feet. And you said that was standard. Do you remember that answer?

D6: That's correct.

10

LCDR TYSON: Can you please explain what you mean by that is "standard"?

15 D6: So the standard for setting a decision height is typically 10 per cent lower than the authorised "not below" altitude in the sortie. So 10 per cent of 200 feet is 180, which is why I set 180.

20 LCDR TYSON: And what's the source of that standard? Is it in terms of an instruction, a publication, or does it come through mentoring, training, Standard Operating Procedures? Where do you get that standard from, please?

D6: It's been a while, but I'm pretty certain it's in the MRH Standardisation Manual.

25

LCDR TYSON: Would it have been your expectation on 28 July 2023 that the other Aircraft Captains on the sortie would have also set the decision height function for their helicopters at that 180 feet level?

30 D6: It's my expectation that that would have occurred, yes.

LCDR TYSON: And, again, can you explain the source of that expectation?

35 D6: In that – it's what I would consider to be standard, setting it 10 per cent below the lowest altitude that I intended to fly en route.

LCDR TYSON: And that comes from things like the manuals rather than anything said, for example, specifically during orders prior to the mission?

40

D6: Yes. The setting of a decision height is not something that is mandated or referenced in orders, no.

45 LCDR TYSON: And in an MRH-90, sometimes in aircraft the decision height can come off the barometric altimeter, sometimes it can come off the

radio altimeter, or sometimes it can be a combination of the two, depending on the flight. For example, barometric higher than, say, 400 feet, then it goes to the radio altimeter when you get lower. In the MRH-90, what sets the decision height?

5

D6: There is a knob on the bottom right-hand side of the Primary Flight Display. You can press it, like, as in push the knob in. If you press the knob in, it will swap between whether it's DH, as in decision height, or MDA as the setting. If its in DH, it is setting it to the best of – like, recalling it after a while. DH is reference to the radio altimeter height. And if you set the MDA, I think it will set to the barometric altimeter, but it may also take the height off the RADALT as the warning. I can't remember exactly without having a look at the Flight Manual.

10

15 The difference is, if I wanted it to, I guess, illuminate as the DH, I would have pressed the button in. It would say "DH", and then I've set a number at the bottom of the display and I can see what the number is. And then when I descend below that number, I will get the visual indication and I'll get the audible warning as well.

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LCDR TYSON: And certainly at sort of 200 feet below, you're not going to get a difference in accuracy, whether it's been set off a barometric or the radio altimeter. It wouldn't matter at least at those altitudes?

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D6: The radio altimeter is accurate to 2500 feet. The barometric altitude on an aircraft is set to a pressure. It's a pressure instrument. So the radio altimeter would be more accurate.

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LCDR TYSON: And just in terms of understanding the purpose behind setting the decision height, a narrow approach might be that why decision height is important is if, in terms of the precision of your approach to, say, an LZ or an airfield – so you use the decision height to give you, the pilot, specificity for the vertical profile on the approach. But a broader approach might be that the decision height, the purpose of it, is actually as a safety technique to maintain correct altitude even en route to, say, an intermediate waypoint, so forth.

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I understand from your evidence that given some of the things that you said yesterday about the safety net and so forth, that the decision height, the purpose behind you setting it for the MRH-90 was more not the narrow approach but a broader safety approach. Would that be fair, or can you explain the purpose behind why you set the decision height at 180 feet?

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D6: Specifically, the purpose that we would set the 180 feet is because we're flying below 500 feet, so considered low-level flight. So I'm setting

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a warning while I'm flying at low level that I have descended below the altitude that I wanted to maintain, I guess. So it's predominately the second point that you mentioned.

5 The first point that you mentioned is more in line with conducting an instrument approach. So you specifically want a height to trigger at the bottom of a procedure and their numbers reference to that procedure. So in terms of the mission that we're talking about, it would be the second instance, which is for a warning that you've descended below a height
10 en route to a landing point.

LCDR TYSON: Thank you. And having set the decision height at 180 feet while Bushman 82 was still on the tarmac, did you change the decision height at any point prior to the crash of Bushman 83?
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D6: Not prior to, no.

LCDR TYSON: Had the sortie proceeded as planned, would you have changed the decision height later in the course of the sortie?
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D6: No, I would not have.

LCDR TYSON: So you would have maintained that both en route to the LZ and back?
25

D6: Correct. There is a call to acknowledge the decision height on the approach. So as you descend below, it you would get the DH warning and, as the flying pilot, I would say, "DH on approach".

30 LCDR TYSON: And if the decision height that you've set is breached, how do you respond to that? Wearing two different hats, first, how do you respond to it if you're the non-flying Aircraft Captain; and, secondly, how do you respond to it if you're the flying pilot?

35 D6: I think whoever was aware of it first, regardless of the position, would probably announce the DH, or say something like, "Altitude", to prompt someone to, like, adjust the altitude, would be my expectation.

LCDR TYSON: If it were the case that other Aircraft Captains in this
40 sortie on 28 July had set the decision height at a level well below 180 feet – say, 100 feet or 75 feet, say – would setting it at that level surprise you?

D6: As I said before, it was my expectation that the Aircraft Captains
45 would probably set it at 180 feet.

LCDR TYSON: So just if I can press you a little on that? Is the answer to my question, yes, it would be surprising?

D6: Yes, I guess so.

5

LCDR TYSON: And what if another aircraft in the formation had set the decision height, say, at 50 feet, that would be even more surprising?

D6: My answer would be that it would be not what I consider standard. It's also worth pointing out though that the aircraft, I guess, in the formation are forming off each other. So even if one was not set to the correct altitude, if the entire formation had descended below 180 feet, someone else in one of the other aircraft would've likely have picked up on that. For example, if 81 had not set 180 feet and I had in 82, and our minimum authorised altitude was 200 feet, and we descended below 200 feet and I was not convinced that 81 had seen it or acknowledged it, I could then speak up and raise it. So by mere fact that one of the other aircraft has not set that, it doesn't necessarily mean that the safety net is still not there within the formation.

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LCDR TYSON: But if you hadn't set it, you could still fly the correct plane, simply by close observation of the other Bushman in front of you.

D6: Could also fly – the answer is yes, but I could also fly, like, just by setting the decision height. I still get indications of my altitude. All it is, is just an indication that I have descended past a given altitude. So even if I don't have it set, or set correctly, I can still see what height that I am flying at. And if I intend to fly at 200 feet, I can still see that I am at 200 feet.

I could also equally – if I was completely loaded up or something else was going on – almost not even be aware that the decision height has gone off, and descend through it. It's just another tool in the aircraft to, I guess, be set, to be used by the pilots, like, to increase situational awareness.

LCDR TYSON: I now want to ask you about the RADALT hold function. Now, I think you gave some evidence that you'd set the RADALT hold function pretty much as soon as you went feet wet. So you've left Proserpine Airport and you've crossed the mainland, and you're into, I think it's called Repulse Bay. Is that fair, or - - -

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D6: Correct. Pretty much at the moment where you crossed over the coast.

LCDR TYSON: And just as I understand the geography, there's a peninsula. So when you cross the coast, there's the bay, then there's a peninsula with Cape Conway at the southern tip of it, and there was a saddle

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on that peninsula. And the initial flight plan was that you'd cross the water, you'd then go overland and in towards the IP. Is that correct?

5 D6: I believe so. I'd have to reference a map, but I do vaguely recall that.

LCDR TYSON: Then, do you recall that what in fact happened on the sortie on the night in question, that rather than crossing the saddle, the flight skirted south and around Cape Conway?

10 D6: Correct. We avoided going overland on the peninsula because there was low cloud along the intended flight path. So we varied to overwater earlier than planned.

15 Lcdr TYSON: Again, what would be your expectation – when you set the RADALT hold function, what would your expectation be about other Aircraft Captains in this sortie? Would they set it at the same point or, for example, would they set it after the formation had skirted around Cape Conway, or at a subsequent point in the flight path?

20 D6: My expectation would be that the Aircraft Captain would – sorry, the pilots in the aircraft would set either a barometric or RADALT hold, once the aircraft had descended below 500 feet. It's worth noting though that flying formation you are making power changes and attitude changes a lot of the time. So even with the RADALT set, by making a power change, I
25 would be usually putting the trigger in on the collective. The moment I do that, to make a power change, it momentarily – or as long as I pull the trigger in, it prevents the RADALT hold from working while I'm making the power changes. But the moment I release the trigger, the RADALT hold would re-engage at that point, at the height that the aircraft was on.

30 So my expectation would be, as per the requirement, below 500 feet overwater.

35 Lcdr TYSON: As opposed to using the collective to temporarily go away from it, would you reset the RADALT hold function, say – let me go back a moment. Obviously one of the things that happened in the course of the sortie was that there was a descent from 500 feet to about 200 feet. Do you remember that?

40 D6: Correct.

LCDR TYSON: When you were doing the descent, did you reset the RADALT hold at that time?

5 D6: So I wasn't the flying pilot for the descent, so you'll have to ask my co-pilot exactly what he did. But my recollection would be that he would've done something along the lines of hold the collective in, as in hold that trigger in that I was just referencing, which momentarily standby's the RADALT. The function is still engaged, to be clear; it's just being disengaged, I guess, by the use of the collective trigger.

10 Decrease the power to commence the descent would hold it in for the time that you're descending, then once the aircraft has levelled back out with the formation, release the trigger and that resets the new reference altitude.

15 LCDR TYSON: But you don't actually plug in a number? You don't say, "200 feet"? It's just you use the collective like the way you've described, to set the RADALT hold?

20 D6: If I was in the back of the formation, I would use it as described. I would not set a number unless I was 81, or the flight lead, or a single aircraft, because the rate that the aircraft descends isn't going to necessarily match the rate of the aircraft ahead of me. So I would be manually controlling my rate to match, so I'd be doing that through power inputs.

25 It's likely that 81 would potentially set from 500 feet to 200 feet, on the setting as described, and they would engage it. But everyone else is forming off them. So that would be, like, an appropriate use of that automation.

30 LCDR TYSON: So, for example, with the decision height function obviously you get the audible warning, and you get the lights on the panels. There is no similar concept when you're using the RADALT hold, because that's effectively the autopilot-type function, and it's either on or you use the collective, or you disengage it?

35 D6: Correct, yes. There is no, I guess, warning associated with that system.

LCDR TYSON: What would be a reason why you would actually disengage the RADALT hold on this particular sortie?

40 D6: Potentially for the approach to land. But once we crossed over the coast – so I would disengage it prior to crossing the coastline. Also, if the aircraft is flown in TAC mode, it's my understanding or my recollection that the aircraft can't have an upper mode engaged. So you have the attitude mode, and then you have two modes which are called NOE modes, or SCAS or TAC, in the way that the trims follow up on the collective and cyclic inputs.

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If you're flying in TAC mode you can't engage an upper mode. You would have to be in ATT mode to engage an upper mode.

5 LCDR TYSON: Would there be any reason why you would fly in the TAC mode prior to reaching the IP?

10 D6: Overwater, I would not, so I could have that upper mode engaged. But I can't think of any reason unless it was – I can't think of any reason that I would actively disengage RADALT while I was overwater until I was looking to cross back overland.

15 LCDR TYSON: And you can't think of any reason why on this sortie, prior to reaching the IP, that a pilot would disengage the RADALT hold?

D6: I can't think of any, no, I cannot.

20 LCDR TYSON: Would it surprise you if it were the case that the RADALT hold was disengaged on one of the aircraft in the sortie?

D6: Potentially, yes. I don't know the details.

25 LCDR TYSON: And then just to carry it forward, but your expectation would have been that when you actually got to Lindeman Island, when you're reaching land and when you're getting – when you're then thinking about your LZ, you would have disengaged the RADALT hold at that point?

30 D6: I would have disengaged it prior to crossing the coastline because it's based off a radio wave return. The water is "A level" and then crossing the coastline, the level is going to change, and that's going to change the aircraft trying to maintain that set height. So it will start to undulate and pulse the power and all that sort of stuff. So I would remove it prior to crossing the coastline.

35 LCDR TYSON: And then having embarked the Ground Force element and then going wet feet again and heading back to Proserpine, you would have reset the RADALT hold?

40 D6: If we were below 500 feet overwater, yes.

LCDR TYSON: Just in relation to the two turns at the hold, during the hold, how long does it take in terms of time to complete those turns?

D6: The turns themselves are 180 degrees at around 15-degrees angle of bank, depending on the speed of the aircraft, call it somewhere between 180 knots. That's roughly a rate 1 turn. So that would be about one minute to complete a 180 degree turn.

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LCDR TYSON: So two minutes in total? About two minutes for both turns?

D6: The turns separately, but you still have to – like, it's a racetrack, as described. So you would exit a 180 degree turn, you would fly for a period, and then enter the next 180 degree turn. So the whole sequence would be more than two minutes.

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LCDR TYSON: And how far away were you in terms of flying time from the IP at the time of the crash of Bushman 83?

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D6: I estimate we would have been probably within one minute's flight time if we wanted to continue through the IP.

LCDR TYSON: Thank you. That's helpful to know those timings. Is there any reason why during the turn sequence that you would have disengaged the RADALT hold?

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D6: As I said before, I can't think of any reason why you would disengage it overwater if you had it engaged, unless you were going to cross overland or a peninsula, like you described previously.

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AVM HARLAND: If you're in formation and you find yourself out of position and you want to make an adjustment, would that be a reason why you might disengage RADALT hold?

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D6: Yes, sir. I think that would actually be reasonable if you had to put in power inputs and you didn't want to have the aircraft potentially – like, because if you release that trigger at any point, the aircraft would then try and sort of maintain that height. So if you were trying to effect a rejoin or you were trying to change power settings, that could be a reason. And then my expectation would be that you would reset it once you were back in the position that you want.

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AVM HARLAND: Understood. Yes, thank you.

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LCDR TYSON: If you were abnormally high in the plane on the course of a turn, would that be a reason to disengage the RADALT hold?

D6: It could potentially. My personal preference would be to leave the RADALT hold engaged and disengage it with the trigger, like I mentioned before, and reset my position and then re-release the trigger so that the RADALT was then doing its function after I regained the position.

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LCDR TYSON: Is it possible that if it were the scenario that I'm an experienced pilot, I've flown from Proserpine Airport to Lindeman Island either that day or the day before, that I've now got visual of Lindeman Island, I've got lights of 81 and 82 in front of me – assuming I'm either 10 83 or 84 – that I just make a decision that I'm going to fly manually through to the LZ?

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D6: Depends on which point that you're going to be manually flying through. Like I said, I would be disengaging it on the approach, once 15 crossing overland.

15

AVM HARLAND: It may be a point of clarity here in my mind. So is there, like, two things that we're talking about here and maybe crossing over. One is about disengaging the RADALT hold mode – so that's 20 disengaging that autopilot mode – and the other is the trigger you're talking about on the collective to effectively pause it momentarily while you adjust your settings?

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D6: Yes, correct.

25

AVM HARLAND: So there are two things.

D6: Yes. So if I was making power inputs like we've discussed or like, you know, changing heights, I would be pausing it, is a much better term. 30 The disengaging it would be crossing overland; as in I am removing the function, so it is – like, stop working. Reason being, if you keep it engaged, as the terrain undulates – like, say, you set it at 500 feet as a reference, it's trying to constantly maintain that 500-foot radio altimeter reading. As you cross the terrain and it's undulating, it's going to constantly be hunting for 35 500 feet. So we typically would not use it overland.

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You could use the barometric altitude, which is going to maintain that pressure altitude height as opposed to a radio altimeter reference.

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AVM HARLAND: Understood. So, effectively, you can disengage the autopilot RADALT hold mode, which is one action, but while that autopilot mode is actually engaged, you can actually momentarily pause it - - -

D6: Correct.

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AVM HARLAND: - - - while you might make some adjustments.

D6: Yes.

5 AVM HARLAND: And then re-engage it just through that trigger action.

D6: Yes, correct.

10 AVM HARLAND: Okay. LCDR Tyson.

LCDR TYSON: And if you did disengage the mode as opposed to the
pausing method using the collective, you've actually disengaged it. What,
if any, are the consequences of that for the trim, or the stability of the
aircraft? Does it have no consequences, or can it potentially destabilise the
15 trim or the flight stability of the aircraft?

D6: It has, as far as I'm aware, no consequences. Though the aircraft is in
its mode – for example, ATT mode – if you remove the function, the aircraft
is still in its attitude retention mode, so all the other trims and stuff are still
20 acting validly. You would actually get back on the collection a collective
trim, so you're just retrimming where the physical position of the collective
is versus it trying to drive based on that radio altimeter reading.

LCDR TYSON: You're familiar with the term "controlled flight into
25 terrain"; is that right?

D6: I am.

LCDR TYSON: And is that the concept that there's an airworthy aircraft
30 that's under the complete control of the pilot that's inadvertently flown into
either water, terrain, or an obstacle?

D6: That's what the concept is, yes.

LCDR TYSON: And is setting the correct decision height function when
35 you're flying at night overwater, is that an important tool to avoid controlled
flight into terrain?

D6: It is a tool to help you build situational awareness so that you do not.
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LCDR TYSON: So it's a tool, but you wouldn't use the adjective
"important"?

D6: I would say that it's as important as a whole bunch of references in the
45 aircraft.

5 LCDR TYSON: What about, again, you're flying at night overwater, is engaging the RADALT hold function an important tool to avoid a controlled flight into terrain?

D6: Yes.

10 LCDR TYSON: And what are some of the other factors? Is it, for example, general situational awareness, things like that? What are some of the other tools at your disposal to avoid a controlled flight into terrain?

15 D6: The use of the crew for picking up uncommanded rates of descents or uncommanded pitch or roll angles, I guess; or where the aircraft is referenced to the formation, your Primary Flight Display for speeds, headings, altitudes, navigation systems in the aircraft. There's a multitude of different systems in the aircraft that are important to maintaining situational awareness of the flight path of the aircraft.

20 LCDR TYSON: Just a couple of miscellaneous points. So when were you intending to change from who was flying the plane between yourself and the co-pilot on this sortie?

25 D6: It's completely up to the Aircraft Captain. So I was intending to take over as I was preparing to fly an approach to land because I had nominated that I was going to be the pilot to do the approach to land.

LCDR TYSON: So is that immediately after the IP, because the IP was about five nautical miles from the LZ? Is that about right?

30 D6: Approximately, yes.

LCDR TYSON: At what point would you have intended to take over then?

35 D6: I like to take over earlier than that, so I can get a feel for what the aircraft is doing. So in the case of where we were that night, if I'd got an indication that we were about to leave the hold, I probably would have taken over before we'd left the hold so I could fly to the target. I could also have taken over if we'd been in the hold for a while and I wanted to give my co-pilot a break from flying formation.

40 LCDR TYSON: Do the two of you discuss that between yourselves before the flight or is that discussed during the rehearsal of concept. Does the AMC in the formation have an inkling into what each Aircraft Captain is going to do, or is it just up to each Captain in each individual aircraft in the
45 sortie?

D6: Generally, it's up to the Captain in each individual aircraft of how they want to run who is flying it and at any given time in the formation.

5 LCDR TYSON: In terms of opening the doors, would you have simply taken your cue from Bushman 81 as to when you would have opened the doors?

10 D6: Correct. We had a briefed position of where we were going to open the doors, but I would not have done it until Bushman 81 had done it. The whole point of that is so that the flight lead is aware of the configuration of all the aircraft behind him. For example – sorry, another example of that is the landing gear. I wouldn't just put my landing gear down randomly. I would be doing it once the flight lead had done it.

15 LCDR TYSON: What was the briefed position of when doors would be open?

20 D6: My recollection is that it was once we'd passed through the IP.

LCDR TYSON: But that was subject to a more paramount consideration, which is if 81 did it, then you would have done it in 82?

25 D6: My expectation is that we were going to do it after passing through the IP, and I would have done it on 81 commencing their opening of the doors. That would have been my trigger to then – or my (indistinct) to then open the doors on my aircraft as well.

30 LCDR TYSON: As the Aircraft Captain, what's the command that you give to the aircrew in terms of preparation before the doors were opened?

35 D6: Aircrewman, like, knowing it's going to be approaching, would request to go on harness. I would clear them on harness. I would then tell them we are below 80 and then I would clear them for the doors, or they would request it. But I would not clear it until we were below 80 and I had seen it, or I wanted to open the doors.

LCDR TYSON: All right. Thank you, ma'am. Thank you, sir.

40 MS McMURDO: Thank you. COL Gabbedy?

COL GABBEDY: Thanks, ma'am. Thanks, sir.

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<CROSS-EXAMINATION BY COL GABBEDY

5 COL GABBEDY: Good afternoon, D6 . I'm COL Nigel Gabbedy. I
appear for MAJGEN Jobson. I've just got a couple of short matters to deal
with. In your statement for the Inquiry, at paragraphs 58 to 60, you talk
about appointments performed by Aviation Officers that increase the
workload. My question for you is simply this: in your opinion, if those
10 appointments were filled by non-flying officers, if Army Aviation redid
what's been undone, do you think that would assist in the retention of
skilled pilots?

D6: Honestly, I do, yes.

15 COL GABBEDY: Turning to a different matter, you were talking about
Exercise TALISMAN SABRE at paragraphs 112 to 113 of your statement,
and we were looking at the issue of fatigue and tents. My understanding of
the fixes that you were suggesting there would be relocating the tents away
from non-Aviation units?

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D6: Correct. So I'm not suggesting that being in tents is unreasonable.
I think it's perfectly reasonable to be in accommodation like that, given that
on an exercise or an operation you're likely to potentially be in a tent, given
any circumstance, I guess. I feel though that if you were to do it, you could
25 be a little bit more deliberate in where those tents are situated, reference
other units that aren't on the same cycles, to try and, I guess, manage the
noise and fatigue in and around that, I guess, establishment.

30 COL GABBEDY: Another improve or fix I believe you mentioned in your
evidence was perhaps better education of the junior flight crew in terms of
their sleep discipline and sleep hygiene?

35 D6: Yes, along with, I guess, education of Commanders around, like, the
management of any kind of fatigue system, I guess, particularly for
authorisation and all that sort of stuff. So if someone was to put their hand
up or someone was to indicate being fatigued, I guess like how that is
managed, I guess, within units. But particularly, I think, there would be
benefits in management of people's personal fatigue and how to, I guess,
40 be on an exercise and be with those sort of distractions to manage fatigue
levels.

COL GABBEDY: Was there anything else that you thought would be an
improve or fix in terms of sleep hygiene and fatigue whilst on exercise?

45 D6: Not that I can think of at the moment.

COL GABBEDY: Thank you for your time.

5 MS McMURDO: Thank you. Any other applications to cross-examine?
Yes.

<CROSS-EXAMINATION BY SQNLDR NICOLSON

10 SQNLDR NICOLSON: Good afternoon. My name is
SQNLDR Nicolson. I appear for D10 in these proceedings. Can I get you
to just turn over, in terms of the pseudonym list that's in front of you? D10
was the Officer Commanding in 22/23; can you confirm that?

15 D6: Correct.

SQNLDR NICOLSON: I just wanted to clarify two questions. There was
some cross-examination this afternoon about the RADALT. Is there a rule
20 in place that the RADALT is to be used overwater, below 500 feet?

D6: There is, yes.

25 SQNLDR NICOLSON: In terms of the illumination issue, you assessed in
your first statement – that's your Comcare statement, I think – you assessed
the moon illumination as 60 per cent.

D6: Approximately, yes.

30 SQNLDR NICOLSON: Is that fair to good illumination at the time for the
prediction?

D6: Correct. I would say that 50 or 60 per cent is actually almost ideal
illumination for a flight on NVD.

35 SQNLDR NICOLSON: In terms of if the illumination was set at
30 per cent or below, was there other equipment that could be used for
missions at that level?

40 D6: On the aircraft, we had the Forward-Looking Infrared. I wouldn't
necessarily use that in formation, but I'd be using that for landing, I guess,
predominantly.

45 SQNLDR NICOLSON: In terms of your two roles that you had in 22/23,
your primary role was a QFI?

D6: Correct, sir.

5 SQNLDR NICOLSON: Your secondary role was the Squadron Safety Officer?

D6: That's correct.

10 SQNLDR NICOLSON: In terms of your opinion over that period, did you consider that the Squadron had a good safety culture?

15 D6: I believe the Squadron had a good safety culture. To qualify that remark, like it's my belief that members of the Squadron had the ability to speak up, regardless of their, I guess, experience or position within the Squadron, without fear of having, I guess, reprimand for lack of a better word. It's my experience that people were willing to offer improvements or talk about problems within the organisation, which I think is an indication of a positive safety culture.

20 SQNLDR NICOLSON: When you talk about a safety culture – and this is the period we're talking about in 22/23 – you talked about safety days.

D6: Correct.

25 SQNLDR NICOLSON: Do you recall a safety day in early 2023 where there was a briefing about how to navigate the Sentinel program to submit fatigue reports?

30 D6: I do vaguely recall a safety day that touched on the raising of fatigue reports. I'm sure it would have gone through how to put one in. My experience was when I actually came to do it, it was sort of a process that was foreign to me.

35 SQNLDR NICOLSON: With that safety day in early '23, and there was that reference to how to navigate Sentinel, that was to do with all the Squadron, to your memory?

40 D6: I believe so. All of the available members of the Squadron at the time would have been there for a safety day.

SQNLDR NICOLSON: In your statement to the Inquiry that was dated 6 May this year, you refer to two occasions that you did submit reports?

45 D6: Correct.

SQNLDR NICOLSON: From D10's position as the Officer Commanding, he encouraged you to submit those reports?

5 D6: I submitted both of those reports after having conversations with D10, and it was his suggestion to put the reports in.

SQNLDR NICOLSON: The first report was relating to the compressed SOQC course in June '23?

10 D6: The first report was November '22.

SQNLDR NICOLSON: Sorry, the second one was in June '23 with the SOQC report?

15 D6: That's correct.

SQNLDR NICOLSON: We'll just deal with that report, firstly. That SOQC, was that a course that was run by the Regiment - - -

20 D6: It was, yes.

SQNLDR NICOLSON: - - - not by the Squadron?

25 D6: That's correct.

SQNLDR NICOLSON: In terms of training and qualifying pilots, there was only a limited time that you could progress that training through the calendar year?

30 D6: That's correct. And I guess that's one of the conflicts – one of the conflicts within a flying unit is trying to find time to do your own training, as well as all the tasks external to a unit.

35 SQNLDR NICOLSON: Was that one reason why the June '23 SOQC course was run by the Regiment, to try and relieve the pressure from the Squadron?

D6: That is correct, yes.

40 SQNLDR NICOLSON: In terms of your evidence you've given, I won't repeat what you've said today and yesterday, but that was the reason why a fatigue report was put in, in terms of it was too much pressure to the two QFIs running the course in terms of the amount of hours and duty hours.

D6: That's correct. So it was a course run by the Regiment, but the only two QFIs that were available to be on it were the Squadron QFIs, and that was the reason why the report was raised.

5 SQNLDR NICOLSON: I note in the fatigue reports that are attached, or annexed to your statement, you went into some detail about the amount of hours that you worked.

D6: Correct.

10 SQNLDR NICOLSON: Duty hours.

D6: Correct.

15 SQNLDR NICOLSON: I take it in terms of duty days, that's part of the rules that the Squadron operate from?

D6: Correct.

20 SQNLDR NICOLSON: Those duty days, do they relate to flying days?

D6: They do, yes.

25 SQNLDR NICOLSON: So that's obviously the requirement in terms of what the rules require in terms of how many duty days you're flying. You can't exceed that limit within the rules.

30 D6: That's correct. It's worth noting that in that fatigue report we didn't exceed any of those rules. It was just highlighting that we got close to, I guess, the limit of the rule.

35 SQNLDR NICOLSON: In dealing with that course, you referred to, at paragraph 74 of your Inquiry statement – this is at page 15 of 26. If I can just get you to turn that up.

D6: Got it.

40 SQNLDR NICOLSON: You noted that the trainees only flew only two waves per days.

D6: That's correct.

45 SQNLDR NICOLSON: However, yourself and D2 flew four waves per day.

D6: That's correct.

5 SQNLDR NICOLSON: So when you were submitting the fatigue report, it was relating really to yourself and D2 about the number of waves or sorties that you flew as part of the training program?

10 D6: That's correct. So contact hours for the students would have been probably less, but almost similar. The flying rate would have been less than half. It's probably worth noting that there would have been – and it would have been appropriate for me to put in other members. For example, there would have been aircrewman who would have been in all of those waves as well, just due to available people at the time.

15 The reason why I've only included the two QFIs is one of them was myself, and the other one was someone who I was directly responsible for. So that's the only reason why I focused it only on two individuals.

20 SQNLDR NICOLSON: Can I move to the other fatigue report, and you cover that at paragraph 78 of that statement at page 16 of 26. That related to, as you indicated correctly, it was in another course in November '22?

D6: That's correct.

25 SQNLDR NICOLSON: That was lodged after a night sortie had been cancelled?

D6: Correct.

30 SQNLDR NICOLSON: Was that cancelled because of D10 as the OC?

D6: That's correct. So he made the assessment not to continue due to the concerns of the fatigue within the formation and then, as a result of that, wanted the fatigue report raised to capture the fact that a sortie had been, I guess, cancelled.

35 SQNLDR NICOLSON: Lodging the fatigue report is a way of collecting data?

40 D6: That's my understanding, yes.

SQNLDR NICOLSON: Did you find, at least from D10's position as the Officer Commanding lodging reports, he would encourage that to happen?

45 D6: Yes, absolutely.

SQNLDR NICOLSON: You talk at paragraph 80 of your statement below about the fatigue, and you've defined the fatigue between two different sets; that's workplace and organisational fatigue.

5 D6: Correct.

SQNLDR NICOLSON: What do you mean by that?

10 D6: It's my opinion that within the unit it was very rare for someone to be so physically tired that they could not perform their duties or fly. I'm not saying that there weren't instances where people did not fly as a result of being fatigued. And at the end of that SOQC that we referred to, I was definitely physically tired. I do also think though that over the period of
15 '21 to '23, there was a level of organisational fatigue in and around constant changes and constant developing of aircraft, the impending change that was about to happen, going back to Black Hawk, the amount of angst in and around people not being sure about what courses they were going to go onto and how long they were on MRH or Black Hawk. I think you cannot be in
20 an organisation and work that amount, you know, year in, year out, and have that amount of change and angst, and all that sort of stuff, and not be fatigued by that; as in almost get beaten down in a way, I guess, is a way of describing it.

25 So it's my opinion that there is, and particularly in a lot of surveys or – like, a lot of reports when people are talking about fatigue, it may not be I am physically tired to do my job; it may be that I am physically tired of what is going on.

30 SQNLDR NICOLSON: That's more primarily the organisational fatigue you're talking about?

D6: Correct. That is what I am meaning when I refer to that.

35 SQNLDR NICOLSON: Is it like with the change in '23, the MRH-90 was being transitioned out at some stage and the Black Hawk was being introduced?

D6: Correct.

40 SQNLDR NICOLSON: That required a workforce to be retrained on the Black Hawk.

D6: Correct.

45 SQNLDR NICOLSON: That is aircrew maintainers?

D6: Yes, that is correct.

5 SQNLDR NICOLSON: And also, pilots.

D6: Correct.

10 SQNLDR NICOLSON: You mentioned yesterday in your evidence about currency or competency for some pilots that reached to the MRH category that, effectively, you've lost those years and have to go back and retrain on the Black Hawk which is soon to be introduced.

15 D6: That is correct. And there's a generation of pilots who have almost struck out three times by going onto the S-70A-9 and being reasonably junior, and then having to go across onto the MRH-90, who have then developed and been reasonably junior, and then had to almost start again on the M model, the UH-60. So that, as well, I think, creates a level of organisational fatigue.

20 SQNLDR NICOLSON: If we could deal with the workplace fatigue. As I understand it with the Squadron, the Regiment maintains the calendar in terms of training exercises?

D6: It does, yes.

25 SQNLDR NICOLSON: And in terms of what we've referred to as DACC, D-A-C-C?

30 D6: The Regiment, I guess, controls that in as much as the Regiment is what gets tasked for DACC, but correct.

35 SQNLDR NICOLSON: Whilst the Regiment planning for the Squadron, in the calendar year there's periods of low tempo and periods of high tempo, it was aimed at the low tempo. For example, school holidays was no flying?

D6: That's correct. Every school holiday period had a reduced tempo period over it.

40 SQNLDR NICOLSON: From the June course that we just talked about until the exercise is Proserpine, there was a two-week period of low tempo?

D6: That's correct. It was a reduced tempo period over a school-holiday period.

SQNLDR NICOLSON: So was that the aim of the calendar at least, to try and control the tempo for surge going from an exercise to training?

5 D6: Yes, that is my understanding. I think that's also one of the reasons why the SOQC was programmed in a shorter period than what had previously been done to, I guess, fit it in prior to that exercise.

10 SQNLDR NICOLSON: In terms of fatigue and fatigue management, the Squadron had rules that dictated the flying duty days. They also had rules in terms of rest periods and there was some mention in your evidence about a FACE check.

D6: Correct.

15 SQNLDR NICOLSON: So they were the rules that were set up to have the Squadron follow those rules?

D6: That is correct.

20 SQNLDR NICOLSON: In terms of the Squadron maintaining or dealing or managing with fatigue, how did you find the Squadron, particularly the chain of command, managing fatigue in 22/23?

25 D6: I would say that the Squadron, in particular – and the Regiment was as well – but the Squadron, from what I saw, was proactive in trying to manage fatigue. However, for all the reasons what I've just said, it's something that has been quite hard to manage.

30 SQNLDR NICOLSON: In terms of the work or assistance to the civil community, that was at short notice or unplanned in terms of the Regiment calendar?

D6: Correct, and it happened multiple times over 2022 to 2023.

35 SQNLDR NICOLSON: Whilst you had the Regiment planning for the training exercises, it was an additional burden that came at short notice?

40 D6: Correct, and often in the middle of training of exercises which then creates additional burdens in other places later on.

SQNLDR NICOLSON: You've mentioned in your evidence in your statement, at page 18 of 26, paragraph 89, that you yourself have pulled out of a sortie due to feeling tired, and you've referred to that as FACEing out.

45 D6: Correct.

SQNLDR NICOLSON: In terms of the FACEing out process, that is as an Aircraft Captain, when you're about to start a sortie or a mission, do you do a FACE check with yourself and your crew?

5

D6: Yes. That was the genuinely – sorry, the genuinely completed thing prior to jumping into the aircraft. The Aircraft Captain would usually go over the mission sortie brief and all that sort of stuff with the crew, so everyone is on the same page, and conduct a FACE check to make sure everyone was able to, or was happy to, continue with the sortie.

10

SQNLDR NICOLSON: Were there occasions that when you did that FACE check as the Aircraft Captain, that some of the crew might say that they weren't particularly 100 per cent?

15

D6: I've had instances where the crew have noted that they are, like, a level of fatigued, but we've continued with the sortie because they were happy to. Generally, I think you would not get to the point where you're doing that brief if someone was so fatigued that they were not willing to fly. I think it would have come up well before that point.

20

SQNLDR NICOLSON: You talk, at paragraph 90 of your statement, about the issue about concern about fatigue levels. You indicated it was more with the maintainers.

25

D6: Yes, at one point during 2023 – or '22 to '23, we were pretty proactively trying to manage the aircrew's rest and, I guess, duties in and around all the things that were going on. One of the things that I was hearing and seeing was how stretched our maintenance workforce was, particularly in and around leading up to exercises. So one of my concerns – and I think I said it in the statement – one of my bigger concerns was about the maintenance workforce within the Regiment, as opposed to the aircrew.

30

SQNLDR NICOLSON: I guess from your position as the QFI and the Regiment Safety Officer, I think your position, you sat close to where D10 sat within the offices?

35

D6: Yes, I was in an office that was diagonally across from his.

40

SQNLDR NICOLSON: You could speak to D10 in terms of the concerns that you raised and try to address those concerns to deal with fatigue management?

D6: D10 had a reasonably open-door kind of policy anyway, but I could always rely on talking to him about any of the concerns that I raised.

5 SQNLDR NICOLSON: Can I just deal with in general, just in terms of issues to deal with mission? As I understand the evidence – this is just general questions – there’s a mission plan that is developed for a particular mission?

10 D6: Correct.

SQNLDR NICOLSON: In the mission planning, there’s normally pilots that are conducting the mission that would do the mission planning?

15 D6: Correct.

SQNLDR NICOLSON: Depending on the size of the mission, whether there’s one ship or four ships, it normally would be the key pilots that are running the mission?

20 D6: Correct. All the co-pilots helping, generally, and it was not uncommon for aircrewman to help in different aspects of the planning as well.

25 SQNLDR NICOLSON: Then from the mission planning, the next phase is to the mission orders?

D6: Correct.

30 SQNLDR NICOLSON: Do the mission orders then provide the aircrews in the ships, whether it’s a formation – for example, the four-ship formation – the orders have been given to all the crew in the ships as to what will happen at mission?

35 D6: Correct. It also gives the members of the aircrew – sorry, the members of those ships, the opportunity to clarify any points of concerns or points that require further clarity in the mission orders.

40 SQNLDR NICOLSON: And particularly with this mission that we’re talking about today, you had experienced pilots within the mission orders: yourself, D2, D9 and D14, if you’ve got to check those pseudonyms?

D6: They are right. Yes, correct.

SQNLDR NICOLSON: They were all senior pilots, in your view?

D6: They were the most senior pilots in the Squadron at the time, with the exception of D14, who was the Regiment Standards Officer.

5 SQNLDR NICOLSON: In the mission orders, if any concerns were raised at that time, they could be raised by people in the group?

D6: I believe so, yes.

10 SQNLDR NICOLSON: The next phase is a Rehearsal of Concept drill?

D6: Correct.

15 SQNLDR NICOLSON: Is that basically a walkthrough about what the mission will entail?

D6: It is, and generally either run by the flight leader or the AMC, which also involves questions to the aircrew to confirm that the flight leader and the AMC are happy that everyone is on the same page.

20 SQNLDR NICOLSON: And when the Rehearsal of Concept drill, speeds, heights, and the path of mission would be discussed in detail with the crew?

D6: Correct.

25 SQNLDR NICOLSON: So the aim of the Rehearsal of Concept drill is effectively that before the mission starts everyone is aware of what the mission was, how to get to the mission, and how to get home?

D6: Correct.

30 SQNLDR NICOLSON: You've talked in your evidence this morning that for a two-hour sortie, it would take about five hours of your day?

35 D6: Yes, I would agree. And that was, I guess, an estimate. It depends on, I guess, the complexity of the sortie, but that would be my estimate.

40 SQNLDR NICOLSON: You've mentioned – and this is at page 22 of 26, this is paragraphs 116 and 117, if I could just draw that your attention – you've mentioned in your statement that D10 was the Authorising Officer for the mission.

D6: Correct.

45 SQNLDR NICOLSON: That was in requirements with the rules that there was an Authorising Officer?

D6: Correct.

5 SQNLDR NICOLSON: D14, you've indicated, was the nominated Safety Officer - - -

D6: Correct.

10 SQNLDR NICOLSON: - - - for the mission orders?

D6: Correct.

SQNLDR NICOLSON: Was that standard, to have a Safety Officer?

15 D6: It was, with the majority of missions that we would do as a formation, and it was used as an independent verification of any issues, I guess, that had come up during the mission orders or the ROC.

20 SQNLDR NICOLSON: So that's just a normal process in terms of preparing for the mission, to have someone as a Safety Officer, in your view, just to check the independent process?

D6: Yes.

25 SQNLDR NICOLSON: Is that required within the rules?

D6: I believe it's required within SO flying, not non-SO flying.

30 SQNLDR NICOLSON: Dealing with that topic, I think there was some questions and answers you gave this afternoon about the type of mission. Flying to the IP, was that a non-SO flight?

35 D6: The entire mission was a non-SO flight. It specifically talked to what it is that makes it a Special Operations flight, but it is in and around the risk management for it and this was not a mission that fell in that category.

40 SQNLDR NICOLSON: After the Rehearsal of Concept drill, is there a normal period of free time; like an OC's hour, it's referred to, or the mission bubble?

D6: Yes. So I referred to that previously and, yes, it's worth noting this mission, in particular, we had more than an hour. So it was less compressed than what it would have been with an hour's - OC's hour.

SQNLDR NICOLSON: Then, finally, after the OC's hour – if we could call it that – then there's the time to prepare, obtain equipment, get ready and then head to the airframe?

5 D6: Correct. Generally, the OC's hour is independent of that and the getting to the aircraft and getting ready to start ideally would be done after that break.

10 SQNLDR NICOLSON: So is that just a normal procedure for any mission, that there's a stepping process that's been adopted in 6 Aviation?

D6: Correct. Everything is trying to be as standardised or as graduated as we can possibly make it for, I guess, a bunch of reasons.

15 SQNLDR NICOLSON: Firstly, safety?

D6: Correct.

20 SQNLDR NICOLSON: Everyone within the mission knows exactly what the mission is?

D6: Correct.

25 SQNLDR NICOLSON: You've talked about some evidence about some changes in the mission, about different turns. That was for the flight lead in 81?

D6: Correct.

30 SQNLDR NICOLSON: Those sorts of changes are really weather-dependent?

35 D6: As I sort of alluded to, like, it's not uncommon on an Army mission for something to change. Like, nothing ever goes as per the plan. So it is reasonable to expect that something will have to change while you go flying, and as long as it is articulated, I don't see any issue why that would cause any sort of concern.

40 SQNLDR NICOLSON: In terms of this was a night-flying mission, all the parties involved were aware roughly from the mission orders what time that there was an intention to depart on mission?

D6: Correct.

SQNLDR NICOLSON: So as an individual, you could prepare yourself to have the expectation about when the mission would commence?

D6: That's correct.

5

SQNLDR NICOLSON: You mentioned earlier in your evidence – this is at page 15 – sorry, this is the earlier occasion in the exercise, that you saw some junior aircrew. This is at page 21, paragraphs 110 and 111. You've given some evidence about what you noted about some junior crew up early. You were aware that there was a mission that evening and that raised your concerns. You spoke to D20, who was a Troop Commander?

10

D6: Correct.

15 SQNLDR NICOLSON: And also D10 as the Officer Commanding?

D6: Correct.

20

SQNLDR NICOLSON: I note in paragraph 110, about three-quarters of the way down, you refer to the mission window for the program mission that night was around 2 am?

D6: Roughly around then. I believe it was after midnight, but I recall it being quite early in the morning.

25

SQNLDR NICOLSON: At paragraph 111, as a result of things that you raised with D20 and D10 – ultimately you don't know what decision-making process occurred after you raised those concerns – but at 111 you note that the mission was brought forward to about 9 or 10 o'clock that evening?

30

D6: Correct. Again, approximate times because I was not on the mission. However, the mission was brought forward earlier than midnight. Again, I don't know if it was directly as a result of raising the concerns; however, it was after I had conversations with D10 about my concerns.

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SQNLDR NICOLSON: I guess, importantly, whether or not there was any change in the mission timing because of the concerns you raised, did you consider it important, from your position, if you saw matters that would affect fatigue, to raise that with the Troop Commander, which is D20, and the OC and D10?

40

D6: Correct. Any matters of safety, whether it's fatigue or anything else, I felt it important to raise with the chain of command.

45

SQNLDR NICOLSON: Did you find that culture generally amongst other people within the Squadron?

5 D6: I believe so, and I believe, because there was people with experience like myself who would commonly raise concerns, that other people would feel, I guess, comfortable to; however, that's my perception. I would hope the other members of the Squadron had the same perception.

10 SQNLDR NICOLSON: Yes, thank you. Thank you, ma'am.

MS McMURDO: Thank you. You asked some questions about Sentinel.

15 After you put in those Sentinel reports, do you remember anything happening that made you feel that fatigue was being better managed after that?

D6: Not specifically, no, ma'am.

20 MS McMURDO: You also say in your statement, the Inquiry statement, at paragraph 91, that upon reflection you've come to realise you were operating at a constant high workload, which resulted in a level of acute fatigue. Looking back, do you consider there were others in 6 Aviation Regiment who were also operating in a level of acute fatigue at the time in July 2023?

25 D6: Yes, I believe that there were people within the Regiment who were probably feeling the same kind of stresses that I was. What I was alluding to before, I think, the background of all of the taskings and all of the changes and the tempo and all that sort of stuff, I do believe there were members there that were at an acute level of fatigue.

30 MS McMURDO: Who would they have been, please?

35 D6: In my experience, it was more likely to be people in roles of responsibility than it was line pilots or aircrewman.

MS McMURDO: Tell me if you can't, but are you able to name names?

40 D6: I would prefer not to. But I guess the point I'm trying to make is that people within, say, the Regiment Headquarters who were working quite actively at their jobs that they were posted to, and who also had to fly and go away on exercises, would be members that I would be thinking of, members within the Squadron who held potential appointments. I would say that anyone with secondary duties was probably – "secondary duties"

being the wrong term – like other responsibilities within the Regiment, was probably at a more likely chance to be at a higher level of fatigue.

5 MS McMURDO: I have to ask you this. Was CAPT Dan Lyon in that category?

10 D6: Yes, he was Troop Commander, who was working reasonably hard during that period. So it would be my estimation that he would likely be one of those people affected by a higher level of fatigue.

15 MS McMURDO: Thank you. Are there further applications to cross-examine? Yes, COL Thompson.

20 D6: Is there any chance that I might be able to just have a five-minute break, ma'am?

25 MS McMURDO: Of course. Absolutely every chance. We were going to have a break anyway this afternoon. So we'll have a 10-minute break and then we'll sit through to 5 o'clock. Thank you.

30

HEARING ADJOURNED

35 **HEARING RESUMED**

MS McMURDO: COL Thompson.

40 COL THOMPSON: Thank you, ma'am.

<CROSS-EXAMINATION BY COL THOMPSON

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COL THOMPSON: Good afternoon, [REDACTED] D6. COL Thompson, Legal Officer for BRIG Dean Thompson, who was the Commander of 16 Aviation Brigade last year. Same spelling, no family relationship. I'll be brief. If I can take you to your Inquiry statement of 1 August 2024, Exhibit 53B, and if you can turn to paragraph 104 on page 20, beginning:

In my opinion, you cannot manage a risk that you are not aware of.

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The risk you're referring to is the MRH-90 HP1 turbine blade problem that you mentioned in paragraph 102?

D6: Correct, sir.

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COL THOMPSON: Just refresh your memory by reading that paragraph 104 through to the last line, "To sign off on the MRPs". And you define those in paragraph 101, on the same page, as the Mission Risk Profile. What I'm interested in is the last words, "which is already at the

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16 Brigade Commander level". What do you mean by those words?

D6: They are the 6 Avn MRPs for Special Operations flying, medium risk, which requires a one-star signatory sign-off.

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COL THOMPSON: Thank you. The next paragraph, 105, on the second-last line you mention that you lost confidence in Aviation Command and the Airworthiness chain. Is 16 Aviation Brigade in that chain, in your view?

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D6: Yes.

COL THOMPSON: Nothing further. Thank you, ma'am.

MS McMURDO: Thank you, COL Thompson. Any re-examination?

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FLTLT ROSE: One point.

<RE-EXAMINATION BY FLTLT ROSE

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FLTLT ROSE: D6, you gave a response to a question you were asked and mentioned the safety net in formation. What do you mean by that?

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D6: Within a formation you're not operating as a single aircraft per se, you're operating as an entity, so you're all looking out for each other. So, for example, if something happens to one of the other aircraft, or there is something wrong with one of the other aircraft, or it's not in the right place or position, or it misses something, or it misses a radio call, whatever, it's

40

generally picked up by one of the other aircraft. So, I guess, instead of having four crew members, you've got a collective, like, up to 16 in a four-ship aircraft to sight potential errors.

45

FLTLT ROSE: So the safety net is the increase in eyes on the formation to pick up any errors that another aircraft may be leading themselves into?

5 D6: Or any other conditions that haven't been identified; for example, weather or whatever else. You just have more people aware of what's going on, so there is more likelihood that something could be picked up.

FLTLT ROSE: And with that, responsibility also ensues to pay particular attention to look out for the other people involved in the formation?

10 D6: That's correct.

FLTLT ROSE: And would you take additional steps, as a pilot in a formation, that you wouldn't necessarily take in a single-ship sortie?

15 D6: What do you mean by "additional steps"?

FLTLT ROSE: For example, would there be additional safety precautions you would take when flying in formation that you wouldn't have to take if you were flying a single ship?

20 D6: Aside from, like, the formation spacing or picking up on formation spacing, like, the "not below" heights, the no closer distances, all those sort of things which are specific to formation flying, generally it's no different than flying a single ship when it comes to looking and identifying for risks. What I mean by it is, having inherently more people in the formation, you

25 are more likely to identify risks.

FLTLT ROSE: Nothing further.

MS McMURDO: I think Air Vice-Marshal has a few questions.

30 AVM HARLAND: I just had a few questions; we're almost there. Firstly, just a question just about decision height. If you were transiting at 500 feet, is there a requirement – or is it common practice to set that 500 feet minus 10 per cent – so 450 feet – or is it the case that you just set it at the minimum

35 altitude for the sortie, minus 10 per cent?

D6: I would set it to the – I believe the requirement is for the minimum altitude minus 10 per cent. That minimum altitude for the sortie could change because you might be authorised to different heights throughout the

40 mission. But you could also set, you know, up to independent DH systems within the aircraft.

So you could potentially set one for that minimum altitude and set one for something else, I guess, if you wanted to. But my experience, it would be

45 just set to the minimum altitude.

5 AVM HARLAND: Thank you. The next one is just regarding the incident sortie. Was there anything unusual or noteworthy that you saw during the planning or execution phase of that sortie, or would you consider it to be fairly standard?

10 D6: I consider it to be standard. Nothing was indifferent, really, how the unit would normally go about any of its planning or execution. I noted that it was not an SO mission, but it's probably worth nothing that a lot of the control measures which are additional for an SO mission were utilised anyway, because that's kind of standard to go through the same processes. But nothing that we were going to do – or nothing in the orders or anything like that stood out as being different.

15 AVM HARLAND: Thank you. And in your time flying MRH-90, and noting you've got quite a lot of experience flying at night with the TopOwl, have you experienced any spatial disorientation?

20 D6: I've experienced illusions in formation before, so, like, where other aircraft are in and around me versus the horizon. I haven't had an unusual attitude as a result of it. However, I became – like, I guess, what I was seeing was by reference to either the symbology or the Primary Flight Display to sort of, I guess, reorientate my perception of where the aircraft flight path was.

25 AVM HARLAND: You have experienced illusions or spatial disorientation not to the point where it resulted in an unusual attitude and your primary antidote to that was to go back to instruments to recalibrate your head as to where you were?

30 D6: Correct.

35 AVM HARLAND: How often would that happen, those illusions, would you say?

40 D6: I only really experienced something – I'm talking about a few times in my career that I can put my finger on, and not just on the MRH. I've also experienced it using ANVIS-9 without the symbology. Just general NVD illusions I've experienced previously, like, inherent with flying at night on goggles.

AVM HARLAND: Was it difficult to cope with?

45 D6: In the cases that I recall, it was uncomfortable. But, I guess, as I've sort of said, the antidote was to re-reference where I was sort of – my

perception of where the aircraft flight path was and what we were doing, based on the instruments.

5 AVM HARLAND: And in the case that you did that, if you were in formation where you needed to go back to instruments and potentially take your focus off the formation disposition, how would you and the co-pilot share your duties to be able to, I guess, hope to maintain the formation for as long as possible?

10 D6: In the only real occurrence that I'm referring to that I recall I was the flying pilot, I asked whether my co-pilot had good references and I handed over. I re-referenced myself by quickly scanning instruments just to – because I was feeling an overwhelming feeling of the leans. So all I wanted to do was try and re-reference what my head thought was, I guess, the right
15 way up.

AVM HARLAND: Could you just briefly describe “the leans”?

20 D6: So “leans” or, like, spatial disorientation, is when, I guess, your inner ear has picked up movement and in the case that I'm referring to, I had my head misaligned with the aircraft axis so my head was moving a different way to what the aircraft was. Your inner ear has picked up movement. Generally – forgive me for the numbers – but, 80 per cent of how you
25 perceive where you are in space is done through your eyes and the rest is done with all the other senses in your body, so inner ear and seat of the pants.

If that vision is, I guess, hindered or reduced, as it is in instrument flying or NVD night flying, your body can sort of, I guess, almost be tricked by the
30 inner ear and the seat of the pants to give you an overwhelming feeling that you might be, say, not level; like, in a turn or, like, not necessarily orientated. And the reason why I referenced the instruments was I suspected the aircraft was, like, straight and level at the time, which it was. So, I was trying to re-engage my brain through my sight, the
35 80 per cent, to go, “Yep, this is what's normal”, so I could eliminate that illusion.

40 AVM HARLAND: In the simplest of terms, if you were to have the leans now, even though you're sitting vertically in your chair, you may feel like you are leaning to one side in terms of what your body is telling you?

D6: Yes, correct.

AVM HARLAND: Thank you. And final question, how dependent is safety culture on Command personalities? So put simply, does the safety culture at a unit change when Commanders change, or is it enduring?

5 D6: That's a good question. I believe it should be enduring. And I think it should be enduring in the culture of the organisation because Commanders obviously come and go; however, I believe individual Commanders directly influence what that enduring culture is.

10 AVM HARLAND: Yes. That's all, thank you.

MS McMURDO: Thank you very much, D6, for your assistance to the Inquiry. I know it's been a very gruelling 24 hours for you. You've had to cover some very tough and difficult moments in your life, but the Inquiry greatly appreciates your assistance in helping us determine what happened in this dreadful crash. So you are free to go now. Thank you.

D6: Thank you, ma'am.

20 MS McMURDO: Just leave the exhibits there. Thank you.

<WITNESS WITHDREW

25 MS McMURDO: Yes, COL Streit.

COL STREIT: Thank you, Ms McMurdo. I call D5. He will, hopefully, be waiting just outside.

30 MS McMURDO: He's been waiting for a long time.

COL STREIT: Yes.

35 **<D5, Affirmed**

<EXAMINATION-IN-CHIEF BY COL STREIT

40 MS McMURDO: Help yourself to water, D5.

45 D5: Thank you, ma'am.

5 COL STREIT: D5, can I just first orientate you. At your desk, face down, are two A3 pages with some information. If you just turn up the first one, you'll see that is a pseudonym list with names and associated pseudonyms. Can I just ask you, first, just to be obviously mindful of your security obligations in these proceedings and when you need to refer to a particular individual and you're uncertain whether that individual has a pseudonym, can you just check that particular document.

10 D5: Yes, sir.

COL STREIT: One of those two documents is in alphabetical order, which might make it easier to search if you're not aware of a person's pseudonym.

15 D5: Yes.

COL STREIT: But, first, can you just confirm that your name is associated with the pseudonym D5?

20 D5: It is.

COL STREIT: Thank you. Next, did you receive a section 23 Notice to appear in these proceedings today?

25 D5: I did.

COL STREIT: And did that section 23 Notice contain a series of questions for you to answer in the preparation of a statement?

30 D5: It did.

COL STREIT: And did you also receive a Frequently Asked Questions Guide for Witnesses to Give Evidence in Inquiries?

35 D5: I did.

COL STREIT: Privacy Notice?

D5: Yes.

40 COL STREIT: And also an extract of the Inquiry's Directions?

D5: I did.

COL STREIT: Did you also complete, last year, towards the end of last year, in November, a statement about matters concerning the events on 28 July 2023?

5 D5: I did.

COL STREIT: I will refer to that as the Defence statement, just to distinguish it from a statement which you have prepared for these proceedings.

10 D5: Understood.

COL STREIT: Can I show you two documents? In fact, I'll show you three. The first two documents comprise what appears to be your Inquiry statement with the questions with it. The next document is what I've described as your Defence statement. I'll just ask you first to turn to the Inquiry statement. Just confirm, first, that by looking through the document, that you're satisfied that the statement that I provided to you is a copy of your statement provided to this Inquiry?

15 D5: It is.

COL STREIT: And by reference to the second document that's with that statement, which has a title, "Section 23 Notice, Information Topics", can you just confirm that what you have been provided are the questions that you were asked by the Inquiry which then you used to produce your statement?

25 D5: They are.

COL STREIT: Thank you. And in the formulation of your statement, which you have in front of you, the numbered paragraphs commencing immediately under the subparagraph heading, "Background Qualifications and Posting History", which commence with paragraph 1, "I'm currently posted to 173 Avn Squadron" – and it goes on. Does the paragraph numbers correspond to the questions contained in the Section 23, Information Topics?

30 D5: Yes, it does.

COL STREIT: So if a person was to have both documents, they could look at whatever question number on the section 23 Notice series of questions, then go to that question number in your statement, and that comprises your answer to that question. Is that correct?

45

D5: That's correct.

5 COL STREIT: Can you just put those two documents to one side for the moment? And I now ask you to pick up your Defence statement and just confirm that that is your statement?

D5: It is.

10 COL STREIT: And that statement was signed by you on 29 November 2023; is that correct?

D5: Correct.

15 COL STREIT: I'll just ask you some questions in relation to the preparation of that statement. First, can you recall when you were asked to prepare that statement?

20 D5: I believe I was first contacted by Ms Demi Baker on behalf of Caroline Rice in early August, I think was when we first had correspondence in terms of – at some point there may be a requirement to do this.

COL STREIT: You'll see at paragraph 22 – I'll start again. You'll see at paragraph 2 of the Defence statement you say:

25 *I make this statement in response to a Form 25 requirement by the Coroner for information issued on 5 September 2023.*

30 Does that then assist in recalling when perhaps Ms Rice, or a representative of Ms Rice, contacted you?

D5: I believe from emails I've got, I believe it was August where there was an initial correspondence, but the requirements to this may have been that date.

35 COL STREIT: Sure. And do you recall receiving a copy of the Form 25 requirement from the Coroner?

D5: Yes.

40 COL STREIT: And in terms of the preparation of the statement, did you receive any assistance by a member of Defence in the preparation of this Defence statement?

45 D5: No. So there was some backwards and forwards between myself and Ms Baker after the statement was written initially, and that was just in terms

of formatting, changing certain sentences to read better. But the words themselves are my own.

5 COL STREIT: Did you ever receive a document which listed any questions that you would need to answer which then assisted you in the preparation of your Defence statement?

D5: I don't recall, but it's possible.

10 COL STREIT: Now, in relation to your Defence statement on 29 November 2023, are there any amendments you wish to make to that statement?

D5: There is not.

15 COL STREIT: And can I just ask you to pick up your statement to the Inquiry? Was that signed by you on 24 July 2024?

D5: Yes.

20 COL STREIT: And are there any amendments you wish to make to your Inquiry statement?

D5: There is not.

25 COL STREIT: Ms McMurdo, I tender both the Defence Statement and the Inquiry statement.

30 MS McMURDO: The documents referred to as the Defence statement dated 29 November 23 will be Exhibit 54A.

#EXHIBIT 54A - DEFENCE STATEMENT OF D5 DATED 29/11/23

35 MS McMURDO: And the addendum statement, 24 July 2024, will be 54B. Thank you.

40 **#EXHIBIT 54B - INQUIRY STATEMENT (ADDENDUM) OF D5, TOGETHER WITH SECTION 23 NOTICE QUESTIONS, DATED 24/07/24**

45 COL STREIT: And, Ms McMurdo, just to ensure I've recorded that

correctly, the Inquiry statement also contains the section 23 Notice questions.

5 MS McMURDO: The addendum statement and section 23 Notice questions; is that right?

COL STREIT: That's right.

10 D5, can I just begin by asking you some questions in relation to your Defence statement? And I should also begin by indicating to you that what I propose to do is lead you through parts of your Defence statement, then we'll transition to the Inquiry statement, and then we'll return back to the Defence statement when we deal with the sortie on 28 July 2023.

15 D5: I understand.

COL STREIT: So, first, in relation to your Defence statement, you joined the ADF on 7 July 2015; is that correct?

20 D5: Correct, yes.

COL STREIT: You're presently ██████ in the Australian Defence Force. You're a member of the Australian Regular Army; is that correct?

25 D5: Correct.

COL STREIT: You were promoted to ██████ in January 2022?

30 D5: Correct.

COL STREIT: You're presently posted as a co-pilot to 6 Aviation Regiment. Is that right?

35 D5: Correct.

COL STREIT: Now, just dealing with a little bit of your background, commencing at paragraph 7 of your statement, you have a degree, a Bachelor of Aviation from Griffith University?

40 D5: That's correct.

COL STREIT: You joined the Australian Defence Force as an Officer Cadet at the Royal Military College Duntroon in July 2015?

45 D5: Correct.

COL STREIT: And then, after graduating RMC in December 2016, you were promoted to the rank of Lieutenant, allocated to the Australian Army Aviation Corps, and then set about engaging in the process of becoming a qualified pilot in the Australian Army. Is that right?
5

D5: That's correct.

COL STREIT: You initially trained – and this is between 2017 and 2020 – you completed basic flying training in Tamworth, New South Wales; is that right?
10

D5: Correct.

COL STREIT: Then Helicopter Aircrew Training School in Nowra, and then the School of Army Aviation in Oakey in Queensland.
15

D5: That's correct.

COL STREIT: In January 2021 you were posted to the 5th Aviation Regiment, which is in Townsville, as an MRH-90 pilot?
20

D5: That's correct.

COL STREIT: In January 2023 you were posted to your current role at the 6th Aviation Regiment.
25

D5: Yes.

COL STREIT: So you spent 12 months in Townsville at the 5th Aviation Regiment as an MRH-90 pilot.
30

D5: Two years.

COL STREIT: Sorry?
35

D5: Two years, sorry; 24 months.

COL STREIT: Sorry, my mathematics. You can tell I became a lawyer. So two years as an MRH-90 pilot and then posted to 6 Aviation Regiment.
40

D5: That's correct.

COL STREIT: In terms of your hours, you set out at paragraph 10 the types of airframes you are qualified to fly. Paragraph 11 you say that your
45

total flying time in MRH-90 helicopter as at 28 July 2023 is 720.6 hours; is that correct?

5 D5: That's correct.

COL STREIT: Being 581.6 hours spent in that airframe and 139 hours simulator.

10 D5: That's correct.

COL STREIT: In relation to paragraph 12, I just wanted to ask you this. You'll see paragraph 12(d)(xxv) reflects that you completed your MRH-90 Special Operations Co-pilot Qualification Course in 2023; is that right?

15 D5: That's correct.

COL STREIT: Do you recall approximately when you did that?

20 D5: The specific date for that is in the Inquiry statement.

COL STREIT: Sure.

D5: That could confirm what that's - - -

25 COL STREIT: Is that around June '23?

D5: That's correct.

30 COL STREIT: Did you do the course with LT Max Nugent?

D5: I did.

35 COL STREIT: Prior to doing that course, did you, nonetheless, fly at 6 Aviation Regiment?

D5: Yes, correct. Prior to the course starting, we started flying probably around February of 2023, after we'd done the mandatory initial training that we do each year with the Regiment.

40 COL STREIT: Can I ask you to go back to your Inquiry statement, please? Just moving forward from your background, qualifications and posting history at paragraph 1, you're presently a Troop 2IC within 173 Avn Squadron; is that right?

45 D5: That's correct.

COL STREIT: In terms of that role as a 2IC, what does that mean you're doing in addition to flying?

5 D5: So the Troop 2IC, the way it's currently sitting is usually I will just sort of staff any admin paperwork prior to it going to the Troop Commanders, just to alleviate any backwards and forwards between spelling errors or incorrect information. So I'll vet most of the officers' paperwork going through to them.

10 Then on a more daily basis, I'll just touch base with the Troop Commanders and find out if there's anything I can assist them with throughout the duty of the day; or if there's something coming up in the coming weeks, what can I do to alleviate some pressure off them?

15 COL STREIT: Does that mean when the Troop Commander is away, you step up to the role of Acting Troop Commander?

D5: That's correct.

20 COL STREIT: Are you able to assist the Inquiry understand how that role as the Troop 2IC impacts, if at all, your availability to fly?

25 D5: I'd say the role as the Troop 2IC is not very time-intensive, so I wouldn't say that it impacts your flying schedule at all.

COL STREIT: So in terms of your duties as the 2IC, when would you do those duties in a flying week?

30 D5: So, I guess, this year's been probably different to other years within the Regiment in terms of the flying rate. But if, you know, you're flying within the certain times, you would organise to do your admin outside of those times so that you can concentrate on the flying aspect in between. And it would also be dependent on what admin was
35 time-sensitive, or not; whether it had to be done straightaway or if you could put it off a couple of days. So it would be very specific to what was coming through.

40 COL STREIT: In terms of your experiences this year as flying rate, as opposed to last year, and noting that MRH-90 did not fly again post the accident, so we're talking really about the first half of last year from about January to July 2023, comparing that to your experiences this year, was the period last year, in the first six months, busier?

5 D5: No, I'd say they're probably pretty comparable currently. So I'm currently flying the H135, which is based out of Bankstown. So it means that each day that we're flying we're actually driving out to Bankstown, to then fly the aircraft from there. So there's more time associated with getting to and from that aerodrome within your working day. Whereas last year, you'd probably just spend time within the office preparing for a flight. So I'd say from last year to this year it's comparable.

10 COL STREIT: So last year, did you have any 2IC responsibilities in the first half of last year?

D5: I did not.

15 COL STREIT: So you were a line pilot in the first half of last year?

D5: Yes, correct.

20 COL STREIT: At the time of the accident, you were a CAT C pilot on the MRH-90?

D5: Correct.

COL STREIT: You're currently a D Category pilot on the H135?

25 D5: Correct.

COL STREIT: You are an Aircraft Captain for general flying, and a co-pilot for Special Operations flights. Is that correct?

30 D5: That's correct.

COL STREIT: At paragraph 5 you say you completed an Aviation Safety Officer Course and a H135 Aircraft Captain Course since the date of your statement to the Coroner. So the date of your statement to the Coroner was 35 29 November 2023; is that correct?

D5: Correct.

40 COL STREIT: So in terms of completing an Aviation Safety Officer Course, can you just describe in general terms what that course is?

45 D5: So that course is a two-week course held out of – in Canberra, where they take you through the Aviation Safety Management System within Defence and how that works. And they sort of run you through how – they kind of give you some indication of how you would lead an investigation if

you needed to go through sort of a CAT A/CAT B incident. But it's mostly utilised for just the general ASRs that would come from daily flying, how you'd process them. And you can then act on them because you have the qualification.

5

COL STREIT: Thank you. Can I just pause there momentarily? There's something I overlooked. Ms McMurdo and AVM Harland, for your assistance, I have copies of the section 23 Notice questions.

10 MS McMURDO: That would be helpful, thank you.

COL STREIT: I apologise, I overlooked that earlier.

MS McMURDO: Thank you.

15

COL STREIT: When you did the Aviation Safety Officer Course, were you the only – was that done internally, sorry, within 6 Aviation Regiment?

D5: No, it's held in Canberra.

20

COL STREIT: In Canberra.

D5: Yes.

25 COL STREIT: Was there anyone else from 6 Aviation Regiment that accompanied you? And if there was, just be mindful if they have a pseudonym.

30 D5: Yes, correct. There was one other member. I'll just – D33 was on the same course I was on.

COL STREIT: How long was the course?

D5: It was two weeks.

35

COL STREIT: Two weeks. Thank you. So you're presently in your third year of seniority as a [REDACTED], as of January 2024; is that correct?

D5: Correct, yes.

40

COL STREIT: Does that mean you're entitled to any extra – well, I'll start again. Holding a responsibility as a Troop 2IC, do you know if that entitles you to any extra pay?

45 D5: Troop 2IC does not, no.

COL STREIT: Is that something you've made an enquiry about?

5 D5: No, it's just known that's not a position that you'll get extra pay for.

COL STREIT: I just want to deal very briefly with paragraph 7 of your statement. You there list your total hours in relation to MRH-90. The number is the same as what's contained in your Defence statement. At paragraph 9 you say you felt confident in your ability as an MRH-90 pilot with respect to currency, proficiency and recency as at 28 July 2023. Is that correct?

D5: Correct.

15 COL STREIT: You had just completed, had you, the Special Operations Qualifications Course just a couple of weeks earlier?

D5: That's correct.

20 COL STREIT: At paragraph 13 you identify two operations, essentially: Defence Aid to the Civilian Community operations, where you had been flying as a line pilot. Is that right?

D5: Correct.

25 COL STREIT: That includes Op FLOOD ASSIST in March '22 to April '22, where you were located various locations: Oakey, Lismore, Ballina?

D5: Ballina.

30 COL STREIT: Ballina, thank you. And then Op NEW SOUTH WALES FLOOD ASSIST was 24 March 2021 to 6 April 2021. You were located at Richmond.

35 D5: Yes, correct.

COL STREIT: You flew in both of those aid to the civilian community operations?

40 D5: I did.

COL STREIT: You flew as a co-pilot, did you?

45 D5: I did.

COL STREIT: Just dealing very briefly with your experience flying in MRH-90. You prefer to sit on the right side of the cockpit – well, you did; is that correct?

5 D5: Correct, yes.

COL STREIT: Is there any reason for that?

10 D5: I guess, going through training, in a very general sense, the Captain will usually sit on the left and the co-pilot or trainee will sit on the right. So the majority of my experience has been sitting on the right. And just due to that experience, it's where I'm most comfortable.

15 COL STREIT: You say at paragraph 17 that the cockpit workload on MRH-90 is very situation-dependent. For general flying it's easily manageable with a small amount of experience. For flights involving specific missions, this workload would increase due to utilising more systems on the aircraft. Is that right?

20 D5: Yes, correct.

COL STREIT: In terms of the split between general flying and mission-specific flying, what would you say, as at the date of the accident, was your rough split?

25 D5: Sorry, could you repeat that?

COL STREIT: So at the time of the accident, in July of 2023, what percentage would you say of your flying hours in an MRH-90 would fit the general flying bill? And what, as opposed to the mission-specific flying bill – which is more difficult, as I understand your evidence?

35 D5: I'd probably say maybe a 70 to 30 split in terms of the general flying, being we have the opportunity to go out to a training area and practise whatever sequences we want to practise, being different to being given an actual mission scenario, working through that mission and then having to set up different systems to be able to perform that correctly.

40 COL STREIT: So the 70 per cent is the general flying, or is the - - -

D5: There was, yes, correct, more time to do general flying.

45 COL STREIT: More time general flying. It's an approximation, I understand, so about 70 per cent general flying, 30 per cent mission-specific, which is the more difficult flying?

5 D5: Yes, that's correct. That's taking into account the two years that I spent at the 5th Aviation Regiment, where we did, I'd say, a lot more general flying, which is different to my experience at 6 Avn where we went sort of straight into an SOQC, where it's very mission-focused.

COL STREIT: Sure. You also at para 17 say, last sentence:

10 *The workload generally is higher than all other airframes I have flown and far higher than the small general aviation airframes flown.*

15 So that's a reference to the workload flying an MRH-90, from your experience, is generally higher than other airframes you've flown?

D5: Correct.

20 COL STREIT: You've identified at paragraph 18 some advantages and disadvantages in relation to the MRH-90, based on your opinion.

D5: Correct.

25 COL STREIT: They include an advantage that the systems of the MRH-90 could provide greater situational awareness in certain conditions. And disadvantage is low flying hours in the aircraft could result in less of a working knowledge of specific systems and therefore greatly increasing pilot workload.

30 D5: Correct.

35 COL STREIT: So is the Inquiry to understand your evidence that essentially the advantages of the MRH-90 really only come into play as advantages provided you having had sufficient time flying the aircraft to understand and operate its systems as best you can?

40 D5: Yes, correct. And I think what I was kind of getting at with the disadvantages was, so on the sort of centre console of the aircraft there's the DKU, or the Display Keyboard Unit, and that was the unit where we would input all information into the different systems to work. And that system was not intuitive as to how it works. Like there's sub-menus within sub-menus, within a larger menu.

45 So if you had the experience and you're flying fairly often, you would know where to get information fairly quickly through all of the sub-menus. But if you hadn't been flying very often, or you didn't have that working

knowledge, it would take a while to find that information you were looking for.

5 COL STREIT: Does that mean if you're not flying regularly, you would just default to the pathway that you're comfortable with to operate the aircraft's systems? You might not be operating all of the systems, but just those systems to get the job done?

10 D5: No. I mean, the systems that you need for the flight, you would certainly take the time to set up. I guess, I'm talking more about if there was a specific thing that you needed to look for or to change, if you needed a certain grid coordinate and you needed to change it from one standard to another standard, if you didn't have a working memory of where that was within a sub-menu, it would take longer. But in terms of setting up systems,
15 if the systems were required for the flight, they were always set up.

COL STREIT: You identified at paragraph 19 that – you were talking about in that paragraph about flying in certain parameters, less than five times total in your career. What were the parameters you were describing there, if you can recall? Do you need to have regard to the question at
20 paragraph 19?

D5: I believe the parameters were similar to the night of the incident, which I'll refer to again.
25

COL STREIT: So I'll read the question to you:

30 *Outline how many times per year you would have flown a sortie in MRH-90, which included all of the following parameters: at night; on NVDs; overwater; in formation; lower than 500 feet.*

Describe how difficult it is to fly a sortie with all of these parameters.

35 *Describe how your opinion changes, if at all, if the sortie is in a degraded visual environment.*

40 So you say in response to that question, you believe you would have flown in those parameters less than five times in your total career; is that correct?

D5: Specifically in formation, that would be correct. If it wasn't in formation, it's very different.

45 COL STREIT: And with good weather conditions you don't believe the profile is difficult to fly.

In poor weather conditions (low light, with cloud coverage reducing visibility to the horizon) this profile is far more challenging to fly.

5

Is that correct?

D5: Correct.

10 COL STREIT: You also, in paragraph 20, say:

In low illumination levels, it could be difficult to identify the aspect of the aircraft when utilising only the formation lights.

15 So is that a reference to lights being on the back of the aircraft that you might be forming off?

20 D5: No. So the MRH had specific formation lights on the aircraft itself. Within the cockpit you could change the light intensity of them. We found that, I think – I believe there was four settings. Two or three of them were very similar and didn't change too much, and then the last one kind of made it quite bright. I guess, regardless of that, they weren't very – we didn't find them very useful in actually telling what aspect the aircraft you're following was at.

25

COL STREIT: The response to that issue, was it was by installing certain adhesive light strips on the back of the MRH-90 tail section?

D5: Correct.

30

MS McMURDO: So did that improve it significantly?

D5: Yes, ma'am. Yes.

35

COL STREIT: At paragraph 21 you say flying in position 3 of a four-ship formation contained no additional difficulties in your opinion, with the exception of flying in the heavy left or heavy right formation. What did you mean "with the exception of flying heavy left or heavy right"?

40

D5: So there's different formations that we can fly in. An example would be sort of stack left, [REDACTED] [REDACTED] With the heavy left or heavy right formation, all aircraft are stacked in that direction, with the exception of the second aircraft, which is on the opposite side. What I'm referring to there is all the flying pilots

of those aircraft will be solely referencing a single aircraft to formate off. Whereas the flying pilot of the aircraft - - -

5 COL STREIT: Sorry, just a second.

MS MUSGROVE: Just I'd like to request the feed to be cut, please.

10 MS McMURDO: Yes, certainly. We'll cut the feed for a moment. Yes, what's the problem?

MS MUSGROVE: You didn't lead it in the last witness because of the sensitivity issues. It's been led. It's in relation to the formation. So "heavy left" is fine; it's just "stack left".

15 COL STREIT: I don't understand the difference. But I can deal with it easily enough. It's the choice of a word that seems to - - -

MS McMURDO: So we've cut the feed. Can it come back on now and just leave out what's - - -

20 MS MUSGROVE: Two different things, stack left is just - - -

MS McMURDO: Where are we up to with it, I guess that was what we need?

25 MS MUSGROVE: And that was the approach that they were taking, was heavy left, is the formation that's been (indistinct).

COL STREIT: I can deal with it easily enough.

30 MS McMURDO: Sure. Well, we've got a five-minute delay in what's being fed. So can you just tell us where the problem was, so that – or is that the Commonwealth?

35 COL STREIT: I'll let the Commonwealth raise – they've raised the matter, perhaps they can deal with what the issue is.

MS McMURDO: Yes. It's just so we know where the transcript should come in and where we can start again.

40 MS MUSGROVE: Yes, certainly. I don't have the exact questions but it was the answer. The first answer was "stacked left", and then - - -

45 MS McMURDO: So is this question 21?

MS MUSGROVE: No, it was in the oral evidence. It didn't relate to the answers that are actually in the statement.

MS McMURDO: Right.

5

MS MUSGROVE: So it was some questions about the formations that they were flying and the answer was "stacked left".

D5: No, sorry, I was giving an example of something different.

10

MS MUSGROVE: Correct. And previously when the question was asked about stacked left, the witness indicated that that had a classification that they wouldn't address in the answer to Mr Gracie. [REDACTED]

15

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

MS McMURDO: Right.

20

MS MUSGROVE: I don't know if we have a live transcript in which we can see - - -

MS McMURDO: No, but we can do that. So everything was all right up until that point?

25

MS MUSGROVE: Correct.

MS McMURDO: It's really just that line or so around there that needs to be taken out.

30

MS MUSGROVE: It's the "stacked left", and it's the description of the "stacked left".

AVM HARLAND: So the mention of the word "stacked left", okay, but the description of it not.

35

MS McMURDO: No, you don't even want the word mentioned, I think; is that right?

40

MS MUSGROVE: I'll just take some instructions, I'm sorry. That's correct, yes, so "stacked left", the mention of is fine, but the description thereof is not.

MS McMURDO: Okay, thank you.

45

MS MUSGROVE: Thank you.

LCDR GRACIE: Can I just explain, ma'am.

5

MS McMURDO: Sorry? Yes, we can start the live feed again now, can we?

LCDR GRACIE: I was just going to explain, ma'am, it was in response to a question that I put to D6 coming out of Annex C, where that reference was, and we used the term "stacked left", and then he said that he was not comfortable in explaining what it was.

10

MS McMURDO: All right. Well, that's consistent with what we're told. All right then.

15

LCDR GRACIE: Thank you. All right. The live feed has restarted. Has the live feed restarted? Yes, the live feed has restarted now.

COL STREIT: That's all right. Thank you, Ms McMurdo. D5, can I just draw your attention to paragraph 21. What you say in paragraph 21 is this: flying in a position of three of a four-ship formation contained no additional difficulties in your opinion, with the exception of flying heavy left or heavy right formation. You go on to say:

20

25

The reason for this is that you are not focused on one aircraft, like the other positions. You have to split your focus between both aircraft in front. You are taking your navigation information from Aircraft 1, whilst maintaining your formation spacing off Aircraft 2, which is more difficult than normal due to them being on the opposite side of the formation. The divide of attention increases the workload of the flying pilot.

30

Is that correct?

35

D5: That's my experience, correct.

COL STREIT: That's your experience.

40

D5: Yes, correct.

COL STREIT: Can you recall how many times – again, not a memory test – or have you flown in a position 3 of a four-ship or greater sortie?

45

D5: Yes, and my first time doing that was on the SOQC.

COL STREIT: In June 2023?

D5: Correct.

5

COL STREIT: We might jump ahead in your statement, but did you experience difficulty in being in that position in terms of learning where you needed to be as ship 3 in a four-ship formation?

10

D5: I think as a first time doing it, there was a bit more to consider that I hadn't considered before, having not flown in that position at previous Regiments or at the School. So I did have a bit more difficulty in the first couple of flights maintaining that position as it was something I was unfamiliar with.

15

COL STREIT: Was that something Max Nugent experienced some difficulty with as well?

D5: Correct.

20

COL STREIT: If you go to paragraph 84 – I'm sorry to jump ahead, but we'll just deal with this issue – go to paragraph 84 of your Inquiry statement, you say:

25

Flying in the position of 3 of a heavy left/right formation is known to be a more difficult position to fly within a formation. I don't recall ever flying this position during the MRH-90 conversion training. It was also not a formation that we ever flew at 5 Aviation Regiment during the SOCC QC at 6 Avn Regiment. Both Max and myself found that we were having more difficulties flying in this position, which was also noted by the instructors at the time.

30

And it goes on. Did you talk to Max about this aspect during the course?

35

D5: Yes, correct. We got somewhat similar debriefs on those points that we weren't maintaining position as well as what we'd been maintaining them while we were on different positions within the formation.

40

COL STREIT: So it's a bit like the debrief – you get the debrief from the instructors and then you catch up with Max as a course mate and you have a chat about how things are working?

D5: Yes, correct.

45

COL STREIT: What's working well and what needs to be improved?

D5: Yes, correct.

5 COL STREIT: This was one of the topics, that you both were experiencing some difficulty coming to terms with?

D5: Yes, correct.

10 COL STREIT: All right.

D5: Sorry. I'll say I believe he had similar issues. I had been debriefed on that and when we had the conversation after, when we were talking about how our flights went, it was noted that we had not been taught specifically that position within that formation before. So it was our first time flying in those conditions.

15 COL STREIT: So you were thrown in the deep end, both of you, without any experience?

20 D5: I don't think it would – I wouldn't call it being thrown in the deep end. I think it just hadn't been identified and we hadn't even identified it ourselves. The heavy left/heavy right, it was just the first time we had flown that formation, and having not known that until we kind of started considering before flying that, we're actually looking at two different aircraft now, not one. That is a difference to what we were used to, so it was just something that we needed to get some experience in.

25 COL STREIT: It was a new experience?

30 D5: Correct.

COL STREIT: The best way to deal with new experiences is to do it.

D5: Is to do it, yes, correct.

35 COL STREIT: Keep doing it.

D5: Yes.

40 COL STREIT: If we can just come back to where we were dealing with that particular aspect of your evidence. Now, at paragraph 22 you say:

There's no standard turn when flying in formation. I don't believe a left or right turn is more difficult than the other.

45

That's your experience?

D5: Yes, correct.

5 COL STREIT: You say:

However, flying on the inside of a turn in close formation does require more attention than if the formation had a larger spacing.

10 Is that correct?

D5: Somewhat correct, yes, to an extent.

15 COL STREIT: In para 23 you say "zero times". Para 23 deals with question 23, and that is this:

Describe any times you lost situational awareness flying in an MRH-90, what the circumstances were that led to this, and what you did to correct it.

20

So I take it, given your response, that you've had zero times that occurred to you?

D5: None that I recall, no.

25

COL STREIT: Can I just briefly deal with TopOwl. You've given some evidence at paragraph 24 and onwards in relation to your experiences on TopOwl. So you have used the symbology upgrade version 5.10 since you were trained on MRH-90. Is that right?

30

D5: Yes, so there was a version change somewhere early on in my career flying MRH-90. I can't recall exactly the time we changed versions across, but the majority of my career I would say I've flown on the latest version, I believe.

35

COL STREIT: Now, we understand and there's some evidence before the Inquiry that sometimes one of the effects of version 5.10 is that sometimes objects can appear closer than they are. Have you had that experience?

40 D5: Yes, correct.

COL STREIT: Can you recall what training you had to become accustomed to that consequence of TopOwl 5.10?

5 D5: Yes. So when we were going through the School and we first started learning to fly on TopOwl, we would fly an approach to a specific area. And then we would fly in the vicinity of a tree, for example, and the instructor might ask, “Hey, take me to 10 feet off of that tree”. And then I would hover over to that point, where I think 10 feet is from what I can see, and then we would turn the white light on and see, without looking through the goggles, what is that actual distance.

10 COL STREIT: I see, yes. Now, at paragraph 26 you have the words:

I don't recall ever experiencing this flaw.

That response relates to question 26, which is this:

15 *State whether you are aware of a flaw in TopOwl relating to the attitude information that is projected onto the visor when the pilot turns their head to the left or the right. State whether you have ever been affected by this flaw when flying the MRH-90; and, if so, what did you do to overcome this flaw?*

20 But given your evidence at paragraph 26, you don't recall ever experiencing this issue?

25 D5: I don't recall ever experiencing that, and I think the way I would utilise the symbology within the visor was as, like, a supplementary to what I was seeing outside, so I would take all my actual references from outside and whatever key pieces of information I thought I needed, I would then reference the symbology. So in terms of attitude or angle of bank information, I would never – or I have never referenced solely the symbology. So whatever was occurring, if that occurred in a turn, it was not something that I ever noticed.

30 COL STREIT: Was the issue ever taught to you when you were trained on the use of TopOwl 5.10?

35 D5: I don't recall specifically. I do remember receiving a – I think it was a PowerPoint presentation of the differences between them, and if that was a difference, I would suggest it would probably be in that, but I don't recall specifically reading that.

40 COL STREIT: Just in relation to you talked about when you would use the symbology, and you would also focus in on the instruments in front of you, and you would look outside, what about in low cue environments, when there's little light outside or cultural lighting, low illumination, what do you do then?

45

5 D5: So I think there's a big difference between, say, if you're flying
overland and if you're flying overwater. So even with low illumination
flying overland, you've still got buildings, treetops, all the terrain around
you that will still give you cues. When you're flying overwater, because
10 everything is flat and there's no real peripheral vision that you can get cues
from, it becomes a bit more challenging. So you would tend to rely a bit
more on your symbology at that point, to gain additional information in
conjunction with using your Primary Flight Display which is in front of you
on the screen.

15 COL STREIT: Just taking you to paragraph 28 now. D20 and
CAPT Lyon were the two Troop Commanders, 6 Aviation Regiment, when
you first arrived in January 2023; is that correct?

D5: That's correct.

20 COL STREIT: You say D20 was your direct supervisor; however, due to
career courses for D20 and you, you mostly reported to CAPT Lyon; is that
right?

25 D5: I think "mostly" is probably a poor choice of word there. Just with
D20 being on career courses, CAPT Lyon was the only – was the Troop
Commander to go to and, yes, that's who I dealt with in that time.

30 COL STREIT: I just turn now and deal with the issue of fatigue. In your
statement you say you didn't have any specific role in 2023, and you were
a line pilot, so you regarded – your experience was your workload was
significantly less than others in your unit; is that right?

D5: Correct.

35 COL STREIT: To your observation though, coming out of 5 Aviation
Regiment, and your experience of the workload in 2022, and jumping into
6 Aviation Regiment for that first six months before the accident in July,
are you able to – what was your impression by way of comparison of the
workload from 5 Avn as against to what you were doing at 6?

40 D5: Do you mean specifically as a line pilot?

COL STREIT: Yes.

45 D5: I'd say they were definitely probably about the same. My
understanding going to 6 Avn was that it would be a much busier posting
and that you'd go – kind of bounce from exercise to exercise, and the

lead-up training that was involved in that. When I got to 6 Avn in January '23 there was a period that was allocated for internal training which, from talking to colleagues, that was kind of an unheard of thing.

5 So I kind of went into a Regiment that had a period of similar flying schedules to what I'd just come from, so I didn't feel like it was any different posting in at that time. But that would – that could be different for other members who have been there longer.

10 COL STREIT: You made the comment in your evidence at paragraph 30 that your workload was significantly less than others in the unit. So I take it that's because you're drawing an observation or a comparison between your workload and other people you were observing in the unit. So when you say "others in the unit", who are you particularly referring to?

15 D5: The Troop Commanders are a big one. So the Troop Commanders, the Squadron OPSO, and then I guess the members who are at RHQ who are trying to fulfil that role and then trying to come back to conduct flying duties as well. It was just very obvious that, you know, I'd get to work, 20 D20 would already be there, and she would leave long after I'd left, and that was regular.

COL STREIT: Can I take you to paragraph 32 onwards, just dealing very briefly with what's known as the Jervis Bay ditching in March 2023? Now, 25 you didn't participate in the training exercise at the Jervis Bay Territory in March 2023. Is that correct?

D5: That's correct.

30 COL STREIT: Subsequent to that particular incident, did you get a briefing about what had happened in the Jervis Bay Territory in that incident?

35 D5: Yes. So I was on a career course when the incident happened, so I believe there was some sort of brief shortly after that happened. And once I'd returned – I believe it was a couple of weeks to a month after – there was a briefing given in one of the aircraft hangars by the Aviation Commander, and he spoke about some aspects of that incident.

40 COL STREIT: If we turn your statement to paragraph 40 onwards, there's some more detail there. In paragraph 43 you say you were away on a career course during the Jervis Bay accident so you were not present during a brief that was given by the CO just after the incident. You say:

5 *I was present several weeks later when the Aviation Commander, MAJGEN Jobson, delivered an update to the initial findings of the incident. We were told that a section of the turbine blades had a known issue; however, Army Aviation had decided not to replace them due to two reasons. One was the cost –*

which you say –

10 *was around \$25 million for all aircraft. The second was that it would not reduce the overall risk in the Risk Management Profile, so the cost outweighed the probability of the event occurring.*

That's a summary, but were those two things that I've just read out, being your evidence, were they communicated to you by GEN Jobson?

15

D5: I believe it came from him.

20 COL STREIT: Sure. And prior to – you've obviously returned to the unit after your course, and no doubt you were given some information about the initial findings, and that a section of a turbine blade had failed, and an aircraft had impacted the water. When did you first learn of the known issue you referred to in your statement concerning the turbine blades – the MRH-90 engine?

25 D5: It was in that brief at the hangar.

COL STREIT: So you had no knowledge beforehand of that issue in relation to the MRH-90 engine?

30 D5: I personally didn't, and I don't know of anyone that knew about it prior to that incident.

35 COL STREIT: When you heard that information, what was your initial thoughts at that time about – I'll put it bluntly. Were you happy or unhappy to be told at that stage that there was a known issue with the MRH-90 engine?

D5: Unhappy.

40 COL STREIT: If you had been a co-pilot in relation to a mission where you were told about a known issue concerning an engine on the MRH-90 aircraft you were about to fly, might that have affected the process you went through in relation to planning for the mission, or the task that you were going to do in that aircraft?

45

5 D5: I think that would be very specific to what the mission was. Engines can fail, and just because it's a known issue doesn't mean that that will be the reason that an engine would fail, but it certainly would give a little bit of context as to maybe I should be thinking of something else. If I'm hovering over the ocean and I know I'm sort of committed to going into the ocean if we have an engine failure, you may change your mind as to heights. But that's – again, that would be Aircraft Captain, up to them to decide that sort of - - -

10 COL STREIT: It would be something you'd feed into your planning, wouldn't you?

15 D5: It would be a consideration. Whether that changes the outcome – maybe not.

COL STREIT: You can't plan for a risk if you don't know about it.

D5: You have to know about it first.

20 COL STREIT: I'm just going to deal with some matters concerning your knowledge of the members of Bushman 83. This begins at paragraph 47 of your statement. I'll read out these matters, and I'll just ask you to confirm that what I've read out is correct, or accurate. Paragraph 47 says:

25 *I first met CAPT Lyon when I posted into the Regiment in January 2023. He was very well respected and looked after by other members of the unit, and I - - -*

30 MS McMURDO: “Looked up to”.

COL STREIT: Sorry?

MS McMURDO: You said, “looked after by”. Sorry, but - - -

35 COL STREIT: “Looked up to”.

MS McMURDO: It was a significant change.

40 COL STREIT: Thank you. I need some new glasses. Thank you, Ms McMurdo.

I'll start again.

45 *I first met CAPT Lyon when I posted into the Regiment in January 2023. He was very well respected and looked up to by other*

5 *members of the unit, and I quickly formed the same opinion. He took the responsibilities of a Troop Commander very seriously, especially with regards to welfare of members in the Squadron and their family life. I only flew with Diesel once, but knew of him being a very competent and capable pilot.*

Next, dealing with LT Nugent, you say:

10 *I first met LT Nugent when he posted into the 5th Aviation Regiment in Townsville around July 2022. We worked together there for six months and posted to the 6th Aviation Regiment in January 2023. We never flew together, but I'd heard from other pilots he was a very capable and natural aviator.*

15 In relation to WO2 Laycock, you say?

I first met WO2 Laycock sometime between 2018/2019, when I was conducting EC135 training in Nowra. As a QAI –

20 Qualified Aircrewman Instructor –

25 *he would assist in the instruction of students and provide guidance as required. I believe I flew with him sometime during that period, but can't recall specific flights. This was not on MRH-90; however, he was regarded as one of the most competent and highly respected members in Army Aviation.*

Next, in relation to CPL Naggs, you say this:

30 *I first met CPL Naggs when I posted to 6 Aviation Regiment in January 2023. I flew with him on a number of times and he was part of the crew in my aircraft when I was on the SOQC. He was extremely professional and was a very competent aircrewman.*

35 Can I turn now to Exercise TALISMAN – sorry, everything I said correct?

D5: That's correct.

40 COL STREIT: Can I turn now to Exercise TALISMAN SABRE. I'll deal with some matters in your addendum Inquiry statement and then I'll return to your Defence statement. In the lead up to TALISMAN SABRE you worked nine days in the two weeks leading up to the commencement of the exercise. Is that correct?

45 D5: Correct.

COL STREIT: And you believe that they were all day shifts, no longer than nine hours per day?

5 D5: Correct.

COL STREIT: You had just completed your Special Operations Qualification Course about two weeks before Exercise TALISMAN SABRE?

10

D5: Yes, correct.

COL STREIT: How would you describe that course in terms of its intensity for you?

15

D5: They were certainly longer days. I think we averaged probably about 12 hours a day, and we would be flying sort of the Monday to Thursday with a weather hold sort of day on a Friday, if it was quiet. So they're certainly longer days, but we were learning something new and the people on that course were very eager to be on there.

20

COL STREIT: You do the course. It was busy. You then have, what, two weeks before you go on TALISMAN SABRE?

25 D5: Correct.

COL STREIT: And you were doing, effectively, nine hours a day and you were doing a day routine, day shifts?

30 D5: Yes, correct.

COL STREIT: Do you recall being called in on the weekend of the 22nd or 23rd into work before the deployment to Proserpine on the Monday?

35 D5: I don't believe I went to work, no.

COL STREIT: At para 53 you say you don't recall the exact time you departed; however, you believe it was somewhere between 0700 hours, 0830 hours. You don't recall the time you arrived at Proserpine, but you believe you went to bed that night around 2300.

40

D5: Yes, correct.

COL STREIT: Now, the trip up to Proserpine, that's a fairly long trip measured in how many hours? About seven or eight hours, was it, do you

45

recall?

5 D5: I'm not sure. We actually swapped crews halfway through. So I flew with D20 for the second half and there was another member that flew with D20 for the first half. So we swapped out sort of halfway through.

COL STREIT: So it wasn't a straight flight; you stopped off somewhere?

10 D5: We stopped and refuelled.

COL STREIT: Stopped and refuelled. Swapped out some aircrew who were flying - - -

15 D5: It was just myself and the other co-pilot.

COL STREIT: Sure. And then you arrived at Proserpine. And went through whatever was left of the day and did some night routine and then bed at about 2300?

20 D5: Yes, correct.

COL STREIT: And are you able to recall when you were to transition to night routine?

25 D5: I think the next day we'd kind of – I think there was a decision to push the flying window – I can't remember if it was left or right, but there was a change. But then I believe it was the day after that it was sort of into the night phase, or conducting nights from there.

30 COL STREIT: Now, in terms of the sleeping arrangements, at para 54 you talk about sleeping in tents, 18-person tents?

D5: Yes, there was 18-person tents. Correct.

35 COL STREIT: Did you find it difficult to get to sleep and stay asleep whilst you were deployed?

40 D5: There was definitely distractions and noises around. If you're prone to waking up to that, I guess it would affect you. I personally didn't find it too bad. Sounds I don't really wake up too much, but lighting I do. Yes.

COL STREIT: And given your evidence at para 55, you put a balaclava over your face, did you, for you to get to sleep?

45 D5: Yes, correct. Yes, I wore a balaclava over my eyes.

COL STREIT: Were the people in the tent that you were in, was that known as the Junior Aircrewman tent?

5 D5: Correct, yes. So, there was (indistinct) mainly.

COL STREIT: Or aircrew tent?

D5: Yes, correct.

10 COL STREIT: So it was a combination of pilots and aircrewman?

D5: There was, yes.

15 COL STREIT: Was Max Nugent in your tent?

D5: He was.

20 COL STREIT: Now, at para 55 you say you hadn't conducted a sleeping trial so you were not able to take any sleeping medications on exercise; is that correct?

D5: Yes, correct. You obviously have to have conducted a trial before, that you can then utilise them through Defence.

25 COL STREIT: Now, in terms of being deployed with MRH-90 on an exercise, was that your first experience about being deployed?

30 D5: No, I'd conducted one field exercise whilst I was at 5th Aviation Regiment.

COL STREIT: And in terms of the location, where you were was adjacent to the airfield at Proserpine, was it?

35 D5: On this exercise it was, yes.

COL STREIT: Yes. What about the other exercise you went on?

40 D5: I believe the area we were in was next to an aerodrome, but it was mostly unused. They'd not put any traffic on there.

COL STREIT: I see. Now, paragraph 56 of your Inquiry statement you've listed some sleep times for the 25th through to the 28th. Is that correct?

45 D5: That's correct.

COL STREIT: How did you feel on the morning of 28 July, when you got out of bed?

5 D5: I don't believe I would've felt any more tired than I would on any other day, I guess.

COL STREIT: At paragraph 61 you say:

10 *During the day of 28 July I would say I was fully alert and wide awake. By the time we got airborne, I would say I was okay, somewhat fresh.*

Is that correct?

15

D5: From the choices I could make, yes, that would be right, I would say.

COL STREIT: At any time that you were deployed at Proserpine, did any other sort of senior pilot – I'm not suggesting this happened, but I'm just asking – come and speak to you, or where you were present in a group of people about, you know, drinking coffee early and getting to sleep, getting into a better routine, or anything?

20

D5: No, I don't recall a conversation about that.

25

COL STREIT: At paragraph 62 you say:

30 *I was slightly concerned with the amount of sleep some members may or may not have been getting. On two occasions I woke up to the majority of the members in the tent being awake and conducting their morning routine. I didn't mention this to anyone. However, I was unsure when the individuals went to sleep and if they were crewing the flight on those evenings.*

35 So when you say you were "slightly concerned", what was the concern you had?

D5: I guess it was just waking up and seeing that I was one of the last people to wake up and everyone else was awake, and some of them it was clear they'd been awake for a while because they'd already shaven or had a shower, had breakfast and I was only waking up at that point. But, I guess, what I'm getting at with that paragraph is that I've got no idea – if I went to bed at 2 am, I've got no idea if they went to bed at 2300 the night before. So they could have got more sleep than me; I wouldn't have known.

45

COL STREIT: At paragraph 55 – sorry, 56, you’ve identified the times approximately that you woke up each morning. So those times are a guide, aren’t they, to the Inquiry of when you wake up and then you’re observing other members in your tent - - -

5

D5: Yes, correct.

COL STREIT: - - - who’d have been – have already been awake for a little bit because they’ve undertaken certain activities.

10

D5: Yes, correct.

COL STREIT: Now, can I return to your Defence statement, please? Ms McMurdo I am proposing to attempt to complete this witness’s evidence today and sit to 5 pm, if that was - - -

15

MS McMURDO: I’m planning to sit until 5 o’clock today and tomorrow.

COL STREIT: Thank you.

20

Now, can I just briefly take you through the lead-up to the mission on 28 July 2023? Can you just explain briefly what your role was in the preparation for the mission on 28 July?

25

D5: I guess the night before we’d spent the majority of that evening preparing and planning the orders itself – planning the mission itself. I believe we were cut away from the tent – or out of the planning tent at around 2345. We started work that morning at about 1200 and spent the last couple of hours getting the final product ready to then deliver those orders. My part of that was just assisting with our planning, getting the product ready and then having sort of the general area for where the orders would be given set up, appropriate for a group of individuals to be there.

30

COL STREIT: At paragraph 20 you say you would describe the mission to be the normal standard for broader Army Aviation community, but easier than the types of missions 6 Avn Regiment normally train for. That’s based on your experience of 5 Aviation Regiment for two years, and your experiences at 6. Is that correct?

35

D5: Yes, correct. So that mission itself didn’t have anything particularly warranting – there was no Special Operations’ approach at the end. There was nothing in between that that you had to be trained specifically at 6 Avn to conduct. It was more of an air mobile style mission where we were just going to pick up some individuals and take them somewhere else.

40

45

COL STREIT: Although the mission appeared to you to be at normal standards, for broader Army Aviation were there factors that made the mission, or made what you were going to conduct, more difficult in the context of it would be at night, overwater, and potentially low illumination?

5

D5: Yes. So all those factors would make it more challenging than if you were to, say, do it during the day overland, yes.

COL STREIT: Sure. And there was also the impact of potential weather event as you were flying through the showers – well, potentially, through showers.

10

D5: Yes, correct.

COL STREIT: You were the co-pilot for Bushman 82?

15

D5: Correct.

COL STREIT: Just have a look at the pseudonym list. Was D6 your Aircraft Captain?

20

D5: Correct.

COL STREIT: In terms of paragraph 22 of your Defence statement, D1 presented orders for the mission. Do you recall that?

25

D5: Correct.

COL STREIT: Do you recall what was briefed in relation to the “not below” height that the sortie was to apply?

30

D5: Overwater was “not below 200 feet”.

COL STREIT: When you were told that in a briefing, did that mean you would then need to undertake what action in relation to the RADALT?

35

D5: When you’re flying below 500 feet overwater, you have to have a collective function in. So you could either have a barometric altitude hold function or the RADALT hold function, you know, or the autopilot system engaged.

40

COL STREIT: And what is your understanding of the reason that you would have to do that?

D5: It is an element of mitigating the risk of becoming disorientated and

45

not knowing whether you're climbing or descending. It's a sort of safety height. It'll give you that height.

5 COL STREIT: Was it briefed in orders about what might occur should the sortie encounter weather attempting to cross the saddle where the peninsular is?

D5: I don't recall specifically if that was spoken about.

10 COL STREIT: Ultimately – and looking at paragraph 24 of your statement – you say:

Between 3:30 pm and approximately 6 pm there was a break.

15 You had a break on the 28th, and during this time 6 Avn Regiment's members, and you, roughly had 30-minute naps. So you recall having a nap, do you, in the afternoon of 28 July?

D5: Yes, correct.

20

COL STREIT: And, to the best of your recollection, you saw CPL Naggs having a nap as well during this period?

D5: I believe it was CPL Naggs.

25

COL STREIT: At paragraph 26 you describe the departure from Proserpine Airport. And you initially flew in a different direction to what was planned. As planned, the aircraft were in a heavy left formation.

30

Instead of flying north-east, we flew east to avoid a mountain range and bad weather.

So you were the flying pilot, were you, of Bushman 82?

35

D5: Correct.

COL STREIT: And you flew, did you, Bushman 82 up until a point where the incident occurred? Is that right?

40

D5: So within, I'd say, 30 seconds to a minute after the incident is when my Captain took over.

45 COL STREIT: Aircraft Captain took over at that point. Just in relation to your memory of the sortie up until the point of entering the initial point, if we can just deal with that? Was there anything that sort of stands out to you

in terms of departing Proserpine and travelling, or flying, to the initial point that required you to – you experienced something you hadn't experienced before?

5 D5: Yes. So, I had an issue with my horizontal – so my horizon line, sorry, and my symbology, I had an issue with that. And at the points of the sky where there was no visible horizon, I was finding it challenging to maintain a certain height on plane with 81.

10 COL STREIT: Just in relation to TopOwl that you had that experience, if you just return back to your Inquiry statement at paragraph 25, very briefly, you say:

The only time I had felt uncomfortable was the night of the incident.

15

This is using TopOwl version 5.10. You say:

20

Prior to every sortie, the pilot is required to boresight the TopOwl to ensure that the symbology being projected in the visor has the correct orientation (symbology horizon line on the actual outside horizon). Prior to departing, I believed mine to be correct. However, when we were airborne, I could see that my symbology horizon was higher than the actual horizon.

25

The TopOwl symbology includes “vector balls” which would take the current aircraft information and show where the aircraft is currently flying if no parameters are changed. The result was that I had a vector ball showing below the symbology horizon line when we were in level flight.

30

When the actual horizon was lost due to cloud cover, I experienced the illusion that the aircraft was descending when we were still in level flight.

35

Is that correct?

D5: Correct.

40

COL STREIT: Did you tell your Aircraft Captain about this issue when you were airborne?

45

D5: Yes. So I had noticed on the ground it looked perfectly normal. It was when we were airborne it became apparent that it was quite off. Once I'd sort of realised that, I had a conversation with the Aircraft Captain saying, “Hey, look, my symbology horizon, it's significantly off the actual horizon

and the vector ball is under, and it's giving me conflicting information". And his advice was to sort of – because we knew we were in a very short transit – it was only 10 to 15 minutes before we were supposed to be landing at Lindeman Island where I would then reset it, to re-engage it back to where it should be – it was just kind of, "Memorise where the vector ball is in regards to that horizon line and that is sort of the new – that will be the standard until we can land on and fix it".

And I seconded that. We can change the brightest of the symbology as to how bright you see it on the visor. I just requested him to turn mine really low so that it wasn't giving me conflicting – it wasn't so bright in my face to sort of conflict what I thought I was seeing outside.

COL STREIT: And then you would just essentially, what, ignore that information and focus in on the instruments in front of you?

D5: Well, focus on the aircraft in front of me.

COL STREIT: Yes. Was there any discussion at all about potentially this requires a mission abort?

D5: No, because the symbology itself hadn't failed. It hadn't become US. I mean, every time every pilot gets into an MRH they would set that symbology to be correct. And the way you do that is there's like a test function. You'd set a set of crosshairs onto a set of crosshairs on the Boresight Radical Unit on top of the dash. And once they were aligned, you would look out, release the test button and confirm the symbology line is on the actual horizon.

It's very seldom will I have an actual horizon in front of me. I've usually got tree lines, buildings. So it's kind of a, "I think that's where it should be". It was only on the ground it looked normal. And then when we got airborne it was apparent that it wasn't. So the – I guess what that meant was at the portions of the flight where I couldn't see a visual horizon outside, I then had a vector telling me I am descending below the horizon when in fact we were not.

MS McMURDO: So you didn't mention that in the Defence statement. Was there any reason for that?

D5: I'm unsure whether I was asked a question specifically in regards to that or - - -

COL STREIT: Have a look at paragraph 28 of your Defence statement. That might assist.

MS McMURDO: I'm sorry, yes.

D5: Which paragraph was that, sorry?

5

COL STREIT: Twenty-eight of your Defence statement. That seems to be where you – you don't talk about that issue specifically, but it seems to be where you start addressing your Helmet-Mounted Sight Display, NVGs, to assist your vision at night. So Ms McMurdo's question to you is, is that you haven't addressed the issue about the symbology error that you've encountered, which you address in your Inquiry statement but you didn't deal with that or didn't raise that matter in your Defence statement, and Ms McMurdo was just wondering why.

10

D5: Yes. It may have been whatever questions was asked, I've just answered the questions asked.

15

MS McMURDO: Thank you.

COL STREIT: So just dealing with paragraph 28, you say:

20

Flying over the ocean, it was quite dark.

So does that mean there was limited cultural lighting available, from your memory?

25

D5: Yes. So by the time we got over the ocean, we're pointing out further east, so all the cultural lighting would be behind us. So there was really nothing in front of us other than – if there was gaps in the clouds, you might see some sort of illumination from the starlight through that, but generally it was dark.

30

COL STREIT: I'm sorry to jump around, but can I take you to paragraph 71 of your Inquiry statement? You say this:

35

I found the flying conditions to be challenging during portions of the sortie on 28 July 2023. There was significant portions of the sky had cloud coverage, reducing high light levels, and there were several rain showers in the area. In those areas, I could not see a visible horizon. It was very hard for me to see where the ocean stopped and the sky started.

40

Is that correct?

D5: Correct.

45

COL STREIT: So how did you deal with that particular issue, as the flying pilot?

5 D5: So we still have reference to (1) the instruments, (2) the symbology that you have, and then what the aircraft in front of you is doing as well. And, I guess, when I've made that statement, I – it wouldn't be everyone within the crew would be experiencing that; it would generally just be the flying pilot because 95 per cent of my focus is purely on the aircraft in front.
10 Whereas the other crew members have the ability to look around them to see the horizon is over there, everything is as it should be currently.

But with the – I guess, with the night-vision goggles, we only have that
15 40 degree field of view. And when we're flying in close formation, the aircraft we're following takes up probably half of that space. So you only get kind of 10 degrees either side. And if there's no horizon behind that specific point, you don't have the ability to have it within your visual – within visual at all times.

20 COL STREIT: You say at paragraph 28, second-last sentence:

*Due to the darkness, Bushman 81 briefed to all aircraft (Bushman 81 to 84) prior to the commencement of the turn, that they were opting for a gentle left turn instead of a right turn. To
25 the best of my recollection, I believe a pilot in Bushman 81 said over the radio words to the effect of, "We're going to conduct a left turn to the IP due to weather".*

30 "IP" means Initial Point.

There were also rain showers to the north-east of the IP, which I assumed contributed to the decision to make a left turn.

35 So you were flying at that time, obviously, Bushman 82?

D5: Yes, correct.

COL STREIT: I'll read out the next bit. You say:

40 *Approximately five seconds into the left turn I heard D10 from Bushman 84 say over the radio words to the effect of, "83, come up, come up, come up." Approximately three seconds later I saw a massive flash of yellow light in my NVG, as well as my peripheral vision. The flash lasted for about three seconds. I then heard my
45 Aircraft Captain, D6, shout –*

a few words:

5 *I then heard D10 say - - -*

sorry, that's me saying "a few words", not you. I then continue your evidence. You say:

10 *I then heard D10 say over the radio, "83, fallen angel. Fallen angel, fallen angel".*

At para 30 you say:

15 *I did not see Bushman 83 impact the water.*

Is that all correct?

D5: Correct.

20 COL STREIT: What happened next? Was it that the Aircraft Captain of Bushman 82, D6, took over flying?

25 D5: Yes. So we were kind of rolling out of where we would have rolled out of – into that holding pattern anyway. I think we were flying for maybe 10, 15 seconds before he then took over.

30 COL STREIT: You then ultimately, did you, end up, landed on at Lindeman Island, waiting for further instructions as to when you would next be in line to take over the search and rescue component of what was happening?

D5: Yes, correct. 81 and 82 both landed on at Lindeman Island.

35 COL STREIT: You then, did you, depart Lindeman Island and, Bushman 82, you, returned to Proserpine and refuelled?

40 D5: Yes, correct. We knew we – when we set off for the initial mission, we hadn't taken full tanks of fuel anyway due to the performance requirements, and then we knew we'd be sitting on the ground just burning fuel anyway. We were going to be second to Aircraft 81. So the decision was made we'll go back to Proserpine, offload as much weight from the aircraft that we can, refuel as much fuel as we can, and then be ready to have a longer station over the incident site, if it was required.

COL STREIT: Ultimately, you participated in the search and rescue before returning to land back at Proserpine Airport at about 3.30 am? I'm just looking at para 35 of your Defence statement.

5 D5: Yes, correct.

COL STREIT: Your aircraft, you did not subsequently return to the incident site for search and rescue, your aircraft, did it?

10 D5: No, we went just the one time.

COL STREIT: What happened that morning – no doubt there was a lot of activity, but ultimately was the situation that that afternoon you were then on an aircraft returning back to 6 Aviation Regiment?

15

D5: That's correct. And apologies, in paragraph 35 where it says I attended the Operations tent at around 3.30, we actually sat on – the 3.30 was when I believe we landed and then we sat on the APU after refuelling for probably an hour, hour and a half after. So when I actually got to the Operations tent was probably close to around 5 o'clock.

20

COL STREIT: So a bit later?

D5: Correct.

25

COL STREIT: I understand that. Can I return back to your Inquiry statement briefly? At paragraph 72 you say you left Proserpine Airport on 29 July 2023 at around 1430 hours.

30 D5: Correct.

COL STREIT: You have not been interviewed by Queensland Police with respect to this incident; is that right?

35 D5: That's right.

COL STREIT: The day after you arrived home, at paragraph 74 you say:

40

All aircrew had a meeting with the CO and were told not to discuss the events of the evening of the crash to anyone. This includes talking amongst ourselves, the media and QPS.

Is that correct?

45 D5: That's correct.

COL STREIT: Is any reason given at that time by the Commanding Officer as to why that was a requirement?

5 D5: I'm unsure of what his decision-making process was.

COL STREIT: You had an interview face to face with the DFSB on 23 October 2023; is that right?

10 D5: That's correct.

COL STREIT: You had an interview with Comcare on 5 May 2023?

15 D5: Correct.

COL STREIT: Can I just ask you a couple of final matters, please? Could the witness be shown Exhibit 37?

20 MS McMURDO: Yes, that's the FRAT, the Fatigue Risk - - -

COL STREIT: It's the FRAT, the Fatigue Risk Awareness Tool. This could possibly be presented on screen as well for other persons.

25 So, first, this document, are you familiar with it?

D5: I am.

COL STREIT: When did you first come across this document?

30 D5: I believe I've seen it at some – it is in a document somewhere that we've been briefed on and we've seen this; however, this was not something that we were utilising last year.

35 COL STREIT: So, to your knowledge, this was not being utilised – well, it was not being utilised by you at 6 Aviation Regiment as at the date of the accident?

D5: Not as at the date of the accident, no.

40 COL STREIT: When do you first recall being required to use this document?

45 D5: I believe there was an SI released in, I think it was December '23, and I personally started using this in the end of April, early May this year, when I started flying helicopters in this country again.

COL STREIT: Do you find the document helpful?

D5: I do, yes.

5

COL STREIT: They're my questions, Ms McMurdo.

MS McMURDO: Thank you. I've just got a couple of questions before we look at cross-examination.

10

You left Proserpine Airport around 2.30 on 29 July to return to base?

D5: Yes, ma'am.

15

MS McMURDO: At that stage, did you know Queensland Police were wanting to talk to you for the Coroner?

D5: I did not, no.

20

MS McMURDO: You hadn't been told that then. All right. So you ended up having to give a number of statements over several months about this incident.

D5: Yes, ma'am.

25

MS McMURDO: Did you find that distressing, to have to keep giving statements, a lot of which covered old ground – repeating that? Would it have been better to have just given one account initially so that you didn't have to go over old ground every time someone interviewed you?

30

D5: I believe if there was – and it would be hard to say because I don't know how many investigations would go into an accident which would be normal, but if there was a bank of questions that was generalised, that everyone could lean off, then I would only have to write and provide one statement, have it professionally looked at, and I could submit that to everyone.

35

MS McMURDO: Would that have been helpful? That's what I'm asking you.

40

D5: Yes, ma'am.

MS McMURDO: So that you didn't have to keep going over the same things. So although there were different investigations looking at particular

features, and so you might have to be asked additional questions, you wouldn't have to repeat all the things all over again.

5 D5: That would be helpful, ma'am, yes.

MS McMURDO: It would be helpful and less traumatic for you?

D5: Less time thinking about the details, I guess.

10 MS McMURDO: Okay. So the day after you arrived home, the CO told you not to discuss the events of the evening of the crash with anyone, including talking amongst yourself, the media and QPS. Is that correct?

15 D5: That's correct.

MS McMURDO: Now, it's a pretty natural thing that you would want to have a debrief with each other after having gone through such a terrible experience. So what I'm asking you is not by way of criticism, but did you in fact talk to your colleagues who flew that night about what happened, and have a debrief with each other from time to time over the months before, say, you gave the statement to the Inquiry?

20 D5: So the morning after the incident we all wrote witness statements for DFSB. While I was writing that, I was sitting next to one of my aircrewman and I had asked him, "Just to confirm what I'm writing, is this your recollection also?" Outside of that - - -

MS McMURDO: Do you recall who that was?

30 D5: The specific person, ma'am?

MS McMURDO: Have a look at the pseudonym list.

35 D5: It would be D8.

MS McMURDO: Thank you. Yes.

40 D5: I guess, in addition to that, every now and then you would hear someone mention something, I guess, sort of within the office, something they may have heard or seen. But there was never a time where we got together to discuss the events that we saw. Like, I wouldn't be able to tell you now what the guys in 84 saw that night.

MS McMURDO: So perhaps from time to time over the weeks and months you might have had a brief discussion with someone else who was involved in the incident that night?

5 D5: It's possible, yes.

MS McMURDO: Possible, yes. That's all I have, thank you. Did you have anything?

10 AVM HARLAND: No.

MS McMURDO: Applications to cross-examine?

15 <CROSS-EXAMINATION BY LCDR GRACIE

LCDR GRACIE: I'll be very brief, about three minutes; one discrete topic. D5, I am LCDR Malcolm Gracie, representing the interests of
20 CAPT Danniell Lyon. Could you just have a look at Exhibit 54B, which is your Inquiry statement, please, paragraph 71? I know you've given some evidence on this. I just want to ask you a couple of other matters.

25 D5: Yes.

LCDR GRACIE: In saying that you found the flying conditions to be challenging, was it challenging in a way that was beyond your previous experience, or consistent with other challenging conditions that you've
30 flown in?

D5: I've flown in very similar scenarios, I guess you could call it, where we had the same sort of low level, overwater. Being in formation definitely makes that slightly different, and being specifically in a close formation where you're so close to the aircraft in front, and you have knowledge that
35 the aircraft behind you is equally as close, knowing that you can't move off of your position certainly adds another layer of stress, you could call it.

And then just specifically other points where I lost the visual sight horizon due to a cloud layer or a rain shower in between, that was where my more
40 challenging – I would say was the most challenging points because it was hard to discern what was up and down without referencing everything else.

LCDR GRACIE: You mentioned in your Defence statement – the other Exhibit 54A – you go into some explanation there which I just want to ask
45 you about. At paragraph 28 you say it was quite dark and you had a

5 Helmet-Mounted Sight Display, night-vision goggles. You don't mention there, but you do in the Inquiry statement, the fact that the symbology seems to have been out of alignment or out of whack. I think you said that the vector was out of alignment with the horizon. Could you just say something about that?

10 D5: Yes, okay. So the actual symbology with what you would actually see will not move. What you're testing when you first get in the aircraft is that the horizon line matches the outside horizon line. If that is off, it doesn't mean all symbology is off; it's just that one line that is out. So the actual vector, while I was flying straight and level, was showing where it should show; the horizon line was not aligned to where it should be.

15 LCDR GRACIE: In paragraph 25 of your Inquiry statement you talk about that. You say that:

20 *The vector ball showed below the symbology horizon line when we were in level flight, and it gave the sensation that the aircraft was descending when still in level flight.*

 D5: Correct.

25 LCDR GRACIE: Was that a contributing factor to the aircraft, on occasion, sitting high relative to Bushman 81?

30 D5: Yes, correct. So at the portions of the flight where I couldn't see a visible horizon outside, sometimes that symbology would – “overwhelming” would be the wrong word, but it kind of presented itself differently, and I would get this feeling that, “I know I'm in line with the aircraft in front of me”, but I've got a vector telling me that I'm descending below the horizon. So my natural reaction a couple of times was to check up on the power, which would bring us up on plane slightly, and then I'd have to check myself that I know I'm in the right position, bring it back down, back on position.

35 LCDR GRACIE: Are you discussing this with D6, as the non-flying Captain?

40 D5: Yes, correct. So as it would happen, he would say, “Get back down onto position”, or words to that effect.

 LCDR GRACIE: If your symbology is not right, is there some way to disconnect it, or do you just have to ignore it?

5 D5: I mean, you can turn the brightness all the way down so you can't see it at all. You could just turn it off, but this – for us, I guess, it was a known issue and we had spoken about how to combat that issue. But losing the visible horizon outside was the point where it started to become more of a challenge to overcome that.

LCDR GRACIE: Did he say to you to ignore it and have regard to the Primary Flight Display only? Did you have those sort of discussions?

10 D5: I don't believe that being part of the conversation.

LCDR GRACIE: All right.

15 D5: Not that I recall, anyway.

LCDR GRACIE: But there was more than that one occasion of 82 riding high - - -

20 D5: Yes, it was a couple of times.

LCDR GRACIE: - - - caused by what you were saying: difficulty in the visual cues without the horizon?

25 D5: Yes.

LCDR GRACIE: And you've said it was quite dark. Do you recall whether there was a moon?

30 D5: I believe there was, but the cloud cover negates that.

LCDR GRACIE: Your recollection is "quite dark"?

D5: At that time, it was very dark, yes.

35 Lcdr GRACIE: All right. Thank you. Thank you, ma'am. Thank you, sir.

MS McMURDO: Thank you. Any other applications to cross-examine?
COL Gabbedy.

40 COL GABBEDY: I'll be short, ma'am.

<CROSS-EXAMINATION BY COL GABBEDY

5 COL GABBEDY: D5 , I'm COL Nigel Gabbedy. I appear for MAJGEN Jobson. Could I take you to paragraphs 43 and 44 of your Inquiry statement?

D5: Yes.

10 COL GABBEDY: You refer in paragraph 43 to a brief by the CO that you missed, and then a briefing by MAJGEN Jobson that you were present for. Can you remember where that briefing was given?

D5: I believe it was Hangar 8.

15 COL GABBEDY: Do you know how long it took?

D5: Roughly 45 minutes. That's - - -

20 COL GABBEDY: I appreciate it's about a year ago.

D5: Yes, it's - - -

25 COL GABBEDY: Best you can do?

D5: I'd say maybe 30, 45 minutes, something like that.

COL GABBEDY: Was it only the Major General that spoke?

30 D5: There was certainly other people there. I can't recall exactly who spoke and who said what.

35 COL GABBEDY: In relation to the turbine blade issue, can you remember being told that that defect had been identified some years earlier?

D5: The first I recall of ever hearing it was in that brief.

40 COL GABBEDY: That's the first you were told about it. Were you told when it had been identified?

D5: I believe we were, but I couldn't tell you what that date was. I think he did give that information.

45 COL GABBEDY: And can you remember whether the Major General advised you of what the manufacturer's recommendation was?

D5: I believe he did give that information, but I wouldn't be able to, verbatim, give you that.

5 COL GABBEDY: If it assists you, this Inquiry's taken some evidence that the manufacturer recommended that the defect could be dealt with in deep maintenance, rather than by way of an immediate recall and replacement. Can you recall hearing that information from the Major General?

10 D5: Not specifically.

COL GABBEDY: And if you look at paragraph 44, I think you say that every aircraft would have at least one modified engine. Can you remember if it was the case that each aircraft at 6 Aviation had two modified engines before flying resumed?

D5: It may have been to – that may be, but I'm unsure.

20 COL GABBEDY: But you can't remember whether or not that was briefed to you?

D5: Not specifically, no.

25 COL GABBEDY: All right. Thank you very much. Nothing further, ma'am.

MS McMURDO: Yes, SQNLDR Nicolson?

30 SQNLDR NICOLSON: Thank you. Just a couple of questions.

<CROSS-EXAMINATION BY SQNLDR NICOLSON

35 SQNLDR NICOLSON: Good afternoon. My name is SQNLDR Nicolson. I appear for D10, who's the Officer Commanding. I've just got three questions for you. Firstly, can I take you to your Inquiry statement, paragraph 51, page 7 of 11? This refers to the two-week period in the lead-up to Exercise TALISMAN SABRE.

40 D5: Yes.

SQNLDR NICOLSON: Can you just confirm, in that two-week period, there was no flying by you?

45

D5: I'd have to check my logbook.

SQNLDR NICOLSON: This is after the flying course, in the two-week period. Your recollection was there was no flying?

5

D5: I don't recall flying during that time.

SQNLDR NICOLSON: Second question is, in early '23, when you posted into 6 Aviation, do you recall a safety day – early in '23?

10

D5: There would've been one, yes.

SQNLDR NICOLSON: Do you recall that at a safety day there was a talk or a briefing about the Sentinel program, about fatigue, how to submit fatigue?

15

D5: Briefed - - -

SQNLDR NICOLSON: Is that your - - -

20

D5: Briefed by D10?

SQNLDR NICOLSON: In that safety day, do you recall that?

25

D5: Specifically, I can't. But that sounds like something that we'd do on that day.

SQNLDR NICOLSON: And, finally, in your Inquiry statement, at paragraph 39, you refer to some rules about FACE checks, 6 Aviation?

30

D5: Yes, correct.

SQNLDR NICOLSON: Can I just confirm, when you were at 5 Aviation, were FACE checks used when you were operating the MRH-90 in 5 Aviation?

35

D5: Yes, correct. I've conducted and been part of a FACE check on, I think, every flight that I've - - -

40

SQNLDR NICOLSON: And is that part of the training that you had - - -

D5: Correct.

SQNLDR NICOLSON: - - - in terms of your aviator experience?

45

D5: Yes, correct.

SQNLDR NICOLSON: Thank you. Thank you, ma'am.

5 MS McMURDO: Thank you. You did mention some notes for the DFSB that you made early on?

D5: Yes, ma'am.

10 MS McMURDO: Did you keep a copy of those?

D5: I was provided a copy via my lawyer, yes.

15 MS McMURDO: Your lawyer. Okay. So you have a copy of them?

D5: I can provide them, yes.

MS McMURDO: You can provide a copy of them.

20 D5: Yes.

MS McMURDO: Okay. Thank you. There is more cross-examination. All right.

25 COL THOMPSON: I seek leave, and I'll be two minutes.

MS McMURDO: Yes. All right. Yes, COL Thompson.

30 **<CROSS-EXAMINATION BY COL THOMPSON**

35 COL THOMPSON: Good afternoon, [REDACTED] D5. COL Thompson, Legal Officer for BRIG Dean Thompson. If I can take you to paragraph 72 of your Inquiry statement? You say you left Proserpine on 29 July '23 at around 1430 hours, the incident having occurred on 28 July '23. Did you see BRIG Dean Thompson, at all, after the incident, before you left Proserpine?

40 D5: I believe I did see him.

45 COL THOMPSON: Yes. And what context? Did he address you and your colleagues, or just you? Or what other circumstances did you see him in?

D5: I believe he may have been in the Operations tent when we landed at around 0500.

COL THOMPSON: And did he address you and your colleagues?

5

D5: I don't recall, specifically.

COL THOMPSON: Don't recall, okay. It's not a memory test. And after you arrived back at 6 Aviation Regiment, do you remember BRIG Dean Thompson addressing you and your colleagues, at all; especially about talking to media and QPS, things like that?

10

D5: There was several different meetings where we were told, you know, "Don't talk amongst yourself". Specifically, who said what, I – there was a lot of them. I don't recall.

15

COL THOMPSON: You can't recall BRIG Thompson - - -

D5: I can't say exactly, no. I'm sorry.

20

COL THOMPSON: - - - as part of that? Thank you, ma'am. Thank you, D5 .

MS McMURDO: Thank you. Yes. Re-examination, COL Streit?

25

COL STREIT: Thank you, Ms McMurdo, the witness can be excused.

MS McMURDO: Thanks very much, D5 . You're free to go. We greatly appreciate your assistance to the Inquiry. We know that it's very difficult for you to give this evidence and to revisit this time in your life. It's greatly appreciated.

30

<WITNESS WITHDREW

35

MS McMURDO: Yes.

COL STREIT: We have five minutes. The witness, I'm told, next, is outside.

40

MS McMURDO: Would you like to start?

COL STREIT: I could deal with the preliminaries, get that moving.

45

MS McMURDO: All right then.

COL STREIT: I call D16.

5 MS McMURDO: Thank you.

CLERK OF THE COURT: Do you want to take the oath or the affirmation?

10 D16: Affirmation, please.

<D16, Affirmed

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

MS McMURDO: And could you get a clean glass for the witness, please?
Thank you.

20 D16: Thank you.

COL STREIT: D16, you received a section 23 Notice to be here today?

25 D16: I did.

COL STREIT: And that section 23 Notice contained some questions, did it?

30 D16: It did.

COL STREIT: And, in answering those questions, you prepared a statement for your evidence in these proceedings?

35 D16: I did.

COL STREIT: You also received a Frequently Asked Questions Guide for Witnesses in Inquiries?

40 D16: I did, sir, yes.

COL STREIT: An extract of the Inquiry Directions?

45 D16: Yes.

COL STREIT: And a Privacy Notice?

D16: I did.

5 COL STREIT: Now, I will ask some documents to be shown to you. Whilst I'm doing that, you're with a support person who's seated with you at the time?

D16: I am, sir, yes.

10 COL STREIT: I don't need you to identify that person by name, but we will obtain the details shortly after your evidence finishes today. Thank you. Can I just ask you to take a moment to move through that documentation, which also contains a number of annexes from A through to M, just to confirm what that document is, and then I'll ask you some brief questions.

15 Just for Counsel representing's assistance and the Inquiry's assistance, most of the annexures are at the "Official" level, save for G which is "Official: Sensitive".

D16: That is my statement, sir, yes.

20 COL STREIT: Thank you. Now, the top of your statement, in the very top, it says "Statement of [REDACTED] D16". Is that correct? On the first page.

D16: Yes, sir.

25 COL STREIT: On your immediate right is an A3 document. Could you just turn that document over and just identify the pseudonym number D16 and whether that accords with your name?

D16: It does, sir, yes.

30 COL STREIT: Thank you. Now, in relation to your statement and the annexures that you've attached to your statement – I'm not suggesting there are – but are there any amendments you wish to make?

D16: I do, sir. I've got two pen amendments and one addition.

35 COL STREIT: So the first pen amendment?

D16: So pen amendment is question 27. That is the timeline I've provided.

40
45

COL STREIT: Yes.

D16: So there's a time at about the 0230 in the morning, it says, "2248". That should be "0248".

5

COL STREIT: I see. So that appears – question 27 has a couple of pages. So the first page deals with the question and then we move to the second page, about the middle of the second page, the time:

10

2248: phone call to FLTLT Power regarding the imagery received.

Is that what you're referring to?

D16: That's correct, sir, yes.

15

COL STREIT: What's the correct time?

D16: That was 0248, in chronological order.

20

COL STREIT: Can I just ask you to make that pen amendment, and just initial the amendment. Thank you. Next pen amendment?

D16: Is question 29.

25

COL STREIT: Yes.

D16: So it reads, "Handed over SAR mission coord". That is a time/date group. The first two numbers should read "29" instead of "27".

30

COL STREIT: Thank you. Could you just make that pen amendment, and initial?

D16: I think for the addition, sir, I might just talk about it verbally, rather – in the interests of time.

35

COL STREIT: All right, thank you. The addition is something I'll lead from you. Is it additional evidence you wish to give to the Inquiry?

D16: It is, sir, yes.

40

COL STREIT: I can lead that from you tomorrow. But what I will do now, if you could put that statement back, that jigsaw back together, that would be appreciated. Ms McMurdo, I tender the statement of D16 of - - -

45

MS McMURDO: I think it's 6 August '24.

COL STREIT: Sorry, it's on the front page, the date.

5 Perhaps I'll do this. D16, can you just confirm to the Inquiry that you
digitally signed your statement on 6 August 2024?

D16: I did, sir, yes.

10 COL STREIT: Thank you. I tender the statement.

MS McMURDO: Statement and Annexures A to M will be Exhibit 55.

15 **#EXHIBIT 55 - STATEMENT OF D16, INCLUDING
ANNEXURES A TO M, DATED 06/08/24**

20 COL STREIT: Thank you. Ms McMurdo, that concludes my questions
for this witness for today. If we can have the witness appear tomorrow and
we'll begin at 1000, if that's convenient.

MS McMURDO: Sorry you've been waiting so long to get on.

25 D16: That's all right, ma'am.

MS McMURDO: And such a non-event, really, when you did finally get
on. But at least that's done and you'll be settled in and ready to go with
your evidence tomorrow.

30 D16: Thanks, ma'am.

<WITNESS WITHDREW

35 MS McMURDO: Thank you. We'll adjourn till 10 o'clock tomorrow
morning. Thank you.

40 **PUBLIC INQUIRY ADJOURNED UNTIL
THURSDAY, 15 AUGUST 2024 AT 1000**