

1 THE PRESIDENT: Yes, CMDR Rush.

2  
3 CMDR RUSH: Sir, I call CMDR Blenkin.

4  
5 <MATTHEW BLENKIN, sworn: [10.06am]

6  
7 <EXAMINATION BY CMDR RUSH:

8  
9 CMDR RUSH: Q. CMDR Blenkin, could you state your full  
10 name and your current posting to the Commissioner, please?

11 A. Certainly. My name is CMDR Matthew Blenkin, and I am  
12 the Senior Health Officer for the Australian Defence Force  
13 in Victoria, currently on secondment to the Victorian  
14 Coroner investigating the bushfires.

15  
16 Q. Your secondment to the Coroner and the Victorian  
17 bushfires may explain your expertise. What does it relate  
18 to?

19 A. I am a specialist qualified forensic odontologist,  
20 a forensic dentist, and my current secondment is with the  
21 disaster victim identification operation that is currently  
22 ongoing to identify the victims of the bushfires in  
23 Victoria six weeks ago.

24  
25 Q. What are your qualifications in relation to  
26 odontology?

27 A. I have a Masters in Forensic Dentistry from the  
28 University of Sydney and I am board registered in New South  
29 Wales as a specialist forensic odontologist.

30  
31 Q. In that capacity, CMDR Blenkin, were you seconded to  
32 the group that set about the task of attempting to identify  
33 the body that was located at Christmas Island?

34 A. Yes, I was.

35  
36 Q. Were you, in fact, part of the party that went to  
37 Christmas Island for the purpose of trying to find the  
38 grave and then removing the body from the grave site?

39 A. Yes, I was on both expeditions, on the 2001 and 2006  
40 digs.

41  
42 Q. Perhaps in general terms in relation to the body that  
43 was located at Christmas Island, you examined the teeth of  
44 that body?

45 A. Yes, I did.

46  
47 Q. In relation to that, did you prepare a report?

1 A. Yes, I did.

2

3 Q. Is your examination of the teeth of the body contained  
4 in a report that you prepared - the forensic odontology  
5 report - in relation to the unidentified remains?

6 A. Yes.

7

8 CMDR RUSH: That is to be found at COI.001.0071.

9

10 Q. Is what we see there, CMDR Blenkin, the first page of  
11 your report?

12 A. Yes.

13

14 CMDR RUSH: Sir, I tender that report and its enclosures.

15

16 **EXHIBIT #212 FORENSIC ODONTOLOGY REPORT IN RELATION TO**  
17 **REMAINS FOUND ON CHRISTMAS ISLAND**

18

19 CMDR RUSH: Q. Can we go, please, to 0089, which is the  
20 victim identification form. Is this a report that you  
21 prepared in relation to the Christmas Island body?

22 A. Yes, it is.

23

24 Q. Specifically, does it set out the dental findings in  
25 relation to the body?

26 A. Yes, it does. It sets out the location and type of  
27 each of the fillings and any unusual features of teeth or  
28 missing teeth.

29

30 Q. Can I ask you, in relation to victim identification,  
31 as this is called, how important are the teeth and the  
32 dental work in relation to victim identification?

33 A. As far as victim identification in general goes, we  
34 look at five different, I guess, specialty areas for  
35 identification - DNA, fingerprints and dental records are  
36 all considered stand-alone primary identifiers, in that  
37 each one of those on its own is often accepted by a coroner  
38 as a positive identifier. The other two methods are using  
39 medical or anthropological information and what we call  
40 property, but that's things like clothing, jewellery, dog  
41 tags, tattoos, scars and that sort of thing.

42

43 With the primary identifiers of fingerprints, dental  
44 or DNA, I guess the main point about using dental records  
45 is that, whilst dental treatment on people is distinctive,  
46 there were no radiographs found with any of the records  
47 that we located, dental X-rays. For us to be 100 per cent

1 positive of a dental identification, we need radiographs or  
2 photographs of the teeth, because unless you have a visual  
3 image, what dental records will show is somebody's  
4 interpretation of what they saw at the time. A written  
5 record is not necessarily 100 per cent reliable. So we  
6 rely, in a coronial matter, on the visual images provided  
7 by either photos or X-rays.

8  
9 Q. I'll come to it in more detail in a minute, but in  
10 relation to the crew of *HMAS Sydney*, there were some  
11 hundreds of crew members excluded on the basis of dental  
12 records. If I understand your last answer, it is to the  
13 effect that there were no radiographs in relation to the  
14 crew of *HMAS Sydney*?

15 A. That's correct. I guess you would call them, in  
16 a way, soft exclusions. The victim identification process  
17 we were working through was that it would be unrealistic to  
18 try to screen family members of the 645 crew if we could  
19 narrow it down to a targeted group. So how do we narrow it  
20 down? By making the assumption that the dental records are  
21 accurate and ruling people out if there is a definite  
22 non-match there. Using height and age on the  
23 anthropological method helped to narrow the field down even  
24 more, and then there were the other factors as well.

25  
26 Q. Your evidence is to this effect, as I understand it:  
27 it is preferable to work off radiographs, but here there  
28 were none available?

29 A. Yes, that's correct.

30  
31 Q. So it was on the written record?

32 A. Yes, that's correct, and that happens in reality. In  
33 fact, we're going through the same process in Victoria at  
34 the moment and the Coroner will accept written records if  
35 the other evidence available at the time supports the  
36 findings.

37  
38 Q. What we're looking at in the enclosure to your report  
39 concerning the examination of the body and the dental  
40 findings - I take it that each tooth was examined, and your  
41 findings are set out against numbers, which are numbers  
42 given to teeth?

43 A. Yes. Each little box on that diagram represents  
44 a tooth from the top right, right around to the top left,  
45 bottom right, around to the bottom left, and each tooth is  
46 divided into five different areas, which are the back, the  
47 front, each side and the top, and it shows what surfaces of

1 that tooth actually have a filling in them.

2

3 Q. So just by way of explanation, if we go across the  
4 page to 18, 17, 16, 15, there are black spaces filled in in  
5 relation to those teeth.

6 A. Those black spaces represent the fillings. A cross  
7 represents that the tooth is missing. As you can see on  
8 tooth 12, that little arrow above tooth 12 indicates that  
9 the space between the adjacent teeth is closed. In this  
10 case, that was quite a distinctive marker.

11

12 Q. At paragraph 87, just down the page, you note, "9 gold  
13 inlays present".

14 A. Yes. Whilst the majority of the restorations were  
15 amalgam fillings, there were nine gold fillings present as  
16 well as empty spaces where fillings had been and fallen  
17 out, and they looked to be the shape that you would cut if  
18 you were to put gold in place, so we suspect that he had  
19 had roughly 12 gold fillings.

20

21 Q. So on the basis of what you accepted, which I'll come  
22 to, for the age of this person, being a relatively young  
23 man, there was a considerable amount of dental work?

24 A. Yes.

25

26 Q. And, also, if one accepts nine gold inlays, expensive  
27 dental work?

28 A. Yes, very much so. It's also worth considering, in  
29 the context of the standard dental treatment of the time,  
30 with the majority of the 320-odd people that we excluded on  
31 dental basis, for the most part it was on the fact that  
32 they had other teeth missing and extracted. The default  
33 treatment, when fillings became too big, was to pull the  
34 teeth out at the time. Root canal treatment and everything  
35 that we do a lot of nowadays was uncommon back then. What  
36 we found was that the majority of the crew that we had  
37 dental records for had one or more teeth extracted.  
38 Obviously, teeth don't grow back. So if you can find  
39 a record that says that this tooth was extracted, but we  
40 have a body with that tooth in it, we know that it wasn't  
41 that person. And that was the basis for the majority of  
42 the dental exclusions.

43

44 Q. Again, looking at this issue historically, would that  
45 be considered usual or unusual to have that amount of  
46 dental work in a --

47 A. Unusual. Very unusual. You would expect either that

1 they were quite well off and could afford that sort of  
2 treatment, or that they were related to a dentist.

3  
4 THE PRESIDENT: Q. Looking at the document on the  
5 screen, where the Xs are, where the numbers 12 and 36  
6 appear, does that mean that those teeth had been extracted?

7 A. It means that they were missing. Whether they were  
8 extracted or not present at birth we don't know, but what  
9 it means is that they were definitely not there.

10  
11 Q. When you examined it, they weren't there?

12 A. Yes, but all the other teeth were.

13  
14 CMDR RUSH: Q. Sometimes, as I understand it,  
15 CMDR Blenkin, where a tooth is removed, the other teeth may  
16 move, in a sense, to fill the space?

17 A. They can, and that's not unusual and that's how  
18 orthodontists do it. They just help push things along  
19 a little quicker than would happen naturally. In this  
20 man's case, the missing 12 tooth and the space closure  
21 would indicate that the tooth had been missing for at least  
22 10 years - it takes at least that long for a space like  
23 that to close - or even from birth.

24  
25 Q. If we can go back to page 0071, the first page of your  
26 report, and looking under "Ante-Mortem Dental Records", you  
27 there state that 340 records of the ship's company of 645  
28 were obtained.

29 A. Yes.

30  
31 Q. Were there records on the ship?

32 A. Yes, I'll clarify that. Records containing dental  
33 information for 340 members of the crew were actually  
34 recovered. The majority of those records were initial  
35 medical examinations for entry into the Royal Australian  
36 Navy at the time. There was a medical section and a dental  
37 component.

38  
39 The practice at the time was to actually store dental  
40 records on the ship, and it's still the practice today -  
41 ill advised as it is. So all the original dental records  
42 went down with the ship. The recruit medical records were  
43 held elsewhere, so that's how we managed to get hold of  
44 a number of those. But, from what I understand, the  
45 archive where they were held was originally in Melbourne  
46 and had moved a few times in the meantime, and I suspect  
47 that's how many of the records were lost.

1  
2           We also found some information in the ship's medical  
3 logs up to September 1941. They're still held in the  
4 archive and we actually went through that and waded through  
5 that. That was more anthropological in nature, but there  
6 was the odd piece of information - a sailor was hit in the  
7 mouth and broke some teeth, that sort of thing.

8  
9           Q.    So using that information from dental records and from  
10 the medical log of the ship, you indicate at the bottom of  
11 the page under "results" that at this stage 310 of the crew  
12 were excluded on the basis of dental records.

13          A.    Yes.

14  
15          Q.    That was by comparison with what we've seen with your  
16 examination of the dental work and the teeth of the  
17 Christmas Island body?

18          A.    Yes.

19  
20          THE PRESIDENT:   Q.    Why was it that if you recovered  
21 320 records, all those people were not excluded?

22          A.    We actually recovered slightly more records than that.  
23 Some of the records didn't have dental information on them,  
24 or, because they were medical and dental combined, the  
25 dental section might have been blank; there might not have  
26 been a dentist in the recruiting centre on that day to do  
27 the entry exam.

28  
29          Q.    So they weren't really dental records at all?

30          A.    Well, no, but there were some that were specifically  
31 dental records. I can't off the top of my head remember  
32 the number of the form, but it's a service dental record.  
33 But there was no clinical information on it. It may have  
34 been a record that, in the detail of the record, listed  
35 that the member had posted in to this establishment or to  
36 this ship, had a dental examination, and then that was all  
37 it said; it didn't actually list any details of any  
38 treatment, so the records were incomplete.

39  
40                So from all of the records that we obtained, the only  
41 ones that we didn't exclude were the ones that didn't have  
42 enough information - didn't have any dental information on  
43 them.

44  
45          Q.    They must have had no information, I expect, because  
46 the information that you have in the diagram that we saw  
47 before is very particular.

1 A. Yes.

2

3 CMDR RUSH: Q. The exclusion process, then,  
4 CMDR Blenkin, without the sort of information that you were  
5 able to ascertain from the Christmas Island body, without  
6 that information for individual crew members, therefore,  
7 could it be said, lacks the authority or the accuracy that  
8 might be necessary for exclusion?

9 A. Without dental radiographs, as I said earlier, we are  
10 making the assumption that the written records are  
11 accurate. I guess the only way that that could be proved  
12 wrong is if we go through the people who we haven't  
13 excluded, rule all of them out through a process and find  
14 that we don't have our man.

15

16 Q. And in relation to the exclusion process that was  
17 undertaken on the basis of the written record, obviously  
18 a comparison between that record and what you have as your  
19 results of the examination of the Christmas Island body -  
20 from your point of view, was it sufficient; did those  
21 records provide the sort of information that was necessary  
22 for exclusion?

23 A. Yes, I think they did, and the reason for that is that  
24 whilst much of the dental work and fillings were not  
25 routinely recorded in the examinations, the teeth that were  
26 extracted were routinely recorded, and the pattern of  
27 extractions of the teeth was, in the majority of those  
28 exclusions, the basis for the exclusion. They were very  
29 good at charting which teeth were missing, and it was quite  
30 common for people to have two, three, four or five teeth  
31 missing. As I said, it was the default treatment once  
32 dental treatment failed at the time.

33

34 Q. In this report, you indicate 310 people as being  
35 excluded. Has that number been increased as a consequence  
36 of the obtaining of further records and further comparison?

37 A. Yes, it has. The initial search for records was done  
38 by a clerk for me out of the Queanbeyan archives, but  
39 during the search I went back just to double-check, just to  
40 have another dig around to see if we could find any more,  
41 and I managed to locate an additional 24 records, 16 of  
42 which had dental information on them, and they were all  
43 excluded as well.

44

45 Q. So is the number excluded on dental information 326?

46 A. Yes, it is, based on a comparison of the records.  
47 Since that time, there have been a number of other

1 exclusions on a dental basis.

2

3 Q. Perhaps if we can deal with that. Further down the  
4 track, was an identification process attempted that  
5 involved DNA testing?

6 A. Yes. After narrowing the list by excluding people on  
7 the basis of dental treatment, height and age, we were left  
8 with I think 118 men from the ship.

9

10 Q. Perhaps I jumped too far ahead. After the dental  
11 records, was there also an exclusion process undertaken in  
12 relation to examining the crew by height and age?

13 A. Sorry, yes, there was.

14

15 Q. Was that put against the findings of Dr Denise Donlon  
16 concerning her anthropological examination of the body and  
17 her opinion as to the height and age of the body?

18 A. Yes.

19

20 Q. In relation to that, Dr Donlon has given evidence to  
21 the Inquiry. Her evidence is that the height of the body  
22 was between 5 foot 6 and 6 foot 2?

23 A. Yes.

24

25 THE PRESIDENT: To an accuracy of 99.7 per cent.

26

27 CMDR RUSH: Q. To an accuracy of 99.7 per cent. It's in  
28 her report, which is exhibit 153. In the age range that  
29 she gave, she allowed a year underneath and a year in  
30 advance of the average that she found on examination of the  
31 body, and she has given evidence of an age range between  
32 22 years and 31 years.

33 A. Yes.

34

35 THE PRESIDENT: Q. I think her exclusion was one year  
36 below and one year above the greatest extremities that she  
37 found by scientific analysis, as distinct from an average.

38 A. Yes. You're correct, because the average would be  
39 a single point. The range was the extreme ranges in the  
40 reported literature.

41

42 CMDR RUSH: Q. Again, in relation to height and age, did  
43 you rely on service records to make a determination?

44 A. Yes, we did. Whilst some of the records didn't have  
45 any dental information, they did provide height and age of  
46 the individuals, so some of the information was gathered  
47 from the medical records and some of it was from personnel



1 records.

2

3 Q. After exclusion for dental and exclusion for height  
4 and age, how many of the crew were left in relation to the  
5 identification process?

6 A. At that stage, that left 118.

7

8 THE PRESIDENT: Q. Well, I don't know how that works,  
9 because we have done the same exercise in the Inquiry. We  
10 have 645 on the list. When we exclude for dental, height  
11 and age but leave in DNA, there are 99 people remaining,  
12 and there are 10 excluded for DNA, which leaves 89 people  
13 remaining.

14 A. Those figures probably postdate. The 118 people  
15 was the initial list that we came up with to further  
16 narrow down before we even commenced DNA testing.  
17 CMDR Greg Swindon maintained the database of the personnel  
18 and the exclusions, and at the time he had the up-to-date  
19 list, and on the day, when we excluded the dental and the  
20 height and age, we came to, I distinctly recall, 118 at the  
21 time.

22

23 Q. I've seen a report where it was.

24 A. Yes.

25

26 Q. The material that has been given to me after work on  
27 all the records that we have been given from Navy reduces  
28 it down to 99?

29 A. Since that time, we've managed to exclude a number of  
30 others on a dental basis, based on smiling photographs,  
31 specifically because from the record you can see that that  
32 lateral incisor is missing and the space is closed. That's  
33 very obvious in photos of high quality. We ruled out  
34 a number of people. I guess they're the only solid dental  
35 exclusions, if you want to be quite specific about that.

36

37 The DNA evidence and additional information we have  
38 gathered that we previously didn't have on the age of some  
39 of the people allowed further exclusions from the list.

40

41 THE PRESIDENT: My concern is to make sure that we have an  
42 accurate list.

43

44 CMDR RUSH: Sir, I tender the list that has been prepared  
45 by the Commission, which takes into account the most recent  
46 information that the Commission of Inquiry has received.  
47 After, as you've said, sir, DNA testing is taken into

1 account, our records would reveal that 89 persons out of  
2 the complement of 645 remain as people who as yet have not  
3 been excluded under the process that commenced I think  
4 around the beginning of 2007.

5  
6 THE PRESIDENT: Yes, very well. A list compiled by the  
7 Commission of Inquiry, which numbers all 645 officers and  
8 crew on board *HMAS Sydney* and notes their exclusion on DNA,  
9 dental, height, age or any multiple of those factors will  
10 become exhibit 213.

11  
12 **EXHIBIT #213 LIST COMPILED BY THE COMMISSION OF INQUIRY,**  
13 **WHICH NUMBERS ALL 645 OFFICERS AND CREW ON BOARD *HMAS***  
14 ***SYDNEY* AND NOTES THEIR EXCLUSION ON DNA, DENTAL, HEIGHT OR**  
15 **AGE OR ANY MULTIPLE OF THOSE FACTORS**

16  
17 THE PRESIDENT: Q. You said that somebody within Navy  
18 had a list, kept the records. Who was that?

19 A. CMDR Greg Swindon.

20  
21 THE PRESIDENT: CMDR Rush, we should make inquiries to  
22 ensure that this list is accurate and compare it with his.

23  
24 CMDR RUSH: I will, sir.

25  
26 THE WITNESS: We're still working off his list currently.

27  
28 CMDR RUSH: Q. After the process that you have  
29 identified of dental, height and age, was there a further  
30 process which was adopted by Navy in relation to any  
31 particular group of people that were focused upon?

32 A. Yes, there was. That group of 118 people is still,  
33 I guess, an impractical amount to DNA screen or to track  
34 down the relatives of and DNA screen all, so the intent was  
35 to somehow narrow the field even more and pick, out of the  
36 118, who would be the most likely group of people who would  
37 possibly be the body recovered from Christmas Island.

38  
39 When we recovered the body from the island with the  
40 excavation of the grave site, we recovered some items of  
41 clothing, specifically some press studs. Within those  
42 press studs was some material that the War Memorial carried  
43 out some analysis on. Their conclusions were that they  
44 were likely to be from white overalls. We used that as  
45 a filter, as a signpost, to point us in the direction of  
46 the next most likely group of people, and at the time the  
47 Naval historians from the Sea Power Centre gave us an

1 indication that the people most likely to be wearing white  
2 overalls at the time were the technical officers or warrant  
3 officers.

4  
5 So we went back to those that were not excluded on the  
6 other bases, and the people that fit that criteria were  
7 just three.

8  
9 Q. Three?

10 A. Three officers.

11  
12 Q. What was the nature of the role of each of those three  
13 officers?

14 A. They were engineering officers. I think they were all  
15 engineering officers.

16  
17 Q. And they were selected for the screening process on  
18 the basis that it was believed that they may have been  
19 wearing white overalls?

20 A. They were eligible to wear white overalls as part of  
21 their uniform. They may have been wearing them on the day,  
22 so they were the most likely group of people to test first.  
23 Ultimately, if we really want to sort it out, we would have  
24 to find the relatives of all 645 people. It was a matter  
25 of narrowing it down to the most likely group and working  
26 out from there. After some time, and with the help of the  
27 media, we located relatives of those three men, DNA tested  
28 them and there was no match, which excluded all three of  
29 those men.

30  
31 On that basis, we thought that the next most likely  
32 group of people would be the remaining officer corps,  
33 because we just assumed that if you're sharing a cabin with  
34 someone and there's a fire on the ship or you go to Action  
35 Stations, you may put on a pair of overalls to get to your  
36 Action Station quickly, and you might put on a pair of  
37 white overalls. It would be unlikely for a sailor to put  
38 on an officer's overalls, but for one officer to put on  
39 another officer's overalls wouldn't be unlikely from  
40 a cultural point of view.

41  
42 I guess our next group of people was the remaining  
43 officer corps plus the canteen assistants, because we were  
44 unsure what they were wearing, and we included the RAAF  
45 pilot because we were unsure as to what his uniform would  
46 be. Sorry, when I say "the remaining officer corps",  
47 I mean those that hadn't been excluded on the previous

1 bases.

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Q. The information concerning the DNA testings that the Commission of Inquiry has been provided with indicates that 10 persons from the crew of *HMAS Sydney* have been excluded as a consequence of DNA testing. That could not include the entire body of officers.

A. No. The entire body of officers that hadn't been excluded at that stage, including the canteen staff, was 13, and I think that also included technical warrant officers.

THE PRESIDENT: Q. Many officers were excluded on the basis of age, I think?

A. Yes, they were. Of that list of 13, a number were excluded on DNA - I think about seven. For the remainder, additional information was gained on height or age. I can't recall off the top of my head which ones were excluded on height or age. We were also provided with a number of smiling portrait photographs, some of which were of enough quality to positively exclude them on a dental basis, because we could see that they, in life, had the tooth that had been extracted or was missing. The photos shows them smiling with the tooth in the front of their mouth that our body was missing from an early age.

CMDR RUSH: Q. In relation to the exclusion process, the evidence of Dr Donlon is to the effect that there was bowing of each of the fibulae of the body, which she put down to likely occupation, stress, repetitive movements or the carrying of heavy loads; that there were Schmorl's nodes, which indicated herniation of the intervertebral disks of the spine, which she indicated was most commonly due to people carrying heavy weights, and also that the body, on her examination, revealed lateral squatting facets, which she indicated was unusual for a person of European ancestry; it is normally associated with people who spend a lifetime of squatting. In relation to the process of exclusion, what was made of that particular information?

A. That information wasn't used in the exclusion process, because, as I talked about earlier, medical information, such as scars or treatment of that sort of nature, and even height and age, for that matter, are considered secondary identifiers and you wouldn't positively identify somebody on that basis.

1           The sort of information that that relates to may help  
2 point us in the right direction, but you certainly wouldn't  
3 identify somebody on that basis. For that to be of any  
4 use, it's a post-mortem piece of information that needs  
5 a matching ante-mortem piece of information for it to be of  
6 any use. So, yes, this person carried heavy loads, they  
7 squatted habitually throughout their junior years and that  
8 sort of thing - that sort of information from an  
9 ante-mortem point of view is not readily available, and the  
10 only way you get that really is from interviewing the  
11 families.

12  
13 Q.   Commander, wouldn't it tend to widen your pool of  
14 people, in the sense that if one allows for an age between  
15 22 and 31 and perhaps with the sorts of duties that were  
16 required of individual crew members, it may tend to suggest  
17 a person carrying out a more robust type of activity?

18 A.   That is my understanding of it, but we still would use  
19 height and age in preference to that, as far as a priority  
20 for exclusion goes.

21  
22 Q.   So on the basis now that there are some 89 persons  
23 left to be excluded in the process that has been adopted,  
24 what is Navy's intention in relation to furthering the  
25 process?

26 A.   The Minister assisting, I think, made a media release  
27 earlier in the year that said that all of those people who  
28 hadn't been excluded on a scientific basis would be  
29 eligible for DNA testing should they want to come forward  
30 and offer a sample. So our intent is basically to test up  
31 to those 89 people, or however many the reconciled list  
32 says.

33  
34           At this stage, my understanding is that Navy  
35 Headquarters are fielding inquiries from family members  
36 volunteering to provide a DNA sample to test them.

37  
38           Prior to the reburial of the body, we took a sample of  
39 tooth and bone for isotope testing. It's not a test that  
40 we would normally do in a victim identification process,  
41 because of the broad nature of the results.

42  
43           As a bit of background, what is isotope testing? Your  
44 bones and teeth within your body, and your skin as well,  
45 take in elements from the surrounding ambient atmosphere -  
46 from the soil, the air, mostly from the air we breathe.  
47 Those elements are incorporated into the bone and teeth

1 within your body. That mix of elements within the air has  
2 a specific signature for specific locations.  
3

4 If you have that signature, you can get an indication  
5 of where this person was living. That sounds great, but  
6 there's a bit of a rider on it. Your teeth stop forming  
7 and taking in those elements at about 10 years of age, so  
8 any tests on the teeth will usefully give you an indication  
9 of where the person spent their first 10 years of their  
10 life. The bone, on the other hand, continues to do it  
11 throughout life, and it takes about 10 years to turn over  
12 those elements in the bone. So any tests on the bone will  
13 give us an indication of where they spent the last 10 years  
14 of their life.,if they were geographically reasonably  
15 stable.  
16

17 The information on the profile of the ambient elements  
18 in the atmosphere - and this is going outside my realm of  
19 expertise, but this is my understanding of the process - is  
20 geological in nature, and it is based on the geology of the  
21 land mass where they were living.  
22

23 From talking to the laboratory where they're going to  
24 do this testing, they have said they can pretty much  
25 provide a result that will say that the person was either  
26 from the Northern Hemisphere or the Southern Hemisphere,  
27 and that's about the level of accuracy they can get. They  
28 may not be able to distinguish between Australia,  
29 New Zealand and South Africa, or from North America and  
30 Europe, but they will at least be able to say Northern or  
31 Southern Hemisphere.  
32

33 That may, again, give us an indication, because we  
34 don't feel that we have Northern or Southern Hemisphere in  
35 the first 10 years of their life or in the last 10 years of  
36 their life. So it may give us an indication of where they  
37 were born or where they lived. Again, it may help point us  
38 in the right direction. It may narrow the field. If they  
39 were born in the Northern Hemisphere and lived in the  
40 Southern Hemisphere, then there may have been a Royal Navy  
41 changeover or they may have been born in the UK and came to  
42 Australia to live and then joined the Australian Navy.  
43

44 We wouldn't exclude people on that basis, but, again,  
45 we would use that as a signpost for the next most likely  
46 group of people to DNA test first, without ruling out the  
47 others of that 89.

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Q. So is the position this, CMDR Blenkin, that the DNA test remains the test for identification?

A. Yes, it does.

Q. And the isotope testing may assist to identify a specific group or person for exclusion?

A. Yes, more likely a group than an individual.

Q. Evidence that the Commission of Inquiry took yesterday was that this process for the identification of the Christmas Island body was, in effect, handed over to Navy in January 2007. Why is it that the isotope testing is not being done until now?

A. As I said, it's a very broad filter, for want of a better term. It's not a routine part of a disaster victim identification process. We're doing it because the DNA testing of those smaller groups, based on the clothing, was not as helpful as we thought it would be, or yielded no positive result. So it's just yet another test that we can try, to help point us in the right direction.

Q. For the purposes of this question, if we accept that there are 89 people in the crew left that have not been excluded, will they remain the focus as a general group in relation to the identification process?

A. Yes.

Q. Is there any system or process or protocol in place now for the contacting of the remaining families to put into place some DNA testing in relation to that group of people?

A. Yes, Navy Headquarters established a communication strategy, which included a media release and a website, that has put information out there that allows people to come forward, if they are willing, and provide a sample to the Navy. But Navy is not at this stage actively going out and searching for these people. I found, going out and DNA testing the 16 people that we have excluded --

THE PRESIDENT: Q. Sixteen or ten?

A. Sorry, the list was ultimately 16 people. Sorry, the list was 16 people. We received DNA samples from 10 of them. I found that a number of those people, about half, really didn't want to know the answer. Their brother, husband, dad was dead and they didn't want to dredge it all up again, but they were willing to help for everyone else's

1       sake, and I think that's part of the driver behind not  
2       going out and soliciting these samples from people. If  
3       they would like to come and give us a sample, we will  
4       happily test it for them, but we're not going to force  
5       them, press them into it.

6  
7       CMDR RUSH:    Q.    I think you suggested that some 57 people  
8       had approached Navy, is that correct, in relation to --  
9       A.    I'm not sure of the figure. That wouldn't have come  
10       from me. I'm not sure, but there have been a significant  
11       number of people come forward and request the DNA testing.

12  
13       Q.    So is the process in relation to that testing of  
14       people that have come forward taking place at the moment?  
15       A.    It is ongoing. We're waiting for the supply of DNA  
16       swabs to come in. We have to get them from the United  
17       States and we're waiting for them to come in.

18  
19       THE PRESIDENT:   Do we have details of those 57 to see if  
20       we can reduce this list of 89?

21  
22       CMDR RUSH:    No, we don't, sir.

23  
24       THE PRESIDENT:   We should get them.

25  
26       THE WITNESS:    The 57 would be the people who came forward.

27  
28       THE PRESIDENT:   Q.    I realise that, and many of them may  
29       already have been excluded on a number of bases, but there  
30       should at least be one central list from which people can  
31       work.

32       A.    Yes.

33  
34       THE PRESIDENT:   So far as I'm concerned, this is it.

35  
36       CMDR RUSH:    Q.    That is being handled by CMDR Swindon?  
37       A.    CMDR Jones is the central point of contact in Navy  
38       Headquarters.

39  
40       Q.    And CMDR Jones is based where?

41       A.    Within Navy Headquarters. His title is Director of  
42       Navy Coordination and Communication.

43  
44       Q.    CMDR Blenkin, as best you are able to say, would Navy  
45       dentists have been using gold fillings?

46       A.    Quite possibly, yes. Quite possibly. In fact, I'd  
47       probably say likely.



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Q. Can you calculate age from teeth?

A. Unfortunately - that was the subject of my Masters thesis.

THE PRESIDENT: Q. What was your conclusion?

A. You can while they're developing, which means up to about the age of about 16 years; they're terrific for that. Beyond that, once they're fully formed after 16 years of age, 16 to 18, the age estimation from teeth is very difficult, to the point where, when we give advice on this, we would normally just say "adult", and that would be the broad range. The teeth have finished developing. They are now an adult. That's about all we can use them for.

CMDR RUSH: Q. And these teeth fitted that description?

A. Yes, they did.

CMDR RUSH: They are the matters, sir.

THE PRESIDENT: Thank you very much, CMDR Blenkin.

<THE WITNESS WITHDREW

CMDR RUSH: Sir, if I can call Mr George Bailey.

<GEORGE THOMAS BAILEY, sworn: [10.53am]

<EXAMINATION BY CMDR RUSH:

CMDR RUSH: Q. Mr Bailey, could you state your full name and address to the Commissioner, please?

A. George Thomas Bailey. My address is [REDACTED]

Q. And your occupation?

A. I'm the Senior Objects Conservator at the Australian War Memorial.

Q. What does that role at the War Memorial involve?

A. Principally, my role at the War Memorial involves caring for objects and their collection, preparing them for display and things of that nature.

Q. Do you have qualifications in relation to that role?

A. I have a Bachelor of Applied Science in Conservation of Cultural Materials, and I specialised in objects and