

1 UPON RESUMPTION:

2
3 THE PRESIDENT: Yes, CMDR Rush.

4
5 CMDR RUSH: Sir, I call Detective Sergeant Snow.

6
7 <TIMOTHY JOHN SNOW, sworn: [2.05pm]

8
9 <EXAMINATION BY CMDR RUSH:

10
11 CMDR RUSH: Q. Detective Sergeant, could you state your
12 full name to the Commissioner, please?

13 A. Timothy John Snow.

14
15 Q. And your current posting in the New South Wales Police
16 Service?

17 A. I am currently posted to the Forensic Services Group
18 at Parramatta.

19
20 Q. Do you hold or have you held a Commission in the Royal
21 Australian Army Reserve?

22 A. Yes.

23
24 Q. What is the nature of that?

25 A. I was Captain in the Royal Australian Army Corps.

26
27 Q. In relation to your current position, what are your
28 qualifications?

29 A. I have specialty training in the field of forensic
30 ballistics investigation. I have studied and performed
31 that role for a period of over 11 years.

32
33 Q. Do you hold a Bachelor of Science degree from
34 Macquarie University?

35 A. I do.

36
37 Q. What is the nature of the ballistics investigation
38 that you do?

39 A. Investigating firearm-related homicides and all
40 firearm-related matters within the State of New South
41 Wales, classification of firearms, classification of
42 ammunition and ammunition components, and prohibited
43 weapons.

44
45 Q. In your day-to-day activities, how is that put to
46 practical use?

47 A. When I was at the forensic ballistics investigation

1 section, I was called upon to attend numerous crime scenes
2 involving the fatal use of firearms, attend post-mortems,
3 assist the forensic pathologists with the investigation of
4 post-mortem examinations, determining range, proximity, if
5 you like, muzzle-to-target distance, determining
6 trajectories through the body of bullets and bullet
7 fragments.

8
9 Q. In relation to that work that you have done over the
10 years, has it also involved your undertaking various
11 courses in testing, rifles and shotguns and the nature of
12 ammunition?

13 A. Yes, yes, we do numerous armourers courses and
14 proficiency tests annually.

15
16 Q. Were you called on 16 October 2006 by Dr Donlon in
17 connection with your coming to review and give an opinion
18 in relation to the body that was recovered from Christmas
19 Island?

20 A. Yes, I had a conversation with Dr Donlon on that date,
21 yes.

22
23 Q. Did you prepare a statement, with your particular
24 expertise, in relation to what you saw and your assessment
25 in relation to the Christmas Island body?

26 A. Yes, I did.

27
28 Q. Sir, that is at COI.006.0130. Is what we see
29 there the first page of the report put into an expert's
30 certificate pursuant to section 177 of the Evidence Act?

31 A. Yes.

32
33 Q. Turning to the next page, at the bottom of
34 paragraph 4, you indicate there that as a consequence of
35 the telephone conversation, you attended at the University
36 of Sydney, at the Shellshear Museum, for the purpose of
37 examining the skeletal remains?

38 A. Yes.

39
40 Q. Was your specific concern to examine the skull in
41 relation to a piece of metal that had been located in the
42 skull?

43 A. That's correct. Dr Donlon had asked my opinion on
44 the nature of that metallic object that was embedded in the
45 skull.

46
47 Q. Perhaps if I could ask you firstly to look at this, if

1 I may approach?

2 A. Thank you.

3

4 Q. That is a cast of the skull that was organised by
5 Dr Donlon specifically to demonstrate the skull and the
6 piece of metal that was located in the skull?

7 A. Yes.

8

9 Q. Firstly, how does what you have in your hand there,
10 that being the cast of the skull, compare with what you saw
11 of the actual skull?

12 A. It is a very, very good representation of the outer
13 table of that skull.

14

15 Q. Were you asked to examine it in relation to the piece
16 of metal that was located in the skull?

17 A. Yes.

18

19 Q. Perhaps if you could turn it around so that initially
20 the Commissioner can see it, you are pointing there to the
21 piece of metal that you identified?

22 A. That's correct, sir.

23

24 Q. Perhaps if you would just turn it this way so that we
25 can have a look. Thank you. When you saw just that aspect
26 of the skull, did you have any first impression?

27 A. I did form an opinion based on my experience, yes,
28 that it did not look like any small-arms ammunition that
29 I have ever seen.

30

31 Q. Why not? Why didn't it look like small-arms
32 ammunition?

33 A. Small-arms ammunition, especially military small-arms
34 ammunition, has certain features on the external surface of
35 those objects, and this did not depict any of those
36 external features that I would expect to see.

37

38 Q. What were the external features shown there that you
39 would not expect to see with small-arms ammunition?

40 A. This was basically a spherical object with a diameter
41 of approximately 15mm. There was some heat effect on the
42 inner surface, almost like molten metal, globular molten
43 metal.

44

45 Q. The other piece in front of you is a cast of the inner
46 surface of the skull that Dr Donlon took and has given
47 evidence about. Again, I would ask you by comparison with

1 what you saw of the skull, how does that compare?

2 A. It compares very, very well. It is a really excellent
3 representation of it.

4

5 Q. Are there any features in relation to that cast, as it
6 depicts the metal object, to distinguish between small-arms
7 ammunition and a piece of shrapnel or other metal?

8 A. Again, with military-type small-arms ammunition,
9 I would expect to see part of the circular base of the
10 bullet and maybe even some cannular-type features around
11 the external surface of the bullet, around the bearing
12 surface. Again, these objects don't appear to depict any
13 of those features that I would expect.

14

15 Q. In your report you refer to bevelling. What does that
16 mean?

17 A. I refer to bevelling on the inner table of the skull.
18 This object is a representation of that inner table of the
19 skull. Around the object, a portion of the inner table of
20 the skull has been removed at an angle, or around the
21 circumference of the object, and we call that bevelling.
22 It is indicative of trajectory, if you like - the path of
23 the object as it travels through the skull, both the inner
24 and outer tables. You usually get bevelling on the inner
25 table of the skull if the bullet is travelling from outside
26 to inside.

27

28 Q. Looking at the skull, both outside and inside, were
29 you able to form an opinion as to the likely trajectory of
30 the piece of metal - where it came from?

31 A. Yes, I was. I formed the opinion that the object
32 impacted with the skull moving from front to rear.

33

34 Q. Just pointing to your own head, approximately where
35 are we looking at?

36 A. Approximately up there (indicating).

37

38 Q. That is just above --

39 A. The left eye socket.

40

41 Q. -- your left eye socket?

42 A. Yes.

43

44 Q. One of the matters that helps you determine that is
45 bevelling?

46 A. Is the bevelling, yes, that will give you an idea of
47 the trajectory of the object.

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Q. At the time you examined the skull, had the piece of metal been removed from the skull?

A. Not initially, no. On the 20th, it was still in situ.

Q. Have you had the opportunity since of examining the piece of metal as removed?

A. Yes, on the 27th, I saw it when it was removed.

Q. As a consequence of that further examination, what opinion did you form?

A. I formed the opinion that due to the size and weight of the object and the physical features, it wasn't consistent with small-arms ammunition or any component of small-arms ammunition that I have ever seen, and it was more consistent with being a fragment of a larger shell or projectile, if you like.

Q. You referred to size and weight being key determinants in relation to that opinion. What was it about the size and what was it about the weight of the metal object that led to the opinion that it wasn't small-arms fire but was more likely to be shrapnel?

A. The external dimensions of the object. I think it was approximately 15mm.

Q. I think you refer to it in paragraphs 7 and 8 of your report at page 0132.

A. Yes, in paragraph 7, you state:

The object was removed from the bone and appeared to be roughly spherical in shape with a diameter of approximately 15mm ...

I measured the weight, and it had a retained mass of approximately 4.35 grams, which is 67.2 grains. Due to the size, most small-arms ammunition in use at that time, if we're talking about handgun-type ammunition, would be 9mm in nominal diameter and of a bullet shape, if you like, a jacketed round-nosed bullet shape. Again, this object didn't depict any of those features, and I would expect the weight of a 9mm calibre bullet to be a lot more than 67.2 grains.

Q. In the next paragraph, you note that it is a ferrous-based fragment. What is the significance of that?

A. I tested it with a magnet, and it was magnetic

1 reactive, which indicates that it has some ferrous content
2 as well as the rust that was obvious on the object.

3

4 Q. Is that of any significance to you in making that
5 determination between bullets or shrapnel?

6 A. At the time, a number of different Defence Forces, or
7 Military Forces back then, used steel in jacketing of the
8 bullets, as well as some of them having a steel core. The
9 steel core was also enclosed in an amount of lead, and the
10 jacketing was sometimes anodised and sometimes left steel,
11 sometimes copper anodised, if you like, copper coated.
12 There was also powdered iron used as well, compressed into
13 the jacket.

14

15 Q. Would you expect lead to be in a metallurgical
16 examination of a small-arms bullet at this time?

17 A. I would.

18

19 THE PRESIDENT: Q. Am I correct in thinking that the
20 shape of an object such as this would not be distorted by
21 contact with a human skull?

22 A. Depending on the type of ammunition used. If it is a
23 military calibre cartridge, they were usually at that time
24 jacketed round-nosed bullets, and 9mm is particularly,
25 although small, quite powerful, and I would have expected
26 it to have entered the skull cavity, if not exited as well.
27 I have seen them go through houses, like the whole house.

28

29 CMDR RUSH: Q. And maintain its shape?

30 A. Yes.

31

32 Q. If it had gone into the skull?

33 A. Yes.

34

35 Q. Did this have any shape like a bullet?

36 A. Just spherical. To not enter the skull cavity itself,
37 it was probably moving at quite a slow speed in comparison
38 to a fired 9mm Parabellum calibre bullet.

39

40 Q. Detective Sergeant Snow, because of your interest,
41 have you studied and collected small-arms munition,
42 including German munition, from the Second World War?

43 A. Yes, I have.

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45 Q. And made a close study of the nature and type of
46 bullet that the Germans were using in the War?

47 A. Yes.

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CMDR RUSH: I have no further questions.

THE PRESIDENT: Thank you, Detective Sergeant. You have been very helpful. Thank you.

CMDR RUSH: Sir, that concludes the evidence for today. Tomorrow is Professor Duflou, Mr Wesley Olson and also Mr Austin Chapman.

THE PRESIDENT: Right. I shall adjourn until 10am tomorrow.

**AT 2.20PM THE COMMISSION WAS ADJOURNED
TO WEDNESDAY, 18 MARCH 2008 AT 10AM**