CHAPTER 7

THE UNKNOWN SAILOR

There are probably very few parents of sailors who were lost on HMAS Sydney who are still surviving but there are many wives, children, brothers, sisters and other relatives who are. They are part of the Sydney family and most would wish to know the identity of the sailor on Christmas Island.¹

- 7.1 On or about 6 February 1942 a carley float,² containing a corpse, was recovered off Christmas Island in the Indian Ocean. The body was partly decomposed and clothed in a blue boilersuit which had been bleached white by exposure. A shoe or boot was also found in the carley float, and the island doctor believed that it did not belong to the deceased. The body was examined by the doctor, who found that it was the body of a white male, but as there were no personal effects or identifying items on the body, his identity could not be determined. After examination the remains were interred in an grave in the old European cemetery on Christmas Island. The burial was conducted with 'military honours'.³
- 7.2 Mr J C Baker, who had been in charge of the Radio Station on Christmas Island, indicated that when he left Christmas Island on 17 February 1942, 'an inquest, which had been delayed owing to illness of an official, was in progress. A full report is to be forwarded to Australia as soon as this inquest is concluded'. It is not known whether the report of the inquest was ever forwarded to Australia, as no inquest report or autopsy report has ever come to light. Christmas Island was overrun by Japanese Forces on 31 March 1942. Whether records of the body were destroyed during this period, or whether they were removed and later lost, is not clear.
- 7.3 For many who made submissions to this inquiry, the body on Christmas Island was a central concern. If the body was indeed that of one of HMAS *Sydney*'s crew, there was a strong feeling that it should no longer lie in an unmarked grave in a remote part of the Indian Ocean. For some, the body on Christmas Island symbolised what they felt had been the neglect of the *Sydney* and her crew, and was a condemnation of the government's inactivity:

... the grief of the surviving relatives still forms a large part of at least many of them ... There is a sense of frustration within the community that the navy has not revealed the full circumstances surrounding the deaths of the crew of HMAS *Sydney*. There is a mixture of hope and despair that the body on Christmas Island may be a relative, and ... the

¹ McGowan, Submission, p. 897.

Named after Carley in England, where they were originally manufactured. Defence advised that the term carley float is often used generically, and hence it has been written in lower case throughout this report (Department of Defence, Transcript, p. 13).

³ Department of Defence, Submission, p. 1854.

⁴ Shipping Intelligence Report No 137/1942, reproduced in Department of Defence, Submission, p. 1964.

country for whom that relative has given his life is so unfeeling, unbending, contemptuous or irreverent as to ignore the compelling evidence and not be bothered to carry out a proper investigation so that the deceased sailor's remains should/could be identified.⁵

7.4 The Committee's Terms of Reference required that it specifically address:

... the practicability of accurately locating the grave of an alleged body from HMAS *Sydney* which was allegedly buried on Christmas Island; [and] the identification of any scientific procedures now available which could verify the identity of human remains alleged to be those of a crewman of HMAS *Sydney* buried on Christmas Island if and when such remains were located.

- 7.5 As a preliminary to addressing those two issues, the Committee felt that it was necessary first to establish whether or not, on the balance of probability, the body came from HMAS *Sydney*. If this could not be determined satisfactorily, the issue for consideration was then whether there was any other basis on which to seek an exhumation.
- 7.6 In examining this issue, as indeed with many of the issues raised in this inquiry, the question of standard of proof was central. As one submission argued:

[To] demand ... a 'definite link' implies proof beyond reasonable doubt, a standard demanded by law in a criminal prosecution but one, which ... should not have to be met in an inquiry of this nature. To apply such a high standard would make the task of the Committee impossible. I respectfully suggest that the Committee is obliged to examine all relevant material and then attempt to reach a conclusion by saying that, on balance, it is more likely e.g. that situation (a) happened rather than did situation (b).

7.7 The Committee was conscious of comments such as these in conducting the inquiry, and as noted in the introduction to this report, has sought to determine what a reasonable person would believe and has looked at the balance of probabilities.

Origins of the Carley Float

Contemporary accounts of the discovery of the body indicate that it was thought by many at the time that the carley float and body had originated from HMAS *Sydney*. After the war, the Director of Naval Intelligence, Captain G C Oldham, investigated the matter. His brief report, noted that '... the clothing found on the corpse could possibly have been that of an R.A.N. rating', however 'it seems reasonably certain from the particulars given of the covering of the Carley Float that the Float did not belong to an H.M.A. Ship'. On this basis, Captain Oldham concluded that the carley float was 'not ex H.M.A.S. *Sydney*'.

⁵ Heazlewoods Solicitors, Submission, p. 1419.

⁶ McGowan, Submission, pp. 890-891.

The report is reproduced in a number of submissions. See for example, Heazlewoods Solicitors, Submission, p. 1482 and Department of Defence, Submission, p. 1957.

- 7.9 This appears to have been the end of the matter as far as Navy and indeed the Department of Defence were concerned. There is no record of other investigations having been made, and the Department of Defence has maintained the position that 'Given the lack of further details it is difficult to come to any definitive conclusion on the origins of the Christmas Island carley float'.⁸
- 7.10 Gill indicated that it 'was at first thought that [the body] might be from *Sydney*, but in the early post-war years, and after detailed investigation of all reports and descriptions of the float and its occupant, the Director of Naval Intelligence at Navy Office (then Captain Oldham, RAN) concluded that this could not be so'. This view has been challenged by a number of researchers and interested parties, with many claiming that the evidence overwhelmingly supports the carley float being from *Sydney*.
- 7.11 Michael Montgomery, in his work on the *Sydney*, implies that the carley float sighted off Christmas Island was from the same source as the carley float recovered by the *Heros*, i.e. from *Sydney*. ¹⁰
- 7.12 Barbara Winter was more explicit, arguing that:

The float did not materialise out of thin air. It came from a ship sunk in the Indian Ocean about November 1941, off the coast of Western Australia; a ship which had been shelled, and from which men were missing; a ship with an Australian-made, naval pattern Carley float. It came from *Sydney*. ... In an unnamed grave at Flying Fish Cove, beneath the soaring cliffs of Christmas Island, lies the only man from HMAS *Sydney* to find a grave ashore. ¹¹

7.13 Among the more recent accounts of the loss of *Sydney*, Tom Frame has been the only one to doubt that the body and the carley float originated from that ship. Frame argued that:

There were no marks on the float which linked it to *Sydney*; its association with *Sydney* from the outset was only circumstantial. ... It remains the responsibility of those who assert that the float originated from *Sydney* to prove conclusively that [the condition of the items found] ... is consistent with its purported origins and that, furthermore, it discounts other possibilities.¹²

However, in the second edition of his book, released in July 1998, Frame indicated he was 'now inclined to believe the float was from *Sydney*' while contending that more work needs to be done in establishing a direct material connection between the float and *Sydney*. ¹³

7.14 In submissions to this inquiry, debate about the possible origins of the carley float has revolved largely around three key points:

⁸ Department of Defence, Submission, p. 1856.

⁹ Gill, op. cit., pp. 459-460.

¹⁰ Montgomery, op cit., p. 142.

¹¹ Winter, op. cit., p. 241.

¹² Frame, op. cit., pp. 203-204.

Frame, op. cit., 2nd edition, Preface, p. xii.

- the oceanographic conditions that would have affected a carley float adrift in the Indian Ocean;
- whether there were other ships in the area from which the carley float might have been lost; and
- the physical characteristics of the float.

Each of these will be examined in turn in this section, before considering the question of location of the body and exhumation.

Oceanographic Factors

- 7.15 Was it possible for a carley float, lost from the reputed site of the battle, to have reached Christmas Island by early February 1942? For those who argue that the Christmas Island carley float was from HMAS *Sydney*, the work of Dr John Bye, an oceanographer at the Flinders Institute for Atmospheric and Marine Research, Flinders University of South Australia, is of particular interest. On 7 October 1994, 943 drift cards were released near the supposed site of the sinking of HMAS *Sydney* (27°3'S, 111°3'E). As of January 1997, nine cards had been reported one found in June 1995 on South Island, Cocos (Keeling) Islands, three on the coast of Kenya, one each on the coasts of Mauritius, Zanzibar and Tanzania, and two in Kwa Zulu Natal province, South Africa.¹⁴
- 7.16 Based on the cards recovered, Dr Bye has reached the following conclusions:
 - the cards recovered indicate an anticyclonic drift pattern, northward to the vicinity of Cocos (Keeling) Islands, westward towards East Africa, and then southward down the African coast; and
 - the results of the drift card experiment strongly support the possibility that a drifting object from the site of the sinking of HMAS *Sydney* could have arrived at Christmas Island.¹⁵
- 7.17 The card that was found on Cocos (Keeling) Islands was not found until June 1995, some eight months after its release. Dr Bye accounts for the longer time compared with the carley float as follows:
 - (a) the drift card release was about a month earlier in the year than the sinking of HMAS *Sydney*;
 - (b) the track of the cards may have passed by Christmas Island one or two months before arrival off Cocos (Keeling) Islands;
 - (c) the apparent transit time from Cocos (Keeling) Islands to the Kenyan coast was very short, which suggests that the card found on Cocos (Keeling) Islands may have arrived well before it was discovered;

Exhibit No. 9, Table 1.

Exhibit No. 9.

- (d) there is the possibility that the carley float may have been propelled by its crew towards the coast of Western Australia in the early hopeful days of its journey.¹⁶
- 7.18 Dr Bye's findings from this experiment, are reinforced by the recovery of a drift card, released in December 1969 in a previous Southern Ocean experiment, at 40°00'S, 111°32'E, which was found on 10 January 1971 on Dolly Beach, Christmas Island. 17
- 7.19 The work of Dr Bye is supported by a study by Professor Matthias Tomczak, Professor of Oceanography at Flinders University, who found:

The location [of the wreck site] ... is sufficiently west of the continental slope and thus outside the reach of the Leeuwin Current, which in November is as its weakest. From these general conditions it can be concluded that any raft set adrift from HMAS *Sydney* before it sank would most certainly have drifted northward. ... In summary, there is little doubt that a carley raft released at a position near 26°30'S, 111°00'E in mid-November, drifts northward at least to about 20°S. Thereafter the drift of the raft depends on a number of factors. It is possible for the raft to reach Christmas Island by February, particularly if the raft's exposure to the current is minimal and its drift is mainly determined by the wind. It is therefore not unreasonable to assume that the carley raft retrieved at Christmas Island ... could have reached the island after having been released at a position near 26°30'S, 111°00'E in mid-November.¹⁸

- 7.20 CMDR R J Hardstaff, former Deputy Hydrographer RAN, also supported the theory that the carley float that was found off Christmas Island was from HMAS *Sydney*. ¹⁹
- 7.21 In a paper attached to its original submission, the Department of Defence posed two questions could an object originating near 24°S, 111°E on 19 November arrive at Christmas Island in early February; and what other possible points of origin could there be for such an item?²⁰ In response to the first question, the paper found '... it is possible for an object released off the west coast of Australia to be carried to the vicinity of Christmas Island by currents within three months in the early part of austral summer's monsoon period'.²¹ On the basis of this evidence, the Committee rejects the view put by Professor Creagh that '... none of the meteorological conditions prevailing at that time would lead to an expectation that the float could have drifted towards Christmas Island'.²²
- 7.22 While acknowledging also that the results of the drift experiments 'tend to support the theory that an object could have drifted from the location of the battle to Christmas Island'

¹⁶ Exhibit No. 9a.

¹⁷ Exhibit No. 11a, p. 3.

¹⁸ Tomczak, Professor M, reproduced in Exhibit No. 11a.

¹⁹ Hardstaff, Transcript, p. 446.

²⁰ Oceanographic Conditions near Christmas Island, November through February, Attachment O to Department of Defence, Submission, pp. 1968-1971.

²¹ ibid., p. 1970.

²² Creagh, Submission, p. 1012.

the Department of Defence indicates there are at least four other possible points of origin for the float:

- Java Sea:
- Banda Sea:
- Timor Sea/North West Shelf; and
- West-Northwest of Christmas Island.

The Department concludes that 'the source area of the float could not be determined with certainty'. ²³

- 7.23 The Committee believes that the Department of Defence would have to mount a more thorough case than that presented in its submission to support the view that there are four other points of origin for the float. No comparable study to the drift card study undertaken by Dr John Bye appears to have been undertaken by Defence. A detailed hydrographic assessment of currents in each of the four areas, together with the locations of the putative source of the carley float (either a damaged or sunk vessel) would seem a prerequisite to making such assertions.
- 7.24 However, if the Department of Defence is correct in its assertion that there are four other possible geographic sources for the carley float, the question then to be asked is, if the carley float originated in one of these areas, from what vessel did it come?

Could the Carley Float have come from a Ship other than Sydney?

7.25 In its submission, the Department of Defence indicated that it believes that the float may have originated from any one of 11 merchant ships and 11 naval vessels sunk in the broad area of the Indonesian archipelago in the period June 1941 to February 1942.²⁴ In addition, Defence noted:

During the period leading up to the Japanese occupation of Singapore and the Netherlands East Indies large numbers of craft attempted to flee the region to Australia. Many were lost. No records are known to exist giving details of these craft or their occupants and it is possible the float may have originated from one of them.²⁵

- 7.26 However, Mrs Rosslyn Page has conducted an extensive review of shipping that might possibly have been the source for the carley float, examining not just the 21 ships nominated by Defence, but over 100 ships including:
 - all Allied and Axis warships sunk in the Indian Ocean, at or south of the Equator, before 6 February 1942;
 - all Allied, Axis and Neutral merchant ships sunk, scuttled or seized in the Indian Ocean at or south of the Equator, before 6 February 1942;

²³ Department of Defence, Submission, p. 1857.

²⁴ ibid., p. 1856.

²⁵ ibid.

- all Allied and Axis warships sunk at or south of the Equator, before 6 February 1942, in South East Asian seas;
- all Allied, Axis and Neutral merchant ships sunk, scuttled or seized at or south of the Equator, before 6 February 1942, in South East Asian seas;
- all warships sunk at or north of the Equator, before 6 February 1942, in South East Asian seas;
- all merchant ships sunk, scuttled or seized at or north of the Equator, before 6 February 1942 in South East Asian seas; and
- loss of crew-members (where known) from Allied and Axis warships and crew-members and/or passengers from merchant ships, sunk, scuttled or seized before February 1942.²⁶
- 7.27 Mrs Page concludes from her work that 'the only Allied warship sunk in the Indian Ocean, *at* or *south* of the Equator between 1939 and before 6 February 1942, equipped with a Carley float manufactured to RAN specifications and marked "LYSAGHT DUA-ANNEAL ZINC. MADE IN AUSTRALIA" ... was HMAS *Sydney*'. 27
- 7.28 A suggestion made to the Chairman of the Committee, that the body may have originated from a convoy during 1940-1941,²⁸ was also examined by Mrs Page and discounted. As Mrs Page pointed out, the carley float recovered off Christmas Island was 'riddled with shrapnel', indicating it had been in proximity to a battle, rather than the result of someone going overboard.²⁹
- 7.29 Several vessels were not covered by Mrs Page's review, but Dr John Bye, using the drift current patterns of the region and the required average speed for debris to arrive at Christmas Island from the position given for each sinking, reached the following conclusion: 'that there are NO listed ships (except for HMAS *Sydney*) which could have been a source for the Christmas Island Carley Float'.³⁰
- 7.30 A summary of those vessels identified by Defence, and comments by Mrs Page and Dr Bye are in Table 7.1.

²⁶ Page, Submission, pp. 690-792.

²⁷ ibid., p. 3685.

Referred to in letter on behalf of Mr Eric Krake and Mr Ed Krake, in Knight, Submission, pp. 3313-3315; Knight, Transcript, p. 388, and by Chairman in Transcript, p. 378.

²⁹ Page, Submission, p. 3915.

³⁰ Bye, quoted in Page, Submission, p. 3697.

Table 7.1 Comparison of Vessels as Possible Source for Carley Float³¹

Name of Ship	Date Lost	Location	Comments ³²	
Velebit	26.6.41	10°N, 88°E	Current drift towards Malacca Strait.	
Perekop	18.12.41	Near Senoa, Natuna Island, Dutch East Indies	As for <i>Banka</i> . Also too fast. ³³	
Kwangtung	4.1.42	09°12'S, 111°10'E	Carley floats did not form part of her peacetime equipment; <i>Kwangtung</i> never visited Australia. ³⁴ However, possibility of drift towards Christmas Island.	
Baynain	11.1.42	Off Tarakan, Dutch East Indies	Captured. Too fast.	
Jalarajan	14.1.42	00°12' S, 97°E	Current drift westward away from Christmas Island.	
Senang	16.1.42	01°15' N, 104°50'E	As for Banka. Also too fast.	
Eidsvold	20.1.42	Off Christmas Island	All 31 crew saved. ³⁵	
Zannis L Cambanis	21.1.42	01°15′N, 104°31′E	As for Banka. Also too fast.	
Taisang	24.1.42	00°55'N, 103°35'E	As for Banka. Also too fast.	
Harpa	27.1.42	Main Strait, Singapore	Main Singapore Strait, (1°15'N, 104°00'E). As for <i>Banka</i> . Also too fast.	
Giang Seng	29.1.42	Dutch East	Not recorded in Lloyd's War Losses, but Dutch sources indicate vessel not sunk until 2 March 1942.	

³¹ Department of Defence, Submission, p. 1856. All positions are as given in this submission.

Drawn from Page, Submission, pp. 740-790 and Bye, Dr J, Possible Origins of the Christmas Island Carley Float – An Oceanographical Assessment of Sources Other than HMAS Sydney, Exhibit No. 37.

Too fast' refers to a comparison of the 'required average speed' for the arrival of debris at Christmas Island, given the position and date of sinking. In the event that this speed was greater than the mean current speed on the direct path between the sinking site and Christmas Island, the ship was excluded as 'too fast' (Exhibit No. 37, p. 3).

Page, Submission, pp. 740-741.

³⁵ ibid., p. 748.

		Indies	Sunk near Surabaya, situated on the Madura Strait which opens onto the Java Sea (not the Indian Ocean). ³⁶	
Sydney	19.11.41	26°S, 111°E (est)	'E	
Prince of Wales	10.12.41	3°34'N, 104°26'E Debris from the ship was subject to the clockwise gyres of Northern Hemisphere Oceans and the Equatorial Counter Current, which flows West at and to approx. 7° north of the Equator. Opposing currents South from Sunda Strait to Christmas Island.		
Repulse	10.12.41	3°37'N, 104°21'E	As for Prince of Wales.	
Kampar	13.12.41	Penang	As for <i>Banka</i> . Also too fast and opposing currents in Malacca Strait.	
Banka	10.12.41	East Coast of Malaya	At or North of the equator, between 0° and approximately 7°N, the Indian Counter Current flows west. Debris (if any) would have to negotiate the various Straits and localised currents, to come into the Indian Ocean. ³⁷	
Kudat	30.12.41	Port Swettenham	Lloyds reported the loss of Kudat as occurring on 10 January 1942. Flow of debris: see comments for <i>Banka</i> . Also too fast.	
Prins van Oranje	11.1.42	South of Boengoe Island, Tarakan	Too fast.	
Thanet	27.1.42	2°40'N, 103°42'E	Subject to the same forces which governed the ocean currents as for <i>Repulse</i> and <i>Prince of Wales</i> . Also too fast.	
Kelana	16.1.42	Malaya	As for Banka. Also too fast.	
Larut	22.1.42	East Coast of Sumatra	Crew saved. ³⁸ Also too fast, and opposing currents.	
Raub	22.1.42	East Coast of Sumatra	Crew saved. ³⁹	

37 38 39

ibid., p. 762. ibid., p. 768. ibid., p. 789. ibid., p. 786.

- A similar exercise in examining the ships listed by the Department of Defence as possible sources of the carley float was undertaken by the former Deputy Hydrographer RAN, CMDR R J Hardstaff RAN (Retd). He examined the location and date each ship was sunk, the shortest distance in nautical miles to Christmas Island, the days between sinking and the arrival of the carley float at Christmas Island, the miles needed to be covered per day, and the drift rate. Taking into consideration which vessels would be likely to carry naval carley floats similar to that found off Christmas Island, CMDR Hardstaff concluded that 'serious consideration should be given to HMAS *Sydney* only'.⁴⁰
- 7.32 It has also been claimed that the carley floats were an accountable item,⁴¹ and records kept of floats lost during this period. However, other evidence has suggested that such floats were 'a throw-away item', replaced as necessary.⁴² There was also the suggestion that the float may have originated from a Defensively Equipped Merchant Ship (DEMS), which sometimes carried carley floats. However there were no known DEMS lost in the Indian Ocean at that time from which the float might have come.⁴³
- 7.33 It is apparent from an examination of Table 7.1 that while a number of the vessels listed by the Department of Defence are most unlikely as possible sources of the carley float, not all of the vessels can be ruled out. The Committee believes that while it is not possible, on this basis, to prove conclusively that the carley float originated elsewhere than the *Sydney*, it is also not possible to discount the view that the carley float may have come from the *Sydney*.

The Nature of the Carley Float

7.34 The description given by Captain J R Smith, Harbour Master from Christmas Island of the carley float was as follows:

In Captain Smith's opinion, the Carley float in question was undoubtedly of Naval pattern. The wooden decking was branded with the word 'PATENT' and one hole, apparently caused by a bullet was found in this decking.

The outer covering of the float was damaged in several places, a few pieces of metal being found embedded in the kapok filling. One of these pieces, in the opinion of the gun's crew on the island, was what remained of a bullet.

The inside framework, also the divisions between the buoyancy tanks were branded as follows:-

'LYSAGHT DUA-ANNEAL ZINC. MADE IN AUSTRALIA INSIDE.

⁴⁰ Hardstaff, Submission, pp. 3955-3956.

⁴¹ Heazlewoods, Submission, p. 1420.

Department of Defence, Transcript, p. 13. See also Australian War Memorial, Transcript, p. 103: 'They were not part of the ship's equipment. It was at the discretion of the captain to take on whatever equipment like that he could'.

⁴³ Olson, reproduced in Heazlewoods Solicitors, Submission, p. 1692.

All the roping attached to the float had a red yarn running through the strands.⁴⁴

- 7.35 While substantially agreeing with this description, Mr J C Baker also added that the float was marked No. 2 on the outside covering. His recollection of the inscription varied slightly, and was 'MADE IN N.S.W. ANNEALED ZINC INSIDE'. Both men referred to marine growth on the float, indicating that it had been in the water for some time.
- 7.36 It is believed that part of the carley float was taken by Captain Smith to Fremantle in late February 1942 and that it was given to naval authorities who reportedly agreed that it came from an Australian ship.⁴⁶ There are no records pointing to the fate of the remains of the carley float, and most assume that it has been destroyed in the intervening period.
- 7.37 Captain Oldham based his findings that the float was not from *Sydney*, largely on the physical description of the carley float. A second carley float, found by naval auxiliary *Heros* during the search for *Sydney* in November 1941, has survived and is currently in the collection of the Australian War Memorial (AWM). The Department of Defence accepts that 'there is very strong evidence to suggest that it came from the *Sydney*'. The AWM float was subjected to extensive scientific analysis, the report of which was published in 1993. In summary, that investigation found:

The extensive damage to the float appears to have been caused by particles of shrapnel from at least one high-explosive shell detonating on or near the main structure of the ship and ricocheting into the float. There is no evidence of damage by small arms fire. Nor does the exterior structure of the float have any heat or burn marks to indicate that it was exposed to the fires reported to have broken out on *Sydney*. 49

and

The *Sydney* was described by Detmers as ... 'a mass of flame' ... If Detmers' account is accepted it supports our speculation that the float was not on the *Sydney* at the time of which he was speaking, and probably was damaged and either blown or washed overboard some 15 minutes earlier during the action before the *Sydney* passed behind the *Kormoran*. ⁵⁰

7.38 The report also noted that other damage to the float 'has been caused by early investigative techniques and as the result of being on "open" display from 1942 to 1960'. 51 In

Shipping Intelligence Report No. 137/1942, 25/2/1942, S/S "ISLANDER" from Christmas Island. Reproduced in Department of Defence, Submission, p. 1962.

Shipping Intelligence Report No. 137/1942, 23.2.1942, M/V "HERMION" from Christmas Island. Reproduced in Department of Defence, Submission, p. 1964.

⁴⁶ Based on reports from Mrs J Smith, contained in Department of Defence, Submission, p. 1854.

⁴⁷ Department of Defence, Transcript, p. 13.

⁴⁸ Ashton, Challenor and Courtney, *The Scientific Investigation of a Carley Float*, Technical Paper of the Australian War Memorial No. 1 (November 1993), Exhibit No. 30.

⁴⁹ ibid., p. 8.

⁵⁰ ibid., p. 27.

⁵¹ ibid., p. 24.

regard to the often repeated accusations that the Germans machine-gunned Australian survivors, the following comment in the scientific investigation report is of note:

If, as proposed, the float was shot at by machine-guns, any projectiles from the German weapons then in use would be expected to have penetrated the relatively soft body of the float with clean entry and exit holes. No such holes were found and nothing discovered and removed from the Carley float has any morphological or metallurgical resemblance to the type of machine-gun bullets that could have been used during the naval action in November 1941.⁵²

- 7.39 The Committee notes with concern that, despite this clear indication of an absence of bullets, a number of submissions still continue to describe the carley float as 'heavily marked by bullet perforations', holding to the theory that its occupants were machine-gunned.⁵³
- 7.40 A comparison of the descriptions of the Christmas Island float and the float in the AWM is not conclusive, although there are a number of similarities. The comparison is summarised in Table 7.2. On the basis of this comparison, the Department of Defence believes that 'Given the lack of further details it is difficult to come to any definitive conclusions on the origins of the Christmas Island carley float'. 54
- In looking at the descriptions, Mr Wes Olson noted that the red yarn in the rope indicated that it was navy issue rope, or Admiralty rope. Further, the numbering of the float is not inconsistent with it coming from *Sydney*, as there is evidence that Captain Burnett had the rafts numbered on the ship (as reflected in the number 5 on the float in the Australian War Memorial). Mr Olson also notes that Lysaghts of Newcastle, New South Wales produced a treated sheet steel product which was know as Zincanneal. The AWM carley float has 'Lysaght Zincanneal Australia Panel Quality' stamped on its steel panels. He concludes that 'As British manufactured Carley floats were constructed of copper, the fact that both the Christmas Island float and the AWM float were constructed of Australian galvanised steel would suggest that both were made in Australia'.⁵⁵
- 7.42 The main difference between the two floats then appears to be kapok versus cork. Some doubt has been raised about the accuracy of the observation that kapok was what was seen in the Christmas Island float. It has been suggested that in fact it might have been balsa which had degenerated as a result of shellfire damage and long exposure to salt water and sun. 'Both reconstituted cork and balsa wood are rigid materials and would provide an adequate support for the outer wrapping of canvas strips. On the other hand kapok occurs in flock form, has insignificant tensile strength so that it could not be glued to the buoyancy tubes (as were cork and balsa) and has insufficient compressive strength to withstand the forces generated by being wrapped in canvas'. However the evidence is not conclusive, and as Mr Olson suggested:

⁵² ibid., p. 26. Professor Creagh, who participated in the examination of the shrapnel, using an electron microscope, has claimed that metal fragments found were from *Sydney* (Transcript, p. 118).

⁵³ See for example, Montgomery, Submission, p. 635.

Department of Defence, Submission, p. 1856.

⁵⁵ Olson, W, letter of 6 March 1997, included in Heazlewoods Solicitors, Submission, pp. 1691-1692.

⁵⁶ Turner, Submission, p. 3972.

The question that begs to be answered though is were all wartime manufactured floats constructed with the specified materials? It is quite possible that due to wartime shortages some contractors may have supplied the R.A.N. with Carley floats with a kapok covering. Alternatively was Baker mistaken when he said that the float had a kapok filling? ... One is therefore left wondering how Oldham could ignore the fact that the float was numbered in navy fashion, and carried navy rope, and then decide it was not a navy float on the sole grounds that it may have had a kapok covering. ⁵⁷

Table 7.2 Comparison of the Christmas Island and AWM Carley Floats⁵⁸

Item	AWM Float	Christmas Island Float	Remarks
Colour	Grey	Grey	
Markings (wood)		'PATENT'	
Markings (steel)	LYSAGHT ZINCANNEAL AUSTRALIA PANEL QUALITY ⁵⁹	LYSAGHT DUA-ANNEAL ZINC MADE IN AUSTRALIA INSIDE or MADE IN NSW ANNEALED ZINC INSIDE ⁶⁰	
Markings (hull)	5	261	Possible raft number
Covering	Cork	Kapok	No information identified on how widespread the use of Kapok was.
Rope	Blue yarn in strands	Red yarn in strands	1938 Seamanship Manual states that rogues yarn was used in naval rope as follows: Red for rope manufactured at Devonport Dockyard; and Blue for rope made by trade.

⁵⁷ Olson, W, letter of 6 March 1997, included in Heazlewood's Solicitors, Submission, p. 1692.

⁵⁸ Source: Department of Defence, Submission, p. 1855.

⁵⁹ Exhibit No. 30, p. 12.

The descriptions vary slightly between the accounts given by Mr Smith and Mr Baker (see Department of Defence, Submission, pp. 1962-1965).

In the Department of Defence Submission (p. 1855) the numbers appearing on the two rafts are incorrectly attributed, being shown as '2' marked on the AWM float and '5' on the Christmas Island float, when the reverse is actually correct. See Shipping Intelligence Report No 137/1942, reproduced in Department of Defence, Submission, p. 1964, and Exhibit No. 30, p. 8.

- 7.43 In a later submission, Mr Olson also noted that kapok was used for flotation purposes and may have been used as a wartime substitute for cork.⁶²
- 7.44 Mr R H Turner, in commenting on the carley floats, reported a recent conversation he had with a former sailmaker of Garden Island, who had been the repair point for life rafts and carley floats during the war. That person indicated that these type of rafts, as described in the Australian War Memorial report, had been brought in as a wartime expedient with a limited service life, and therefore the raft could have been an RAN raft.⁶³
- 7.45 Mr Olson has also examined two carley floats found in the collection of the Western Australian Maritime Museum (WAMM). One float was the same size and pattern as the carley float now in the AWM, was found to be constructed of Lysaght Queen's Head galvanised sheet iron, and the outer covering was balsa wood covered by painted canvas. Mr Olson concluded that 'it would appear that [it] was Royal Navy or Royal Australian Navy issue. Given that the inside framework is Australian manufactured Lysaght galvanised iron, it would appear probable that [it] is ex-Royal Australian Navy'.
- 7.46 The second float was also examined, was of similar size and construction, and due to some markings 'it is considered probable that [it] is ex-Royal Australian Navy. Year of manufacture was probably 1944, although a 1945 or later year of manufacture cannot be ruled out'. 65
- 7.47 The significance of these examinations is in regard to the investigation conducted by Captain Oldham in 1949 into the origin of the Christmas Island carley float. As Mr Olson observed, one of the main deciding factors in Captain Oldham rejecting the float as being from an HMA Ship was the covering of the carley float:

Although the Admiralty specifications called for copper buoyancy tanks and a cork covering, was Oldham justified in expecting that all Royal Australian Navy issue Carley floats should be manufactured from these materials?

We know that one surviving Australian manufactured Carley float was constructed of galvanised iron, and covered with cork and canvas. [AWM float]

We know that another surviving Australian manufactured Carley float was constructed of galvanised iron, and covered with cork and canvas. [WAMM Historic boat 27]

We know that a third surviving Australian manufactured Carley float was constructed of galvanised iron, and covered with balsa wood and canvas. [WAMM Historic boat 26]

As none of the three surviving Australian manufactured Carley floats were made from copper, and only two had a cork covering, one is left

Olson, Submission, p. 2323.

Turner, Transcript, p. 493.

⁶⁴ Olson, Submission, pp. 2320-2321.

⁶⁵ ibid., p. 2321.

with the impression that Captain Oldham was probably not correct in his conclusion. ⁶⁶

- 7.48 The examination of the two carley floats held by the Western Australian Maritime Museum was preliminary only. The Committee believes that more information might be forthcoming, if the two carley floats were subjected to the same type of examination as the carley float in the Australian War Memorial. The Director of the WAMM has recommended that 'a comprehensive scientific and historical examination is carried out on the two floats (and comparisons [made] with the War Museum float) ...'. 67
- 7.49 The Committee recommends that:
 - 3. the two carley floats in the collection of the Western Australian Maritime Museum be subject to scientific examination by the Western Australian Maritime Museum in conjunction with the Australian War Memorial.

Conclusion

7.50 The Committee believes that there is insufficient evidence to prove conclusively that the carley float recovered off Christmas Island in 1942 was from the *Sydney*. However, the Committee has concluded that based on the oceanographic studies, the physical description of the float and an investigation of other possible sources for the float, there is a strong probability that the float originated from *Sydney*. While it is not possible to prove the origin of the float beyond any doubt, it is equally impossible to prove the alternative, that the float, and its unfortunate occupant, were not from that ship.

The Body

- 7.51 The Committee also considered whether there were any clues as to the origin of the float and its passenger to be obtained from the brief description of the body itself. As noted earlier, the body recovered from the carley float had nothing (such as dog tags) to assist in its identification. Mr Baker, who assisted in the recovery of the body, is reported as indicating that 'The Shore doctor established that the body was that of a white man. All the flesh was gone from the right arm, also the eyes and nose were missing. Otherwise the corpse was decomposed in parts'. Professor Ranson, Deputy Director of the Victorian Institute of Forensic Medicine, has indicated that '... the reports of the body being decomposed certainly would not be inconsistent with that time interval [i.e. originating from *Sydney*] but, to be quite honest, you cannot be 100 per cent sure'.
- 7.52 Reports that the body had a perfect set of teeth appear to have originated with Mr Jack Pettigrew, an Island resident who had attended the funeral. Mr Pettigrew said that when examined, the Island medical personnel found the body to have 'a perfect set of teeth no

⁶⁶ ibid., p. 2322.

Western Australian Maritime Museum, Submission, p. 3449.

One submission suggested that 'the absence of name tags excluded Military/Naval personnel' (O'Sullivan, Submission, p. 3763) but other evidence has indicated that tags were often not worn. See for example, Winter, op. cit., p. 241.

⁶⁹ Shipping Intelligence Report No 137/1942, reproduced in Heazlewoods Solicitors, Submission, p. 1474.

Ranson, Transcript, pp. 320-321.

extractions or fillings', which was felt to be unusual for the time.⁷¹ This observation was confirmed by other Christmas Island residents.⁷² There is some indication that this was a comparatively rare event for the time (see para 7.113), but at least three of the submissions refer to crew on the *Sydney* who had perfect teeth, and hence the belief by some that the body may be from the *Sydney*.⁷³

Was there a coronial inquiry?

7.53 Mr Baker also indicated that when he left Christmas Island on 17 February 1942 'an inquest, which had been delayed owing to illness of an official, was in progress. A full report is to be forwarded to Australia as soon as this inquest in concluded'. It is not clear who was conducting the inquest, but Mrs Rosslyn Page, in her research on this period indicates that she believes the designated authority to hold an inquest lay with the District Officer, Tom P Cromwell. Mrs Page goes on to say:

Tom P Cromwell probably wrote on, or typed an official document (Death Certificate), attesting the truth of the facts stated, as of death ... Dr J Scott Clark, the Medical Practitioner, would have conducted a cursory autopsy/post mortem, to determine gender and cause of death.⁷⁶

At the time of World War II Christmas Island was a colony of the United Kingdom, administered from Singapore. It became an Australian Territory on 1 October 1958, but up until 1992 the Territory had a Singapore based legal regime. According to the Department of Transport and Regional Development, 'records relating to the Territory's administration prior to 1958 were returned to the United Kingdom during the 1980s and may now be in the custody of the Public Records (sic) Office' in London. The Committee, through its Historical Adviser, approached the Public Record Office to attempt to determine if records relating to Christmas Island were available and has confirmed that some material is available at the PRO dealing with Christmas Island and the British Phosphate Corporation.

Conversation between Mr Jack Pettigrew and Mr Kevin Lourey, reported in a letter from Mr Lourey to Mrs Rosslyn Page, reproduced in Exhibit No. 11b, Appendix A.

⁷² Exhibit No. 11b, p. 7.

See for example, Mr Curtis, in Craill, Submission, p. 3731; Craill, Transcript, p. 346; McGowan, Submission, p. 895; Fraser, Submission, p. 3550.

Shipping Intelligence Report No. 137/1942, reproduced in Heazlewoods Solicitors, Submission, p. 1474.

Both Mr Cromwell and Dr Scott Clark were interned at POWs, on Christmas Island, Surabaya and the Celebes, and returned to live in England.

⁷⁶ Page, Exhibit No. 11b, pp. 38-39.

⁷⁷ Department of Transport and Regional Development, Submission, p. 2198.

The PRO holds material under CO273 [Colonial Office], Straits Settlements Original Correspondence 1838-1946. All other PRO records are to series outside the 1941-1942 date range (E-mail, PRO to Professor P Dennis, 8 April 1998).

- 7.55 The Committee recommends that:
 - 4. the Australian Government continue inquiries to determine if, within the records of the Public Record Office London, there are any records relating to a coronial inquiry undertaken on Christmas Island on the unknown sailor.

Clothing

- The clothing found on and near the body provided some information. In addition to the boiler suit, bleached white from exposure, a shoe was found beside the body. According to reports, the Medical Officer did not believe the shoe belonged to the dead man, raising the possibility that there may have been others on the float. The descriptions of the shoe vary somewhat: Mr Clark states that the shoe was 'probably branded 'CROWN BRAND PTY 4', although he had some doubts about 'CROWN' '4'. Harbour Master Captain Smith's recollection was of a canvas shoe branded either 'McCOWAN' or 'McEWAN' and also 'PTY' followed by a crown and/or a broad arrow. A later description, given in 1949 by Mr J W Brown, former Sergeant of the Christmas Island Platoon of the Singapore Volunteers, referred to a 'pair of boots'.
- 7.57 While it appears that the boiler suit did not coincide with the type stocked by the RAN, Defence has acknowledged that the 'fact that the overalls may not have been of naval origin does not preclude the possibility that the body was. Sailors were, and are, renowned for buying their own non-standard items of clothing. ... The RAAF did use a blue coverall'⁸³ and there were 6 RAAF personnel on *Sydney*.
- 7.58 In regard to the shoe, Defence has indicated that the broad arrow mark was 'a general indication of Government issue'. Defence went on to say that 'Based on the descriptions given the DNV [Director of Naval Victualling] stated that the markings on the shoe definitely corresponded to RAN supplies, provided the shoes were of leather and not canvas. A check of Commonwealth Gazettes for the period 1938 to 1941 showed that Jas McKeown & Sons Pty Ltd were suppliers of both light boots and canvas shoes to the RAN during this period'.⁸⁴
- 7.59 The Committee found that the Defence submission strained the bounds of credibility in suggesting that 'the shoe ... may have belonged to a merchant seaman from a sunken vessel who could have been given the shoes as part of an issue of clothing after being picked up by a warship'. If Defence's scenario is correct, that unfortunate soul was then lost overboard again, with a naval type carley float and from there found his way to Christmas Island. While it cannot be ruled out absolutely, the Committee considers such a scenario to be highly unlikely.

Neale, We Were the Christmas Islanders, (Bruce Neale, 1998, ACT), p. 60.

⁸⁰ Shipping Intelligence Report No. 137/1942, reproduced in Heazlewoods Solicitors, Submission, p. 1474.

⁸¹ Shipping Intelligence Report No. 137/1942, reproduced in Heazlewoods Solicitors, Submission, p. 1476.

Begin Department of Defence, Submission, p. 3193.

⁸³ ibid., p. 1858.

⁸⁴ ibid.

⁸⁵ ibid.

7.60 On the basis of the descriptions of the body and clothing, the evidence again is inconclusive. However, there is nothing in the description of the body and clothing to suggest that it was from a non-RAN source, and the shoe in fact points to the opposite conclusion. The Committee therefore believes, on the balance of probability, that the body and the carley float found off the shore of Christmas Island in February 1942 were most likely from HMAS *Sydney*.

7.61 Given this probability, the Committee then considered the specific issues contained in its Terms of Reference:

- the practicability of accurately locating the grave; and
- identification of any scientific techniques which could verify the identity of those human remains if and when they were located.

The remainder of this chapter addresses these two issues, as well as the implications of any exhumation.

The Cemetery

7.62 The body recovered off Christmas Island was buried in the Old European Cemetery overlooking Flying Fish Cove. Europeans were buried in that cemetery from 7 June 1907 until 2 January 1950. The Shire of Christmas Island has indicated that, based on tombstone markings and a copied register, there is evidence of ten persons having been buried in that cemetery, including the unknown sailor (although there is a suggestion of the burial there of an eleventh, Mr Hobson, about whom the Shire Council is seeking further information). 86

7.63 The Old European Cemetery has been described thus:

[It] is in an area known to be steep and heavily covered with limestone. There is evidence of burrowing by red crabs and movement of boulders and topsoil from above. There is no evidence to suggest that any of the identified graves have been subject to movement greater than 5cm. It is possible that a grave which was not retained by a significant masonry surround could have been covered by continual downward movement of soil and debris. It is probable that bodies were interred between limestone which may have reduced any slippage or movement.⁸⁷

and

The entire hillside behind the 'Old European Cemetery' is basically loose volcanic material which, in turn, is overlain by rocks and boulders that have fallen from the limestone cliffs which fringe the entire Cove. Resting at an angle of about 35 degrees, the soil is fairly

87 ibid., p. 2607.

Shire of Christmas Island, Submission, p. 2606. There is some question as to whether Mr Hobson, a sailor from a visiting ship who died on 31 October 1950, was buried on the island, and if so where, or whether he was buried at sea. The list provided by the Council does not include the name of Mr Norman Howard, whose grave was mistakenly marked as that of the unknown sailor in 1994.

stable when dry, but when saturated the entire slope becomes unstable, mobile, and dangerous. ⁸⁸

7.64 There is no indication of whether the corpse was buried in a coffin or not.⁸⁹ If a coffin was not available, 'the usual procedure was to wrap deceased personnel in a shroud (bag) or blanket'.⁹⁰ The grave site was recorded as unmarked.

Locating the body

7.65 There are no records giving the exact location of the burial place of the unknown sailor in the Old European Cemetery, and therefore the exact location of the remains cannot be precisely identified. Eyewitness accounts, such as those of Joseph 'Bunny' Baker, described the burial in the following terms:

We carried him up the hillside to a lovely park site overlooking the Cove and surrounded by a mass of bougainvillea. He was buried in what was then the cemetery near to the coffee gardens. The District Officer conducted a short service whilst we few volunteers provided a military escort. A Sikh policeman sounded the Last Post and the notes floated down the hillside to the shore in the quiet evening. ⁹¹

- 7.66 Mr Kevin Lourey, a civil engineer and Island Manager for the British Phosphate Commission between 1966-1969 surveyed the grave sites in the Old Cemetery in 1950. Mr Lourey left Christmas Island in 1969, but maintains that he is able to identify the location of the grave site, based on his knowledge of the area and where locals, present at the time of burial, had indicated it was located. While acknowledging that 'after the lapse of 27 years since I left the Island my memory may be a little astray' but that the general location was correct, Mr Lourey has indicated on a map where he believes the grave to be. Photographs of the cemetery, found by Mr D Inglis in Australian Archives files, and subsequently examined by Mr E McGowan and Mr Lourey, appear to show a mound of earth in the same area as indicated by Mr Lourey in his evidence to the Committee.
- 7.67 Mr David Powell also conducted a survey of the Old European Cemetery in the mid-1960s, and indicated the site where he believes the unknown sailor lies. Others who have lived on the island also have their views on the location of the grave site. 94
- 7.68 The degree of confusion about the exact location of the grave site is reflected in the fact that in 1994 a group of relatives and friends of *Sydney* personnel arranged for a cross to be sent to Christmas Island for erection on the grave site of the unknown sailor. ⁹⁵ A

⁸⁸ Statutory Declaration from Mr D Powell, reproduced in Heazlewoods Solicitors, Submission, p. 1564.

There is a suggestion that the body may have been buried in a 'coffin ... built to conform to the body as it lay'. Unpublished papers of Jonathon Rowbotham, referred to in McDonald, G, Submission, p. 179. However, there is no indication that Mr Rowbotham was present at the burial, and accounts of others who were present do not mention an oddly shaped coffin. See comment by Mr Lourey that 'Certainly the people who told me about [the burial] never said that to me' (Transcript, p. 362).

⁹⁰ Exhibit No. 11d, p. 5.

⁹¹ Neale, M, op. cit., p. 60.

⁹² Exhibit No. 11d, p. 8.

⁹³ McGowan, Submission, pp. 4703-4707.

⁹⁴ See for example Collins, Submission, pp. 3145-3149.

⁹⁵ Exhibit No. 11d, p. 6.

memorial service was held, attended by community representatives, and a cross and plaque erected over what was believed to be the grave on 9 August 1994. However, it subsequently transpired that the cross and plaque had been placed on the grave site of Norman Howard, a British Phosphate Commission Overseer who had died in 1924. The incorrect site was also accepted at that time as the burial site of the unknown sailor by the then Department of the Environment, Sport and Territories. ⁹⁶

- 7.69 The confusion about the alleged burial site was repeated in a number of submissions, and indeed photographs were provided to the Committee in the sincere belief that they showed the grave site. Most of the references appear to be to what is now generally accepted as the grave of Mr Howard (with a well-defined surround, but no formal headstone in place).
- 7.70 An archaeological survey of the Christmas Island cemetery was carried out in December 1995 by Dr M Gibbs, who was undertaking a conservation study of the nearby Christmas Island Club building. In an article written about the survey, Dr Gibbs noted that:
 - ... while the cemetery has not been regularly maintained for several decades, some of the vegetation has been cut back by interested members of the CI Club ... The ground surface around the cemetery is soft and appears quite unstable, primarily as a result of the annual burrowing of thousands of red crabs ... [and] the destructive effects on the graves, surrounds, monuments and the land surface in general was readily apparent. Combined with vegetation clearance and water runoff it is not surprising that there has clearly been a heavy movement of soil down the slope and across the site. ⁹⁸
- 7.71 Dr Gibbs recommended that a 'remote sensing survey should be made of the cemetery, focussing (sic) on the apparently empty areas between the visible graves ...'. Dr Gibbs cautioned, however, that 'discovery of a grave will not necessarily confirm its identity as the 1942 burial'. 99
- 7.72 The Shire of Christmas Island advised the Committee that it had requested a consulting engineering geologist to inspect the Old European Cemetery and provide advice on procedures to locate the grave of the unknown sailor. A site marked on an Archaeological Survey 1995 diagram as a likely grave site, and supposedly now covered by a boulder, appears in fact to be a rocky outcrop.
- 7.73 There have been several suggestions that the body may have been removed from Christmas Island. The Committee has not found any evidence to support these suggestions.

Correspondence from Department of the Environment, Sport and Territories, reproduced in Heazlewoods Solicitors, Submission, p. 1600.

⁹⁷ See for example, Crooke, Submission, pp. 3949-3954.

⁹⁸ Gibbs, Dr M, The Corpse in the Carley Float: An archaeological survey of the Christmas Island Cemetery and the possible burial site of an HMAS Sydney sailor, reproduced in McGowan, Submission, p. 911.

⁹⁹ ibid., p. 914.

See for example, End Secrecy on *Sydney* Group, Submission, pp. 2067, 2086.

- 7.74 It is unfortunate that the Old European Cemetery has deteriorated over the years, complicating the search for the burial site of the unknown sailor. The Committee hopes that sufficient resources will be provided to the Christmas Island Shire Council to allow for restoration work to be undertaken on the Old European Cemetery and other cemeteries on the Island as required.
- 7.75 The Committee recommends that:
 - 5. the Minister for Regional Services, Territories and Local Government arrange for an assessment of the condition of the cemeteries on Christmas Island, and provide sufficient additional funding to the Christmas Island Shire Council to allow restoration and maintenance work to be undertaken.

Should the Body be Exhumed?

- 7.76 Before considering whether or not it is technically possible to locate the grave site, and once located, identify the remains, the Committee first considered whether, as a matter of principle, it should support the calls for the body to be exhumed. Central to those considerations was identifying what purpose such an exhumation would serve, and what the likelihood would be of its success.
- 7.77 A number of attempts have been made in recent years to gain consent for the exhumation of the unknown sailor on Christmas Island. In each case, 'the purpose in seeking exhumation was to attempt to determine whether the unknown sailor had been a crew member of HMAS *Sydney*'. ¹⁰¹
- 7.78 The Committee agrees with the view put by Heazlewoods Solicitors that the granting of an exhumation order does not of itself guarantee the location and identification of the remains. Should an exhumation order be granted, there are a number of possible outcomes:
 - it may be that the grave site cannot be located;
 - if the grave site is located, there may be no remains left;
 - if sufficient remains are found, scientific examination can be undertaken to try and determine the identity of the remains;
 - if the remains are not able to be identified, they could be reinterred in an appropriately marked grave; and
 - if the remains are identified, action would need to be taken to determine the final resting place of the remains. 102
- 7.79 Professor John Hilton, Director of the New South Wales Institute of Forensic Medicine, in support of the exhumation, made the point that:

¹⁰¹ Department of Transport and Regional Development, Submission, p. 2198.

Heazlewoods Solicitors, Submission, pp. 1654-1655.

... the question has been put and I think, unless it is investigated, it will never be satisfactorily answered. It may not be satisfactorily answered at the end of the day even with investigation. In essence, it is better to investigate than to speculate. ... It is perhaps a small link in Australia's historical chain, but there has been so much historical speculation about this that I think it is incumbent on us to try and resolve this now if we possibly can, remembering that as time passes the chances of success diminish. ¹⁰³

7.80 Professor Hilton also referred to the humanitarian aspects of this matter:

It is quite extraordinary ... that, even after a space of 50 to 60 years, or even longer, the surviving relatives and descendants might like to know where their relatives ended their lives and where they were interred. 104

7.81 Dr Carl Hughes indicated that he felt there were two main reasons for attempting to exhume the body: one from a forensic and evidential point of view; and second that the 'representation of one of the bodies, where it is not possible to identify other bodies, is helpful to the relatives'. The emotional toll that the loss of *Sydney* has taken, and indeed still continues to take, was mentioned in many of the submissions to the inquiry. As Mrs Barbara Craill indicated:

It is long overdue that the body be exhumed. ... It could be my father. DNA and dental records held by the Navy would prove beyond doubt. My father deserves this. A crew member deserves this. All relatives and friends of HMAS *Sydney* would celebrate this honourable happening and the haunting would fade. ¹⁰⁷

- 7.82 In considering the issue of exhumation, the need to protect the other consecrated graves from disturbance is extremely important. However, the Department of Transport and Regional Development indicated that it should be possible for the Minister to issue an exhumation order in such a way as to limit the area exhumed within the cemetery. The Committee, however, does not support an open-ended search of the cemetery, should the initial exhumation (based on the best possible evidence available) be unsuccessful.
- 7.83 Navy indicated to the Committee that it would have no objection to the body being exhumed, if a link between it and the *Sydney* were able to be made. ¹⁰⁹ Under the heading of 'Evidentiary Guidelines', Defence Instruction PERS 20-4 states:

Allegations that the remains of MIA members of the ADF have been located need to be supported by strong circumstantial or definite evidence before public funds are used to investigate the remains ...

¹⁰³ Hilton, Transcript, pp. 402, 407, 408.

¹⁰⁴ ibid., p. 408.

Hughes, Transcript, p. 496.

See for example, Craill, Submission, p.1403; Bickle, Transcript, p. 501.

¹⁰⁷ Craill, Submission, p. 1404.

Department of Transport and Regional Development, Transcript, p. 70.

¹⁰⁹ Department of Defence, Transcript, p. 20.

Unsubstantiated hearsay evidence is insufficient grounds for the ADF to investigate human remains. When hearsay evidence is provided to the ADF, in an endeavour to substantiate information provided, the appropriate civilian authorities (foreign or otherwise) should be requested to carry out initial inquiries. ¹¹⁰

On this basis, the Committee believes that an attempt should be made to locate the grave and identify the remains, and the Department of Defence, and in particular, Navy, should be involved in the process.

7.84 The Committee finds the calls from the families for action in resolving the identity of the Christmas Island body, and the arguments of Professor Hilton and Dr Hughes to be most persuasive. In examining the submissions, it is apparent there is a strong desire, among those who submitted, for some positive action to be taken by the Government, and this underlies many of the comments. The Committee is of the view that it will only be by proceeding with an attempt to locate and identify the body, regardless of the outcome, that Australian authorities can then truly say they have done everything possible to pursue this aspect of the *Sydney* controversy.

Legal Authority for Exhumations

7.85 The legislative basis for a legal exhumation in the Territory is as follows:

The Coroner's Act [Coroner's Act 1922 (WA)(CI), and the Coroner's Act 1988 (WA)(CI)] empower the Western Australian Coroner – who has jurisdiction in the Territory – to order the exhumation of a body if the Coroner believes that it is necessary to conduct a coronial inquiry into a death.

Section 58 of the *Cemeteries Act 1986* (WA)(CI) (the Cemeteries Act) provides that:

The Minister [for Territories] may in writing order the exhumation of a body and the re-burial or disposal of the ashes after cremation of the body in accordance with this Act and may further order how and by whom the costs of the exhumation, reburial or disposal shall be met.¹¹¹

7.86 The then Department of Transport and Regional Development¹¹² noted in its submission that 'no statutory criteria' are provided to guide the discretion provided under Section 58, and that Commonwealth policy on exhumations 'has been that a cogent case must be presented before an order under the Cemeteries Act can be made to disturb consecrated grave or graves and remove human remains buried with appropriate ceremony'. ¹¹³

¹¹⁰ Exhibit No. 59, p. 2.

Department of Transport and Regional Development, Submission, p. 2198.

Now, the Department of Transport and Regional Services.

Department of Transport and Regional Development, Submission, p. 2199.

- 7.87 In May 1997, when considering a request for exhumation by solicitors acting for a group of relatives of those lost on the *Sydney*, the then Minister gave the following reasons for his decision not to grant an exhumation order:
 - the Minister was not satisfied that the evidence presented established a sufficient connection between HMAS *Sydney* and the deceased or the carley float in which he was found (and in particular, the possibility that the deceased may have come from other vessels or drifted from other areas had not been adequately addressed);
 - the evidence provided did not overcome the Minister's concern that the precise position of the deceased's grave could not be located prior to exploratory excavations taking place in the cemetery;
 - the applicant failed to convince the Minister that, even if the correct remains could be located and uncovered, the means existed to identify them conclusively as being of a particular crew member of HMAS *Sydney*. 114

Subsequent requests that the decision be reconsidered have been unsuccessful.

- The Committee believes that in the intervening period, a great deal of work has been done by people such as Mrs Rosslyn Page and Dr John Bye addressing the first of the Minister's concerns. While there is never going to be conclusive proof that the carley float was from HMAS *Sydney*, the Committee believes that on the balance of probability, it did originate from that vessel (see para 7.60). On the third point, the Committee believes that, given the scientific techniques available, particularly in regard to DNA testing, perhaps there is a chance that, should remains be uncovered, the identity may be determined. While the chance of a definitive identification of the body being made is remote, the wishes of many of the relatives weighed heavily on the Committee and it felt obliged to respond to their continuing pressure for all steps possible to be taken, once and for all, to attempt to resolve the question of the identity of the body.
- 7.89 The Committee believes that the second concern of the Minister's is the most relevant at present. While there is anecdotal evidence of the location of the grave, its exact location is still unclear. The Committee believes that a small team should be sent to Christmas Island, comprising an archaeologist with relevant experience, and a representative from Defence, together with Mr K Lourey, to try and more accurately determine the location of the grave. The team should not only examine the Old European Cemetery, but should also consider all available documentary evidence, consider the feasibility of the various technologies for locating the grave, as well as consult with long-time residents of the Island and the Shire Council, in an attempt to locate the grave of the unknown sailor.
- 7.90 The Committee recommends that:
 - 6. (a) the Department of Transport and Regional Services and the Department of Defence attempt to locate the grave of the unknown sailor on Christmas Island, by sending a small team (including an archaeologist) to the Island; and

- (b) should the grave site be accurately located, the Minister for Regional Services, Territories and Local Government issue an order for the exhumation of the remains for the purpose of identification.
- 7.91 The Department also indicated that, in considering whether to grant an exhumation order, the Minister and the Administrator have consulted the Territory's Shire Council to determine the Christmas Island community's views on exhumation. While there may have been community opposition in the past, in a submission to the Committee the Christmas Island Shire Council indicated that 'the community would not object to an exhumation of the body of the unknown sailor provided that other graves were not disturbed and that non-intrusive methods are used to locate the grave site'.
- 7.92 The Committee recommends that:
 - 7. (a) the Christmas Island Shire Council be fully informed and consulted about any proposed exhumation; and
 - (b) attempts be made to contact the relatives of those also buried in the Christmas Island Old European Cemetery before any exhumation order is made.
- 7.93 Should the Minister for Regional Services, Territories and Local Government decline to order the exhumation of the remains of the unknown sailor, Heazlewoods Solicitors, acting for a group of relatives of those lost on *Sydney*, would support an inquest being held into the death. The basis for an inquest is quite specific:

An Inquest could only be held into this death if it could be established that no Inquest had been held in 1942, or if the original Inquisition was quashed and a new Inquest was ordered by the Supreme Court (see section 14 of the *Coroners Act 1920* {WA}).

7.94 To date the WA Coroner has argued that there is no reason to assume an Inquest was not held in 1942, even though no record of the verdict given can be located. The Committee understands that Heazlewoods will be pursuing this matter, seeking to have the Supreme Court of Western Australia order a new inquest.¹¹⁹

Locating the grave

7.95 A number of possible techniques for locating the grave site were brought to the attention of the Committee during the inquiry. Ground Penetrating Radar (GPR) was mentioned in several submissions. However, GPR is not the only option available:

¹¹⁵ ibid., p. 2199

¹¹⁶ ibid.

¹¹⁷ Shire of Christmas Island, Submission, p. 2607.

¹¹⁸ D A McCann, WA Coroner, correspondence reproduced in Heazlewoods Solicitors, Submission, p. 1613.

Heazlewoods Solicitors, Submission, p. 1659.

¹²⁰ See for example, McGowan, Submission, p. 918; Olson, Submission, p. 218.

GPR is one of a range of options which may be used for non-invasive sub-surface examination. Other options include sonar, magnetometer survey and resistivity survey. The method used is entirely dependant upon the nature of the sub-surface disturbance or deposit to be identified. Sonar may be used when air spaces are known to exist below the surface, for instance in coffins ... Resistivity can be used to detect disturbance, while magnetometry may be used when metal is expected as part of the sub-surface deposit. 121

- 7.96 GPR was used in 1990 in an attempt to delineate the Rottnest Island Aboriginal Prisoners Cemetery. The survey 'located zones of disturbed ground which are considered highly likely to represent grave sites. ... [The] archaeological applications of GPR in other circumstances could be highly beneficial'. 122
- 7.97 However, a consulting engineering geologist advising the Shire of Christmas Island, Mr Fred Baynes, 'believes that neither ground penetrating radar nor the use of magnetometers would provide optimum results because of the geological features of the cemetery and the likelihood that the body was not buried with any metal objects ...'. Mr Baynes has suggested that a contract archaeologist be used to research the site and carry out controlled digs as required. 124
- 7.98 There has been a suggestion that some blasting might be required to remove boulders in the cemetery as part of the attempt to locate the grave site. The Christmas Island Shire Council has reservations about blasting at the site, as the area is subject to rockfall. The Committee supports the Shire Council in its reservations, and would not wish to see such action taken in this site.
- 7.99 It appears that, should the decision be taken to attempt to locate the grave of the unknown sailor, technology currently available would assist in its location. The Committee is concerned that the grave site be accurately located with as minimal disruption to the other graves as possible, and is concerned about the possibility of there being possibly one additional unmarked burial site (that of Mr Hobson see para 7.63).

Identification of the Body

7.100 Should remains be found in the Old European Cemetery, the question to be asked is whether there is any chance of identifying those remains. To a large extent that will depend on the physical condition of the remains. Factors such as depth, moisture, heat (soil temperatures) and insects affect the decomposition of human remains. Where the exact location of the remains in not known, a range of techniques may need to be employed to try and determine the position of the body.

¹²¹ Quoted in McGowan, Submission, p. 919; Heazlewoods Solicitors, Submission, p. 1441.

Randolph, Wilson, Frampton, Merrit, *Rottnest Island Aboriginal Prisoners Cemetery: Delineation of extent using ground penetrating radar*, reproduced in McGowan, Submission, pp. 921-938.

¹²³ Shire of Christmas Island, Submission, p. 2607.

¹²⁴ ibid.

Department of Transport and Regional Development, Submission, p. 3124.

¹²⁶ Shire of Christmas Island, Submission, p. 2607.

- 7.101 The soil in the area near one of the graves in the Old European Cemetery has been tested and showed a soil PH in excess of 9. While the PH value of the soil may influence the state of the remains, Professor Hilton indicated that 'you can speculate on the effect of PH but ... you do not know until you look'. 128
- 7.102 Depending on the state of the remains, some information may be able to be obtained by an initial physical examination. Heazlewoods Solicitors, acting for the families of some 63 deceased crew members, argued that the following action should be taken once the remains have been exhumed:
 - measurement of the long leg bones to ascertain the height of the deceased;
 - identifying obvious deformities such as broken bones;
 - identifying which teeth might have been missing or received treatment; ¹²⁹ and
 - DNA testing.¹³⁰
- 7.103 On the basis of the first three actions, Heazlewoods believes that a forensic scientist 'would then be able to exclude from further investigation those crew members who did not fall within the height parameters, or who did not have obvious deformities, old fractures or missing teeth which coincided with the skeleton. If all else fails, DNA testing could be carried out with all surviving relatives'. ¹³¹
- 7.104 While a physical examination would provide some evidence, its usefulness will in large part rely on the type of medical records that exist for the *Sydney* crew, and to a degree, the recollections of family members about the general health of their particular relative (i.e. recollection of childhood bone breakages etc).

Medical records

- 7.105 The Committee received somewhat conflicting evidence during the course of the inquiry on the nature and availability of medical records for those who were lost on *Sydney*.
- 7.106 The Department of Defence, in a letter to Heazlewoods Solicitors in January 1998, indicated:

A random check of some records of HMAS *Sydney* crew members reveals that very little information of relevance is available. The records checked consist in the main of fairly rudimentary enlistment records with nothing that may be usefully used in any identification process. Some sailors enlisted a number of years before the sinking as young as 14 years of age and physical stature would have changed significantly as the individual matured. Dental records are little more than a record that the individual was dentally fit. Records of dental treatment history, which might have helped identification, were not evident on the files and may well not have been maintained at the time.

¹²⁷ Correspondence from Professor J Hilton, reproduced in Heazlewoods Solicitors, Submission, p. 1599.

Hilton, Transcript, p. 403.

Or indeed, confirm the initial observations of 'a perfect set of teeth'. See para 7.113.

¹³⁰ Heazlewoods Solicitors, Submission, p. 1444.

¹³¹ ibid., p. 1445.

Given that the ship's complement totalled 645 crewmen, the task involved in potentially providing copies of records for all crew members is substantial and beyond the scope of the resources of ADF Health Records Navy. In any event the provision of copies of these records is **unlikely to assist any identification**. ¹³²

7.107 When Defence appeared before the Committee in March 1998, it advised that:

To the best of our knowledge, there would be some medical records for all RAN personnel ... Those records by today's standards are incomplete. We have not undertaken a detailed examination of all the personnel on the *Sydney*, but we have undertaken a very limited examination of a small number of records to determine what sort of information would be contained in them ... It is quite a major undertaking for us to reconstruct what medical information actually would be available for each individual person.¹³³

7.108 On the same occasion, when asked whether the records would be of use in trying to determine the identity of the Christmas Island body, however, Defence indicated that:

We believe there is some information that would assist that process, provided a body was located. The sort of information I am talking about is the basic entry parameters when they join the navy and these include height, weight and the state of the dentition. However, there are limitations on this information. Several of the records that we have looked at contain details of the men when they were 14-year-old boys. Clearly, their height, weight and dentition would have changed in the 10 or 16 years until the time they died. But that information, we believe, is available, certainly for the RAN personnel, and would be made available of course, if necessary, if a body was found. 134

- 7.109 It appears to the Committee that the records, while possibly incomplete and not as comprehensive as those kept on ADF personnel today, may be of some assistance in attempting to identify any remains located on Christmas Island. The Committee can see no valid reason why access to those records should be denied to family members after so many years. To attempt to restrict access to such documentation is to invite suspicions of cover-up or indeed indifference to the whole matter.
- 7.110 The office of the Minister for Defence advised in August 1997, in response to a request for medical records for the crew of HMAS *Sydney* from Heazlewoods Solicitors, acting on behalf of some of the families that:
 - ... the administrative actions needed for the retrieval/copying/examination of all records relating to the 645 crew members of HMAS

¹³² Letter reproduced in McGowan, Submission, p. 3277. Emphasis added.

¹³³ Department of Defence, Transcript, p. 7.

ibid. Emphasis added.

Sydney, would be a very large undertaking, and it may be necessary to initiate a cost recovery if such a request were to be ordered. ¹³⁵

7.111 The Committee recommends that:

8. the Department of Defence provide the families of those lost on HMAS *Sydney* with a copy of their relative's medical records, such as exist, if requested to do so by the families, at no cost to the families.

Other identification techniques

7.112 As Professor David Ranson, Deputy Director of the Victorian Institute of Forensic Medicine, stated:

The identification of human remains including skeletal remains is largely based on comparison procedures. ... [I]n the case of badly decomposed bodies and skeletal remains ... the most effectively used method ... is evaluation of dental structures and comparison with known dental records ... Where good clinical dental records are not available, it is often possible to take photographs of the dentition of the skeletal remains and compare these with photographs of an individual taken in life where through the person's smile the anterior dentition can be seen. Careful and accurate superimposition of images from these photographs with images of the skull can result in useful comparisons from which identification can sometimes be made. ¹³⁶

- 7.113 As indicated above (see para 7.52), there is some indication that the unidentified sailor had a perfect set of teeth. Evidence given to the Committee suggests that this was unusual for that time, ¹³⁷ but by itself it would not be sufficient to identify the body. Comparison with dental records (if they still exist) or by superimposition might prove more productive. In addition, as the dental examination was conducted by a medical doctor and not a dental specialist, any observations are of more limited forensic value. ¹³⁸
- 7.114 Dental records in particular may be of varying utility. The Department of Defence advised that of the small group of records it examined, at least three different types of dental description were provided: one saying that the teeth were in good health or not; one describing each tooth by number; and the third, a visual depiction of the teeth. 139
- 7.115 Facial reconstruction is another method that might be employed to assist in the identification of the body, should a skull be recovered from the burial site. Such three-

¹³⁵ Jennings, correspondence, reproduced in Heazlewoods Solicitors, Submission, p. 1680.

Ranson, letter to Mr Ted McGowan, reproduced in McGowan, Submission, pp. 944-945.

¹³⁷ See for example the extracts from 'A Survey of Dental Caries in the RAN 1940' by Surgeon Capt. Woolcott, in McGowan, Submission, pp. 3286-3287. Woolcott found that at 18 years of age 76 per cent of the Australian born recruits were likely to have caries, and by the age of 20, 91 per cent were likely to have caries. However, even on these percentages, several sailors on HMAS *Sydney* could potentially have had 'perfect teeth', and this is reinforced by claims of several relatives that the body might be their family member.

Hilton, Transcript, p. 404; and Ranson, Transcript, p. 324.

¹³⁹ Department of Defence, Transcript, p. 8.

dimensional reconstruction is generally 'only used when more reliable methods have failed or are impossible. As a technique used for identification, it has definite limitations ...'. ¹⁴⁰

7.116 There has been an assumption in a number of submissions that DNA testing will provide the identify of the body on Christmas Island. In assessing the usefulness of DNA, the Committee took evidence from Professor Ranson, and Professor John Hilton, Director of the New South Wales Institute of Forensic Medicine.

7.117 Professor Ranson indicated that:

DNA testing is a comparison test, and you must have some idea of who the person is in order to carry out a matching process ... and what you would like is ... some original biological material from the person ... [e.g. a lock of hair].

There are two types of DNA that could be recovered in the system. The first is nuclear DNA and the other is mitochondrial DNA. Nuclear DNA is probably more likely to be lost. However, it does provide the best identifying type of characteristics. Mitochondrial DNA can be recovered from some poorer specimens and is of great use in comparison work, but it does not have the same reliability in terms of discriminating ability as nuclear DNA. Mitochondrial DNA ... is inherited via a maternal line. 141

130

Exhibit No. 39, Taylor and Angel, 'Facial reconstruction and Approximation' in Clement and Ranson (eds), *Craniofacial identification in forensic medicine*, (Arnold, Great Britain, 1998) p. 177.

¹⁴¹ Ranson, Transcript, pp. 321-322.

7.118 Professor Hilton, however, sounded a note of caution about reliance on DNA:

We use DNA as a last resort when other methods have failed. It is expensive. It is tedious ... [and] despite the publicity given to it in the popular press, the test is not as easily completed as many people would like us to think ... [U]nder the circumstances we are examining here ... Mitochondrial DNA would be a possibility. I would not guarantee the success of it, but it would be a possibility. 142

- 7.119 In terms of the costs associated with DNA testing, Professor Ranson indicated that the cost would depend on the number of tests being done, but thought that a figure of \$300 to \$400 per test would be likely, and doing the tests in bulk would reduce the costs even further. He indicated that if experts charged at commercial rates, it would be expensive, but that experts may be prepared to do the work pro bono. Expenses would then be limited to transport to Christmas Island, on-island expenses and ancillary charges. The DNA testing might also be able to be done on a 'highly modified cost recovery basis'. 144
- 7.120 As Professor Ranson noted, 'It may well be that no individual technique on its own will be able to satisfy the issue of identity beyond all reasonable doubt. However, by combining several techniques it is often possible to arrive at identity to a high degree of certainty and one which satisfies the legal burden imposed on Coroners and the courts'. ¹⁴⁵
- 7.121 It is apparent to the Committee that the attempted examination of the grave site and the remains within will also require the specialist skills of a number of professionals: a physical anthropologist, anatomists and forensic pathologists. Australia is fortunate in having a number of highly skilled people in this area. Any work in this area will require a multi-disciplinary team.

Reinterment

- 7.122 The question of reinterment of the body will depend largely on whether a positive identification of the remains is able to be made. If an identification is possible, then the Committee believes the family should be closely involved in determining the final resting place of the remains.
- 7.123 The Committee was advised that 'the community on Christmas Island would prefer that any remains be reburied on Christmas Island as this has been his resting place for the last half century. This position may change depending upon an identification being established'. ¹⁴⁶

Reinterment of unidentified remains

7.124 Should the remains of the unknown sailor be exhumed, but not be conclusively identified, the Committee believes it would be appropriate that they be reinterred on Christmas Island as close to the original burial site as possible in the Old European Cemetery.

¹⁴² Hilton, Transcript, pp. 404, 407.

¹⁴³ Ranson, Transcript, p. 327.

Hilton, Transcript, p. 407.

Ranson, in McGowan, Submission, p. 945.

¹⁴⁶ Shire of Christmas Island, Submission, p. 2608.

The Committee also believes that the grave site should be appropriately defined (with some form of border and headstone) and that regular maintenance be undertaken of the cemetery as a whole (see paras 7.74-7.75). The headstone should be appropriately marked, indicating that the remains are believed to be those of the unknown sailor, and giving the date of the recovery of the body from the Indian Ocean.

Reinterment of identified remains

- 7.125 The situation should the remains be positively identified, is more complicated. Under long-held Australian Government policy, the repatriation of remains of military personnel killed overseas has been prohibited. Following World War I it was agreed by Commonwealth Nations 'that military personnel killed in war would be buried in the nearest War Graves Commission Cemetery to the place of death'. An exception to this policy was made in 1966 when the Australian Government authorised a variation that permitted the remains of Vietnam casualties to be repatriated to Australia if the next-of-kin so wished. Disinterment for reburial in Australia was not permitted. 148
- 7.126 Should the remains be positively identified as from HMAS *Sydney*, then Defence Instruction (General) PERS 20-4 is relevant. It states that:

The ADF retains responsibility for the recovery of human remains of ADF members killed in conflict. Where the remains are alleged, or identified, as belonging to those of a member of a specific Service, then that Service is responsible for the recovery of the remains ... Once remains have been identified as those of an ADF member, the investigating authority should contact the Office of Australian War Graves (OAWG), Department of Veterans' Affairs ... [which will] ... advise of the appropriate cemetery in which the remains should be interred. 149

- 7.127 OAWG have advised that once they were advised by the Department of Defence that the remains were that of an Australian sailor, identified or otherwise, 'our role would then be to simply mark the grave in situ on Christmas Island and, if the remains were positively identified, we would erect a headstone recording that name. We would seek from any next of kin a personal inscription to go on the headstone'. It is the responsibility of the OAWG, to also maintain the grave in perpetuity on behalf of the nation.
- 7.128 There seems to be little scope, according to OAWG, for the repatriation of the remains back to mainland Australia. However, as the actual location at which the death occurred is not known (being presumably somewhere between the battle site and Christmas Island), and given the geographic isolation of Christmas Island, the Committee believes that sympathetic consideration should be given to the wishes of the family in determining the final resting place of the sailor. If the remains are returned for burial on mainland Australia, the Committee believes it would be appropriate for a small memorial cairn to be erected on Christmas Island, marking the site where the remains lay for over half a century.

¹⁴⁷ Exhibit No. 59, op. cit., p. 1.

¹⁴⁸ ibid.

¹⁴⁹ ibid., p. 2.

¹⁵⁰ Office of Australian War Graves, Transcript, p. 91.

¹⁵¹ Department of Veterans' Affairs, Submission, p. 346.

7.129 A view was expressed to the Committee that the remains should be returned to Australia and buried in a memorial to *Sydney*, possibly in Canberra. While the Committee does not reject this idea, it believes that the final resting place should be a consultative decision, involving the family as well as OAWG and the Department of Defence.

7.130 The Committee recommends that:

- 9. (a) should the remains on Christmas Island be positively identified, the Australian Government ensure that the next of kin be involved in the decision-making process regarding the reinterment of the remains and any commerative activities;
 - (b) if the remains are returned to mainland Australia for burial, a memorial cairn be erected on Christmas Island marking the original burial site; and
 - (c) if the remains are not positively identified, they be reinterred in an appropriately marked grave site on Christmas Island.