CHAPTER 8
SEARCHING FOR SYDNEY AND KORMORAN

It seems inconceivable that a nation such as Australia, with its magnificent military history, can permit the fate of one of its most famous warships to remain shrouded in mystery and for the fate of 645 of her crew to remain unverified. It is, in short, a national disgrace and a scandal ... When a country such as Australia refuses to engage in a search for its lost heroes just off the shore of its own continent, it defies belief.1

What we say is that it is irrelevant how the Sydney was sunk. It will not change history ... What I, my mother, her brothers and sister (and I am sure all the wives, children, brothers, sisters and loved ones – plus one surviving mother of one of the Sydney’s crew) would like to know is where the wreck of the Sydney is lying on the ocean floor, and if the body on Christmas island is that of one of the Sydney’s crew.2

8.1 Under paragraph (3) of the Terms of Reference, the Committee was asked to investigate and report on 'the desirability and practicability of conducting a search for HMAS Sydney and the extent to which the Commonwealth Government should participate in such a search should one be deemed desirable and practicable'. The Terms of Reference also requested that the Committee comment on measures which should be taken to protect the final resting places of both ships, if and when located.3

8.2 In searching for the ships, it is likely that Kormoran will be located more easily than Sydney, as the general area where Kormoran was scuttled is believed known, whereas Sydney was seen 'drifting rather than sailing, and little more than a flaming hulk ... she gradually faded into the darkness, apparently making for Perth'.4

8.3 This chapter examines the attempts made to date to locate both ships; what might be achieved by locating the wreck sites; the technical challenges to be overcome if the search is to be successful; the equipment needed for further searches to be undertaken; and the management issues raised should the search be successful. However, before looking at these matters, the Committee felt it was appropriate to consider a more basic issue – whether an attempt should be made to locate the wrecks.

1 Pless, Submission, pp. 223-224.
2 Fraser, Submission, p. 3549.
3 Terms of Reference, paragraph (3).
4 Detmers, op. cit., p. 187.
Should a Search be Mounted?

8.4 In the evidence put before the Committee, it was by no means unanimous that a search should be mounted to locate the wrecks of *Sydney* and *Kormoran*. While some argued that a search was of great symbolic importance, as a demonstration of the nation's commitment to its war dead, there was also a strong opinion that there would be little practical value in locating the wrecks, and indeed that actual harm might be caused by exposing the wrecks to possible interference.

8.5 Common to a number of submissions was a hope that the wreckage might shed some light on the nature of the engagement:

Finding the remains of HMAS *Sydney* will determine immediately if she was sunk by a jap sub. Only the Germans can report if *Sydney* was hit by their torpedo – makes you wonder doesn't it? Who is to say they struck her anyway. One would need 2 holes in 'her' hull if so.\(^5\)

The hull of HMAS *Sydney* lies mute but will silently reveal the details and the manner of her sinking upon inspection.\(^6\)

In the interest of the pursuit of knowledge it is desirable that the *Sydney* be found.\(^7\)

8.6 When asked about a search, RADM Oxenbould, RAN, commented that:

... we would certainly like to know where its resting place is, and if it was possible to carry out some surveillance or photography of that wreck for anything which might aid in confirming the history as we know it, we would be very supportive of anything we could do in that regard.\(^8\)

8.7 For others, a search was seen more as a sign of faith, from the Government to the families of the survivors:

To maintain credibility the Government and Navy need to find the ships to put an end for all time to the popular belief of a cover up. Where the ships are located and what damage they sustained will go a long way to achieve this.\(^9\)

8.8 Dr K Kirsner and Dr J Dunn summarised the case for a search in the following terms:

[The case] rests on three arguments. The first argument involves scientific and historic curiosity ... The second argument involves

\(^5\) Bray, Submission, pp. 30-31.
\(^6\) Munyard, Submission, p. 93.
\(^7\) Western Australian Maritime Museum, Submission, p. 148.
\(^8\) Department of Defence, Transcript, p. 9.
\(^9\) McDonald, G, Submission, p. 171.
memory and commemoration. The argument is that knowledge about the resting place of the wreck of HMAS Sydney is integral to her commemoration of that vessel and her crew. ... The third argument concerns the management of national disasters, in peace and war. It is our contention that disaster management in a democratic society requires full accountability and transparency; and that the government of the day should leave no stone unturned in its attempts to understand the conditions that led to specific disasters. The extent of public interest in HMAS Sydney illustrates this point directly, and suggests, furthermore, that conspiracy theories expand to fill the vacuums left by the absence of transparent disaster management processes. Discovery of the wreck site will not dispel all of the demons. But it will expel some of them, and that is perhaps the best that can be expected 60 years after the event.10

It should be noted that, in making these comments, Kirsner and Dunn felt that only the second and third arguments justified the expenditure of public funds.11

8.9 There was also a sentiment of desire for closure, a desire to bring to an end the doubts that had plagued the families of those on Sydney for so long:

Those men who lost their lives on Sydney deserve no less and, indeed, it is my view that, if nothing else, they should be comforted by the fact that we, as a nation, have done everything we could do to search for them, to find them. All we can do now is to spiritually bring them home, but we should do that ... [D]o we care enough, as a nation, to search for the Sydney and to do everything we can to find the ship and, as I said, to spiritually bring those people home?12

8.10 For a number of people who made submissions to the inquiry, their interest in the search was more equivocal. Mr Pat Burnett, for example, indicated that:

I think unless they were extremely lucky, it [the search] would be a very long and expensive project. My own personal wish would be that the matter be left in peace after over 50 years and that the search not be carried out. I quite appreciate the desire of next of kin to know as far as possible the truth of what happened and the whereabouts of the Sydney. I would certainly not oppose such a scheme.13

8.11 The arguments against further searches for the wrecks of HMAS Sydney and Kormoran revolve around two main issues, firstly the cost of any search, and secondly, what the discovery of the wrecks might achieve.

8.12 Professor D Creagh, in commenting on this matter, noted that 'it is difficult to see how such a search could be justified. It certainly will be a difficult and expensive operation, given that the two wrecks have escaped detection for the past fifty five years. I do not believe
that the position for the KSN (sic) Kormoran was correctly given so the area of search is probably very wide. The issues of cost and defining the search area are intertwined, and are dealt with in more detail later in this chapter.

8.13 The view was also put that the wrecks may well not shed any light on the engagement, and that the debate would continue on how Sydney met her fate:

I really do not think this will ever go away. We know what happened to the Titanic. We know how she was lost; but the Titanic is going to be around for a few years to come. I believe the Sydney will be the same. Even if we find the wreck tomorrow and fully explain her loss the day after, in 12 months time people are still going to be saying, 'I wonder if that was really what happened?' I do not think the mystery will ever go away, but I think we should be doing as much as we can, while we can, to establish where and how she went down, and to answer some of the other questions.

8.14 Some cynicism about the motives of those who wished to conduct a search was also apparent in several submissions:

There are a number of people in W.A. who would like the search for HMAS Sydney and the Kormoran to be approved so they can go to the public for funds to undertake research. But I consider it a big scam, playing on the public's sympathy for a gigantic rip off.

Conclusion

8.15 After considering all of the arguments the Committee was of the opinion that an attempt should be made to locate the sites of the Sydney and Kormoran wrecks. The Committee is not convinced that the wrecks will explain much about the actual engagement beyond its location (either confirming or disproving at least that part of the German survivors' accounts). However, and more importantly, the Committee considers that the discovery of the final resting place of so many Australians who served on Sydney would bring at least some comfort to the families who have had to live with the frustration of not knowing the site of the wreck for over half a century. The actual wreck sites would also provide a focus for future commemorative activities that might be held (the question of commemoration is dealt with in more detail in Chapter 9).

Technical Challenges

Defining the Search Area

8.16 The major hurdle to be overcome in any search is defining the search area sufficiently, not only to make the exercise economically viable but also to maximise the chances of success. Advice from the Western Australian Maritime Museum indicated that 'the search area for Kormoran is 7,200 square kilometres with the area for HMAS Sydney being far larger'. The search areas for the Titanic and Bismarck, which are often referred to

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14 Creagh, Submission, pp. 1011-1012.
15 Olson, Transcript, p. 213.
16 Sheldon-Collins, Submission, p. 622.
by those advocating the likely success of a search, were of the order of 500 square kilometres.\textsuperscript{17}

**Searches to date**

8.17 The initial search for *Sydney* was called off on 29 November 1941.\textsuperscript{18} By that time, lifeboats containing German survivors had been found at sea, and a two further boats located ashore. A variety of flotsam and jetsam had also been recovered. A summary is in Table 6.1.

8.18 In its submission the Department of Defence enclosed a paper detailing the searches for *Sydney* undertaken primarily by HMAS *Moresby*, since her homeporting in Western Australia in 1974 up until approximately 1991. The searches were conducted on passage through the area, some were as part of routine hydrographic work, and some were deliberate searches investigating unusual features, both magnetic and acoustic.\textsuperscript{19}

8.19 An example of the type of searches undertaken is one conducted in October 1981. Michael Montgomery in his book raised the possibility that the wreck could lie in shallow water, and a promising magnetic anomaly off the Zuytdorp cliffs north of Kalbarri was examined by a combined WAMM/RAN team using HMAS *Moresby*. Upon closer examination, the magnetic anomaly was shown to be a geological formation lying approximately 200 metres below the seabed off Kalbarri.\textsuperscript{20}

8.20 With regard to the RAN searches, however, 'All the searches have been on the continental shelf in depths less than 200 metres'.\textsuperscript{21} The Department noted that 'In deeper water ... the probability of detection is much lower, because of the method of the surveys and the limitations of the equipment'.\textsuperscript{22}

8.21 Defence advised that the most recent search for *Sydney* was undertaken by HMAS *Protector* during July 1997.\textsuperscript{23} However, Defence advised that 'the RAN does not have the specialised equipment required to conduct searches in waters off the continental shelf'.\textsuperscript{24}

8.22 The searches conducted by *Moresby*, however, were in no way exhaustive or comprehensive. As CMDR Hardstaff RAN (Retd) observed:

> Apart from normal surveying operations, *Moresby* did three things. She carried out investigations for magnetic anomalies, in 1981; she did specific investigations of dangers, or underwater features, picked up in the surveys; and she did the passage on sounding on a regular

\textsuperscript{17} Department of Communications and the Arts, Submission, p. 352.  
\textsuperscript{18} Department of Defence, Submission, p. 1844.  
\textsuperscript{19} ibid., pp. 1920-1930.  
\textsuperscript{20} McCarthy, 'HMAS *Sydney*/HSK *Kormoran* and the Western Australian Maritime Museum', in Western Australian Maritime Museum, Submission, p. 4065.  
\textsuperscript{21} Department of Defence, Submission, p. 1920.  
\textsuperscript{22} ibid., p. 1930.  
\textsuperscript{23} ibid., p. 1844.  
\textsuperscript{24} ibid.
basis, working from inshore out, but nowhere where the wreck sites are.\textsuperscript{25}

8.23 CMDR Hardstaff also drew attention to an area from '25 degrees 30 south, down to 28 south which has not yet been surveyed'. This area is just north of the Houtman Abrolhos.\textsuperscript{26}

The 1991 Sydney Forum

8.24 In 1991, at the HMAS Sydney Forum organised by the Western Australian Maritime Museum, a panel of experts was asked to give their opinion on whether the Sydney/Kormoran action could have taken place at the position stated in the German accounts: 26 degrees 34 minutes S, 111 degrees E. The location of the various lifeboats and other debris were used in an attempt to track back to the likely site of the battle, and from there to estimate the approximate location of the wrecks.

8.25 The experts agreed that both ships could have been lost in the position stated by the Germans. However, the group of researchers:

\ldots proved unable to reduce the search area down to anything like the proportions of the two successful deep-water searches \textit{[Titanic and Bismarck]}. The area for Kormoran was c. 7000 square kilometres in area, for example. The area for HMAS Sydney is potentially far larger, given that the amount of wreckage found after the battle was limited. \ldots [A] large-scale search for Sydney was ruled out as a result of the findings of the 1991 Forum (on the basis of the size of the search area and the equipment then available) \ldots\textsuperscript{27}

8.26 Since the Forum, the WAMM has 'continued to work in the water both independently and with the assistance of the RAN examining snags, magnetic anomalies, unusual echo sounder traces or other indications of a wreck \ldots This work is on-going \ldots'.\textsuperscript{28} The WAMM has established contact with the Woods Hole Oceanographic Institute (WHOI), a leading US-based oceanographic research organisation responsible for locating the wreck of the Titanic. The WHOI has 'promised support in locating HMAS Sydney provided the search areas could be narrowed down to Bismarck and Titanic parameters'.\textsuperscript{29}

8.27 In addition to the work of the WAMM, considerable work has also been undertaken by a number of groups and individual researchers, aimed at further defining the most likely search area.

\textsuperscript{25} Hardstaff, Transcript, pp. 438-439.
\textsuperscript{26} ibid., pp. 438, 445.
\textsuperscript{27} McCarthy, in Western Australian Maritime Museum, Submission, p. 4065.
\textsuperscript{28} ibid.
\textsuperscript{29} Western Australian Maritime Museum, Submission, p. 146.
Comparisons with the Titanic and Bismarck

8.28 The discovery of the Titanic and the Bismarck in the mid 1980s signalled to many that locating Sydney, should she rest in deep water, was now technically feasible. It is instructive, however, to note that a number of factors about the experience in locating Bismarck and the Titanic vary from the situation facing those searching for Sydney.

8.29 The Department of Defence, in commenting on whether a deliberate search should be mounted, made the following observation:

The greatest difficulty in initiating such a search is the lack of an adequate datum upon which the search could be based ... In the searches undertaken by Dr R D Ballard for the Titanic and Bismarck there was an accurately known starting position. In the case of Sydney, even with a known datum the search area could be substantial. Sinking ships do not plunge vertically and can move a reasonable distance from the sinking position to the final resting position eg after a three week search, Bismarck was located some 3.2 km from the reported sinking position.30

Titanic was located in 4000 metres of water and Bismarck in 4800 metres of water. Titanic was located in two pieces, half a mile apart. Even with reasonably accurate locations for both ships, it took three weeks to locate the wreck of the Bismarck. The leader of the Titanic and Bismarck search teams, Dr Robert Ballard from WHOI, is reported as commenting that 'finding the wreck of Sydney cannot be described as looking for a needle in a haystack because the haystack has not yet been found'.31

8.30 However, the discovery of both Titanic and Bismarck does indicate that the technology is available not only to locate wrecks at these depths, but also to examine them.

Current location theories

8.31 The Committee agrees with the proposition that:

In making a determination of the most probable search position, the assessment must be based on sound navigational, hydrographic and oceanographic information ...32

8.32 Given that the actual site of the engagement is still in dispute among researchers, it was perhaps not very surprising to find an even more vigorous debate in progress on the possible locations for the wrecks of Sydney and Kormoran. Differences emerge according to whether the German view of events (in whole or in part) is believed, and on whether alternative scenarios of the engagement are considered possible. A number of different possible wreck sites were put forward to the Committee, and these are summarised in Table 8.1.

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30 Department of Defence, Submission, p. 1845.
31 Frame, op. cit., p. 225.
32 Slade, Submission, p. 2603.
Table 8.1  Possible Locations of Battle Site and Wreck Sites

<table>
<thead>
<tr>
<th>Location</th>
<th>Source/comments:</th>
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| 26°34'S, 111°E | Location of the engagement given by Captain Detmers.  
[33](#33) |
| 27°S, 111°E | Location of the engagement, as given by the Navigation Officer of Kormoran.  
[34](#34) |
| 27°11.71'S, 113°12.88'E | Possible location of the Kormoran wreck, as identified by Mr D R E King.  
[35](#35) |
| 24°S, 110°E, in a depth of 3000-4000 metres | Position of Kormoran as given by Mr J Montagu; position of Sydney is not conclusive.  
[36](#36) Based on the report of linseed oil sighted by HMAS Heros on 26 November 1941. |
| 26°20'S, 112°25'E | Kormoran sinking position, given by LCDR Ean McDonald.  
[37](#37) |
| 28°38.39'S, 113°21.86'E | Knight/Whittaker position (KDLS Target 3), believed to be the Kormoran.  
[38](#38) |
| 24°54'S, 108°42'E | Position of battle given by Mr James Eagles.  
[39](#39) |
| 26°42.3'S, 111°46.8'E | Action site. |
| 26°28.35'S, 111°32.6'E | Sydney wreck (note, the Sydney and Kormoran wrecks in this proposal are believed to be 13 nm apart). |
| 26°38.7'S, 111°41.9'E | Kormoran wreck. Positions as provided by CMDR R J Hardstaff.  
[40](#40) |
| 26°15'S, 111°E | Kirsner and Dunn battle site position.  
[41](#41) |
| 26°30'S, 111°30'E | Hughes position of battle site.  
[42](#42) |
| 26°40'S, 110°40'E | Steedman and McCormack battle site.  
[43](#43) |
| 28°S, 113°32'E | Possible site of the Sydney wreck, given by Mrs Glenys McDonald.  
[44](#44) |
| 26°19.6'S, 111°41.8'E | Fugro Survey Pty Ltd, prepared for the HMAS Sydney Foundation Trust.  
[45](#45) |

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33 Department of Defence, Submission, p. 1845.  
34 ibid.  
35 King, Submission, p. 3983.  
36 Montagu, Submission, p. 110.  
37 McDonald, E, Submission, p. 547.  
38 Knight, Submission, p. 2207.  
39 Eagles, Submission, p. 3611.  
40 Hardstaff, Submission, p. 47.  
41 Kirsner and Dunn, Submission, p. 4039.  
42 Quoted in Kirsner and Dunn, Submission, p. 4039.  
43 ibid.  
44 McDonald, G, Submission, p. 174.  
45 HMAS Sydney Foundation Trust, Submission, p. 843.
8.33 The differences of opinion can be classified into two main groups: those who basically agree with the position of the engagement given by the Germans (in the vicinity of 26°34′S, 111°E); and those who believe the engagement occurred much further south, approximately at latitude 28°S. Two of the positions that have attracted varying degrees of support are discussed in this section, as an illustration of the complexities of defining the search area.

The Kirsner/Dunn Position

8.34 The HMAS Sydney Foundation Trust has been very active in its attempts to define the possible search area for the wrecks. Among the procedures it has been undertaking are:

- oceanographic hind-casting (ie reconstructing the movement of all objects and debris thought to have been from the two vessels)
- archival searches (both in Australia and overseas)
- archival analysis.

8.35 The results of the work so far are contained in a submission to the Committee by Dr Kim Kirsner and Dr John Dunn. The paper comments on the feasibility of a search for the wrecks of Sydney and Kormoran. Examining both the oceanographic data and the archival data (survivors reports), the paper suggests an area identified for the Kormoran of a comparable size to that of the searches for the Titanic and Bismarck. The paper identifies two areas as possible sites for a search: the smaller of the two circles (five nautical miles in radius from position of 26°15′S, 111°E) provides a search area similar in dimensions to that of the Titanic and Bismarck. The larger circle (with a 15 nm radius) is certainly bigger than Titanic and Bismarck. Water depth in both areas is approximately 2500 metres.

8.36 The paper also looks at estimates of the wreck site produced by Mr Sam Hughes, a search and rescue expert from the Australian Maritime Safety Authority and Mr Ray Steedman, an oceanographer. While ‘these studies involved different techniques and differed considerably in regard to longitude, they were very similar in regard to latitude, at 26°19′S to 26°40′S’.

8.37 Some concerns about the methodology used by Kirsner and Dunn were raised by Mrs Glenys McDonald, as she found it difficult to fully assess the ‘hindcasting for the seven lifeboats/rafts without a detailed analysis from each boat as to what sails were rigged’. Mrs McDonald also cautioned about placing so much emphasis on ‘the small amount of debris found from two large ships, which were apparently both burning fiercely. None of this debris was found with any evidence of fire damage’.

46 ibid., pp. 824-825.
47 Kirsner and Dunn, Submission, pp. 2727-2742.
48 ibid., p. 2734.
49 Kirsner, Transcript, p. 173.
50 HMAS Sydney Foundation Trust, Transcript, p. 169.
51 Kirsner and Dunn, Submission, p. 2729.
52 McDonald, G, Submission, p. 3351.
53 ibid., p. 3354.
Mrs McDonald also raised the problem of what we should or should not believe of the German account:

Kirsner and Dunn state that we should believe the German story in total and not just accept or reject bits that fit in with our hypothesis. They then go on to say they used a formula which acknowledged that some of the Germans may have lied or deliberately misled. I have no absolute method of knowing if the Germans told the truth. Therefore I feel that some of the alternative hypothesis that people have produced is not unreasonable given the many variances in the German testimonies.54

Kirsner and Dunn also state that they believe 'Sydney sank 10 to 20 miles to the south of that position [26°15'S, 111°00'E]'.55 Mrs McDonald challenges that opinion, indicating that Kirsner and Dunn have not examined the possibility that Sydney could have travelled much further on in a south or south-easterly direction. 'There are many examples of badly damaged ships, with damage similar to that inflicted on HMAS Sydney by HSK Kormoran travelling for many hours before either sinking or reaching safety'.56

McDonald, Kirsner and Dunn are at variance also on the value of oral history (and hence the value of the reports by Port Gregory residents of their sightings of a battle at sea in November 1941). Kirsner and Dunn, while acknowledging the 'intrinsic value' of oral history conclude that 'we should not expect eyewitness testimony to provide reliable information about the time and location of specific events after 30 or 40 years'.57 In a supplementary submission they add:

It is our view that analysis of the eyewitness reports from Port Gregory have (sic) been treated literally when the length of the interval between the original event and the recording sessions, and the lack of independence among the witnesses during the early months and years after knowledge of the event became widespread, suggests a less than literal approach might have been more appropriate.58

However, Mrs McDonald rebuts this view, indicating that while oral history is 'subject to inaccuracies ... so too is the written archival information of the time' and that 'In debunking the value of memory and therefore the collection of oral histories of a battle sounds (sic) off the coast from Port Gregory, Kirsner and Dunn have not adequately explained what it was these people saw'.59 In their supplementary submission, Kirsner and Dunn address this briefly, suggesting four possible explanations for the events that triggered the reports of Port Gregory residents:

• an independent incident now lost to us;

54 ibid., p. 3352.
55 Kirsner and Dunn, Submission, p. 2734.
56 McDonald, G, Submission, p. 3354.
57 Kirsner and Dunn, Submission, pp. 2736-2737.
58 ibid., p. 4045.
59 McDonald, G, Submission, pp. 3359 and 3361.
• the passage of *Uco* on the inshore route at about 0400 on 20 November 1941 (the vessel reportedly often made a lot of smoke);

• reflection of light from high level cloud from the battle or from the 1000' column of flame that marked the end of *Kormoran*; and

• light propagation involving low level cloud from a source in the Port Gregory area.  

Some of these are obviously more likely than others, and the only thing that is certain is that the debate about what Port Gregory residents saw will continue.

8.42 Mrs McDonald argues for a search for *Kormoran* based on German evidence, and then a search for *Sydney* based on both German and coastal sightings.  

... we do have the Captain of the *Kormoran*’s position and the Navigator’s position, plus we have a report of a large sighting of linseed oil by the RAAF and HMAS *Heros* ... [which] should give us a reasonable grid search for the *Kormoran*. If the ship cannot be located in this area, then it is probable that the Captain and Navigator lied and that the battle was much closer to shore than they stated ...

The second position I feel should be grid searched is an area with a central focus of 28°S 113° 30E ...  

8.43 In commenting on the views put forward by Kirsner and Dunn, CMDR R J Hardstaff, RAN (Retd) observed that 'I think the Professor's conclusions are a little far-fetched in this case and his trust in the German POW's too overpowering for him to reach a clear decision'.  

8.44 The HMAS *Sydney* Foundation Trust has indicated its willingness to have its proposed search plans subject to a technical audit.  

**The Knight/Whittaker Position**

8.45 The Committee also received evidence from Mr Lindsay Knight and Mr Warren Whittaker, who in January 1998, using the Knight Direction Location System (KDLS) conducted an airborne search over an area of more than 16 000 square miles off the Western

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60 Kirsner and Dunn, Submission, p. 4045.
61 McDonald G, Submission, p. 3361.
62 ibid., p. 173.
63 Hardstaff, Submission, p. 3753.
64 The Trust has established ‘a technical audit procedure to review the position analyses, the feasibility of an in-water search, and technical issues associated with the in-water search’. The audit would involve a select group of international experts (Submission, p. 828). The Committee believes the Trust would also welcome the contribution of Australian researchers as well as international experts.
65 The KDLS, developed by Mr Knight, ‘consists of a Transmitter/Receiver, and a set of specially constructed and tuned hand held aerials. In addition, a magnetometer and a computer is used ... To use the system, the operator tunes the transmitter to broadcast the predetermined KDLS resonant frequency of the substance to be detected. If the substance is present in the ground or under water, at any depth, the micro energy from the resonating target material is detected’ (Knight, Submission, p. 2219).
Australian coast and located three ‘targets’. Mr Knight believes that Target 1 is possibly HMAS Sydney, Target 2 ‘a mystery ship’, and Target 3, possibly the remains of Kormoran. A second survey was flown several days later, over an area of 26 600 square miles and examined the site of the action as stated by Captain Detmers. No modern wrecks were discovered.  

8.46 According to Mr Knight, the suspected wreck of the Sydney is 85 nm from the KDLS identified Kormoran site, and outside the range of the air searches carried out by authorities in the days after Sydney's disappearance. He also believes that the wreck of what he believes to be Kormoran (at 28°38.39'S, 113°21.86'E) is close to where the action must have taken place. This site is some 193 nm from what he calls the 'official' site. According to Mr Knight, the target believed to be the Sydney is in somewhere around 4,900 metres of water; the vessel that is believed to be the Kormoran is in 800 metres of water.

8.47 Although Targets 1 and 2 are 30 nautical miles apart, Mr Knight believes that they may be parts of the same ship. While others such as Frame believe that Sydney may well be in one or two large pieces on the ocean floor, the distance of 30 nautical miles would seem to rule out the suggestion that Targets 1 and 2 are parts of the one ship.

8.48 The accuracy of the KDLS in depths such as those indicated has not been tested, although Mr Knight claims that depth of water does not affect its detection ability. He indicated to the Committee that KDLS shipwreck surveys have been carried out in a number of sites around Australia, and also in PNG, Guernsey, Indonesia, the Philippines and the United States. Mr Knight has given a number of examples of actual discoveries made using his system, for example, a World War II ammunition ship was located in PNG using the signature of Japanese small arms ammunition; and Japanese ships located in the area of the Philippines.

8.49 Doubts about the utility of the KDLS system have been raised by Kirsner and Dunn, who were critical of the lack of information about the system's sensitivity and specificity (i.e. its capacity to detect a target when one is present, and whether it will detect targets if they are weak; and lack of information about the system's ability to differentiate responses caused by other factors such as magnetic anomalies). While the Committee does not reject the findings arising from the KDLS surveys, it would like to see more evidence of the accuracy of the KDLS before giving the system its endorsement, in the absence of any explanation of the methodology involved.

8.50 Mr Whittaker, in a separate submission to the Committee, examined the relationship between the targets detected by the KDLS, the evidence provided by the objects recovered during search and rescue operations conducted in November 1941, and oral history as collected by Glenys McDonald and others. Mr Whittaker concluded that:

66 ibid., pp. 2204-2206.
67 ibid., pp. 2206-2208.
68 Knight, Transcript, p. 394.
69 ibid., p. 392.
70 Frame, op. cit., p. 226.
71 ‘KDLS Targets can be located at any depth regardless of type of cover’ (Knight, Submission, p. 2218).
72 Knight, Submission, p. 2221.
73 ibid., p. 2222.
74 Kirsner and Dunn, Submission, p. 4026.
there are grounds for thinking that the German survivors lied about the location of the action;

the KDLS survey did not detect any modern wrecks north of Latitude 28°30'S; it is certain that if the wrecks were present, they would have been detected; and

the action between HMAS Sydney and HSK Kormoran took place near the site identified as KDLS Target No 3 (at 28°38.39'S, 113°21.86'E), i.e. west of the Houtman Abrolhos.75

8.51 Mr Whittaker reported the wreck thought to be that of Kormoran (28°38.39'S, 113°21.86'E) and that of the Sydney (29°58.53'S, 112°48.26'E) but did not comment on the third target site identified in the survey.76

8.52 Kirsner and Dunn made the observation that according to the Western Australian Maritime Shipwreck data base, there are 76 modern wrecks offshore in Geraldton-Abrolhos region, the location of only two of which are known with any certainty. Without additional argument, it cannot be safely concluded that any of the "modern wrecks" detected by the KDLS is not one of these.77 Kirsner and Dunn also make the point that, given the large number of wrecks in the area, it is somewhat surprising that the KDLS only detected three signals.

8.53 Kirsner and Dunn also raise concerns about the Knight/Whittaker claim that HSK Kormoran is at 28°30'S, 113°22'E, as their reconstruction:

... puts Kormoran a mile or two to the south of Evening Reef, within sight of the lighthouse on North Island, and, as she was steering 25°, within a mile or two of accidental loss on Noon Reef ...78

8.54 The Knight/Whittaker conclusions place the action site further south than the Kirsner/Dunn area, and in the latter's opinion 'until Knight and Whittaker publish an independent audit, including information about the probability of false alarms and errors of omission for their procedure, the value of this evidence is unclear'.79 Kirsner and Dunn are also critical that the Whittaker hypothesis 'depends on selection of the most extreme values for wind and current ...'.80

8.55 Criticisms of the Knight submission were also made by Mr Alaistair Templeton:

There seemed to be inconsistencies in it, quite apart from a bit of carelessness in presenting coordinates ... What caught my eye at first was that the carley raft was plotted way up north, but it was a full degree of latitude out: it was plotted north of where it was actually picked up. ... All I can say is that if this submission is to be taken

75 Whittaker, Submission, pp. 3636-3639.
76 ibid., p. 3642.
77 Kirsner and Dunn, Submission, pp. 4026-4027. Modern wrecks are defined as ships lost since 1900.
78 ibid., p. 4043.
79 ibid., p. 2735.
80 ibid.
seriously ... someone should have a damn good look at it because it does not stack up. 81

8.56 Mr Templeton was also critical about a more southerly site of an action:

For survivors to be picked up in that position from this mooted idea of near the Abrolhos beggars description. I think it is not physically, navally or seafaringly possible, so I tend to dismiss that area for that reason. 82

8.57 It is the belief of the WAMM that the 'first step in any "in-water" search for HMAS Sydney would be to examine an area at or near 26°32-34'S, 111°E, for any evidence of HSK Kormoran at least. It is clear from the submissions received to date that most search groups and individuals, irrespective of their deductions as to the whereabouts of HMAS Sydney, would see this a useful preliminary step, given that it is one capable of providing positive or negative evidence of considerable significance. 83

Conclusion

8.58 It is apparent from the brief discussion above that there is still a great deal of work to be done on defining a search area. While the Committee supports in principle the idea of mounting a search to locate the wrecks, it would be far too costly to mount a search on the information available at present. The Committee would like to see a phased approach to the search undertaken, beginning with a seminar or workshop, sponsored by Navy, to examine the various theories about possible wreck sites. This seminar/workshop would follow on from the work conducted at the 1991 Forum and the many hours of work since by interested researchers. The value in the seminar would be primarily in subjecting the various views to critical consideration and debate.

8.59 The Committee recommends that:

10. the Royal Australian Navy sponsor a seminar on the likely search areas for Sydney and Kormoran, involving as many of the individual researchers and groups as possible.

8.60 Depending on the outcome of that review, the Committee believes the next step should be an investigation of the area identified by the WAMM (at or near 26°32-34'S, 111°E), should this continue to be the most likely area after careful analysis.

81 Templeton, Transcript, pp. 473 and 475.
82 ibid., p. 476.
83 Western Australian Maritime Museum, Submission, p. 4060.
8.61 The Committee recommends that:

11. after the search area is more accurately defined, some preliminary surveys be undertaken to try and confirm the accuracy of the wreck locations, prior to a full in-water search. An initial search for HSK Kormoran at or near 26°32-34'S, 111°E, if supported by the seminar, would seem a logical starting point.

Search Technology

8.62 In addition to defining the search area using hydrographic, oceanographic and archival sources, the Committee believes a number of initial surveys should be undertaken to determine that the search is in the correct area, prior to a full search being mounted. These modified searches can take a number of forms.

8.63 Mr Wes Olson has put the view that:

There is a possibility that the Sydney and the Kormoran are releasing minute amounts of oil from corroding or ruptured fuel tanks. With the technology that is now available, and given the right conditions, it is feasible that a suitably equipped aircraft would be able to detect any oil seeping up from the wreck(s). Such an operation would not be overly expensive and would offer the best chance of narrowing the search area.  

8.64 Professor Penrose, a Trustee of the HMAS Sydney Foundation Trust, discussed two techniques for determining hydrocarbons: using fluorescence (excited by a laser on a passing aircraft and detected by sensors on that aircraft); and by examining the sheen on the water viewed from satellite space records. Professor Penrose explained that should an expression of hydrocarbons on the surface be found, there are two main sources, one being natural seepage, and the second that a shipwreck is emitting oils (though it may not necessarily be from either HMAS Sydney or HSK Kormoran).

8.65 While there is some doubt about whether the wrecks would be still releasing oil, the Trust has looked at two wrecks that were sunk in about the same time frame: Royal Oak in Scapa Flow and HMAS Perth in Sunda Strait. Both appear to still show oil slicks, although both are in much shallower water than is likely for Sydney or Kormoran. The oil may be strongly dispersed by the time it reaches the surface, but it may give an indication of a general search area, if taken with other estimates of the likely wreck sites.

8.66 Deepwater side scan sonar is another technique that might be used in a search. It involves a sideways looking sonar being towed behind a vessel. While the side scan sonar can detect an object, it cannot say what it is:

The object could be man-made, it could be a natural feature. It could be a volcanic plug or a shipwreck. What a side scan sonar system or a

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84 Olson, Submission, p. 217.
85 Penrose, Transcript, p. 171.
86 ibid., p. 172.
87 ibid., p. 169.
swath mapping system will do is identify a shape that looks out of the ordinary ... What you then need to inspect that with is something like a deepwater remotely operated vehicle or an ROV ..., vehicles available that can work in deep water. They are fitted with a video-type camera.88

This technology can provide a more accurate picture of an object, assisting in its identification. The Trust believes that an initial broadscale search will probably involve a sonar side scan or swath type of technology.89

8.67 To effectively operate side scan sonar technology, a vessel must have a differential global positioning system, to provide accurate navigation. The vessel also has to have the capacity to tow a deep water side scan sonar.

8.68 In addition to these systems, a magnetometer may also be of use. ‘At appropriately short ranges a deep towed magnetometer will tell whether any piece of wreckage or a natural structure is or is not ferromagnetic’.90 HMAS Moresby used side scan and magnetometry in some of its searches in the 1980s. Given the depth that the wrecks are likely to be in, flying an airborne magnetometer is unlikely to be productive.

8.69 All of the above technologies are available commercially in Australia, either permanently or a regular visiting basis.

8.70 It was apparent from the evidence received by the Committee that the vessel needed for the search will require capabilities currently not possessed by the RAN. This was confirmed by Defence which argued that should a deliberate search be mounted it would 'require the charter of a specialised vessel for an indeterminate period of time. Such a venture would be extremely expensive and hard to justify in the current fiscal climate'.91

8.71 HMAS Moresby has been decommissioned, and HMAS Protector does not at present have the capabilities for deep water survey operations. The Committee was advised that:

The two new RAN survey Ships Leeuwin and Melville will only be fitted with a shallow multibeam each eachsounder (sic) system however the ship configuration would enable embarking suitable search systems.92

8.72 In addition to the ability to locate the wrecks, possibly using ships equipped with deep water side scan sonar, once the wrecks are located there will need to be a vessel with a Dynamic Positioning Capability i.e. capable of holding a position over the wreck site in deep ocean while the wreck is examined using an ROV. Mr Ed Punchard, Chairman of the HMAS Sydney Foundation Trust, advised the Committee that it was his understanding that vessels with the capacity to be dynamically positioned are being acquired by the RAN.93 Regardless

88 Graham, Transcript, p. 160.
89 Penrose, Transcript, p. 161.
90 ibid.
91 Department of Defence, Submission, p. 1845.
92 Slade, Submission, pp. 2603-2604.
93 Punchard, Transcript, p. 175.
of whether the RAN acquires this capability, the Committee believes that all avenues for obtaining a suitable vessel should be examined. For example, suitable vessels (with some modification) might be available through other areas of the Australian Government e.g. the Australian Geological Survey Organisation or the CSIRO. In addition:

From time to time, foreign research and survey vessels operate under contract or in cooperation with Australian government agencies in research, geological and maritime boundary related surveys. These vessels are fitted with hull mounted deep water multibeam echosounder technology, towed side scan systems and positioning and logging systems. Such vessels could be utilised in addition to their prime tasking for 'one off' sweeps in a planned search area over a period of time when entering, departing or during a contract or cooperation period with the government agency.94

8.73 CMDR Hardstaff supported a search, but suggested it be conducted by:

... the navy and not other people. It is only a question of hiring a deep sides container with a 1,000-metre cable. The equipment is available to do it, but if that is impossible you have these oil rig vessels on the station passing through on and off all the time. They are operated by other government agencies in Australia and they could do exactly the same job. It would probably cost you a lot more money but they would do the job for you, provided they were told exactly what to do.95

8.74 A vessel such as HMS Scott would be well suited for such search activities. Scott, an ocean survey ship of the Royal Navy, has the ability to sweep a path 60 nm wide at 5000 metre depths.96 It is possible that the RN could be approached about participating in a search, should it prove to be financially feasible. However, other alternatives appear available, and will be reasonably cost effective provided that the search area is more manageable.

Funding a Search

8.75 The Committee was asked in its Terms of Reference to consider the extent to which the Commonwealth Government should participate in a search. The Committee has interpreted participation to be not only in direct funding, but also in terms of logistical assistance and the possible provision of equipment.

8.76 The cost of any search is likely to be in the order of several million dollars, and there are a number of ways this could be funded. Many of the submissions to the inquiry called for Commonwealth funding to be provided to allow the search to be undertaken. For some, there was little doubt as to who should bear the cost of any search:

WITHOUT QUESTION the [Commonwealth Government] should bear 100% of the cost, and forthwith at that. The Seamen were

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94 Slade, Submission, p. 2604.
95 Hardstaff, Transcript, p. 448.
96 Hardstaff, Submission, p. 78.
'Employees' of the Commonwealth Government, and that means the relatives of the lost seamen and other Australians should NOT be called on to contribute. The HMAS Sydney was owned by the Commonwealth Govt. and they have to use their money to pay for locating the hull. The Telecom Float need not all be spent on the Greenies and paying off our Overseas Debt, all worthy causes, but this locating and examining the wreck of the HMAS Sydney now, at once, if not done will remain a BLOT ON THE MEMORY OF ALL THOSE OF US WHO FOUGHT TO SAVE AUSTRALIA FROM WHAT WAS ALMOST German and Japanese control.97

8.77 Other sources of funding, however, might also be possible. Mr Walter Pless, in his submission, noted that:

There must also be philanthropists and other wealthy individuals or organisations who would be willing to contribute funds for such a search ... International groups and identities, including military forces and private corporations with an interest in Australia, may also be willing to assist in financing a properly conducted search and could be approached ... I am sure that a national fund-raising campaign would result in ordinary members of the public contributing to costs of a search. Surviving relatives of HMAS Sydney crew members would, I am sure, be in the vanguard of such a public fund-raising campaign. The RSL and its many members, I am certain, would be more than willing to contribute in some way to the mounting of a search.98

8.78 The Committee considered a range of options for funding, including a proposal that rather than fund a search, a substantial reward be offered for 'a proven find of one or other wreck'.99 While this idea has some appeal, the Committee believes it appropriate that a more co-ordinated approach be taken to any search. It is unlikely that the wrecks will be found by chance, given that deliberate attempts to locate the wrecks have been unsuccessful to date, and despite a reward already being possible under the Historic Shipwrecks Act. As the wrecks are most likely in deep water, the cost to an individual or small group of enthusiasts of the technology and equipment to conduct a search is almost prohibitive.100

8.79 The Committee would prefer to see a more co-ordinated and cost effective approach to a search, rather than a 'free-for-all' that might result from a large reward being offered. The Committee also acknowledges that a successful search will require a multi-disciplinary approach, a high degree of coordination, and clever management if the result is to be achieved. To this end, the Committee has concluded that the HMAS Sydney Foundation Trust is the most appropriate body to co-ordinate the search activities at present.

8.80 The Committee also considered whether the search should be funded solely by the Government, but given the financial constraints on all levels of government, did not

97 Ross, Submission, p. 476. Emphasis in original.
98 Pless, Submission, p. 224.
99 See for example Poniewierski, Submission, p. 3593.
100 For example, Mr J Montagu indicated that his group was quoted a cost of A$1,000,000 per calendar month by the Woods Hole Institute several years ago, with no guarantee of success (Submission, p. 2673).
believe this was either practical or desirable. For some, it was indeed preferable if the search was independent of the Commonwealth:

... [the search's] objectivity would be enhanced in the eyes of those who, like myself, lost relatives in the Sydney if it was undertaken independently of the Navy and under the auspices of such a body as the HMAS Sydney Foundation Trust.\(^{101}\)

8.81 However, the Committee believes that the Commonwealth Government should be involved in the search, and its proposed role, and the role of the HMAS Sydney Foundation Trust, are discussed below.

The HMAS Sydney Foundation Trust

8.82 The HMAS Sydney Foundation Trust (hereafter referred to as the Trust) was established 'to locate the wreck and commemorate those who were lost. It is committed to a non-invasive inspection of the wrecks of HMAS Sydney and, should it be found first, HSK Kormoran. The wreck-sites will then be treated as "graves-at-sea", and protected accordingly'.\(^{102}\) It has Trustees 'representing the Returned Service Organisations, business, technical search audit expertise, technical search companies and institutions, world-recognised archivists, the Western Australian Maritime Museum, and the legal profession'.\(^{103}\)

8.83 The Trust has been established as a charitable trust\(^{104}\) and lays claim to being 'probably the only Australian organisation suitably equipped from the technical and organisational standpoints to search for HMAS Sydney. The Trust therefore represents a significant collaborative initiative involving a broad cross-section of scientific, technical and industrial expertise'.\(^{105}\)

8.84 The Trust has indicated that a critical part of its business plan involves a public appeal for funds. While the appeal has been deferred pending the outcome of this inquiry, the Trust has indicated it has the legal and financial arrangements in place to start, including an auditing process. The Trust has indicated the appeal will seek funds for the technical audit; commemoration activities; the in-water search; and the operating costs of the Trust (which have largely to date been funded by the Trustees, companies associated with them, and some public donations).\(^{106}\)

8.85 The Trust in its submission proposed that consideration be given to the Commonwealth Government setting aside:

... a sum of money specifically for search and commemoration purposes. It is further recommended that funds from this source be available on a dollar for dollar basis based on public donations up to a maximum value, thereby setting a limit on public liability. It is further suggested that a figure in the vicinity of 20% of the total anticipated...
costs would significantly facilitate the search for the vessel while setting an appropriate limit on the extent to which the project would draw on public funds.\textsuperscript{107}

8.86 The Trust provided the Committee with a number of estimates for various components of its program. To complete the work to identify the target area, an amount of $93,000 was sought, as follows:

- $57,000 – for reviewing and revising hind-analysis, analysis of reports provided by \textit{Kormoran} survivors, enhancement of oral history data base from Port Gregory and preparation of a final report;
- $12,000 – for an independent review and evaluation of remote sensing; and
- $24,800 – Trust administration, including appointment of a part-time manager.\textsuperscript{108}

8.87 The budget for the actual search contains a number of options which obviously vary the expenditure. The estimates range from $3.53 million up to $4.08m.\textsuperscript{109} However, the preliminary stages involve more modest amounts of expenditure:

Phase 1 (Alternate A): short survey using a vessel fitted with a narrow beam deep water echo sounder to determine the roughness of the seabed, prior to swath mapping: $110,000

Phase 1(Alternate B): gathering suitable water depth data, if it exists, and producing it in chart form: $15,000

Phase 2 (Alternate A): use of airborne Remote Sensing Technology, using laser fluorescent technology to investigate possible oil seeps from the wreck site: $440,000

Phase 2 (Alternate B): use of satellite photography and sophisticated proprietary hardware and software utilised by some resource companies. Completion of work undertaken to date via a sponsor: $20,000.\textsuperscript{110}

8.88 The major expense foreshadowed by the Trust is in the Phase 3 (in-water swath survey – $1.7m) and Phase 4 of the project (close inspection by Remotely Operated Vehicle – $1.79m).\textsuperscript{111}

8.89 The Trust believes that 'considerable cost savings can be achieved by having various services donated. These could well include Freight, Airfares, Accommodation, Port Charges and Fees including pilotage, wharf fees, wharf labour, Vessel hire, Vessel crew donating their services free of charge, fuel and communications'. Indeed, the Trust has

\textsuperscript{107} ibid., p. 832.
\textsuperscript{108} ibid., pp. 3256-3259.
\textsuperscript{109} ibid., pp. 3628-3633.
\textsuperscript{110} ibid., pp. 3628-3629.
\textsuperscript{111} ibid., pp. 3630-3632.
argued that 'the funding of this exercise may well combine a combination of resources'. In compiling budget estimates, no allowance for savings such as these were included.

8.90 As noted earlier, the Trust has stated that there are vessels available for charter in Australia capable of undertaking the survey work. For the ROV work, there are around four vessels in Australia (three operating in the offshore oil and gas industry) and one working with the RAN, capable of remaining over one location without anchoring while the ROV is deployed. It is the express desire of the Trust that Australian companies be utilised in the search, and the Committee endorses this approach.

8.91 The Committee is aware, however, that the establishment of the Trust and its operations have not been universally welcomed. There has been some concern expressed about the possible conflict of interest between some Trustees who have businesses that might be involved in the work of the Trust as it undertakes the search. There has also been concern expressed that the Trust is more a money-making venture than an organisation dedicated to the commemoration of those lost on Sydney. The Committee notes these concerns but does not share them.

8.92 After having examined the Deed of Trust and having reviewed the material provided by the Trust to the inquiry, the Committee believes there are adequate safe-guards to ensure that funds raised in the name of the Trust are used properly. The Committee notes that under the Deed of Trust establishing the HMAS Sydney Foundation Trust, the accounts of the Trust are to be audited. The Committee also acknowledges the many hours of unpaid work undertaken by the Trustees and the facilities provided by their companies to date. However, in the dispersal of publicly raised funds, the Committee believes it is important that the Trust ensures that any of its work involving the use of commercial enterprises be undertaken following an independent tendering process.

8.93 The Committee has concluded that it would be appropriate for the Commonwealth Government to be involved in the search for HMAS Sydney, giving support not only morally but also in a tangible way. While the Committee believes the HMAS Sydney Foundation Trust should be the prime co-ordinator of the search, RAN resources should also be made available to assist in the search as required. To this end the Committee would like to see closer liaison between the Trust and Navy, along the lines of the MOU signed between the Trust and the Western Australian Maritime Museum.

8.94 The Committee recommends that:

12. the HMAS Sydney Foundation Trust and the Australian Government negotiate a Memorandum of Understanding governing the search for, and subsequent protection of, the wrecks of HMAS Sydney and HSK Kormoran.
8.95 The Committee also supports the provision of Commonwealth funding to the Trust on the following basis:

- an initial grant of $100,000 to cover activities associated with defining the search area for the wrecks. A report on the expenditure is to be provided to the Minister for Defence;

- funding thereafter to be provided on a dollar for dollar basis, matching publicly raised funds, with an upper limit of $2 million being set for Commonwealth liability;

- support provided 'in-kind' by commercial and other sponsors not to attract the reciprocal funding of the Commonwealth;

- assistance 'in-kind' provided by the RAN not to be counted towards the liability of the Commonwealth; and

- that a period be negotiated for the completion of the search and related activities.

8.96 The Committee recommends that:

13. (a) the Australian Government provide an initial grant to the HMAS Sydney Foundation Trust of $100,000 to cover activities associated with defining the search area, with a report on its expenditure to be provided to the Australian Government; and

(b) the Australian Government match public donations, on a dollar for dollar basis, up to a total of $2 million.

Management Issues

8.97 The Committee’s primary concern, should the wrecks be located, is that they be adequately protected as the final resting place of so many Australian servicemen. The importance of the wrecks is such that there was no question in any of the submissions that a proper management plan should be developed.

Protection of the Wrecks

8.98 The protection of historic shipwrecks and relics located within Australian waters is provided for by the Historic Shipwrecks Act 1976 (HSA). Australian waters are defined as being 'from the low water mark to the outer edge of the continental shelf but not including State waters'. In practice this means that 'if the wreck is anywhere in waters from Australia’s low tide mark to the continental shelf, it would be covered by the act'.

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118 Department of Communications and the Arts. Submission, p. 349. Note, responsibility for the HSA now resides with the Department of the Environment and Heritage (Administrative Arrangements Order, 21 October 1998).

119 Department of Communications and the Arts, Transcript, p. 60.
Departmental officers with responsibility for the Act confirmed that the Act extends to the extent of the continental shelf, irrespective of the economic zone boundary.\textsuperscript{120}

8.99 The Act prohibits damage, interference, removal or destruction of an historic shipwreck or associated relics, except in accordance with a permit, and is administered in cooperation with the States, the Northern Territory and Norfolk Island.\textsuperscript{121} Under the Act, the Minister for the Environment and Heritage has delegated certain of his powers under the HSA to the States and Northern Territory: the Minister's delegate in Western Australia is the Director of the Western Australian Maritime Museum.\textsuperscript{122}

8.100 The Department advised that wrecks covered by the Act may be protected in three main ways:

- a wreck in waters under Commonwealth jurisdiction is automatically classed as historic and thus protected if it is 75 years of age or older;
- a wreck may be protected if it is considered to have historic significance and a specific declaration is made by the Minister; and
- a protected zone may be declared around an historic wreck preventing entry except by permit for specified purposes.

Recommendations for the declaration of shipwrecks as historic and for the creation of protected zones are usually made to the Minister by Delegates, but may also be made by any member of the public.\textsuperscript{123}

8.101 The Western Australian Maritime Museum indicated that permits for access to a protected zone would be issued:

... for \textit{bona fide} research or official purposes only. The purposes for which a permit can be issued can include remembrance services, non-disturbance assessments of the wrecks and the wreckage plumes and the obtaining of data and information pertaining to the publication or promulgation of material in written, film or electronic media form for official or public purposes. Entry into the wreck(s) and removal of material from either site is not envisaged.\textsuperscript{124}

8.102 Penalties of up to $10,000 ($50,000 for corporations) and five years in gaol apply for breaches of the Act. The Act also provides for a reward to persons who 'first provide a description sufficient to enable a historic shipwreck to be located'.\textsuperscript{125} The Department stressed that its funding did not cover the financing of searches for wrecks.

\textsuperscript{120} ibid., p. 61.
\textsuperscript{121} Department of Communications and the Arts, Submission, p. 349.
\textsuperscript{122} ibid., p. 350.
\textsuperscript{123} ibid.
\textsuperscript{124} Western Australian Maritime Museum, Submission, p. 146.
\textsuperscript{125} Department of Communications and the Arts, Submission, p. 350.
8.103 It is apparent from para 8.100 above, that the second and third methods of protection would best apply to HMAS Sydney, should she be located within Australian waters.

8.104 The Committee recommends that:

14. (a) should the wrecks of HMAS Sydney and HSK Kormoran be located in Australian waters, they be declared wrecks of historical significance, under the terms of the Historic Shipwrecks Act; and

(b) the Minister for the Environment and Heritage make a declaration creating a protected zone around the site of the wrecks.

8.105 Anyone is able to go searching for the wrecks. The protection provided under the HSA only applies once the location of the ship is known and the Minister has made a determination under the Act. As an officer of the then Department of Communications and the Arts advised:

Anyone out in the ocean can be looking for anything they like while they are out there, as far as our act is concerned. If they come across a ship and identify it, the Sydney in this instance, they would be required under the act to advise the minister accordingly and then the protective mechanisms would be swung into place.126

8.106 The Department of Defence considers that:

... adequate legislative powers exist, in the guise of the Historic Shipwrecks Act of 1976, to protect the wrecks of Sydney and Kormoran should they be located. Further to this legislation, the wrecks are protected by international conventions which hold that they belong to the flag state unless that state has relinquished its claim on them.127

8.107 One submission to the inquiry argued that, should the wrecks be found:

- their locations should be kept secret;
- the wrecks be protected through appropriate government ordinances;
- reporters should be excluded from the search: it is unlikely that they would respect the need for secrecy;
- no items should be removed from the wreck; and
- visual examination only should take place.128

8.108 While the Committee does not endorse keeping the location secret, it is concerned that the wrecks be protected from exploitation and interference. Even with the declaration of a protected zone around the site, there is still concern that it would not prevent unscrupulous people diving on the wreck and trying to take souvenirs. Of course, much will depend on the depth of the water, but even Titanic, resting in 4000 metres has not been totally protected

126 Department of Communications and the Arts, Transcript, p. 65.
127 Department of Defence, Submission, p. 1860.
128 Creagh, Submission, p. 1012.
from the curious and the avaricious. Mrs Glenys McDonald has advocated community involvement in protecting the site and reporting of unauthorised activity; 'we need the community to do that protecting with the help of the authorities, not by the authorities alone'.

8.109 The Committee believes there is merit in Mrs McDonald's suggestions of involving fishermen, dive clubs and others in monitoring the site, and would hope that the Western Australian Maritime Museum would consider community involvement in the steps it puts into place to protect the site. The Navy should also be involved in the development of a management plan for the protection of the wreck sites, as should other 'stakeholders', defined by the WAMM as including 'the RAN, other Museums (notably the War Memorial and the National Maritime Museum), the German Government, the HSK Kormoran Survivor's Association, Australian Statutory Authorities (such as the Department of Veterans Affairs), the Geraldton-based search and research groups, individual researchers and authors, family groups, the Woods Hole Oceanographic Institute and the HMAS Sydney Foundation Trust'.

8.110 The Committee recommends that:

15. in addition to consultations with the HMAS Sydney Foundation Trust on a management plan for the wreck sites, the Western Australian Maritime Museum also consult with the Royal Australian Navy, community groups and other stakeholders.

8.111 If HSK Kormoran is found in Australian waters, the German Government will obviously be closely involved in decisions about its protection and management. In 1991 the WAMM, through the Australian Department of Foreign Affairs, advised the German Government that should Kormoran be located:

... it would not be disturbed in any way, only recorded and photographed. Furthermore the Museum states that the remains of the HSK Kormoran would be treated with respect as the last resting place of those sailors who had gone down with the ship. ... Similar measures [under the HSA] could be taken to protect the wreck of the HSK Kormoran, if it is found also in Australian waters, following consultation with and the agreement of the German government.

These principles were endorsed by representatives of the German and Australian Governments and other stakeholders, establishing 'the precedent for all future deliberations on the management of the two wrecks'.

8.112 Should the wrecks be found to be in international waters, the situation with protection is less clear. If in international waters, 'warships are generally claimed by the country that originally owned that warship', according to Mr G Henderson, the Director of the Western Australian Maritime Museum. However, Mr Henderson also advised that:

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129 McDonald, G, Submission, p. 182.
130 Western Australian Maritime Museum, Submission, p. 4060.
131 ibid., pp. 146-147.
132 Western Australian Maritime Museum, Transcript, p. 128.
... there are discussions going on at the moment within UNESCO along the lines of developing an international convention for the preservation of material in that area which is outside territorial limits. The understanding that we have is that the legislation going to the extreme of the continental shelf should indeed cover this.\(^{133}\)

### 8.113 There is no legislative basis, however, on which to impose access restrictions on a site in international waters:

There is no legislation which effectively covers the deep seabed, but people have access to that deep seabed, primarily through developments that have taken place in the oil industry ... until there is some sort of international legislation covering the deep seabed, there is a dreadful threat to anything on the deep seabed.\(^{134}\)

### A War Grave?

#### 8.114 Suggestions have been made that the wreck should be declared an official 'war grave'. The Australian War Memorial, in fact, noted that the 'wreck is a war grave'.\(^{135}\) While the wreck is certainly the final resting place of those lost during a wartime engagement, the term 'war grave' has specific connotations. The Commonwealth War Graves Commission commented:

Although the wrecks of ships sunk in action are often popularly described as war graves the term is, in these cases, purely descriptive and confers no legal right or title on the Commonwealth War Graves Commission. The Commission discharges its responsibility for the commemoration of those lost in such ships by the inclusion of their names on its memorials and in its memorial registers.

Since the Commission has no responsibility in respect of such ships it cannot give or refuse permission to dive in their vicinity. The wrecks of ships of the Royal Navy are in law the property of the Crown in right of the United Kingdom acting through the Ministry of Defence. Presumably, analogous provisions apply in Australia.\(^{136}\)

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133 ibid.
134 ibid., p. 132.
135 Australian War Memorial, Submission, p. 580.
136 Commonwealth War Graves Commission, included in Department of Veterans' Affairs, Submission, p. 347.
The Trust/WAMM MOU

8.115 In July 1996 a Memorandum of Understanding (MOU) was signed between the Western Australian Maritime Museum and the HMAS Sydney Foundation Trust. The MOU is a ‘statement of general intent between the parties’. 137

8.116 Under the MOU, the Trust Fund will be used as follows:

• to finance, through fundraising, appropriate research and an expedition to search for the final resting place of the World War II Australian Warship HMAS Sydney;

• to fund a commemorative service with the assistance and inclusion of ex-servicemen groups to commemorate the final resting place of the World War II warship HMAS Sydney;

• to conduct a search of all possible locations that have been assessed as viable by scientific and technical studies and historical studies;

• available funds will be used to assist representation of the next of kin of those lost on the World War II Australian Warship HMAS Sydney where possible to attend the commemorative service;

• to ensure that the wrecksites of HMAS Sydney and HSK Kormoran are respected as graves at sea and are afforded the full protection of all appropriate legislation, including the Historic Shipwrecks Act 1976;

• to set up a structure that allows donor funds to be held on behalf of those donors, but that may be expended for the purposes of the Trust's search for the HMAS Sydney;

• to provide support to Maritime Museums, Maritime research centres and public benevolent institutions which satisfy the requirements of Section 78(1) of the Income Tax Assessment Act; and

• generally for Public Charitable Purposes in order to foster objects similar to the Trust. 138

The Museum's intentions are also listed in the document, and include provision of curatorial and educational assistance to the Trustees, provision of expert advice on archival work, and co-operation with the Trustees in examining wrecksites. 139

8.117 The Trust has indicated that it ‘will facilitate protection of the sites by inviting staff from the Museum ... and from the Department of Defence, to attend and observe all in-water search operations’. 140 Furthermore, it has indicated that a plan for inspection of the wreck will be developed and then reviewed by the WAMM, who will also observe the inspection, as will representatives of the relevant service and ex-service agencies. Procedures

137 Exhibit No. 55a, para 2.
138 ibid., para 3.
139 ibid., para 4.
140 HMAS Sydney Foundation Trust, Submission, p. 817.
will include a wreck identification procedure, a survey to determine the general state of the wrecks, and a photographic record of the exposed surfaces of the vessels. The Trust has assured that 'all of the procedures will be non-invasive'.

8.118 The establishment of an MOU is a sensible step, listing as it does the extent of the co-operation between the Trust and the WAMM. However, the Committee wishes to stress that the WAMM, as the delegate under the HSA, must retain full and final control of who has access to the site of the wrecks for research purposes, and must be vigilant in its moves to protect the wreck sites. The WAMM has acknowledged the need for independence in this matter:

... the Memorandum is also designed to ensure that the Museum remains independent in its dealing with the Trust and that the wrecks of both ships, if found, are dealt with on behalf of the Australian and German nations in accordance with the terms of the 1976 Historic Shipwreck's Act and in the spirit of existing agreements and understandings held by the various stakeholders, both informal and in writing. ... Thus, though the Maritime Museum will assist the Foundation Trust in its stated endeavours and will encourage others to join with the Foundation Trust, it is necessary that the WA Maritime Museum maintain its independence in order that it can deal with its statutory responsibilities under the Act.

8.119 The Committee endorses the Trustees declared intention to abide by the HSA, and in regard to the located wrecks, that no entry will take place within the structure of either ship, and that there will be no disturbance of the site or removal of items from the site or surrounding seabed.

8.120 The Trust has proposed that, should the wrecks be located, video footage be obtained, via the deployment of a Remotely Operated Vehicle (ROV). In its submission, the Trust states: 'All video, together with navigation data relating to the vessel and ROV are stored electronically, commonly on CD disc (sic) for later examination and processing and archiving'. The Committee has no difficulty with such video footage being taken, providing that it is available to other researchers and interested parties, perhaps via the Virtual Memorial.

Conclusion

8.121 The search for Sydney and Kormoran is not guaranteed of success. If it does succeed, it may provide those interested in the fate of the ships some further insights into the events of 19 November 1941. If the search is unsuccessful, it does not mean that people will no longer wonder about the final resting place of the ship. However, an attempt to find the Sydney will be a sign that Australia cares about the 645 men who gave their lives in defence of their country, as well as their families and friends.

141 ibid., p. 827.
142 McCarthy, in Western Australian Maritime Museum, Submission, pp. 4068-4069.
143 Exhibit No. 55a, para 5.
144 HMAS Sydney Foundation Trust, Submission, p. 3632.