Submissions

to the November 2001

HMAS *Sydney II* Seminar

Dr M. McCarthy – Compiler

Report—Department of Maritime Archaeology, Western Australian Museum, No. 164

Compiler's note:

At the conclusion of the Royal Australian Navy's HMAS *Sydney II* Seminar in November 2001, the Western Australian Maritime Museum sought permission to compile and promulgate the many submissions received for the seminar. In similar fashion to the papers received on the occasion of the Museum's 1991 *HMAS Sydney II* Seminar, the intention was to make the submissions available to stakeholders, researchers and the public.

In contrast to the 1991 situation, the adopting of an *ex officio* position in conducting this service and in assisting with the 2001 seminar was necessitated by the receipt (in August 2001) of advice from Environment Australia—emanating from concerns expressed within the Museum itself—that the wrecks of *HMAS Sydney* and the *HSK Kormoran* were not protected under the terms of the *Historic Shipwrecks Act 1976*, primarily because they were not yet 75 years old. The matter is presently under review.

The understanding that the wrecks were protected under the Act had under-pinned the Museum's involvement in examining (sometimes with the RAN), the many reports that the wrecks had been located in years past. It also provided the justification for convening of the 1991 Seminar, and for pressing in lectures, position papers and on the Museum's website for a resolution to the HMAS *Sydney* saga on both social and historical grounds. It also provided the philosophical basis for the Museum's formal liaison with other stakeholders (e.g. the HSK *Kormoran* Association, the HMAS Sydney Association, the RSL etc.), with intending search companies (e.g. the Woods Hole Oceanographic Institution, the HMAS Sydney Foundation Trust etc.), with relatives of the lost men, researchers, authors, and with government instrumentalities (e.g. the RAN, the Office of Australian War, etc.).

As one tangible result of the realisation that the Act did not apply to these two wrecks, the website containing an analysis the causes of the continuing controversy and urging official action was voluntarily withdrawn. Those people who had lodged claims to have located the wrecks with the Museum as representative of the Commonwealth Government under the Act were then asked to provide details of any outstanding 'finds' to the RAN (owners of HMAS *Sydney*) through the Seminar. Further, while staff were able to assist the Navy in the 2001 Seminar by providing advice, assistance and facilities, the Museum was not able to provide funds or to finance the promulgation of submissions as it had in earlier times.

In recognition of the need that they be made available for scrutiny, however, the Compiler undertook to lodge copies of the 2001 Seminar papers with the State Library of Western Australia for access on the Interlibrary Loan system. Further, and as advised at the Seminar, those individuals and institutions willing to cover copying and postage charges will be sent the volume at cost, again as a voluntary service.

In respect of the compilation itself, some of the submissions received were relevant to two or more of the four areas under scrutiny (archives, oceanography, oral history, & search method) and as a result they would have appeared more than once in the overall offering—a prohibitively expensive exercise. As a result the papers are presented here under author's name in alphabetical order, rather than under each of the four main research sections. Titles, honours, degrees and service levels conferred or attained by the author(s) are used only where they are supplied by the author(s) themselves, are referred to in the submission as an indicator of the *bona fides* or expertise of the author(s), or appear in subsequent correspondence. Included also are a number of late submissions and/or papers that were circulated to attendees at the seminar.

Where a paper has been submitted by one author and appears again as a secondary reference in a work presented by another, only the cover of that paper is presented in the latter case. Where there are multiple authors, the first name appearing on the paper is used to set the papers in their alphabetical order. In cases where correspondence has resulted in an amendment or addition to the original submission, that has also been reproduced.

Finally, in order to facilitate the reader's progress through what is another very weighty tome—adding further to the mass of material emanating from the 1991 Seminar and the 1998/9 Parliamentary Inquiry — the compiler has produced a précis of each submission. Of its brevity, and in being but one person's interpretation of an often complex offering, this might offend some and an apology is tendered at this point. Finally, readers are referred to the proceedings, reports, and the final deliberations that will be produced by the RAN under a separate cover.

M. McCarthy
Curator of Maritime Archaeology
WA Maritime Museum
May 2002.

Submissons[1]

Name	Compiler's precis of the subject matter
K Baker	With R Hardstaff, defines a 360 sq mile search in the 'northern area',[2] provides an analyses of elements of a list of 19 estimated positions for *HSK Kormoran* and 4 for *HMAS Sydney,* including 3 of R. Hardstaff's See also Hardstaff below.
A.D. Black	Recommends a NE search datum line from a starting point near the 'northern area', recommends a re-assessment of reports of a grave on near Dirk Hartog Island and a wreck nearby.
N Brown-T. O'Leary-F. Leahy-J.Leach	Define a series of possible search areas using a 95% 'confidence region' based on 'network adjustment', compare results with other research, recommend further study areas
J. Bye	Hindcasts the source of debris from the release of drift cards, analyses other natural and oceanographic phenomena to settle on a battle position west of the Abrolhos. Recommends a search of that area. See Fn 1.
J. Doohan	Through the medium of letters to other parties, questions veracity of the German and archival accounts, queries the past and present management of the controversy, questions the veracity of evidence presented to the 1998/9 Parliamentary Inquiry by government instrumentalities, questions the Inquiry's terms of reference, provides 'random inclusions' to argue that the accepted version of events is flawed, e.g. an analysis of the passage and role of the *Kormoran* lifeboats, discusses the *Kormoran* wounded, presents engagement scenarios, analyses the battle, the Christmas Island grave issues, etc etc.

[1] For ease of interpretation, the 'northern area' as referred to here is defined by the Compiler as an area encompassing the region within plus or minus 1° of what is often termed the Detmer's battle position' at c. 26° 30'S., 111° E. This loose application of the term allows the reader to differentiate this general area as referred to in many submissions from the sites or areas also mentioned in a number of submissions lying much closer to shore and further south, near the Abrolhos Islands and offshore from nearby Port Gregory and Kalbarri on the coast.

J.C Dunn & K. Kirsner	Use a 'temporal triangulation' technique to recommend a search area and starting point for the search in the vicinity of the 'northern area'.
I Farquar-Smith	Attests to the difficulty in position fixing during WWII, opposes the search on the basis that an inspection of the wreck(s) would prove inconclusive and looting may occur subsequently.
S.Gratte	Advises of his research dating back to 1971, refutes claims that the battle was heard/seen from Port Gregory, suggests practice shoots were the cause of the reports from that region
R Hardstaff	In accepting a place on Oceanographic Workshop Committee, calls for RAN survey of the charted gap between Cape Inscription and North Island, then in a series of letters from 1/9 to 30/10/2001, provides further analytical data on numerous matters and on other claims, includes deduced positions for the two wrecks in the 'northern area'. See Baker submission.
G. Hielscher	Analyses lifeboat voyage of HSK *Kormoran* survivors Meyer and von Malapert, concludes they started their voyage near the Abrolhos Islands and as a result HSK *Kormoran* and probably HMAS *Sydney* lie in that vicinity. Believes the KLDS Target 3 is *Kormoran*.
D.W. Hitchins	Queries why there is a gap in official surveys of the seabed in the region between Cape Inscription and North Island, in believing HMAS *Sydney* may lie there he requests an explanation for the gap.
HMAS Sydney Search Pty Ltd	Provides details of its company structure, contacts, and aims
S. Hughes	Provides details of developments in search and rescue planning techniques since 1991, outlines Australian Maritime Safety Authority's Net Water Movement System as an aid to locating the wreck(s). Produces search coordinates for the 'northern area', considers the Abrolhos Island positions of low probability.
G. Jackson	Analyses Burnett's actions during the engagement, presents a study conducted by Messrs Boichel, Chilman, Francis, himself, Kagi, Moir and unspecified others ,examining the battle and its antecedents, supports a 'northern area' location for the battle.

D. Kennedy	Indicates the 'official history' is deficient due to the withholding of archives and/or poor translations of originals, provides copy of an original document, calls for a speedy resolution.
DRE King	Provides a position off Kalbarri with supporting oral histories from people resident in that region.
T. Lilley	Examines the science of magnetometry and recommends a two week search regime to assess the target sites.
R. Lloyd	Recommends the RAN use an air-born laser system to search the Knight position near the Abrolhos, reproduces an earlier paper entitled 'When did they know?' questioning the timing of official knowledge of the loss of HMAS *Sydney*.
J. McArthur	Questions the validity of the processes and structure of the Seminar itself, questions the objectivity of two organising Committee members and one Chair, discusses the accessibility and veracity of archives generally, refers to modern bias in the analysis of HMAS *Sydney* –related archives, comments on the Meyer account, questions other analyses, questions the 'official' accounts, suggests that all searches begin with the Whittaker/Knight locations off the Abrolhos Islands, replies to the organiser's return letter re conflict of interest re-iterating his earlier concerns, raising the issue of PMG archives, refers to the post-war destruction of Volunteer Defence Corps and other records, notably those of CMDR R. Long.
M. McCarthy	Advises advice has been received, that the wreck(s) are not covered under the *Historic Shipwrecks Act 1976,* effectively removing the museum from the arena, recommends a search of the 'northern area' and all sites outstanding after the seminar, tables a letter received from Mr J. Blythe re: SS *Cape Otway* and bodies in the water, seeks statement from all government instrumentalities involved that they hold no un-accessed HMAS *Sydney*-related records, refers to the unsatisfactory explanations for the 'Cooper signals' and the loss of HMAS *Sydney* aircrew.

D. McDonald.	Examines W. Whittaker's contention that the lifeboat voyage commenced further south. Accepts the validity of the Whittaker data and assumptions, agrees with the conclusions reached, recommends a re-assessment of the Meyer/von Malapert sailing notes and voyage as a result.
E.McDonald	Queries the processes of the Seminar, expresses concern about the lack of public discussion, queries the objectivity of workshop members and leaders, considers the German account 'suspect', rejects the Detmer's position, concludes the Meyer voyage emanated from the Abrolhos Islands region and that the battle occurred near there, decries 'vested interests' of Museum, Navy and HMAS Sydney Foundation Trust, considers the Whitakker and Knight positions near the Abrolhos to be confirmed, urges an inspection of the KLDS site 3 on that basis and in regards to the cost effectiveness of examining a GPS 'fix'.
G. McDonald	Outlines previous searches of the Port Gregory area, one by the RAN and RAAF, refers to the Bye drift card experiment, proposes a search area based on contemporary reports from the land adjacent Port Gregory, provides a compass bearing for the search, provides a table of the course of the Whittaker and Knight reports since 1989.
J. Mildwaters	Advises of two GPS positions and video footage previously reported to the WA Maritime Museum.
J. Montagu	Deduces that HMAS *Sydney* sank in the 'northern area', claims HSK *Kormoran* picked up survivors and then sailed off only to sink after an accident, fixes the position of the *Kormoran* just south of the 'northern area', claims to have supporting declarations by HSK *Kormoran* crew member, urges further action.
C. Munyard	Provides analysis of Dr List's cryptographs, comments on the Red Bluff camera, questions the Meyer account of the lifeboat voyage appearing on the photographs donated to WAMM, recommends a search of the 'northern area'.

B. O'Sullivan — Analyses the engagement and its antecedents, providing his reasons 'why' particular events occurred, concludes HMAS *Sydney* sank at the 'Detmer's position' in the 'northern area', discounts the Christmas Island carley float as HMAS *Sydney*-related and the 'drift card analysis.

B. Severne, B. Walker, G. Riley & M. Cooper (Sub Ocean surveys). — Report on side scan sonar and magnetometer survey of a seabed feature north east of the Abrolhos Islands, that proved geological in origin.

M.Venables — Recounts his experience on board *HMAT Zealandia,* and on the events and timing of its meeting and being escorted by HMAS *Sydney.*

T. Watson — Urges a search be mounted, refers to the limitations of air-born methods, offers assistance, supports an inspection of the Whitakker/Knight reports, comments on American and British intelligence records urging action on them.

T. W. Whittaker-L. Knight — Report on three aerial searches producing targets west and south-west of the Abrolhos Islands using the Knight Direction Location System, concludes the German account is false, rejects the 'northern area,' as a possibility, provides 9 supporting documents including an overview of the research, a record of the three searches, their failure to locate anything in the 'northern area', provides their evidence to support a battle site west of the Abrolhos, including an analysis of the Meyer voyage, the Bye drift card experiment, a report on meterological conditions, a description of the technology used, presents 14 testimonials to their system.

Submission
by

CPO K. Baker (RAN Ret'd)

CPO K. Baker (RAN Ret'd)

3 Tamar Street
RED HILL, ACT 2603

23 April 2001

Dr Stevens

I write with reference to the RAN's sponsorship of a seminar on the smaller search area for the Sydney and Kormoran and also identification of a body on Christmas Island.

You maybe aware that I formed a committee in 1999 to consider the appropriate search are for either of these two ships. We feel that we have now found the most likely area to be searched. Originally I asked members of the committee to lodge with me their best position for finding the Sydney. The best and most researched answer was given by Commander Reginald (Joe) Hardstaff RAN Rtd who, immediately before his retirement, was Deputy Hydrographer. I might add he is two months young than I am.

He has recently refined these sites and they should be shown on a chart, which I am endeavouring to send you as soon as possible. It is presently held by Lieutenant commander Mike Todd, CO of the Squadron of Mine Hunters being built in Newcastle.

Joe recently suggested an area of 50 square miles, which, if you know Western Australia, equates to an area roughly bounded by Fremantle to Rottnest along the coast to Cottesloe. After a discussion we decided to make it an area of 360 square miles. This target area takes into account all probabilities considered by us.

It would be appreciated by my committee that this view should be taken into consideration by the committee assessing proposals for presentation to the seminar.

Finally, I confirm that my committee would wish to be represented at the seminar by Commander Hardstaff, providing we can muster the funds to send the family to WA – which I consider to be highly likely.

Enclosed are certain CVs including my own. I am only enclosing my 264s for my first and last assessment, which you will understand – other might not.

David, I am sending this letter to you after receiving advice from the Minister of Defence and his stated liaison officer for us LCDR Richard Chartier who has discussed this matter with me personally.

Regards
KB
Keith Baker

PS. My spies tell me that FUGRO who recently resigned with Kirsner from the Punchard Sydney Trust are mounting some sort of search in May for Sydney.

CV - KEITH BAKER

From my Service Certificates, CV of sorts, you will see the dates of my service in various ships. You will note that I spent the first five years of World War II at sea consecutively all in combat areas.

As Ordinary Seaman II OD and AB part of ship: Actions Stations. Y-Turret Twin 6-inch Tu[illegible] and Action Masthead Lookout.

In HMAS PERTH in World War II - joined ship in Halifax, Nova Scotia. Did one North Atlantic Convoy, October. Then based in Kingston, Jamaica as part of South Atlantic Squadron. Pay two shillings a day. Camel, Pall Mall Cigarettes etc were 4d a packet, the best rum in the world a penny a nip and all other requirements as cheap. In November I was promoted to Ordinary Seaman and pay increased to 3s 4d a day

6-inch gun crews were exercised twice a week for three-quarters of an hour on the dummy loader in the port waist. This exercise included lifting 100-pound dummy shells from waist-high tray, pivoting to my left and passing to loading numbers, seas weren't always calm.

Later in Mediterranean Seventh Cruiser Squadron, action in Malta Convoys, the Battle of Matapan, Greece and Crete. Bomb that hit ship at Crete - hit the D/F

Arieal three feet from my head diverting it down through the blacksmiths shop into a boiler room.

E.g. days at sea in April were 23, days in Harbour were 7 which included two in Suda Bay. In May, there were 25 days at sea, there were 6 days in Harbour subject to bombing at night.

In Malta I was promoted to Able-Seaman and pay was increased to 6 shillings (sterling) a day.

Returned to Australia in September '41. In October '41 drafted to commission HMAS WOLLONGONG - 640 tons with a crew of 68 - 20 of whom were permanent service. Part of ship: mine sweeping yeoman - number 1 and captain of 12-pounder FX.

You can imagine the threat to my safe-being was exaggerated by leaving a 6800-ton cruiser with a complement of 645 and 8 x 6 inch guns and 8 x 4 guns.

Left Australia and proceeded to Singapore just in time to commence retreat from that island. Happily we were able to purchase, for two cases of gin, from the

Army a bofors gun, 500 rounds of ammunition and three spare barrels. One of the other ships in the 21st Mine Sweeping Flotilla did the same thing. Many air-raids - last war ship to leave Singapore on 8 February 1942. Proceeded to Palambang to assist in demolishing the Shell Oil Refinery in this town. To avoid sailing on Friday 13 February 1942 the ships of the 21st MSF sailed on the 12th thus avoiding the Japanese task force which demolished the ships that sailed on the 13th.

On 27 February in Tanjong Priok we fuelled from a tanker, the WAR SAIDAR, with PERTH alongside fuelling also. I realised that my safety was probably in the PERTH. Left Tanjong Priok on 27th at midnight with Yarra Convoy, diverted from Convoy to attack Japanese sub which had torpedoed one of the big tankers. This saved us from death because on 4 February a Japanese task force sank the Yarra and all the ships in it. PERTH sunk 0000. 28 February.

Arrived Fremantle on 8 March 1942. Passed and made Leading Seaman in July 1942. In August left Wollongong and posted to re-commission HMAS VENDETTA the WWI destroyer - part of ship: Chief Quarter Master. Action Station: 4-inch Gun, Mark 5 on FX. Mainly uneventful as we formed convoys for ships to and from America. Ship was very wet in any sort of sea water leaked into forward mess deck and the morning watch had to bail it out before breakfast. Had a bad reputation for TB.

Our only dangerous mission was to rescue four Netherlands airmen from a raft very close to the Timor Coast.

Left VENDETTA in September 1943 for HMAS WARRAMUNGA (this was like going from a baby Austin to a Rolls Royce). Part of ship: Coxswain the Port Motor Boat (Captain's). Action Stations: Twin 4-inch Mark 16 - main AA Gun on ship.

Sat for on the AUSTRALIA for petty officer and made on 1 April 1944. (I think the youngest petty officer in the Fleet).

Supported a landing every month for twelve months supporting AIF and USA invasion troops. Only direct contact with enemy! when threatened by US Army Lieutenant with a pistol aimed at my head whilst collecting sand for sand storage on ship. The Japanese planes never got so close.

Left WARRAMUNGA on 25 August 1944. This ended 5 years at sea. Posted to HMAS CEREBUS as New Entry School Instructor for one year then became Instructor and eventually Chief Instructor in the Anti-Gas School in 1946. From 1947-8 was posted as first Full Time President of Petty Officers' Mess - beer was

1948.

In 1948-9 posted to WARREGO as Gunnery Petty Officer. In 1949 posted to HMAS MURCHISON as Chief Bosuns Mate and promoted Chief Petty Officer on 1 October 1949 aged 27. I believe another record. As one had to do five years as Petty Officer before one was in the zone for promotion.

Alongside TARAKAN when she had her explosion alongside Garden Island. All the chiefs in the mess were the first on board to commence rescue operations etc.

1952 left RAN and joined Knox and Alderton, Chartered Accountants, left as Collection Manager in 1958. Joined CAGA and left in 1968 as Manager in

Canberra. I left because I was being posted to Sydney to Head Office and we much preferred the life in Canberra. 1968-81 was salesman with LTW. Purchased LTW in 1981 and retired in 1995 aged 74.

Yours sincerely

K.

Keith Baker

?UE EXTRACT OF THE SERVICE CERTIFICATE

...[illegible] ...th De Rhoan De Montcalm BAKER

Signature and Rank of Officer Certifying. R A N

Division ... [illegible] ... Date of Birth 14th Oct., 1921 O.N. 23006

Name of Next of Kin [illegible] Leila Honey BAKER

[illegible]ion Church of England Relationship Wife

[illegible]gagement s ... Address 11 Loma Street, [illegible], W.A.

[illegible]est [illegible]ription

Stature.	Chest.	Hair.	Eyes.	Complexion.	Marks.
5.10½	42 40 35	Lt.Brown	Blue	Fair	Scar base of Index finger [illegible] hand

*SHIPS SERVED IN.

Name of Ship.	Rating.	From	To	Name of Ship	Rating	From	To
CERBERUS	O/Smn 2	31.3.39	21.9.39	WARRAMUNGA	a/PO Ty	1.4.44	[illegible]
PERTH	"	22.9.39	13.10.39	CERBERUS	"	26.3.44	31.3.[illegible]
"	O/Smn	14.10.39	30.11.40	"	PO Ty	1.4.45	31.3.[illegible]7
"	A.B.	1.12.40	15.9.41	"	PO(Perm)	1.[illegible].47	[illegible]
PENGUIN	"	16.9.41	22.10.41	WARREGO	"	19.[illegible].48	[illegible]
[illegible]	"	23.10.41	30.6.42	MURCHISON	"	[illegible].6.49	30.9.[illegible]
"	a/L/Smn	1.7.42	15.[illegible].42	"	CPO(Prov)	1.10.49	23.[illegible]
CERBERUS	"	16.8.42	24.9.42	WARREGO	"	24.4.51	29.[illegible]
VENDETTA	"	24.9.42	24.9.4[illegible]	PENGUIN	"	30.6.51	29.[illegible]
[illegible]ARRAMUNGA	"	26.9.43	31.3.44	LEEUWIN	"	30.9.51	

[illegible]nds received in action, Hurt Certificates, etc., Examination passed 1.4.47 – Granted Substan[illegible] [illegible]ate of Petty Officer (Perm) ; 7.6.39 – [illegible].A.G. 2 days; 16.9.40 – Passed [illegible]; [illegible].5.42 – Passed Prof. for L/Smn; 5.7.42 – Passed Prof. for P.O. ; 16.1.4[illegible] – Qual. Anti-gas Instr.

[illegible]ls of medals, G.C. Badges, Time in 2nd Class Conduct and Time forfeited 14.10.42 – 1st G.C. Badge granted; 1.7.47 – 2nd G.C. Badge granted ; 31.3.51 – 3rd G.C. Badge granted.

*ASSESSMENTS OF CHARACTER AND EFFICIENCY.

[illegible]ate.	Char.	Effic.	R.M.G., etc.	Date.	Char.	Effic.	R.M.G.
[illegible].30	V.G.			31.12.45	V.G.	Sat	
[illegible]39	V.G.	Sat		31.12.46	V.G.	Sat	R.R.
[illegible].40	V.G.	Sat		31.12.47	V.G.	Sat	R.R.
[illegible]2.41	V.G.	Sat		31.12.48	V.G.	Sat	R.R.
[illegible].42	V.G.	Sat		31.12.49	V.G.	Supr	R.R.
[illegible].43	V.G.	Sat		31.12.50	V.G.	Supr	R.R.
[illegible]2.44	V.G.	Sat		31.12.51	V.G.	Supr	R.R.

GRATUITOUS ISSUES OF CLOTHING, etc., AND ANY OTHER NOTATIONS TO BE MADE ON BACK HEREOF.

*When preparing this form it is not necessary that full details of this information should extend beyond the previous [illegible] assessments of character below V.G. earlier than this are, however, to be noted, and also any breaks in engagement due to, for example, [illegible] discharge by purchase, etc.

*Date of Birth [illegible] *Trade before entry School Student

*Religion C. of E. *Swimming qualification Can Swim

*Commencement of Man's time 14 Oct., 1939 *Current Engagement 12 years *Expiring 13th October, 1951

Next of Kin (Relationship, Name and Address) Mother, Gertrude Somerset BAKER

Joined Ship 26.9.43 From Vendetta

Substantive Rating A/PO Ty.

Seniority 1.4.44

Wishes to Pass for

*E.T.L., H.E.T., Q.W.R., &c. Passed Educationally for	
* Date	
* Passed Professionally for	L/Sun A/PO Ty.
* Date	5.5.42 16.1.44

Date eligible for Advancement

Last Assessment on A.S. 507

(Red recommendation to be specially noted)

Date Last Recommended

Re-engagement:—

Recommendation due

Recommended

Non-Substantive Rating LR III

Date Qualified

Wishes to Pass for LR II

Recommended for LR II (AS1303 July to August)

Character Sat

Efficiency V.G.

Badges:— 1st 14.10.42

2nd

3rd

Next Badge due 14.10.47

Medals

Cells, loss of Badges, &c.

Commencement of V.G. time

Medal and Gratuity. Date due for recommendation

Recommended

1. *DIVISIONAL OFFICER'S REMARKS.

*Remarks Average Hand

Athletics

H.M.A.S. "Perth"

Date 7/12/40

Power of Command

Initiative

Energy

Intelligence

(Sgd) D.J. Sutton
Sub-Lieutenant
Divisional Officer

2. *Remarks A good worker, intelligent and clean. Shown a great improvement in the past six months.

Athletics

H.M.A.S. "Perth"

Date 15th Sept. 1941

Power of Command

Initiative 6

Energy 6

Intelligence 6

(Sgd) J. Martin
Sub-Lieutenant
Divisional Officer.

SI 4895

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(OVER

REGINALD JOHN HARDSTAFF

Statement of Service

Date of Birth	6-5-22
Entered RAN - Cadet Midshipman (Special Entry)	31-1-40
Midshipman	1-9-40
Acting Sub Lieutenant	1-8-42
Sub Lieutenant	28-12-42
Acting Lieutenant	16-4-43
Lieutenant	9-11-43
Lieutenant Commander	1-4-51
Acting Commander	31-10-56
Lieutenant Commander	21-3-58
Acting Commander	5-9-67
Discharged on Retirement	27-7-72

Naval & Specialist Service Categories-

Branch	Seaman
Hydrographic Surveyor- Charge Grade since	1-1-55

POSTINGS (HMA Ships unless stated otherwise)	From	To
CERBERUS- RAN College (Flinders Naval Depot)	31-1-40	22-8-40
CANBERRA (CA)-on passage to India & UK	23-8-40	4-9-40
AUSTRALIA (CA) (including passage HMS Royal Sovereign (BB) from Capetown to Freetown)	5-9-40	23-9-41
NAPIER (DD)	24-9-41	27-11-41
HMS QUEEN ELIZABETH (BB)	28-11-41	7-3-42
HMS FARNDALE (DD) & RN Courses in UK	8-3-42	11-9-42
HOBART (CL)-A/ Navigator & Watchkeeper	12-9-42	9-11-43
SHEPPARTON- Navigator & Assistant Surveyor	10-11-43	17-8-44
MORESBY- as above	18-8-44	16-12-45
LACHLAN- as above	17-12-45	6-5-46
PENGUIN	7-5-46	30-6-46
WARREGO- Navigator & Assistant Surveyor	1-7-46	29-12-46
BARCOO- as above	30-12-46	9-7-47
LACHLAN- Executive Officer& A/Surveyor	10-7-47	26-7-48
KUTTABUL(HO)- Superintendent Chart Depot	27-7-48	6-1-49
BARCOO- Supply Officer& A/Surveyor	7-1-49	30-8-49
LACHLAN- In Command & A/Surveyor	31-8-49	4-10-49
HMNZS LACHLAN- Executive Officer, thence Navigator & A/Surveyor	5-10-49	22-9-51
PENGUIN	23-9-51	30-10-51
KUTTABUL(HO)- Superintendent Chart Depot	31-10-51	9-12-51
PENGUIN- awaiting passage to UK	10-12-51	31-12-51
CERBERUS II-(London Depot)- passage	1-1-52	2-2-52
HMS COOK- Exec Officer & A/ Surveyor	3-2-52	14-3-54
CERBERUS II (London)- passage to Australia	15-3-54	30-4-54
PENGUIN	1-5-54	11-8-54

BARCOO- Executive Officer & A/Surveyor	12-8-54	27-4-55
KUTTABUL (HO)- Deputy SOHS	28-4-55	30-4-56
WARREEN- In Command & Charge Surveyor	1-5-56	30-10-56
WARREGO- In Command & Charge Surveyor	31-10-56	22-1-58
PENGUIN (Balmoral Naval Hospital)	23-1-58	14-3-58
WARREGO- In Command & Charge Surveyor	15-3-58	21-3-58
KUTTABUL (HO)- Assistant Hydrographer	22-3-58	4-9-67
KUTTABUL (HO)- Deputy Hydrographer (RAN)	5-9-67	27-7-72

Note; HO for Hydrographic Office, SOHS-Senior Officer Hydrographic Service

On retirement, granted Honorary Rank of Commander, Royal Australian Navy, Emergency List (1972).

SURVEYING

Associate of the Institution of Surveyors(Australia)		9-4-59
RAN Hydrographic Service		
-Assistant Surveyor	4th Class	10-11-43
- as above	3rd Class *	1945
- as above	2nd Class *	1947/48
- as above	1st Class *	1950/51
- Charge Grade Surveyor		1-1-55

Note; * Exact dates not known

Campaign Medals

1939/45 Star, Africa Star, Pacific Star, War Medal, Australia Service Medal, Defence Medal &Tobruk Medal.

RAN Hydrographic Service 1973 to 1987

Rejoined HO initially as civilian drafting officer, thence Technical Officer (Surveying).	6-2-73
Assumed duties of Notices to Mariners Officer	April 1973
Senior Technical Officer(Surveying) Grade 2	18-1-74
Retired for Long Service Leave	30-6-86
Completed Long Service Leave	5-5-87

RAN Hydrographic Service- Mid February 1994 to 31-10-94

Served as a consultant for disposal of 4400 files & documents to Australian Archives, prior to office move to Wollongong on 4-11-94

1997- 1999

From early1997 to 5-3-99, carried out Notices to Mariners research, as required for Legal Documentation, involving twelve selected Australian Nautical Charts, in a Crown Copyright Action against an overseas Electronic Chart System manufacturer, which was successful in May 2000..

SYDNEY/KORMORAN AFFAIR 19/11/41

TO WHOM IT MAY CONCERN

KORMORAN ESTIMATES

1	Detmers (a)	26 deg 32 min S, 111 deg 00 min E
2	Detmers (b)	26 deg 34 min S, 111 deg 00 min E
3	Fugro	26 deg 19.6 min S, 111 deg 41.8 min E
4	Fugro (Von Malapert Diary)	26 deg 26 min S, 111 deg 33 min E
5	Gill	26 deg 40 min S, 110 deg 32 min E
6	Olsen	26 deg 41.0 min S, 110 deg 35.5 min E
7	Hardstaff	26 deg 38.7 min S, 111 deg 41.9 min E
8	Hardstaff (Von Malapert Diary)	26 deg 53.4 min S, 111 deg 46.3 min E
9	Hughes-1991	26 deg 30 min S, 112 deg 25 min E
10	Hughes (Von Malapert Diary)	26 deg 30 min S, 111 deg 00 min E
11	Hughes with circle 50 nm radius	26 deg 31 min S, 111 deg 30 min E
12	Kirsner- Nov 1992	26 deg 30 min S, 111 deg 30 min E
13	Kirsner	26 deg 00 min S, 111 deg 00 min E
14	Kirsner & Dunn- a few miles north of	26 deg 15 min S, 111 deg 00 min E
15	Laffer- 1991	26 deg 35 min S, 111 deg 50 min E
16	McDonald, Ean 1991	26 deg 33 min S, 112 deg 25 min E
17	McElhinney Nominees Pty Ltd	24 deg 00 min S, 110 deg 00 min E
18	Meyer, H (Kormoran)	27 deg 00 min S, 111 deg 00 min E
19	Steedman (circle 35 nm radius)	26 deg 40 min S, 110 deg 42 min E
20	Whittaker & Knight (KDLS.3)	28 deg 38.9 min S, 113 deg 21.7 mim E

HMAS SYDNEY ESTIMATES

21	Hardstaff	26 deg 28.4 min S, 111 deg 32.6 min E
22	Kirsner & Dunn - 10- 20 nm south of	26 deg 15 min S, 111 deg 00 min E
23	McDonald, Glenys	28 deg 00 min S, 113 deg 32 min E
24	Whittaker & Knight (KDLS.1)	29 deg 58.5 min S, 112 deg 48.3 min E

SYDNEY/KORMORAN AFFAIR 19/11/41

NOTE- In my letter to Capt J.J. Doyle on behalf of K. Baker, dated 12 June 2000, the position deduced by Wes Olsen was not available but is from page 199 of his recent publication. This is almost the same as that by G.H. Gill.

In my letter to K. Baker dated 10 August 2000, I suggested a search area limited by selected drift rates and directions, based on the bearings of 162.5 & 167.7 deg. from *Wyrallah's* flotsam site in 24 deg 10 min S, 110 deg 54 min E at 0800 on 27-11-41. . These limits covering about 195 sq nm are (a) 26 25 S, 111 28 E, (b) 26 25 S, 111 41 E, (c) 26 40 S 111 46 E & (d) 26 40 S, 111 31 E. but I would be happy with a small circular search area of 50 or 100 sq. nm at radii of 4 nm or 5.6 nm respectively., from my own stated positions.

R.J. Hardstaff

15-11-00

Note-For a search area of 360 sq miles, either a circle of radius of 10.7 nm or block 19 x 19nm or 20 x 18nm.

THE LOSS OF HMAS SYDNEY -1941
(WHITTAKER'S PAPER OF 10 SEPTEMBER 2000)

The following notes are made concerning KDLS3 site and other statements by Whittaker, including Kalbarri & Port Gregory reports from unknown sites & heights of eye (HE).

Distances from KDLS Site 3 (posed as *Kormoran*) as follows:-

North Islet	23 nm
Kalbarri	70 nm
Port Gregory	54.5 nm
KDLS.1 (posed as *Sydney*)	85 nm on bearing 200 deg
KDLS.2 (posed as Mysterious)	66 nm on bearing 217 deg.
Note- KDLS.2 to KDLS.1	28 nm on bearing 160 deg.

North Islet distances to:--

Kalbarri	46 nm
Port Gregory	36 nm
KDLS.1	119 nm
KDLS.2	90 nm

Distance of the Sea Horizon in Nautical Miles (nm) as follows:-

1000 feet Flash (Detmers)	36.3 nm
Kalbarri / Port Gregory observers(at abt 200 ft)	16.2 nm
Total sea distance	52.5 nm

(For a Kalbarri observer, there are some coastal features between Red Bluff (650 ft) & Bluff Point (200 ft) which may tend to obscure the SW view towards North Islet and Houtman Abrolhos).

Smoke Report- Smoke sighted from Dirk Hartog Island was previously stated as being made on 20 November 1941, but now appears as 19 November 1941. The height of eye (HE) by an observer at Cape Inscription (the most likely site) would have been about 123 ft for 12.8 nm to sea horizon. Smoke rising beyond the horizon could be about 200-500 ft, giving an extra distance of 16.2- 25.7 nm, with overall totals of 29.0 to 38.5 nm.

In my opinion, if HMAS *Sydney* was abeam at 1000H/19 Nov. and on track from the RV with HMS Durban, she would have been at least about 73- 80 nm off W.coast Dirk Hartog Island/Cape Inscription sites (according to known June- October tracks) and well beyond the range of local observers. The track of *Sydney* illustrated in Chartlet No.1 is nonsense but convenient for the author. Note- *Sydney's* track for 20th June was the closest of all known tracks) and passes 59 nm clear of North Islet (but not 17 nm as suggested by the author). On reaching Lat 30 d 00m S, *Sydney's* course was then altered to 140 deg. to make a landfall with Rottnest Island light, before entering the swept channel approaches to Fremantle.

SYDNEY/KORMORAN AFFAIR 19/11/41

North Islet Light- The light (range 5 nm) was not in existence in 1941, but established during late 1966/67 with details published in early 1967. However, the author does not wish to accept this as fact, having been advised by 'phone, letter and as published in Vol 17 Submissions. In my opinion, the statement about "rowing towards a light", does not mean that they saw a light, but only knew of the existence of a light at Cape Inscription from a chart (it has been suggested that fishermen may have erected a small light with limited range, for local use only and in any case quite illegal for maritime use)

Trocas & Evagoras - Position & Report.-*Trocas* recovered survivors in 24d 06mS, 111d 40m E and not as adjusted by me in 24d 06m S, 110d 40mE as stated in Vol.1 Submission. Also, the report that *Evagoras* recovered an RAN lifebelt in 24d 06m S, 110d 49m E on 27 Nov is incorrect. These amendments have not been used by the author in the various tables & Chartlet illustrations.

Von Malapert /Meyer's Boat Voyage- My own boat track & computations differ greatly from those shown in Chartlet No. 10. I consider that more land sightings should have been made of conspicuous features on Dirk Hartog & Dorre Islands if the author is correct.. From ET.71 to ET.134 (Steep Point to Red Bluff), the SSE counter-current (equivalent in strength) would have hampered boat progress. The deduced departure point was about 15 nm SSE of my *Kormoran* estimate, in 26d 53.4m S, 111d 46.3m E.

KDLS.3- There may be a wreck where KDLS 3 has been located but it could be anything and not necessarily *Kormoran* as suggested (KDLS 2 might be a better choice for the author, being 28 nm NNW of KDLS.1).

KDLS.1- The proposed site for *Sydney* in 29d 58.5m S, 112d 48.3m E, is about 85 nm SW of KDLS 3, and does not fit in with her reported slow speed and travel for period 4- 5 hours. However, in view of the claim that a torpedo hit between A & B turrets was made, it raises the question of battle damage sustained and why the forward magazine did not explode and sink *Sydney* in the initial stages. A recent claim by Wes. Olsen that *Kormoran* fired two upper-deck torpedoes (speed of 27 knots) at *Sydney* travelling at 14 knots at range 1500 metres on the starboard beam to achieve a single hit, is wishful thinking. A hit was only possible if *Sydney* had been moving at 2.5 knots or less at that range and bearing.

Proposed Battle Site- The reputed battle site in the vicinity West of North Islet light, Houtman Abrolhus appears most unlikely , especially as *Kormoran* was making a landfall off Geographe Channel, Shark Bay, on approach course 025 degrees when sighted by *Sydney* (an intention repeated by Detmers in his book "The Raider Kormoran"). This battle site would have given a landfall somewhere off Zuytdorp Cliffs coastline in Lat. 27d 13m S, about 120 nm south of Cape Inscription, and would have been of some concern indicating that either the chart or their navigation was perhaps in error (unlikely in the circumstances). This site is about 1314 nm from the departure RV (7d 56m S, 104d 40m E) and would require *Sydney* to use additional engine revs. to counter a perceived current and make good a speed of 24.8 knots (maximum revs on previous occasions were for 20 knots requiring no special approval from a higher authority (RACAS), for extra fuel consumption in accordance with regulations in force).

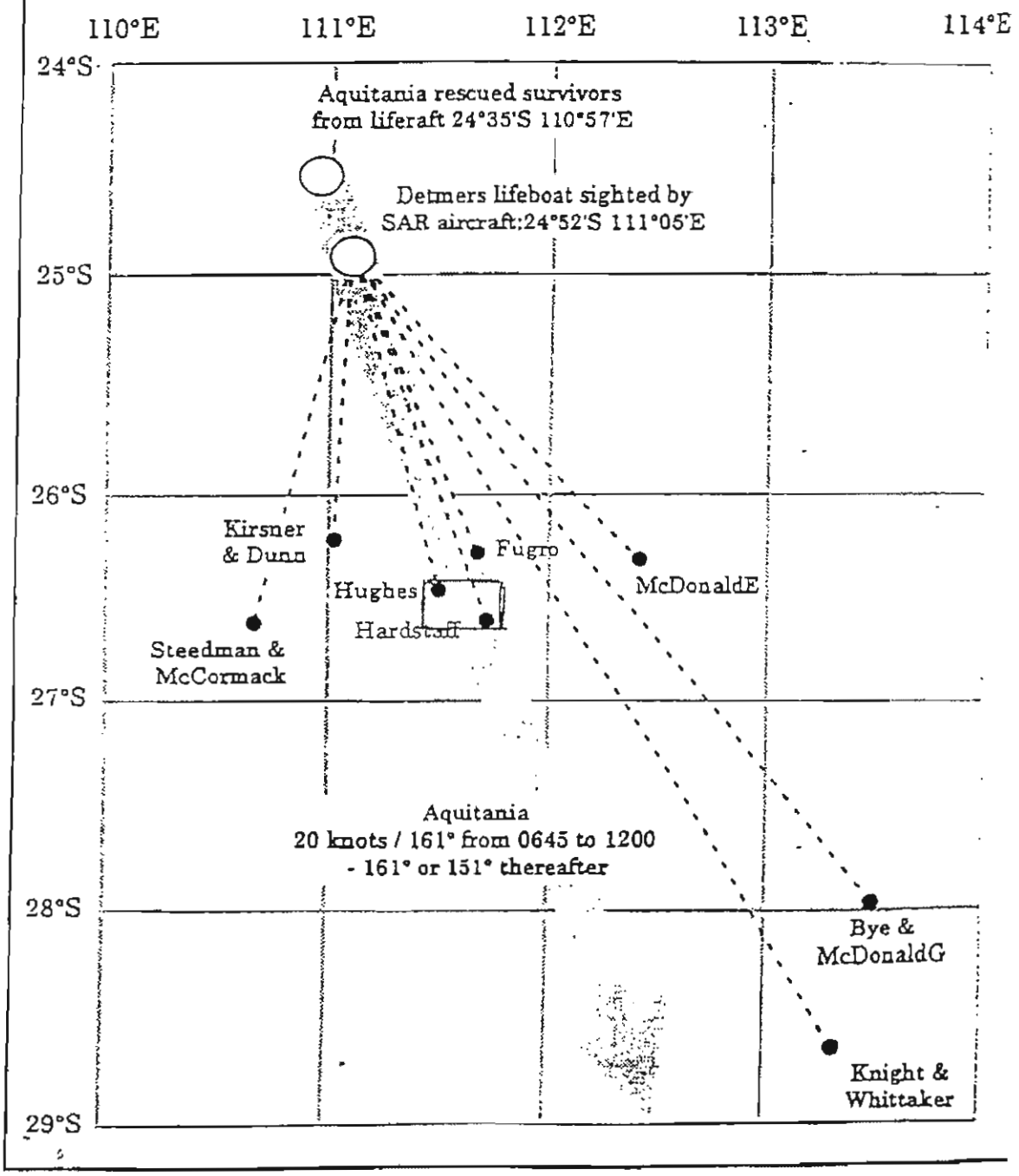
Bearings & Courses- Paras. 13.2 & 13.3- .It is not nautical practice to use magnetic bearings or courses in lieu of true bearings and courses, but tracks laid down on nautical charts are true headings. When a ship's gyro is not available for observations & steering, magnetic bearings & courses are adjusted for both Variation & Deviation before being applied for plotting purposes etc. The former information is printed within the chart compass roses and the latter available from the ship's Record of Compass Swing, either in the ship's log, kept on the bridge or held by the navigator. Note- The courses recorded in all statements during interrogation were given as True, and the author does the same for all his reference bearings & courses in the various chartlets except for those of the Sun.

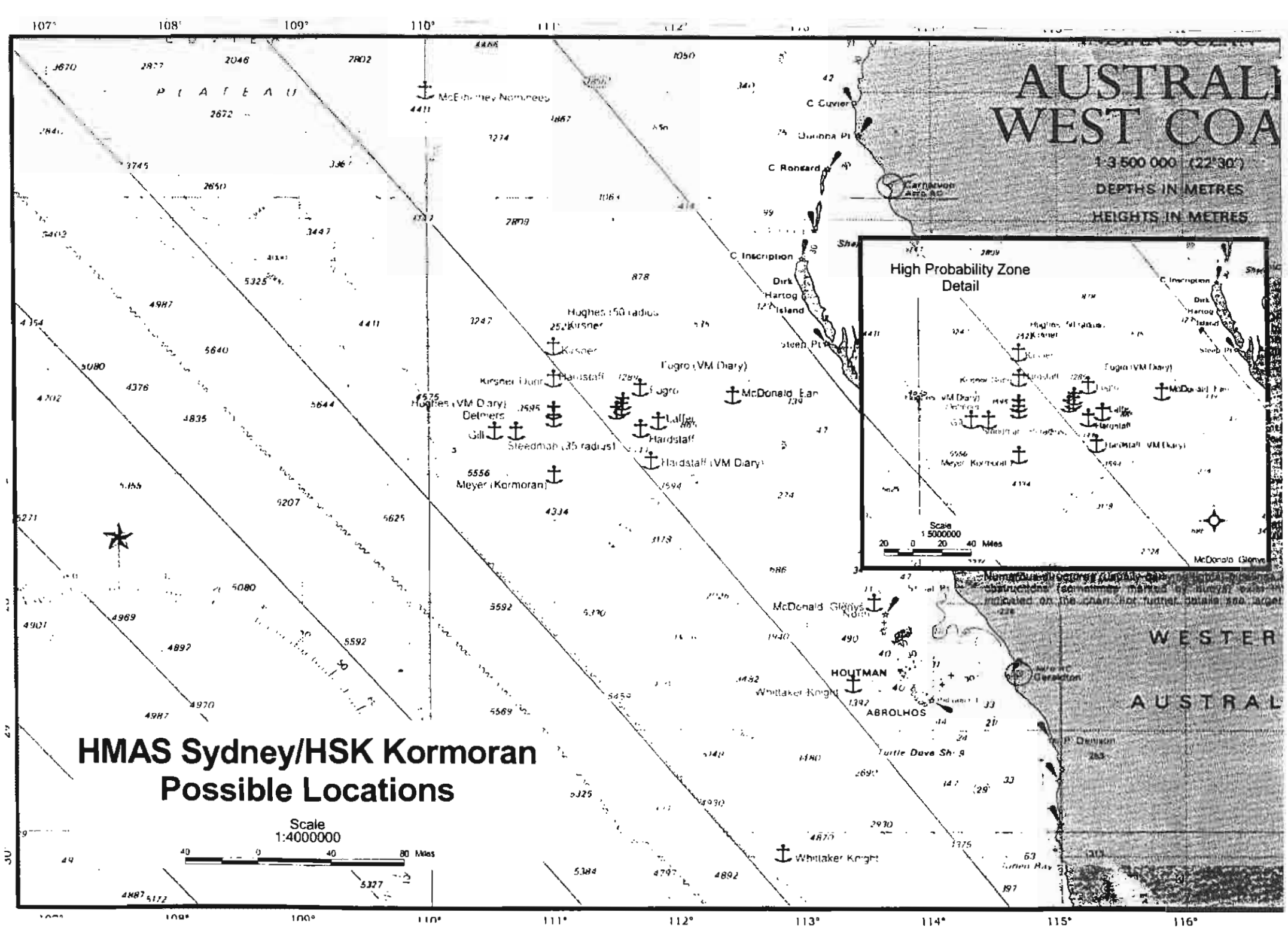
R.J. Hardstaff
17-2-01

Note:-At Sunset- (19-11-41)- The sun's bearing for lats 26d 30m & 28d 30m S was 248.35 deg.rees. With Magnetic Variation of 3 deg. West, ,this would give a Magnetic bearing of 251.35 deg.

Figure 7

Eight sites identified in submissions to the Parliamentary Inquiry




AUSTRALI
WEST COA
1:3 500 000 (22°30')
DEPTHS IN METRES
HEIGHTS IN METRES
High Probability Zone
Detail
Scale
1:5000000
20 0 20 40 Miles
HMAS Sydney/HSK Kormoran
Possible Locations
Scale
1:4000000
40 0 40 80 Miles
McEachney Nominees
C Cuvier
C Ronsard
C Inscription
Dirk Hartog Island
Hughes (50 radius)
Kirsner
Fugro (VM Diary)
Hardstaff
Fugro
McDonald Ean
Hughes (VM Diary)
Delmers
Gill
Steedman (35 radius)
Hardstaff (VM Diary)
Meyer (Kormoran)
McDonald Glenys
HOUTMAN
ABROLHOS
Whittaker Knight
Turtle Dove Sh
WESTER
AUSTRAL
107°
108°
109°
110°
111°
112°
113°
114°
115°
116°

Submission
by

CMDR A.D. Black, OAM, RFD (RAN Ret'd)

CMDR A.D. Black, OAM, RFD (RAN Ret'd)

From: Commander A.D. BLACK
OAM RFD

19 November 2001

Dear Doctor Stevens,

For some time I have been analysing the events of SYDNEY's action with KORMORAN and would have liked to be able to attend the recent Seminar in Paris. Unfortunately that was not possible.

No doubt the Seminar produced many and varied theories and suggestions, and I look forward to being able to access the findings.

In the meantime I am sending you a paper I have prepared, together with a chart, which I would like to be taken into account in the final analysis.

Yours Sincerely

Alexander Black

HMAS SYDNEY-KORMORAN ACTION 19 November 1941

SYDNEY'S PERFORMANCE

By Commander A.D. BLACK
DAM, RFD.

In the lengthy discussions and analyses that have taken place about this event a recurring theme has been criticism of Captain Burnett and the fact that SYDNEY approached KORMORAN too closely, exposing the ship unnecessarily to the attack by KORMORAN.

2. If credence is to be given to the statements made by the German crew members under interrogation, some important facts come to light which, in my opinion, cast a different light on the actions of SYDNEY.

3. Arising out of these is the fact that SYDNEY fought an action that deserves to be recognised as one of persistance and gallantry against unexpected and formidable odds. This should put an end to the criticism and denigration that has characterised discussions about SYDNEY'S conduct and battle worthiness. Indeed this action could justifiably be added to the name ship's battle honours.

4. According to the records of the interrogations of the German crew, immediately prior to the exchange of fire all SYDNEY'S turrets were trained on KORMORAN. This would indicate that the ship was at action stations rather than at cruising or defence stations when only a proportion of the ship's armament would be at immediate readiness.

5. It appears that in the early phase of the action, SYDNEY'S bridge structure had been damaged, "A" and "B" turrets put out of action, and the ship subjected to heavy fire from KORMORAN. None the less "X" and/or "Y" turrets were in action and inflicted damage on KORMORAN that resulted in KORMORAN eventually having to be scuttled by her crew.

6. Information gained from DETMER'S interrogation and from his action report indicates that about five minutes after the action began at 1725, SYDNEY altered course to port and crossed the wake of KORMORAN. SYDNEY'S after turrets then fired on the raider. SYDNEY also fired a pattern of four torpedoes which passed ahead and astern of KORMORAN which then turned to port to open gun arcs. By 1745 KORMORAN'S engines had failed and were not restarted before DETMERS subsequently ordered scuttling action. The Germans stated that SYDNEY was last visible to the south east at about 2200, distant about 20,000 yards heading about 150 degrees.

The significance of SYDNEY'S manoeuvre so soon after the initial exchange of fire has most likely been overlooked or misinterpreted. It could well be that, with extensive damage sustained, particularly on the port side, this change of course by

SYDNEY was, in my opinion, a manoeuvre deliberately initiated and controlled to make use of the only remaining armament, that is the torpedo tubes located on the upper deck on the starboard side.

8. To implement this tactic two conditions would have had to be met. Firstly that SYDNEY had enough engine power to manoeuvre and secondly that there were crew members to control the ship and fire the torpedoes. It was possible for the torpedoes to be fired by local control, and from the alternative steering position in SYDNEY which was well protected and in the after end of the ship.

9. It follows that after firing the remaining torpedoes, with heavy damage sustained, no offensive armament remaining, and with heavy casualties in the crew, the surviving responsible crew members decided to quit the scene of battle and continued to steam away, initially on a course of about 120°. Statements by KORMORAN'S survivors were that Sydney was seen until about 2200; her movements or condition after that were not observed.

10. The state of the ship and surviving crew at this time (about 2200), and the extent to which the steaming capacity of SYDNEY had been reduced, would of necessity influence the survivors to steer towards the nearest land. An inspection of the relevant chart (Montebello Islands to Geraldton) indicates this to be an area between Cape Inscription and Zutdorp Point.

11. As a corollary, to this a matter of great significance, I believe, is the information said to have been provided by a retired commercial diver from rural N.S.W, Mr. SAMPEY, who came forward in 1987 and claimed that in 1979 whilst diving for a Japanese commercial activity 120 miles south west of Carnarvon he had come upon the wreck of a warship, including skeletal remains, in 180 feet of water, which he stated was SYDNEY. He also stated, inter alia, that a telegraphist named Williamson died on Dirk Hartog Island and had been buried there. No crew member named Williamson was a telegraphist but one named WILSON was, and confusion may have arisen about these similar sounding names.

12. Although this report was subsequently investigated by Navy, I believe that it should be further pursued as part of ongoing enquiries. Such a location for the wreck of SYDNEY would not be inconsistent with the scenario set out above.

13. When SYDNEY finally sank, for whatever reason, it would be optimistic to think that her boats and other life saving equipment had not been severely damaged in the engagement. The only surviving gear would probably have been Carley floats. Two such floats were recovered some time later but were not identifiable as SYDNEY'S.

14. The paucity of life saving equipment, the physical state of the survivors, and the delay that occurred before searches were begun, would make it likely that any of the crew who survived the sinking would most probably have perished from exposure, wounds, or shark attack.

15. On the basis of the views set out above I believe consideration should be given to a possible location of the wreck of SYDNEY on the continental shelf by a search described as:

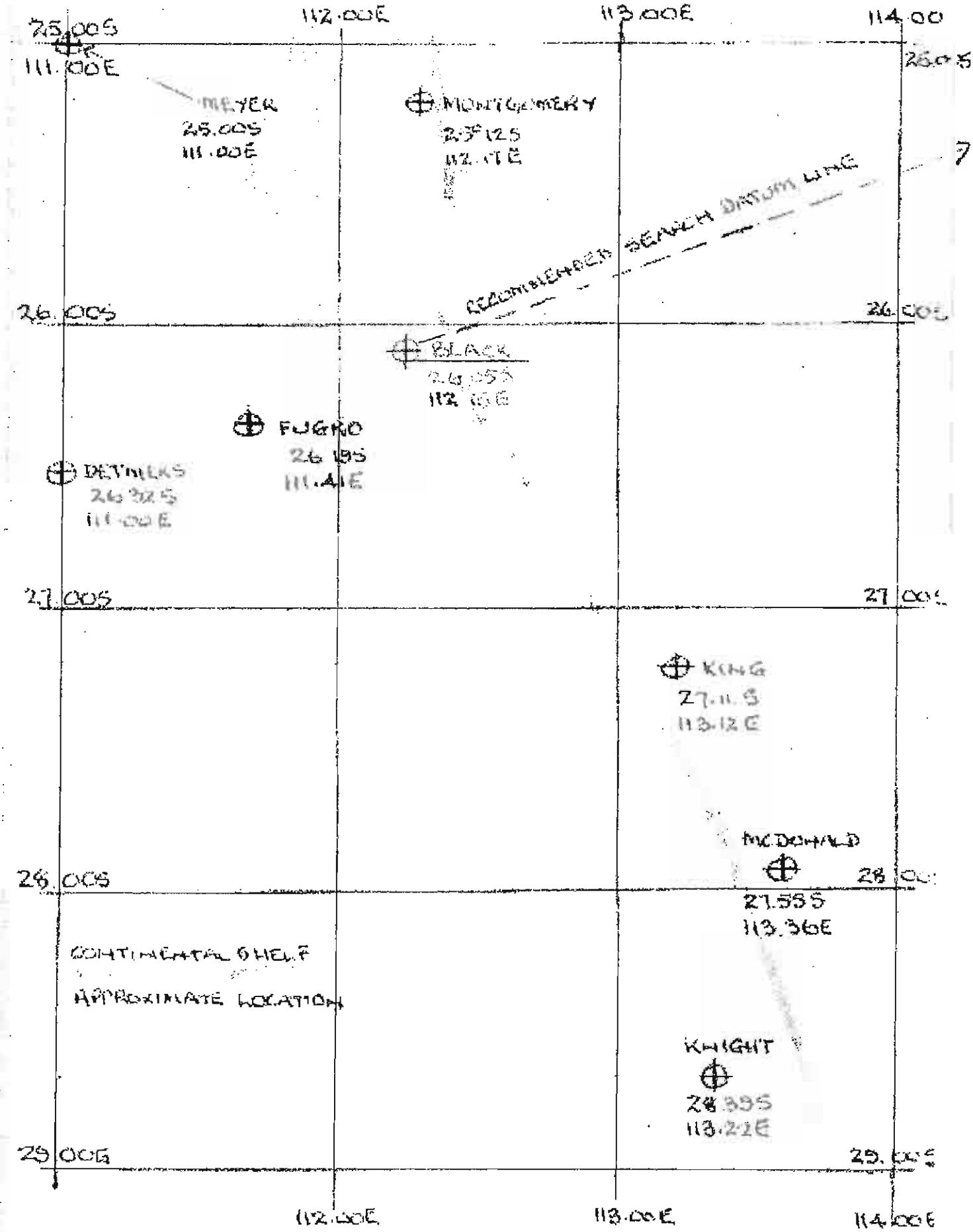
"Commencing at position 26°05'S 112°15E a SWATH 10 km scan north easterly along a line of bearing 068°/070°, crossing the 100 fathom line and ceasing at the 10 fathom line, as an initial sweep. To be followed by offset sweeps adjacent each side to the original track."

17 November 2001

Alexander Black

A.D. BLACK

HMAS SYDNEY - KORMORAN ACTION
ABSTRACT OF ESTIMATED POSITIONS.



Submission
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Modelling Uncertainty in the Search for HMAS *Sydney*

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University of Melbourne

Prepared for the HMAS Sydney Forum
16th November 2001, Fremantle, Australia

Introduction

The loss of the Australian cruiser HMAS *Sydney* to the German raider HSK *Kormoran* is Australia's worst naval disaster (Odgers, 1985). The *Sydney* went down with all hands (645 men and officers) on the 19th of November 1941.

On the 11th of November 1941, HMAS *Sydney*, under the command of Captain Joseph Burnett, left Fremantle on escort duty with Hired Transport *Zealandia* to the Sundra Strait. After handing her charge over to HMS *Durban* on the 17th of November, *Sydney* sailed for Fremantle. At about 4pm on the 19th of November, while in the vicinity of 26° S 111°E, *Sydney* intercepted the German armed merchant cruiser (raider) *Kormoran*, disguised as the Dutch *Straat Malakka* and commanded by Captain Theodor Detmers. In the ensuing battle *Sydney* was heavily damaged with the bridge destroyed and the fire control system disabled early in the battle. *Kormoran* was crippled by a hit to her engine room and was scuttled by her crew later that night. *Sydney* was last seen drifting away, burning amidships and astern.

A few days after *Sydney* was expected to reach Fremantle the authorities attempted to contact her. Search aircraft were despatched on the 24th of November. The searches failed to find any of the *Sydney's* crew, however most of the crew of the *Kormoran* were rescued. Much of the evidence regarding the loss of the ships has come from survivors and the search and rescue operations.

Since the battle many have argued over how *Kormoran* could have vanquished a heavily armed and battle-hardened cruiser and why there were no Australian survivors. Contradictory evidence, government secrecy, inconsistent government reports and other influences have fuelled the arguments. Michael Montgomery's controversial, and since discredited (Winter, 1984), book *Who Sank the Sydney?* inflamed the debate with it's accusations of war crimes and the involvement of a Japanese submarine.

Despite searches by the Royal Australian Navy and other interested parties neither the wreck of *Sydney* nor *Kormoran* has been found. Some researchers believe that if *Sydney* were found she could be examined and perhaps the circumstances of her demise could be reconstructed. At the very least a proper memorial could be established for her valiant crew.

In 1997 a Joint Standing Committee on Foreign Affairs, Defence and Trade held the *Inquiry into the Circumstances of the Sinking of HMAS Sydney*. Many researchers and interested parties from around the country sent in submissions to the inquiry. A number of the submissions hypothesized on what happened on the night of the 19th of November 1941 in an attempt to reconstruct what happened and also to define a location for the battle.

Evidence regarding the loss of the two ships exists in a number of forms: information given by the German survivors, objects found during the search and rescue operations and oral histories from people along the West Australian coast. Much of this evidence appear contradictory or internally inconsistent. Previously only Kirsner (1991), Hughes (1991) and Kirsner & Hughes (1993) have used the historical evidence in a purely mathematical way (i.e. without imposing subjective constraints). However, the uncertainty contained in each piece of evidence (eg from memory loss, imprecise meteorological data) was not fully accounted for. This paper presents the available evidence that may be used to determine the resting place of both ships in terms of measurements and attempts to quantify the uncertainty in the evidence using precisions (represented by σ). Precision is a statistical term that describes repeatability in terms of probability, usually with respect to the Normal distribution. The precisions given in this paper as given at one-sigma (39%) level unless otherwise specified. These measurements are then composed into a number of networks and adjusted using survey network theory based on the least squares algorithm. Least squares estimation is used because it is able to combine all measurements (such as sightings by witnesses and drift vectors) with weights to provide a best estimate of the solution.

The methodology used in this paper arises from the authors' previous work published in Brown *et al* (2001). However, a number of significant changes have been made since the previous work. More measurements have been identified and included in the solution, but also some have been removed in order to reduce the potential for gross errors and over-weighting of measurements. Of most significance a different method for calculating the drift has been used which incorporates empirically based estimates of leeway and wind driven current.

From the results of the network adjustment, positions for both *Sydney* and *Kormoran* have been determined along with estimates for their precision. The network adjustment has been performed several times to allow alternative sets of measurements (resulting from different use of oral and physical evidence) to be used to test various hypotheses. Possible search areas have been defined using a 95% confidence region based on the precision of the derived positions.

The main aim of this project is to investigate the use of survey networks in the context of locating shipwrecks. Before this method can be used to properly define a search area sighting distances need to be incorporated into the eye witness observations.

Physical and Oral Evidence

Drift Items

A variety of physical evidence resulting from the losses of *Sydney* and *Kormoran* were found during the search for survivors. The most notable of these were the lifeboats containing the German survivors. Other evidence includes lifebelts, Carley floats and oil slicks that were found during the search and rescue operations. For each of these, the time and position was collected. All of these observations must be corrected for drift to backplot them to their position of origin. However, not all of these are suitable for drift analysis for a variety of reasons. For example the potential for sail driven movement cannot be discounted on some lifeboats. A diary kept by the German Officer von Malapert allows the sailing vectors of Kohn and Meyer's lifeboats to be calculated. Table 1 records those drift items that have been deemed suitable for drift analysis.

The source of all debris has been established with the exception of the oil found by HMAS *Heros* and the white timber spotted by aircraft. One cannot say with any degree of certainty where these items originated.

Table 1: Positions of Debris

Name	Position from Search and Rescue	Precision Nm	Source Vessel	Source
Aquitania Raft	24° 35' S 110° 57' E	-	HSK *Kormoran*	Hardstaff, 1997
Carley Float	24° 07' S 110° 58' E	2	HMAS *Sydney*	Hardstaff, 1997
Float	24° 10' S 110° 54' E	7	HSK *Kormoran*	Winter, 1984
Green Box	24° 10' S 110° 54' E	7	HSK *Kormoran*	Winter, 1984
Kohn's Lifeboat	24° 10' S 113° 27' E	2	HSK *Kormoran*	Winter, 1984
Lifebelt A	24° 22' S 110° 49' E	2	HMAS *Sydney*	Winter, 1984
Lifebelt B	24° 06' S 110° 49' E	10	HMAS *Sydney*	Hardstaff, 1997
Lifebelt C	24° 10' S 110° 54' E	7	HSK *Kormoran*	Winter, 1984
Meyer's Lifeboat	24° 03' S 113° 26' E	2	HSK *Kormoran*	Winter, 1984
Oil	24° 07' S 110° 58' E	2	?	Hardstaff, 1997
Timber	22° 32' S 113° 13' E	10	?	Hardstaff, 1997
Trocas Raft	24° 06' S 111° 40' E	-	HSK *Kormoran*	Hardstaff, 1997

The cruise ship HT *Aquitania* rescued the first group of German survivors on the 23rd of November 1941. However, Captain Gibbons maintained radio silence until the 27th when he notified the Post War Signal Station at Wilson's Promontory (Olson, 2000). Due to concerns about the use of wind power the *Aquitania* raft has been excluded from drift analysis (Kirsner and Hughes, 1993). For the same reason the raft recovered by *Trocas* has been excluded from the drift analysis.

The navigational accuracy HMAS vessels such as the *Wyrallah* and *Heros* reached would have primarily depended on the skill and experience of the crew, but would be in the

range of one to two nautical miles according to Lieutenant-Commander Ean McDonald, ex HMAS Sydney (pers com, 1999b). A precision of two nautical miles has been assigned to those objects recovered by the *Heros* (Carley Float and Oil) and Lifebelt A found by the *Wyrallah*. Those objects found by the *Wyrallah* at 0001Z/28 (Float, Green box and Lifebelt C) were all recorded as having been recovered at the one place and time but were actually spread out over about an hour (Winter, 1984). Given this, the precision has been reduced to seven nautical miles. Note that a second patch of oil was spotted by search aircraft close to the coast but was not deemed important due to the naturally occurring oil in the area.

The freighter *Evagoras* would have known its position to around three to ten nautical miles (McDonald, pers com, 1999b). The pessimistic value of ten nautical miles has been chosen for Lifebelt B recovered by *Evagoras*.

The remaining drift objects were spotted by aircraft. According to Group Captain (ret) Bourne (pers com, 1999), who took part in the aerial search for survivors, it was standard operating procedure in the RAAF at the time to use both dead reckoning and to observe sun shots. This procedure would produce results accurate to within one to ten nautical miles, depending on cloud cover and wind (Bourne, pers com, 1999). With the weather conditions at the time, ten nautical miles is probably a reasonable estimate (Bourne, pers com, 1999). As such the timber that was spotted by aircraft has been assigned a precision of ten nautical miles.

The lifeboats of Meyer and Kohn were spotted on the beach near Red Bluff and 17-Mile Well respectively. The aviator who spotted them, Flight Lieutenant Cooke, reported their position by naming the location rather than providing a latitude and longitude (Bourne, pers com, 1999). These have been given a precision of two nautical miles.

None of these objects were spotted by aircraft prior to their recovery. Had this been the case then an intermediate measurement on their drift could have been used.

Reports by Survivors

Various crewmembers from the *Kormoran* have provided positions for the battle. These are shown in Table 2. Also included is part of a distress signal received by Geraldton radio, unintelligible except for "2 (gap) 7 C 111 15 E 1000 GMT" (Frame, 1998). Detmers sent the distress call with the intention of confusing and distracting *Sydney* (Detmers, 1959; Frame, 1998). It is unlikely that Detmers would have transmitted a false coordinate in the signal, as this would have aroused suspicions onboard *Sydney*. Making the assumption that the 'C' was misheard and was actually a 'S' the message received by Geraldton radio can be used as a position measurement. The ambiguity in the latitude is too great for it to be any use as a measurement, however the longitude component can be assumed to be very good. A ship such as *Sydney* or *Kormoran* would have been using a sextant, chronometer, gyrocompass and a log to determine their position (McDonald, pers com, 1999a). The resultant position could be determined to at best one quarter of one nautical mile and to approximately one nautical mile in the roughest of weather (McDonald, pers com, 1999a). However, Linke and Pachmann, two wireless operators

from the *Kormoran*, give the position only to the nearest degree. Given this and the garbled nature of the signal, the longitude part of this signal has been assigned a precision of 15 nautical miles.

Many of the German survivors provided position estimates during the interrogations. A number of these sailors would not be in a position to have direct access to navigation information as part of their duties. Exceptions may include the Captain, the Navigating Officer, the Second in Command and the radio operators that sent the QQQ message. According to Frame (1998) the interrogations revealed that Detmers kept his subordinates ill-informed about the ship's activities. Officers were seldom allowed into the chartroom, and during the night watch only the Navigating Officer (Meyer) determined the ship's position (Frame, 1998). Knowing this one could assume that the positions given by Detmers and Meyer are more likely to be accurate than the others are. However, there was ample opportunity before and between the interrogations for the officers to pass on information false or otherwise to the crew. Given these considerations, it is difficult to determine the ultimate source of the information provided by the crewmembers. It must be assumed that only those officers and men with access to navigational information could provide a reliable estimate of the position of the battle and that all other positions must be derived from these or be misinformation. If positions that are derived or quoted from positions given by others are included into the least squares algorithm they will add undue weight to those measurements. In addition the measurements will be highly correlated, a condition which is difficult to account for and will bias the results. However, the positions given by people that may reasonably have had access to navigational information are regarded as measurements of the 'true' position. The true position, in this instance, being that calculated by the *Kormoran's* navigators which is itself dependent on the instruments used to measure it and the navigator's skills. Table 2 records the positions given by sources that are likely to have had access to the information. They include Captain Detmers, the Navigating Officer (Meyer), the radio operators (Linke and Pachmann) and Kapitänleutnant Bretchneider (a senior officer). An attempt has been made to give the original position supplied by the survivor and not positions given later in the interrogations or after the war.

For the sake of completeness Table 2 also includes a position given by Sub Lieutenant Bunjes. It is unclear where Bunjes was during the battle. Bunjes was a prize officer and had no station during action stations (Olson, 2000). This position has not been used in the calculations.

It is reasonable to expect the German officers and men would try and hamper the efforts of the enemy by providing misinformation. There are two main arguments for this. The first is that, as there was no doubt that the *Kormoran* was sunk and the *Sydney* was last seen afloat and under power they may have not seen any reason to give false information about the location of the battle (Winter, 1984). The second argument is that Detmers used illegal tactics to overcome *Sydney* and deliberately gave a position in deep water in order to discourage the Australian authorities from investigating the wreck (Montgomery, 1981, Meadows, 1999). The truth in this matter may never be known. The method used to address this uncertainty is by having various scenarios and is explained later in the paper.

Table 2: Position Measurements

Name	Location	Precision Nm	Source Vessel	Source
Bretschneider's Position	26° S 111° E	20	HSK *Kormoran*	NAA MP1587/1 165K
Detmers' Position	26° 32' S 111° 0' E	15	HSK *Kormoran*	Winter, 1984
Meyer's Position	27° S 111° E	20	HSK *Kormoran*	NAA MP1587/1 164M
Pachmann's Position	26° S 111° E	20	HSK *Kormoran*	Olson, 2000
Linke's Position	26° S 111° E	20	HSK *Kormoran*	Olson, 2000
Bunjes' Position	26° S 111° E	20	HSK *Kormoran*	NAA MP1587/1 164M
Geraldton Radio Longitude	111° 15' E	5	HSK *Kormoran*	Hardstaff, 1997

Some consideration must be given to all the positions for failures in memory as the crew was rescued some six days after the event and not interrogated until some time afterwards. Positions that were published after the war have not been used because it is likely that they will be based on second hand information. The same reasoning applies to the numerous signals and non-original reports that are to be found in the archives. Many of these quite obviously contain typographical, rounding and other errors and often do not reference the source of the original material. Also the positions given by Linke and Meyer have most likely been rounded and only given to the nearest degree.

For the above reasons the reliability of all of the positions are going to be significantly worse than one mile. Just how unreliable the information the Germans gave is very difficult to quantify. A figure of thirty nautical miles has been chosen to represent this uncertainty for Bretschneider's, Meyer's, Kitsche's, Pachmann's, Linke's and Bunje's position because they are given only to the nearest degree. It is important to note that Linke states that the cruiser was part of a convoy or five to seven ships, detracting somewhat from his credibility (Olson, 2000). Meyer later gives a more precise position, however this may have been after contact with Detmers and for this reason it has not been used. The position given by Detmers has been assigned a precision of twenty nautical miles even though it was given to minutes of arc (latitude component only) because memory is still a factor. It is important to note that if these positions are false or contain a gross error (eg. if the Germans lied) then they will bias the algorithm. To overcome this a number of sets of measurements are used to test the agreement between the various sources of information.

Relative Positions

Further measurements include references to the coast, an estimate of the distance to the source of the QQQQ message and the distance and bearing from *Kormoran* at which *Sydney* was last seen. These are recorded in Table 3.

The last measurement taken by a range finder gave the distance from *Kormoran* to *Sydney* as 16,000m (NAA: B5823, Whole Series). The *Sydney's* course was estimated at about 150° and the relative bearing between the ships at the time of the last shots was

225°. However, the glow of flames was seen for at least four hours after the battle ceased (NAA: B5823, Whole Series). The Australian interrogator, Lieutenant-Commander Rycroft, after interviewing Captain Detmers and First Officer Foerster arrived at the conclusion that *Sydney* was on a bearing of 153° heading south at about 5 knots (Winter, 1984). Just how far *Sydney* may have drifted is a matter of conjecture. If *Sydney* managed to maintain the five knots for about four hours (which is at least how long survivors saw a glow) she would have travelled about twenty nautical miles. To reflect this, a distance of 30nm has been used with an extremely high standard deviation of 20nm (as there is no certainty as to how long *Sydney* was afloat or what average speed she maintained before sinking). The bearing between *Kormoran* and *Sydney* has been set at 153° with a standard deviation of 20°. This standard deviation reflects the fact *Sydney* may have changed course, perhaps by heading towards Geraldton or Port Gregory. However, given the heavy damage sustained by *Sydney*, including the loss of the bridge, it seems unlikely that she was navigable.

The QQQ message received by Geraldton radio was also intercepted by the tug *Uco* in position at 26° 45' S 113° 20' E (Olson, 2000). The message was garbled and the position given unclear. However, the radio operator estimated, presumably by the signal strength, that the transmitting vessel was within 300 miles (Olson, 2000). This measurement would best be handled as a constraint within the least squares adjustment. However, constraints of this nature are not often used in surveying and the software used in this research is unable to accommodate them. Until this software limitation is overcome this measurement will be handled as a simple distance measurement of 200nm with a standard deviation of 100nm. The position of the *Uco* is considered known to about 10nm.

Some of the German survivors gave distances to the coast in place of or in addition to an absolute position. One of the survivors to give such information was Lieutenant Bunjes who gave the position of sighting as 160nm south-west of North West Cape (Olson, 2000). Survivors recovered by *Trocas* also provided distances from the coast. Lensch gave the distance as 100nm off Fremantle and Lorscheider as 60nm from land (NAA: MP1587/1 164). The reference given by Lorscheider is too ambiguous to be of use and that given by Lensch is so inconsistent that the algorithm would reject it immediately. Even though Bunjes' position was not used because of doubt about his access to that information, the reference to the coast has been included in the calculations. The reason for this is that such information would be of great importance to people about to enter life boats. Therefore it is reasonable to assume that the information originated from the Captain or another senior officer. Due to the different nature of the information this measurement type has been considered independent of the latitude and longitude positions given by the survivors. A standard deviation of 30nm for the distance and 15° for the bearing has been chosen to represent the uncertainty in Bunjes' reference to the coast because of memory and the movement of *Kormoran* during the battle.

Table 3: **Relative Positions**

Name	Bearing	Precision	Distance nm	Precision nm	Source
Last Sighting	153°	20°	30	20	Winter, 1984
Bunjes' Distance	225°	15°	160	30	Olson, 2000
Uco Distance	-	-	200	100	Olson, 2000

Eye Witness Reports

Part of the evidence available on the *Sydney/Kormoran* engagement comes from people along the coast who witnessed events they believe to be the battle (Table 4). Kirsner & Dunn (1998a) have been very critical of such oral evidence. They have argued that with regards to precise information (such as position and time) that memory will fail and that the "magnitude of the failure will increase with the interval between the original event and the moment of recall" (Kirsner & Dunn, 1998a). The oral histories concerning the *Sydney* and *Kormoran* battle did not surface until about 40 years after the war and, not surprisingly, are generally vague on exact details, especially time. Kirsner & Dunn (1998b) also warn about how the human mind interprets memory so that it is meaningful to them and how memory is influenced by discussion with others. There also exists the possibility that the witnesses saw something completely unrelated to the *Sydney/Kormoran* engagement, such as an electrical storm. Some confusion also exists because of the shelling of Port Gregory by a Japanese submarine at midnight on the 28th of January 1943 and a visit by *Sydney* to Geraldton on the 18-20th of October 1941 (McDonald, 1993, 1997b). Assuming that the people concerned witnessed something related to the loss of *Sydney* and *Kormoran* there still remains the difficulty of assigning each measurement to a particular ship. The details of how these ambiguities have been handled are explained in a later section.

Various methods were used to measure the bearing for the line of sight of the witnesses. The bearings shown for A.Cox, O.Box, D.Pluschke and R.Porter were taken by placing stakes to reconstruct the line of sight and recording the bearing of the line formed by the stakes. A compass bearing may be out by a much as one degree at any given moment because of magnetic storms, but would normally be good to a few tens of minutes (Bannister *et al*, 1993). However, there is some degree of uncertainty in the measurement because they are based off human memory. A standard deviation of twenty degrees of arc has been chosen to represent this uncertainty. The rest of the bearings have come from estimates given by the witness of compass directions, for example 'north-west'. These observations have been given a standard deviation of thirty degrees. The inconsistency in the eye witness observations is evident in Figure 1, a diagram of the measurements. Note that oral historian Glenys McDonald has recorded histories of other witnesses of the *Sydney/Kormoran* engagement, but these are not specific on the direction of the battle.

The maximum distance at which an eye witness may have been able to see the gunfire and explosions from the battle is unknown. The direct sighting distance can be calculated as (Great Britain Admiralty, 1958)

$$d = 1.15\sqrt{h}$$

where h is the height of the observer above sea level in feet and d is the maximum direct sighting in nautical miles. However, a glow or light reflected from clouds can be seen at much greater distances. Bye and Byron-Scott (1999) gives the visibility threshold of light as 100nm. Such a constraint should be used in conjunction with the eye witness observations. However, due to the software limitations mentioned previously this has not been done. It can be seen from Figure 1 that if the maximum sighting distance is indeed 100nm the evidence from the Germans and eye witnesses are at odds with one another.

Table 4: Eye witness observations

Name	Position	Bearing	Description	Source
O.Box	Mt Gregory	265°	Olive Box heard explosions and saw flashes in the early hours of the morning.	King, 1998
A.Cox	Geraldton	305°	Adelina Cox saw a glow out to sea on or beyond the horizon late on the night of 19 November or early on 20 November 1941.	King, 1998
D.Pluschke	Northampton	272°	Doug Pluschke, after returning from a school social late in November 1941, witnessed flashes and explosions out to sea. He could just hear the sound of gunfire.	King, 1998
R.Porter	Riverside	295°	Ray Porter witnessed a column of coloured smoke. He is unsure of the date but remembers that a few days later a large convoy of Army tucks passed by (possibly on their way to Red Bluff).	King, 1998
I.Mallard	Steep Point	320°	Ivy Mallard and her husband witnessed smoke and flashes. She is not sure of the date.	McDonald, 1999b
Rob Family	Yallabatharra Rd	290°	On an unspecified date during the war the Rob family saw flashes as they looked out the west window of their house.	McDonald, 2000
I.Stokes	Horracks	330°	From her two-storey house on the beach at Horracks Isobella Stokes witnessed flashes to the north-west. The exact date is unknown.	McDonald, 2000
H.Sucking	The Swamps	225°	Henrietta Sucking saw flashes out to sea roughly south-west late one night after returning from a party at Yallabatharra. The time was "about the time *Sydney* sank".	McDonald, 2000
R.Taylor	Swamps Rd	305°	Beattie Hayes heard gunfire and saw flashes that lit up the sky and illuminated Mt Victoria and Mt Albert as she returned from a party at Yallabatharra school.	McDonald, 1993
D.Taylor	The Swamps	310°	Dick Taylor heard explosions and saw flashes after returning from town. They lasted for more than half an hour and were still going when he got home. The flashes were then seen to be illuminating Mt Victoria and Mt Albert.	McDonald, 1993
M.Porter	The Swamps	230°	Marge Porter (then Ridley) heard explosions one night during 1941. She went outside and saw gunfire out to sea.	McDonald, 2000

Drift Analysis and Diary Reconstruction

The purpose of undertaking a drift analysis for this exercise is to predict, or hindcast, the point of origin (splash point) for the objects located by search and rescue vessels following the battle between *Sydney* and *Kormoran*. The hindcasting process undertaken

for this project is based upon that used by Bye (2001). Essentially this method simplifies the drift process into two components: ocean current and windage.

Splash point

The exact time of placement for drifting objects in the water is unknown. Kirsner & Hughes (1993) decided to assume 1800H/19 Nov for the splash point. At this time *Kormoran* and perhaps *Sydney* was without power and some of the survivors were in the water and subject to current and wind before dark on the 19th (Kirsner & Hughes, 1993). This project also uses 1800H/19 as the splash point. However, it is unlikely that all objects entered the water at the same time. For instance some items may have been dislodged during the battle. Therefore, a measure of uncertainty has been included in order to minimise the potential bias and correlation in the drift measurements. An allowance of half an hour has been added to the uncertainty of the drift vectors.

Ocean current

Ocean current is the below surface wave motion of the oceans. A mean value of 6° at 0.16 knots, calculated from the various values given at the 1991 *Sydney* Forum in Fremantle, has been chosen to represent the direction and velocity of the sea current. To account for the variation of sea current estimates it was decided that a standard deviation of 20° should be assigned to the direction of the sea current and 0.05 knots for the ocean velocity. Based upon data presented at the *Sydney* Forum it was considered acceptable that the Leeuwin current need not be considered, as it could not have influenced the path of the debris (Kirsner & Hughes, 1993; Pearce, 1991; Hughes, 1991; McCormack & Steedman, 1991).

Windage

Windage is defined as (Bye, 2001)

$$\text{Windage} = \text{Object Speed} / \text{Wind Speed}$$

and contains the effects of local winds on the object (leeway) and on the surface of the sea (wind driven current). Wind driven current is the influence of local winds upon the sea surface. Leeway current is the movement of a drift object resulting from the influence of local winds blowing against exposed surfaces and the drag encountered by the underwater hull (Hughes, 1991). In theory the direction of leeway is parallel to the local wind, however in practice has a tendency to move off the downwind path and is subject to a great deal of variation (Hughes, 1991). As highlighted in Hughes (1991) experiments have shown that craft with a large keel plane have deviated by up to 45°, and those with a smaller keel have deviated up to 60°. For the purpose of this project a standard deviation of 15° was utilised to model the variation of the leeway vector.

Bye (2001) uses current and wind profiles calibrated by empirical data to estimate windage for each of the types of object recovered during the search and rescue. These values have been adopted and are summarised in Table 6. Windage is the largest component of the drift and any error in the windage will have dramatic an affect on the resultant vectors. Because the windage parameters are not known exactly they have been

treated as observations and given a precision of 0.25% of the wind speed. A mean wind speed and direction of 348° at 22 knots, calculated from the values presented at the 1991 Forum has been used in the drift analysis (see Table 5).

Table 5: Summary of Wind Values

Date	Duration hours	Direction	Velocity knots
19th	6	341°	17.8
20th	24	325°	19.3
21st	24	337°	20.8
22nd	24	337°	25.0
23rd	24	322°	33.0
24th	24	329°	23.5
25th	24	351°	23.8
26th	24	15°	18.8
27th	24	55°	16.5
28th	24	347°	18.5
mean	-	348°	21.7
precision	-	20°	5.0

Wind driven current was previously excluded from these calculations because of concerns expressed by Both Hughes (1991) and Kirsner & Hughes (1993) that it might results in double counting. The authors have been satisfied that this is not the case following Bye (2001) and Whittaker (2000).

Vector Construction

The drift vectors and their standard deviations were calculated using the following formulae for each of the drift objects.

Ocean current

$$\text{Distance (km)} = \text{current(knots)} * \text{drift time (hrs)}$$

$$\sigma^2_{\text{distance (km)}} = \sigma^2_{\text{ocean current(knots)}} * \text{drift time}^2\,\text{(hrs)} + \sigma^2_{\text{drift time}} * \text{current}^2\text{(knots)}$$

Windage

$$\text{Distance (km)} = \text{windspeed(knots)} * \text{windage(\%)} * \text{drift time (hrs)}$$

$$\sigma^2_{\text{distance(km)}} = \sigma^2_{\text{wind speed (knots)}} * (\text{windage (\%)} * \text{drift time (hrs)})^2 + \sigma^2_{\text{windage}} * (\text{windspeed(knots)} * \text{drifttime(hrs)})^2 + \sigma^2_{\text{drifttime}} * (\text{windspeed(knots)} * \text{windage(\%)})^2$$

Table 6: Summary of Windage Values (Bye, 2001)

Drift Object	Windage (% of wind speed)
Green Box	6
Lifebelts A, B, C, Float	6
Carley Float (Sydney)	6
Lifeboats	9
Rafts (Aquitania and Trocas)	13

Diary Reconstruction

Using a diary kept by German survivor Lieutenant (Baron) Reinhold von Malapert it is possible to reconstruct the journeys of Meyer's and Kohn's lifeboats to a point of origin. Table 7 summarizes the reduced entries from von Malapert's diary.

The drift periods were dealt with as explained previously. The sailing periods were handled by adding the following sailing vectors to the ocean current. The direction of sailing is thereby corrected by drift to make the course made good. Windage is assumed to be included in the estimates of sailing distance made by von Malapert. A precision of 2° was assigned for the bearing of these vectors (taken using a compass) and a precision of 0.10 knots was used for the speed. The time the boats reached the shore is not known precisely so the allowance for error in the drift time has been increased to an hour.

Sailing vector

Distance (kms) = current (knots) * sail time (hrs) + speed (knots) * sail time (hrs)

$$\sigma^2_{distance(kms)} = \sigma^2_{speed\,(knots)} * sail\ time\ (hrs)^2 + \sigma^2_{sailtime(hrs)} * (current(knots) + speed(knots))^2 + \sigma^2_{current\,(knots)} * sail\ time\ (hrs)^2$$

Table 7: Summary of von Malapert's Diary (from 1800 November 19th)

Propulsion	Direction, Speed and Time Period
Drifted	12hrs
Sailed	68° at 1.24 knots for 24 hrs
Sailed	68° at 1.73 knots for 36 hrs
Drifted	12 hrs
Sailed	45° at 1.73 knots for 36 hrs
Drifted	9 hrs
Sailed	45° at 1.73 knots for 5hrs

Source: (Kirsner & Hughes, 1993)

Vector Simplification

The drift vectors were simplified to a single vector for use in the least squares algorithm. The size of the search area suggests that the curvature of the earth should be considered, but given the magnitude of precisions for the drift vectors in comparison the influence of earth curvature is negligible. Therefore to achieve this simplification it was decided to assume that the search area was planar. The simplified vectors are shown in Table 8.

Table 8: Summary of final drift vectors

Drift Object	Bearing	Precision	Distance nm	Precision nm
Carley Float	169°51'	13°30'	303.8	65.1
Float	169°51'	13°30'	299.4	64.2
Green Box	169°51'	13°30'	299.4	63.3
Kohn's Lifeboat	216°20'	15°39'	209.7	54.3
Lifebelt A	169°51'	13°30'	279.4	59.9
Lifebelt B	169°51'	13°30'	281.4	60.3
Lifebelt C	169°51'	13°30'	299.4	64.2
Meyer's Lifeboat	216°20'	15°39'	209.7	54.3

Figure 1 is a diagram of the measurements that have been collected. The lines originating from the eye witness positions indicate the direction they witnessed signs of a battle. Those originating from the drift objects represent the drift vectors.

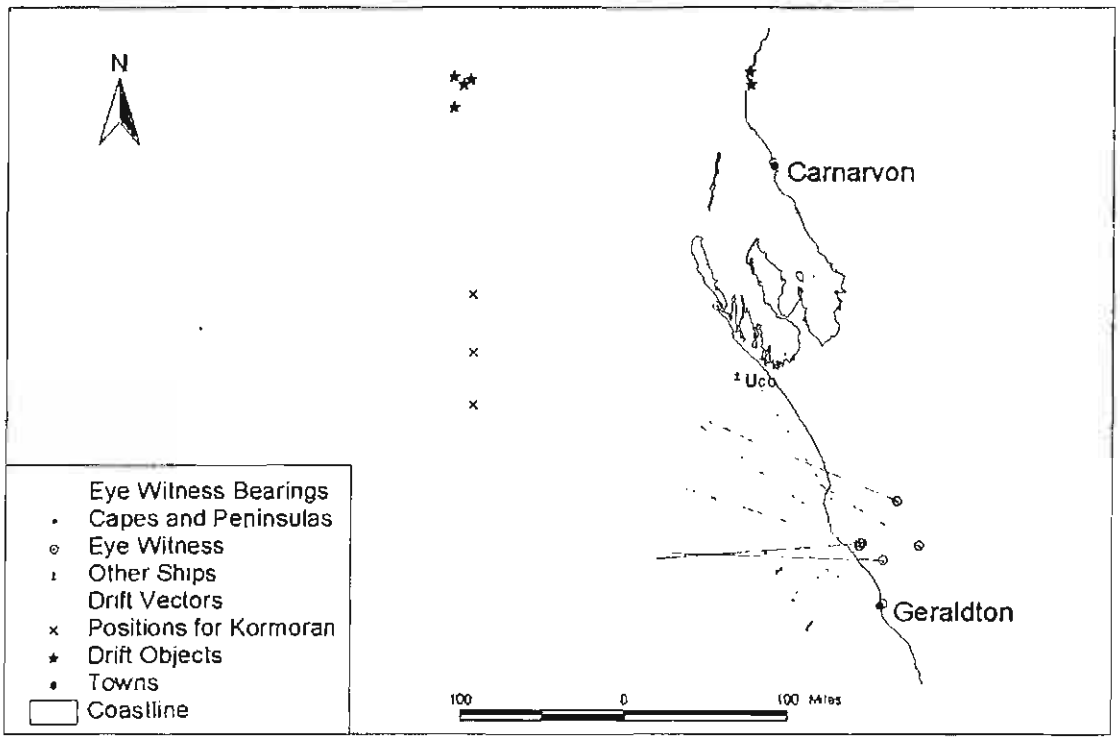

Figure 1: Plan of the Measurements

Note: There are multiple drift observations and German positions that occur at or near the same location which cannot be seen on this plan. The position of the GR longitude is not shown. The length of the eye witness bearings is 100nm.

Network Construction and Results

Survey Networks

Survey network theory uses a least squares algorithm to provide a rigorous technique for combining all measurements and their assigned precisions to estimate position. For example, the direction along which someone on the coast saw flashes is a bearing measurement. Consequently an observation equation of the form:

$$\theta = f(\lambda_s, \varphi_s, \lambda_o, \varphi_o)$$

can be constructed where

θ = bearing from an observer to a ship
λ_s, φ_s, = latitude and longitude of the ship
λ_o, φ_o = latitude and longitude of the observer

This must be linearised using a Taylor's Series expansion for use in the least squares algorithm. On linearising the equations become:

$$\theta - f(\lambda_s', \varphi_s', \lambda_o', \varphi_o') = \frac{\partial f}{\partial \varphi_s}\Delta\varphi_s + \frac{\partial f}{\partial \lambda_s}\Delta\lambda_s + \frac{\partial f}{\partial \varphi_o}\Delta\varphi_o + \frac{\partial f}{\partial \lambda_o}\Delta\lambda_o$$

where λ_s', φ_s', λ_o', φ_o' are approximate values (a priori estimates) of λ_s, φ_s, λ_o, φ_o and $\Delta\lambda_s$, $\Delta\varphi_s$, $\Delta\lambda_o$, $\Delta\varphi_o$ are corrections to the approximate values and are the unknowns being sought.

The measurements are then represented in the linear form using the indirect method as:

$$v = Ax + w$$

where v is a vector of m least-squares residuals, A is the design matrix, x is the vector of u parameters (corrections to the a priori estimates) and w is a vector of m constants. A m x m variance-covariance matrix is constructed where the diagonal elements are the variances (σ^2) of the measurements.

The least-squares optimised estimates for the parameters is then obtained by iterating (Mikhail, 1976)

$$\hat{x} = (A^T P A)^{-1} A^T P w$$

where P is the weight matrix, defined as the inverse of the variance-covariance matrix C_l.

The variance-covariance matrix of the least squares estimates is obtained via (Mikhail, 1976)

$$C_{\hat{x}} = \sigma_0^2 (A^T P A)^{-1} \qquad \text{where} \quad \sigma_0^2 = \frac{v^T P v}{(m-u)}$$

Precisions for the least-squares residuals may also be calculated and are useful for outlier detection in the subsequent network testing phase. The precisions of the residuals are calculated as

$$C_{\hat{v}} = C_l - A C_{\hat{x}} A^T$$

Network Testing

A great advantage of the least squares algorithm is that it provides an estimate of the precision of the coordinates and the corrections to the measurements (residuals) in the form of standard deviations.

For a single correction (observed minus computed measurement) v, with standard deviation σ_v, the statistic

$$\frac{v}{\sigma_0 \sigma_v}$$

is a Student-T random variable, σ_0^2 is the a posteriori variance factor (Mikhail, 1976). This allows for statistical testing of the measurements, referred to as the local test. After each adjustment is performed, any measurement that may be considered a statistical outlier is removed and the adjustment re-run. Testing is performed at the 95% confidence level. The removal of 'bad' measurements continues until all measurements pass the local test or the point of diminishing returns is met.

Another statistical test, the global test, can be performed on the σ_0 which follows a χ^2 distribution and is representative of the network as a whole (Mikhail, 1976). Refer to Mikhail (1976) for more information on network testing.

Methodology

Survey networks usually assume that there is no change in the location of object points whilst the measurements are being taken. In the case of the *Sydney* and *Kormoran* the assumption is not true as the measurements are spread over time and the ships were moving continually. For example, some drift objects may have entered the water during the battle while others entered it afterwards. Also some positions measurements are specified as the position at the time of sighting whilst others are given for the battle itself.

To overcome this, the assumption that *Kormoran* sank in the approximate vicinity of the action has been made. All observations that relate to the battle in general (as the positions given by the crew and some of the eye witness observations do) shall then be assigned to the *Kormoran*. This assumption is reasonable because, according to most reconstructions of the battle, the movement during the battle spans about 5' by 10', which is small in comparison to the range in the measurements. Also *Kormoran* was disabled during the battle and later scuttled (NAA: B5823, Whole Series). The observations to *Sydney* are assumed to relate to the time at which *Sydney* exploded or sank. However it is possible that some drift objects were dislodged during the battle.

By performing the network adjustment several times the accuracy of the eyewitness observations, the positions given by the Germans and the drift analysis can be tested (i.e. it can be seen how well they fit the other measurements).

Network Design and Results

In the previous sections several doubts or ambiguities in the available measurements have been expressed. Four networks have been designed to assess these ambiguities and test hypotheses. Based on the results from Brown et al. (2001) the white timber spotted by a search aircraft has been excluded. The oil found by *Heros* has also not been used because of doubt regarding its source.

Network #1

The first network uses what might be considered the most scientifically sound or reliable measurements: the drift vectors, the *Uco* distance and the Geraldton Radio longitude.

Network #1 passes the global test with all measurements satisfying the criteria for the local test. The σ_0 is small (0.7059) indicating that the measurements are more consistent than the precision assigned to them would suggest. This is not surprising as the drift vectors are highly correlated because they have all been calculated using the same parameters.

However, the precisions have not been scales to make the σ_0 closer to one because they are deemed to be realistic given the lack of meteorological measurements for the region and time of interest.

A very large search area (see Table 9) reflects the low weighting of the measurements and the low (14) degrees of freedom. It is no surprise that the search area for *Kormoran* is much smaller than that for *Sydney* given the shortage of information on *Sydney*. Based on the drift vectors alone the position for *Kormoran* is nearly two degrees south of the position given by Detmers.

Network #2

The second network design adds the measurements derived from information provided by the German survivors to the drift, Geraldton Radio and *Uco* measurements used in Network #1. The main purpose of this network is to test the fit of the drift measurements with the German positions.

The distance from North West Cape to *Kormoran* and the distance between *Sydney* and *Kormoran* fail the local tests before the point of diminishing returns is met. At this point the global test passes with a σ_0 is close to one at 1.1093.

The search areas derived from Network #2 are considerably smaller than those from Network #1, mainly because of the increased redundancy (26 degrees of freedom) in the solution. The position of *Kormoran* is now very close to the positions given by the Germans. This large change in position is evidence of a weak solution, which is not surprising given the absence of any strong datum points. Still it is preferable to retain the objective estimates for the precision developed earlier in the paper.

Network #3

The third network has been designed to test the eye witness observations. As with Network #2 the drift vectors, Geraldton Radio longitude and *Uco* distance are also used. The assumption has been made that all witnesses observed the battle and therefore all eye witness measurements have been assigned to *Kormoran*.

The observation by I.Mallard fails the local test. After the removal of this measurement Network #3 passes both the global and local tests. The σ_0 is 0.9754 and there are 22 degrees of freedom.

This network design offers no additional measurements to *Sydney* over Network #1 and therefore the position and search area for *Sydney* are the same. The precisions of the calculated coordinates of *Kormoran* have improved over Network 1 due to the increase in

redundancy. Based on these results the eyewitness observations agree well with the drift vectors. However, without using estimates or constraints for the sighting distances of the eyewitnesses it is dangerous to make any conclusions based on this.

Network #4

The fourth network design incorporates all of the available measurements. As with Network 3 the eyewitness observations have been assigned to *Kormoran*. This network has the greatest potential to produce an optimised search area because of the relatively large number of observations.

The distance from North West Cape to *Kormoran* and the distance between *Sydney* and *Kormoran* fail the local tests before the point of diminishing returns is met. At this point the global test passes with 37 degrees of freedom and a σ_0 is close to one at 1.2084.

The results from using all the measurements are relatively close to those from Network #2 which used the drift vectors plus the German positions (see Table 9 for results). This suggests that the positions given by the Germans have higher relative weighting than the other observations in the adjustment. There is no conflict between the eye witness observations and the positions given by the Germans. This is because of the very low precisions assigned to the eye witness observations and sighting distances have not been used.

Comments on results

It is evident from the results that the solution is weak. The large variation in the coordinates and their associated quality estimates between the networks is evidence of a weakness in the datum. Unfortunately there are no sources of evidence that can reasonably be called reliable. Even if the positions given by the Germans are correct they are still only quite rough, generally only given to the nearest degree. The drift analysis is heavily dependent on having accurate knowledge about the ocean current, local winds, drift times and windages. These factors prohibit the determination of a 'tight' solution without strongly favouring individual measurements.

Due to the very small amount of evidence regarding the fate of *Sydney* the last known distance and bearing between *Kormoran* and *Sydney* (a dubious estimate at best) has a significant influence on the solution and the estimates of precision especially.

The final coordinates computed for *Sydney* and *Kormoran*, their associated precisions along the semi-major and semi-minor axis, the azimuth of the semi-major axis and the 95% confidence region are shown in Table 9.

Table 10 compares the results from Network #4 (which uses all measurements) with positions computed by other researchers. It can be seen that there are substantial variations in the positions and search areas defined by the various researchers. The position for *Kormoran* from this project is close to that estimated by a number of the other researchers. Due to the lack of information, few others have solved for *Sydney's* position. Knight and Whittaker's (2001) position for *Sydney*, resulting from an airborne

search using their KDLS technology, is markedly different from the positions derived by this project and those of other researchers.

The methodology used in constructing the networks assumed that the position for *Kormoran* represented the battle in general. Therefore, it is not surprising that the search areas for *Kormoran* are no smaller than the area covered during the battle. The search area for *Kormoran* compares very favorably to those of other researchers. Only Kirsner & Dunn (1998a) give a search area for *Sydney*, which is markedly smaller than that from Network #4. Figure 2 illustrates the relationship between the various solutions shown in Table 10.

Table 9: Summary of results from network adjustments

Adjustment	Vessel	Latitude	Longitude	Semi-Major Axis nm	Semi-Minor Axis nm	Azimuth degrees	95% Confidence Region nm^2
1	*Sydney*	28° 55' 40" S	111° 49' 28" E	39.2	35.6	79.0	26,251
2	*Sydney*	28° 51' 56" S	112° 03' 54" E	35.6	31.4	159.3	21,018
3	*Sydney*	28° 55' 40" S	111° 49' 28" E	39.2	35.6	79.0	26,251
4	*Sydney*	28° 51' 59" S	112° 03' 27" E	35.6	31.2	158.7	20,933
1	*Kormoran*	28° 10' 02" S	111° 15' 34" E	26.7	4.8	179.9	2,429
2	*Kormoran*	26° 29' 01" S	111° 11' 13" E	7.9	4.1	179.8	616
3	*Kormoran*	27° 49' 59" S	111° 15' 39" E	18.0	4.8	179.3	1,633
4	*Kormoran*	26° 30' 55" S	111° 10' 20" E	7.6	4.1	179.1	592

Table 10: Comparison of project results with other researchers

Solution	Vessel	Latitude	Longitude	σ Latitude nm	σ Longitude nm	Area Nm^2
This project	*Sydney*	28° 51' 59" S	112° 03' 27" E	35.0	31.8	20,933
This project	*Kormoran*	26° 30' 55" S	111° 10' 20" E	7.62	4.1	592
Hughes (1991)	*Kormoran*	26° 30' 00" S	111° 30' 00" E	-	-	7,853[1]
Kirsner (1991)	*Kormoran*	26° 06' 00" S	111° 24' 00" E	-	-	320
McDonald (1991)	*Kormoran*	26° 22' 00" S	112° 28' 00" E	-	-	11,310[2]
Penrose & Klaka (1991)	*Kormoran*	26° 40' 00" S	110° 30' 00" E	-	-	-
McCormack & Steedman (1991)	*Kormoran*	26° 40' 00" S	110° 40' 00" E	-	-	-
Kirsner & Hughes (1993)	*Kormoran*	26° 17' 00" S	111° 22' 00" E	21.9	9.0	2,070
Kirsner & Dunn (1998a)	*Sydney*	-	-	-	-	707[3]
Kirsner & Dunn (1998a)	*Kormoran*	26° 15' 00" S	111° 00' 00" E	-	-	78[4]
Knight and Whittaker (2001)	*Sydney*	29° 58' 24" S	112° 48' 25" E	-	-	3[5]
Knight and Whittaker (2001)	*Kormoran*	28° 38' 15" S	113° 22' 15" E	-	-	3[6]

[1] Based upon a 50 nautical mile radius
[2] Based upon a 60 nautical mile radius
[3] Based upon a radius of 15 nautical miles
[4] Based upon a 5 nautical mile radius
[5] Based on debris field 3 x 3.5km found by KDLS
[6] Based on debris field of $10km^2$ found by KDLS

Two factors must be taken into consideration when assessing the validity of the solution presented in this report.

1. This project, unlike solutions provided by other researchers, has assigned precisions to each of the measurements. This allows for variation resulting from errors in human memory, climatic processes or positioning procedures to be taken into consideration.
2. The solution is completely dependent on the measurements that are used. One notable shortcoming in the measurements used by this project is that the sighting distance of the eye witnesses has not yet been considered.

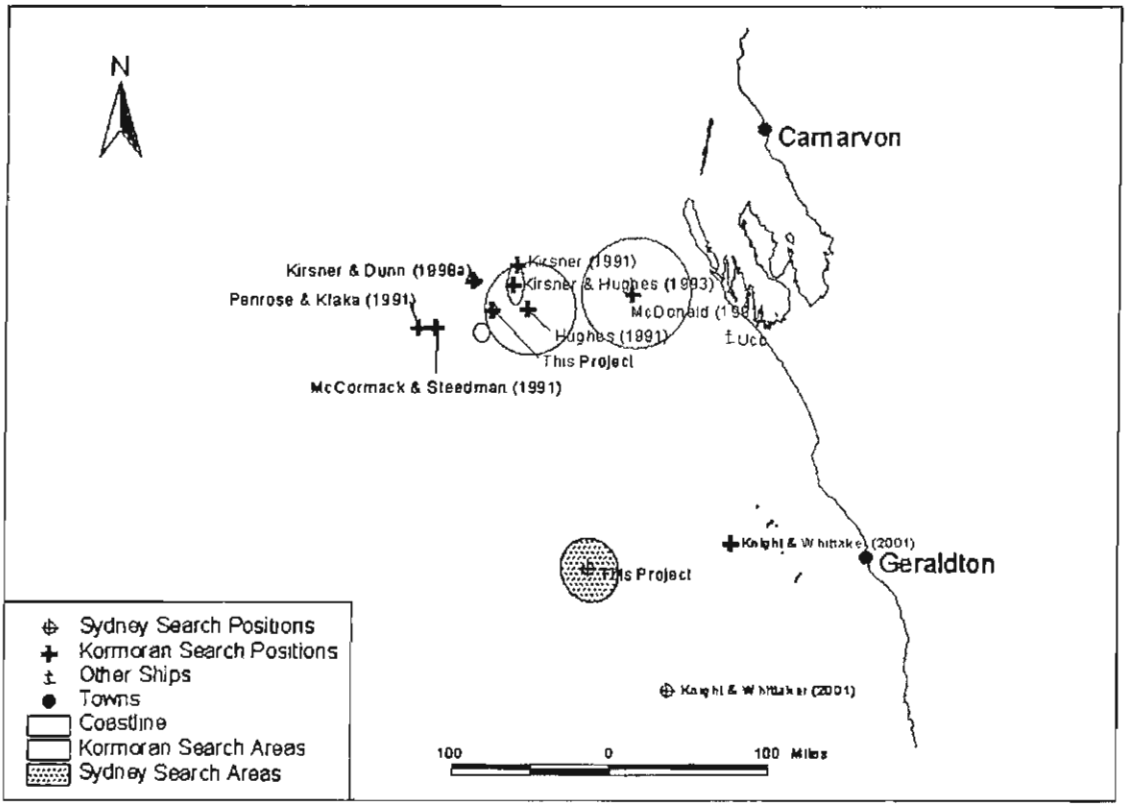

Figure 2: Comparison of solutions by various researchers

Conclusion

This project has attempted to determine a best estimate of the search area for HMAS Sydney and HSK Kormoran by:

- Collecting available evidence suitable for use in a survey network.
- Developing quantitative estimates of the uncertainty contained in each of the items of evidence.
- Performing drift analysis on all suitable debris found during the search and rescue.
- Designing a series of least squares based survey networks to test the weighted measurements and create 95% confidence region search areas.

This project has shown that survey networks have great potential in the definition of search areas for shipwrecks. However, the results produced by the project are by no means final, as not all factors have been taken into consideration (see Further Research). However, the research method developed by this project is deemed to be worthy of further development.

Further Research

Throughout this project, a number of limitations and areas for improvement have been identified. These ideas for further research are listed below.

1. Development of more realistic weights for the observations. The errors in the measurements are not necessarily random, also some measurements (especially the drift vectors) are correlated.
2. The visible horizon of other ships in the vicinity (eg *Uco*) may be used to reduce the search areas.
3. Sighting distances could be incorporated as part of the eye witness observations as constraints. The distance would be a function of visibility, height and what was being seen (smoke or flashes). The intensity of the flash would also be a determining factor in the sighting distance.
4. More measurements could be identified.

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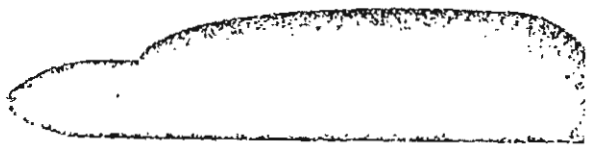

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RESEARCH REPORT 58

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Ocean and atmosphere under one roof at Flinders University

DRIFT EVIDENCE FOR THE LOCATIONS OF HMAS SYDNEY AND HSK KORMORAN

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RESEARCH REPORT 58

ABSTRACT

The method of analysis of the recoveries of 198 drift cards, from nine release positions in the Geelvink Channel, Western Australia, and adjacent waters in November 1998, has been used to hindcast the source of debris which was reported in oral history to have washed ashore at Shoal Point on about November 23 1941. It appears that the debris, which notably included a lifeboat, could have been transported from an origin south south-west of the Abrolhos Islands on about November 20 1941, approximately the date on which HMAS Sydney is believed to have sunk.

On the basis of this possibility, the drift of debris recovered in the Indian Ocean following the battle between HMAS Sydney and HSK Kormoran has also been examined using a state-of–the-art representation of the velocity profiles in air and water adjacent to the sea surface, and published estimates of the wind field during the transit of the debris. This analysis indicates an approximate origin for the debris to the west of the Abrolhos Islands, which implies that HSK Kormoran sank near this location.

The two analyses therefore support the oral history reports of a sea battle having occurred in this region, and eyewitness accounts that HMAS Sydney was subsequently seen tracking southwards.

PREFACE

An analysis of the drift of floating debris is a useful method for locating their origin, however it is necessarily imprecise because of the uncertainties in the knowledge of the wind and the ocean current and wavefield during the drift transit, and also of the windage of the drifting objects. In this paper, we use this method to obtain estimates of the locations of the sinking of HMAS Sydney and of HSK Kormoran, and bearing in mind the uncertainties, the accuracy of the transits is almost certainly better than a factor of two, but unlikely to be better than 10%. Part 1 of the paper describes a drift card experiment in the Geelvink Channel off of Western Australia, which was initiated by the author at the suggestion of Ms Glenys McDonald in order to assess the most likely drift track for debris which washed ashore near Shoal Point in Western Australia, probably on 23 November 1941. The team was augmented by Ms Ros Page and Dr Barry Severne at the planning stage, and the costs were divided equally between all four members. It is a pleasure to acknowledge everyone who reported the finding of the drift cards, whether by telephone, letter or in person, and without whom the drift study would not have been possible. The reports are summarized in Appendix 1.1

The deductions made from the drift experiment are discussed in a wider context in Part 2 of the paper, which focuses on the drift of debris in the Indian Ocean, which were recovered after the battle between HMAS Sydney and HSK Kormoran. The author is very grateful to Lieutenant Colonel T. Warren Whittaker for initiating this part of the study, and there are several references to a companion paper (Whittaker, 2000) in which many Charts and Tables,

especially relevant to the conclusions reached in Part 2, may be found, and also an extended discussion on the capabilities of the Knight Direct Location System (KDLS) for precisely locating the positions of HSK Kormoran and HMAS Sydney.

PART 1

THE 1998 GEELVINK DRIFT CARD EXPERIMENT: INFERENCES FOR THE LOCATION OF THE SINKING OF HMAS SYDNEY

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1.1 Introduction

Part 1 of this Report describes an experiment to provide data, which can be used to simulate the drift current field in the neighbourhood of Shoal Point, Western Australia, where it has been reported that debris, possibly from HMAS Sydney, washed ashore on about November 23 1941 (McDonald,1997).

In the experiment, 700 drift cards were released by Mss Glenys McDonald and Ros Page from an aircraft on November 21 1998 in batches of 100 at seven release points in the Geelvink Channel (Figure 1.1), and 230 drift cards were released offshore at the inferred source of sound and light in November 1941 (Bye and Byron-Scott, 1997). Another batch of 230 cards was released about a week later by boat, south of the Abrolhos Islands (Table 1.1).

The drift cards were of blue polypropylene sheet of size 75 x 90 mm, and of thickness 0.8 mm, and were made by Sign and Print, Windsor Gardens, South Australia. The inscription was in white lettering (Figure 1.2). In the course of the experiment it was found that the lettering on some cards lifted off in the water, for example as shown in Figure 1.2(b). The excellent recovery of cards from four of the releases, however, suggests that this occurrence was not a major problem. The cards were individually numbered from 1 – 1200, of which 1160 were released (Table 1.1).

Here, we present the results of the analysis of the recoveries of the cards from the releases (Section 1.2), and comment on the possible origin of the debris found near Shoal Point in 1941, as recorded by oral history (McDonald, 1997) (Section 1.3). The analysis uses wind data for November 1998 and November 1941, obtained from the Bureau of Meteorology (Bur. Met., 1999), and also climatic wind data for the region (Pearce,1997).

Appendix 1.1 lists the reports of the 198 drift cards recovered, which represent 17% of the cards released.

1.2 Results of the drift card experiment

The drift statistics are summarized in Table 1.1. Figure 1.1 shows the predicted tracks of the drift cards using the wind data. The wind direction during the transits of the drift cards in the Geelvink Channel was initially from the south-west, but from November 23, the wind blew strongly from the south at a speed of about 8 m/s (Table 1.2).

The drift analysis uses the three-hourly wind file for Geraldton Airport, but also takes account of the variation of wind velocity across the Geelvink Channel in Table 1 of Pearce (1997), see Appendix 1.2. The wind data for the period (1990-1995) indicate that for the third week of November, the average wind speed increases from 3.9 m/s (3.3 m/s towards North and 2.0 m/s towards East) at Geraldton Airport to 6.3 m/s (5.8 m/s towards North and 2.6 m/s towards East) at Rat Island in the Abrolhos Islands, i.e. by a factor of 1.6, and the wind direction backs by 7^{0}. A qualitatively similar pattern in the wind field can also be seen in climatic atmospheric pressure charts, e.g. Geiger (1963).

The recovery rates for the drift cards from the four releases (1, 2, 6 and 7) are extremely high, and the minimum speeds of the drift cards, assuming the shortest-istance track, range from 23 cm/s for Release 2, to 7 cm/s for Release 7 (Table 1.1), but the tracks for Releases 1, 6, and 7 are very short (Figure 1.1). The tracks were forecast using wind data for the period (1500, 21 November 1998 – 2100, 28 November 1998). It is apparent that wind drift mainly accounts for

the trajectories from these releases, although for the longest track (Release 2), the addition of an along channel ocean current of 4 cm/s is required for a good match with the observations. The other tracks are too short for the possible existence of an ocean current to be considered. The windage (Table 1.1) of the drift card,

$$W = \text{object speed / wind speed}$$

in which the 'object speed' is the difference in the drift speed of the card and the ocean current speed, see Section 2.2, has the mean value, $W = 0.021$. Note that throughout this Report, the wind and the ocean current are assumed to be collinear, since the precision of the meteorological and oceanographical data is hardly sufficient to distinguish any differences in direction.

We thus have a simple picture in which there is a north-north east circulation, which is mainly driven by local winds. Two drift cards from Release 1, however had a more adventurous voyage, being recovered, respectively, north of Mandurah on 31 May 1999, and south of Bunbury on 14 June 1999, appropriately by Mr Buzzercard (Appendix 1.1). These transits were almost certainly due to advection by the Leeuwin Current which runs strongly in the Autumn and Winter seasons (Pearce, 1997). The distributions from Releases 2, 6 and 7, however, are remarkably static over the length of the experiment, with reports from approximately the same location occurring several months after the initial recoveries. There are only three recoveries from the other releases (Table 1.1). The lack of reports from Releases 3, 4 and 5 probably indicates that the ocean current advected the drift cards Equatorward and offshore of Shoal Point. The low speed (2 cm/s) of the two cards from

Release 5 found near Kalbarri (Appendix 1.1) may be due to the time elapsed before the drift cards were found. There is also a single recovery from Release 9, from which a slow Equatorward drift through the Abrolhos Islands is inferred, possibly also aliassed by the isolation of Long Island, where the card was found (Appendix 1.1). No recoveries were reported from Release 8, which occurred at the sound and light position estimated in Bye and Byron-Scott (1997).

1.3 Implications for the drift of debris from the sinking of HMAS Sydney

The aim of the drift experiment was to infer drift patterns in the Geelvink Channel, in particular near Shoal Point in November 1941, where debris, which included a large grey lifeboat, a tin of cabbage, a new tyre on a rim, a tank of kapok, canvas kapok–filled lifebelts, and a tin of methylated spirits, was reported to have washed ashore a few days after sound and light had been observed out at sea (McDonald,1997). This group of debris, however, was likely to have travelled somewhat differently to the drift cards due to the differences in wind field between November 1998 and November 1941, and also to differences in windage (W) of the debris relative to the drift cards.

The wind during the period November 20 –22 1941 was mainly from the south south- west at a speed of about 5 m/s (Table1.2) in contrast to the period November 21-25 1998, in which the wind blew mainly from the south at a speed of about 8m/s. The 1941 wind field at Geraldton Airport, however, differs significantly from the wind field in the open ocean, which has been

hindcast to have a speed of about 10 m/s from the south south-east over the same period, see Whittaker (2000). This increase in wind speed and backing in direction over the open ocean relative to Geraldton Airport are consistent with the trend in the mean wind field for the third week in November between Geraldton Airport and Rat Island, discussed in Section 1.2.

We now hindcast the track for the arrival of debris at Shoal Point using the same method as in Section 1.2 (see Appendix 1.2), and wind data for the period (1200, 23 November 1941 - 0600, 20 November 1941). Two windages, see Section 2.3, will be investigated which correspond respectively to a lifeboat (W = 0.09), and a rubber raft (W = 0.12), which is used to illustrate a higher windage trajectory. The tracks (Figure 1.3) indicate an approach from the south south-west until about 15 hours out from Shoal Point, when there is an abrupt change in direction to approximately parallel to the coast. This scenario is consistent with the approach of a lifeboat/rubber raft from the open sea south of Geraldton, which on arrival in the shallow coastal zone near Shoal Point may have been broached, spilling its contents to float ashore (McDonald, 1997). It seems unlikely, in view of the motley collection recovered, that the debris could have traveled as a group from a distant source.

The lifeboat and lifebuoy trajectories both pass close to the Zeewyk Channel and the Pelzart Group of the Abrolhos Islands, but, since the wind rose has only 16 directions (Table 1.2) and only a weak and uniform ocean current is included, the analysis can only be expected to hindcast a generalized track especially in the vicinity of the Abrolhos Islands where ocean current speeds may be significant (Pearce, 1997). At 0430 on November 20 1941 when the simulation ended, the respective track coordinates are $29^0 30'S$, $113^0 40'E$ and $30^0 10'S$,

$113^0 30'$E. These positions suggest that the debris arriving at Shoal Point could have had an origin in the vicinity of 29 ½ ^{0} S, 113 ½ ^{0}E, about, or a short time after, 0430 on November 20 1941, possibly as the result of the sinking of HMAS Sydney. On the basis of ' the hook' in the trajectories (Figure 1.3), it is also conjectured that debris of lesser windage, including the Carley float which was recovered at Christmas Island (if it was launched at the time of the sinking), may have drifted away in the Indian Ocean before reaching the Abrolhos Islands.

1.4 Conclusion

The drift analysis presented in Section 1.3, which suggests that HMAS Sydney sank in the vicinity of 29 ½ ^{0} S, 113 ½ ^{0} E, taken in the context of reports by eyewitnesses that HMAS Sydney, severely damaged, was last seen tracking southwards from the site of the encounter with HSK Kormoran (Detmers, 1959), suggests that the battle between the two vessels occurred to the west of the Abrolhos Islands. Hence HSK Kormoran, which was sunk close to the battle site, should be located in the vicinity of 28 ½ ^{0} S, 113 ½ ^{0} E, rather than near 26 ½ ^{0} S, 111^0 E (Detmers, 1959).

It is interesting that the separation in the location of the two ships, according to this reconstruction, resulted in essentially two different drift paths for possible survivors and debris. From the site of the battle and the site of the sinking of HSK Kormoran, the debris moved into the Indian Ocean under the influence of the open ocean wind field, whereas from the site of the

sinking of HMAS Sydney, which occurred somewhat later and further to the south, the more easterly trending wind field under a continental influence, advected the debris towards the coast of Western Australia near Shoal Point.

In Part 2 of this paper, we consider the open ocean drift to examine whether there is independent evidence for the battle between HMAS Sydney and HSK Kormoran with the subsequent sinking of HSK Kormoran, having occurred to the west of the Abrolhos Islands.

Appendix 1.1 Reports of recoveries of the drift cards

Card Nos.	Recovery date	Recovery location
RELEASE 1 28^0 50′ S, 114^0 30′ E	**21.11.98 1430**	**01101 –01200**
01167,01172	22.11.98 0830	½ km N of Pt Moore - PETER BUDD
01162,01179	23.11.98 1215	S of Drummond Cove - ROBERT HANCOCK
01160	23.11.98	Geraldton Hbr entrance - JOHN STONER'S SON
01109	25.11.98 pm	Glenfield Beach - FRANK HOOK
01153	22.11.98 1030	Geraldton Hbr entrance - PAUL SPADER
01175	05.12.98 0800	Glenfield Beach - EDDIE SHIEL
01116,01168,01120	05.12.98 0800	3km N of Coronation Bch - JANINE MORGAN
01147	22/23.11.98	100m N of Coronation Bch - ANDREW LANG
01153	22.11.98 1030	Geraldton Hbr entrance - PAT SPADER
01107,01110,01114,01185,01139,01108	24.11.98	Coronation Beach -
01157,01187,01194	29.11.98	Drummond Cove - D.TAYLOR
01128	07.12.98	Coronation Beach -

01145	12.12.98	S of S.bend Duncan Bch - MRS WRAGG
01125	30.12.98	Coronation Beach - LOUIS PALLAVIANI
01130	09.01.99	Coronation Beach - HAMISH DARBY
01105	29.03.99	1km S of Bowes R. - G.WHITE
01149	03.04.99	3km N of Coronation Bch - IAN BURROUGHS
01123	28.05.99	Coronation Beach - COLIN CLARKE
01129	31.05.99	Singleton 14km N of Mandurah - KEN HOLMAN
01178	02.06.99 1700	1km S of Drummond Cove - ANDY BLEACH
01146	25.01.99	S.Coronation Bch - JOAN REDDEL
01115	13.10.99	Sunset Beach - G.INGHAM
01102	11.07.99	1km N of Sunset Bch - IAN BURGES
01142	14.06.99	S of Bunbury - PETER BUZZERCARD
01122	19.06.99	Tarcoola Beach - GLENYS McDONALD

RELEASE 2 28^0 55'S, 114^0 25'E 21.11.98 1440 00601-00700

00602,00604,00606,00609,00610,00608,00611,00612,00616,00620,00621,00624,00626,00627
,00628,00629,00630,00631,00635,00636,00638,00639,00640,00644,00645,00646,00647,0065
0,00651,00652,00653,00655,00657,00659,00660,00663,00664,00665,00671,00688,00673,006
77,00680,00686,00689,00690,00693,00694,00695,00696,00697,00698,00699,00700

	25.11.98	Between Nobby's Hole & Hutt R - BARRY SAWYERS
00617	18.12.98 1000	Port Gregory jetty - ALEN WILLIAMS

00605,00692	26.11.98	Nobby's Hole	-
00681	26.11.98	1km N of Pt Gregory jetty	- CHRIS VALE
00607,00654	27.11.98	N of Hillock Point	-
00662	-	1km N of Pt. Gregory jetty	-
00612	24.11.98	Coronation Beach	-

RELEASE 5 $28^0$40′, 114^0 15′E 21.11.98 1453 00801-00900

00894,00807	12.03.99	89km N of Murchison R,Kalbarri	- DOM LAMERA

RELEASE 6 $28^0$28′S, 114^0 14′E 21.11.98 1458 00101-00200

00102,00105,00106,00107,00109,00110,00112,00114,00118,00119,00122,00126,00128,00129

,00130,00131,00134,00137,00138,00139,00140,00143,00144,00145,00148,00151,00158,0016

2,00163,00171,00176,00182,00185,00186,00187,00188,00189,00190,00191,00194,00195,001

96,00197

	24.11.98	5km N of Pt Gregory jetty, 2km S of Nobby's Hole	- BARRY SAWERS
00157	03.12.98	Nobby's Hole	- ALEN WILLIAMS

00127,00133,00136,00149,00156,00161,00164,00171,00178,00174

	24.11.98	1km N of Hillock Point	- TONY HOWE, VERN BROWN
00175	-	2km N of Pt Gregory jetty	- CHRIS VALE

00100	05.01.99	1km S of Pt Gregory jetty	- PAULINE GUMMERY

RELEASE 7 $28^0$17'S, 114^0 13'E 21.11.98 1503 00001-00100

00059	23.11.98 0730	just N of Nobby's Hole	- VERN BROWN
00003,00031,00073			
	24.11.98 am	just N of Nobby's Hole	- VERN BROWN
00017,00082,00001,00025			
	24.11.98 am	Nobby's Hole	- VIC IRELAND
00005	08.12.98 1000	Nobby's Hole	-GRAHAM HUMPHREYS
00007,00008,00033,00067,00074			
	24.11.98	Nobby's Hole	- BARRY SAWERS
00010,00026,00053,00070,00078			
	03.12.98 1000	Nobby's Hole	- ALEN WILLIAMS
00020	03.12.98 1700	Nobby's Hole	- PHILLIP TAYLOR'S SON, AARON
00087	03.12.98 1700	N of Nobby's Hole	- PHILLIP TAYLOR'S SON, AARON
00097	16.12.98 1500	Port Gregory jetty	- CAROL WILLIAMS
00027	07.12.98	1km S of Nobby's Hole	- VIC ANDERSON
00037,00059,00080			
	27.11.98	N of Hillock Point	-

00009,00014,00016,00022,00030,00032,00036,00041,00064,00089,00091

	02.12.98 am	Port Gregory	-
00083	03.12.98	Nobby's Hole	-
00043	12.03.98	Port Gregory jetty	- MICHAEL DOYLE
00090	22.07.99	3km S of Pt Gregory	- S.J.BROOKER
00098	31.07.00	Port Gregory beach	- ALLAN KEY

RELEASE 9 $29^0 30'S$, $113^0 54'E$ - 701-800, 501-600, 1001-1030

00577	29/30.03.99	S Gap(?), Long I. Abrolhos Islands	- KEVIN PARSON

Appendix 1.2 Drift tracking

The drift tracks were constructed using the three-hourly wind file for Geraldton Airport, applied to the Geelvink Channel. Using the comparison between the winds at Geraldton Airport and Rat Island, the wind fields across the Geelvink Channel were estimated using the formula,

$$U = U_0 \ (1 \ + 0.004 \ X \ )$$

$$V = V_0 \ (1 + 0.01 \ X \ ) \qquad (A1)$$

where U and V are the cross channel and along channel wind components, U_0 and V_0 are the corresponding wind components at Geraldton Airport, and X is the distance offshore in km, and the channel axis lies along 337.5^0. Using Equation (A1) drift trajectories were constructed for a specified windage (W) using the drift speed components,

$$u = U \ W$$

$$v = V \ W \ + \ v_0 \qquad (A2)$$

in which v_0 is the along channel ocean current. In the simulation of the drift for Release 2 in Section 1.2, v_0 = 4 cm/s, and this value was also used in the Shoal Point debris drift simulation (Section 1.3). Note however that the effects of windage dominate in this simulation, so that the exact value of v_0 is unimportant. For the drift experiment (Section 1.2) forward tracks were obtained, and for the debris field backward tracks were derived from an origin at Shoal Point (Section 1.3).

TABLE 1.1 Release data and windage used in the predicted trajectories in Figure 1.1, and also the drift speed and the percentage recovery for each release

Release	Position S	Position E	Card numbers	Date (21 11 98)	Percentage recovery (%)	Windage (W)	Drift speed (cm/s)
1	28 50	114 30	101-1200	1430	36	0.027	0.14
2	28 55	114 25	601-700	1437	62	0.021	0.23
3	29 00	114 17	901-1000	1446	0	-	-
4	28 50	114 16	401-500	1450	0	-	-
5	28 40	114 15	801-900	1453	2	-	0.02
6	28 28	114 14	101-200	1458	56	0.021	0.10
7	28 17	114 13	001-100	1503	41	0.014	0.07
8	28 00	113 30	201-400 1031-1060	1535	0	-	-
9	29 30	113 54	701-800 501-600,1001-1030	*	<1	-	0.01

W = (drift speed – ocean current speed) / wind speed

Drift speed is the speed of the first recovery measured along the shortest-distance track

* Exact date of release is unknown, approximately 28 11 98.

Position 8 is the origin of the sound and light, estimated in Bye and Byron-Scott (1997).

Meteorological Observations at GERALDTON AIRPORT

Site Number 008051 • Locality: GERALDTON • Opened Jan 1941 • Still Open • Latitude 28°47'46"S • Longitude 114°41'46"E • Elevation 33m

	Air Temperature	Relative Humidity	MSL Pressure	Wind	Rainfall	Present Weather	Past Weather
	°C	%	hPa	km/h	mm	description	description
Saturday 21 November 1998							
12 am	21.1	90	1007.2	NW 13			
3 am	20.1	93	1006.2	WNW 13			
6 am	21.3	89	1007.3	SW 15		HAZE of very small particles	Cloud unchanged or cloudless
9 am	22.8	77	1008.1	WSW 15		HAZE of very small particles	Cloud unchanged or cloudless
12 pm	23.4	71	1008.4	W 24		HAZE of very small particles	Cloud unchanged or cloudless
3 pm	23.5	60	1007.8	WSW 26		HAZE of very small particles	Cloud generally dissolving or becoming less well developed
6 pm	21.9	67	1008.5	SW 24		HAZE of very small particles	Cloud generally dissolving or becoming less well developed
9 pm	19.5	69	1009.9	WSW 17			
Sunday 22 November 1998							
12 am	19.0	68	1009.4	WSW 15		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
3 am	17.9	76	1008.5	WSW 9		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
6 am	20.1	72	1009.3	SW 21		Cloud forming or developing	Cloud unchanged or cloudless
9 am	22.8	54	1010.5	SSW 24		Cloud unchanged or cloudless	Cloud unchanged or cloudless
12 pm	24.5	49	1010.2	SW 28		Cloud forming or developing	Cloud generally dissolving or becoming less well developed
3 pm	22.3	59	1009.7	SW 31		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
6 pm	20.5	62	1010.9	SSW 30		Cloud unchanged or cloudless	Cloud unchanged or cloudless
9 pm	18.6	69	1011.9	S 17			
Monday 23 November 1998							
12 am	18.7	63	1011.8	S 18		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
3 am	18.2	65	1011.2	S 15		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
6 am	16.2	70	1012.9	SE 17		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
9 am	22.5	44	1014.0	S 31		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
12 pm	24.0	41	1012.4	S 35		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
3 pm	23.5	44	1011.3	S 42		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
6 pm	21.2	58	1011.5	S 39		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
9 pm	19.5	72	1012.9	S 31			
Tuesday 24 November 1998							
12 am	18.9	73	1012.7	S 26		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
3 am	15.7	85	1012.4	SE 17		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
6 am	14.5	89	1013.4	SSE 11		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
9 am	22.3	48	1013.4	S 30		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
12 pm	23.7	45	1012.0	S 28		Cloud forming or developing	Cloud generally dissolving or becoming less well developed
3 pm	23.7	48	1010.6	SSW 28		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
6 pm	20.8	60	1010.1	SSW 30		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
9 pm	19.0	66	1010.9	S 24		Cloud forming or developing	Cloud generally dissolving or becoming less well developed

TABLE 1.2 Meteorological observations for Geraldton Airport for the periods 21-28 November 1998, and 15-28 November 1941.

Site Number 008051 • Locality: GERALDTON • Opened Jan 1941 • Still Open • Latitude 28°47'46"S • Longitude 114°41'46"E • Elevation 33m

	Air Temperature	Relative Humidity	MSL Pressure	Wind	Rainfall	Present Weather	Past Weather
	°C	%	hPa	km/h	mm	description	description
Wednesday 25 November 1998							
12 am	18.3	67	1010.3	S 24		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
3 am	17.2	66	1008.9	S 18		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
6 am	18.6	57	1009.2	S 21		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
9 am	22.3	39	1010.1	SSW 26		Cloud unchanged or cloudless	Cloud unchanged or cloudless
12 pm	21.3	41	1010.6	WSW 30		Cloud unchanged or cloudless	Cloud unchanged or cloudless
3 pm	20.9	47	1010.3	SSW 33		Cloud unchanged or cloudless	Cloud unchanged or cloudless
6 pm	19.5	57	1010.6	S 30		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
9 pm	19.0	65	1012.3	S 26			
Thursday 26 November 1998							
12 am	17.0	82	1012.3	SSE 11	0.0	Cloud unchanged or cloudless	Slight RAIN SHOWER
3 am	15.4	87	1012.5	ESE 17	1.0	Distant PRECIPITATION reaching the ground more than 5km away	Slight RAIN SHOWER
6 am	13.9	87	1014.9	SE 11		Distant PRECIPITATION reaching the ground more than 5km away	Cloud generally dissolving or becoming less well developed
9 am	20.3	44	1016.8	S 33		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
12 pm	22.9	30	1015.5	S 33		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
3 pm	22.2	41	1014.7	S 41		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
6 pm	19.2	54	1015.3	S 48		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
9 pm	17.3	57	1017.1	SSE 35		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
Friday 27 November 1998							
12 am	14.1	56	1017.2	SSE 26		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
3 am	10.2	70	1016.2	ESE 8		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
6 am	9.3	74	1016.8	SE 11		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
9 am	23.8	15	1016.1	E 31		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
12 pm	30.0	9	1013.7	E 22		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
3 pm	26.4	26	1011.8	S 42		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
6 pm	22.0	57	1011.0	S 35		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
9 pm	19.8	70	1011.3	S 31			
Saturday 28 November 1998							
12 am	17.8	74	1010.2	SSE 13			
3 am	15.6	69	1008.0	SSE 13			
6 am	16.3	63	1008.3	SSE 8		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
9 am	26.3	39	1008.4	SSW 18		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
12 pm	27.3	44	1008.4	SSW 26		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
3 pm	25.2	52	1008.7	SSW 31		Cloud unchanged or cloudless	Cloud generally dissolving or becoming less well developed
6 pm	20.9	70	1010.4	S 33		Cloud unchanged or cloudless	Cloud unchanged or cloudless
9 pm	19.8	75	1012.7	S 24			

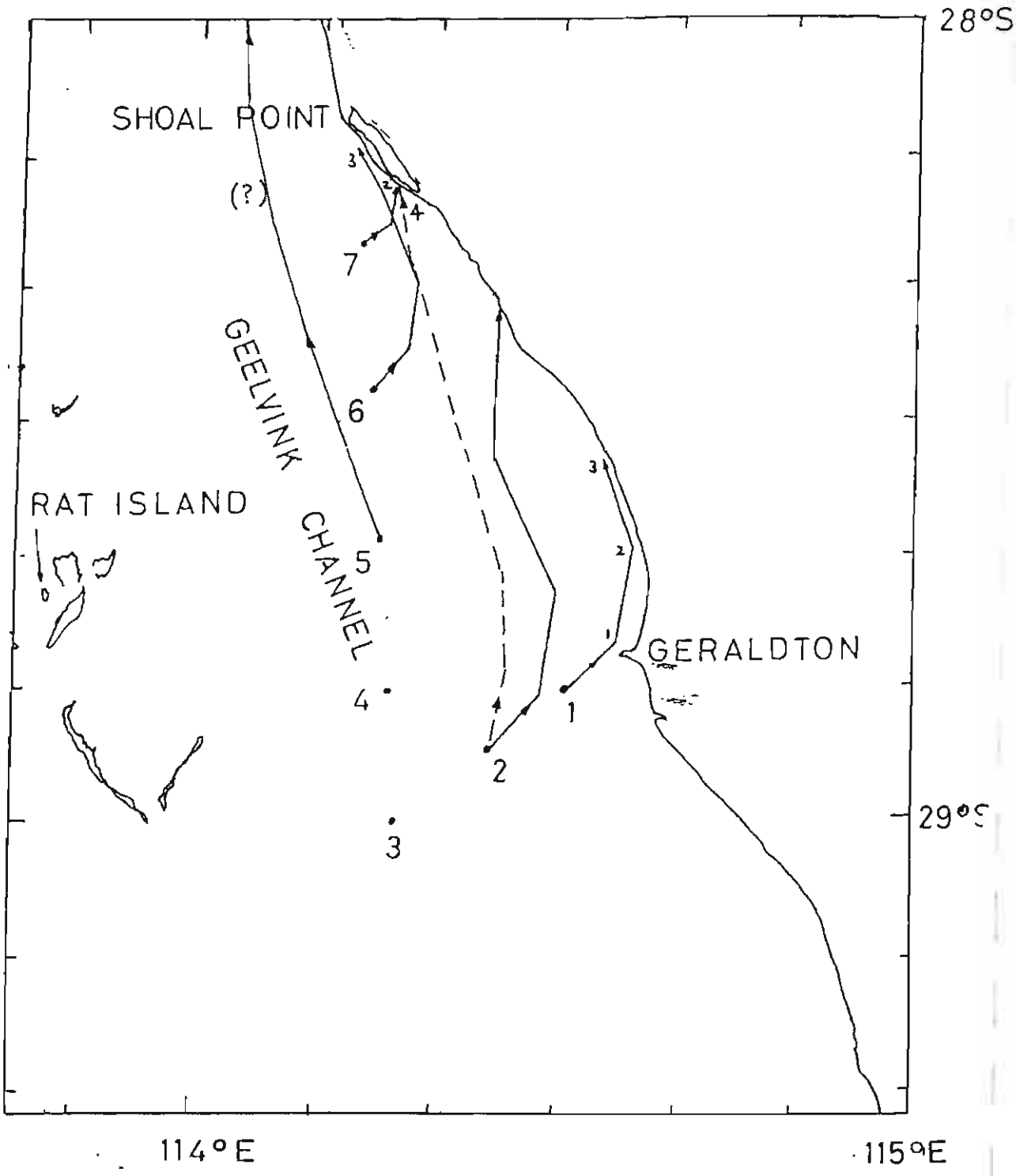
Meteorological Observations at GERALDTON AIRPORT

Site Number 008051 • Locality: GERALDTON • Opened Jan 1941 • Still Open • Latitude 28°47'46"S • Longitude 114°41'46"E • Elevation 33m

	Air Temperature	Relative Humidity	MSL Pressure	Wind	Rainfall	Present Weather	Past Weather
	°C	%	hPa	km/h	mm	description	description
Saturday 15 November 1941							
6 am	18.6	96		NNW 4		HAZE of very small particles	
9 am	24.1			NNW 33			
12 pm	25.2	64		NW 33		HAZE of very small particles	HAZE of very small particles
3 pm							
Sunday 16 November 1941							
6 am	19.6	85		NNW 24		HAZE of very small particles	
9 am	19.2			W 17			Slight continuous RAIN
12 pm	20.1	77		WNW 17		HAZE of very small particles	HAZE of very small particles
3 pm	21.3			WNW 17		HAZE of very small particles	HAZE of very small particles
Monday 17 November 1941							
6 am	16.0	77		WSW 24			
9 am	19.9			WSW 24			Slight continuous RAIN
12 pm	21.7	58		W 24			
3 pm	22.2			WSW 24			
Tuesday 18 November 1941							
6 am	17.5	91		W 9			
9 am	20.6			SW 17			
12 pm	23.8	62		SW 17			
3 pm	24.0			S 24			
Wednesday 19 November 1941							
6 am	11.1	93		E 9			
9 am	19.3			SSE 9			
12 pm	24.4	56		SSW 17			
3 pm	23.8			SW 24			
Thursday 20 November 1941							
6 am	12.2	99		E 4			
9 am	22.7			SSE 17			
12 pm	27.5	60		SSW 17			
3 pm	25.8			SW 24			
Friday 21 November 1941							
6 am	14.9	99		SSE 4			
9 am	23.6			S 24			
12 pm	25.6	71		SSW 24			
3 pm	24.7			SW 24			

Site Number 008051 • Locality: GERALDTON • Opened Jan 1941 • Still Open • Latitude 28°47'46"S • Longitude 114°41'46"E • Elevation 33m

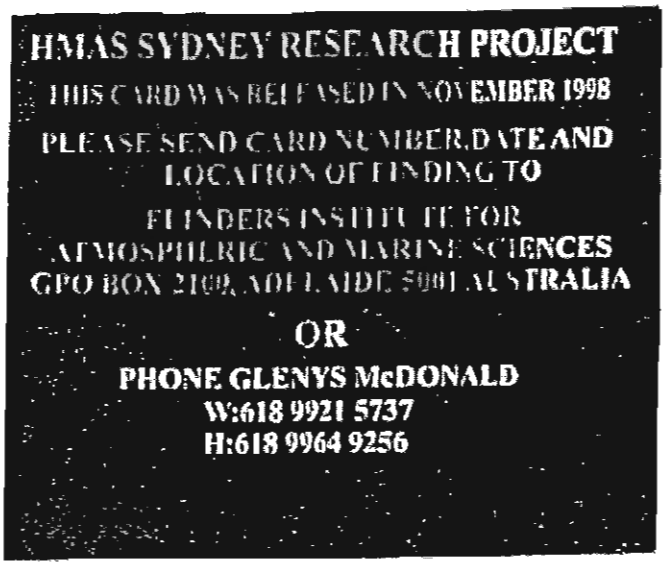
	Air Temperature	Relative Humidity	MSL Pressure	Wind	Rainfall	Present Weather	Past Weather
	°C	%	hPa	km/h	mm	description	description
Saturday 22 November 1941							
6 am	18.1	88		SSW 24			
9 am	21.7			SSW 24			
12 pm	23.3	60		SSW 24			
3 pm	22.7			SW 30			
Sunday 23 November 1941							
6 am	15.0	82		SE 13			
9 am	20.3			SSE 26			
12 pm	24.0	61		S 24			
3 pm	23.3			SSW 33			
Monday 24 November 1941							
6 am	13.2	81		Calm			
9 am	21.3			SSE 24			
12 pm	26.9	66		SSW 17			
3 pm	25.2			SSW 24			
Tuesday 25 November 1941							
6 am	13.3	98		SE 9			
9 am	22.2			S 30			
12 pm	25.4	72		SSW 24			
3 pm	25.5			S 24		HAZE of very small particles	HAZE of very small particles
Wednesday 26 November 1941							
6 am	13.7	99		Calm		HAZE of very small particles	HAZE of very small particles
9 am	23.8			S 9		HAZE of very small particles	HAZE of very small particles
12 pm	24.9	79		W 17		HAZE of very small particles	HAZE of very small particles
3 pm	24.4			W 17		HAZE of very small particles	HAZE of very small particles
Thursday 27 November 1941							
6 am	17.1	93		NE 9			
9 am	22.3			NW 17			
12 pm	21.1	77		WSW 33			
3 pm	21.0			W 24			
Friday 28 November 1941							
6 am	17.3	78		S 9			
9 am	19.4			S 24			
12 pm	23.8	62		S 17			
3 pm	22.4			SSW 24			



The large numbers indicate the Release positions. The small numbers on the drift trajectories are the elapsed time in days of the first drift card report. The dashed trajectory from Release 2 includes the effect of the along channel ocean current.

Figure 1.1 The release locations and predicted trajectories of the drift cards released in the Geelvink Channel.

(a)



(b)

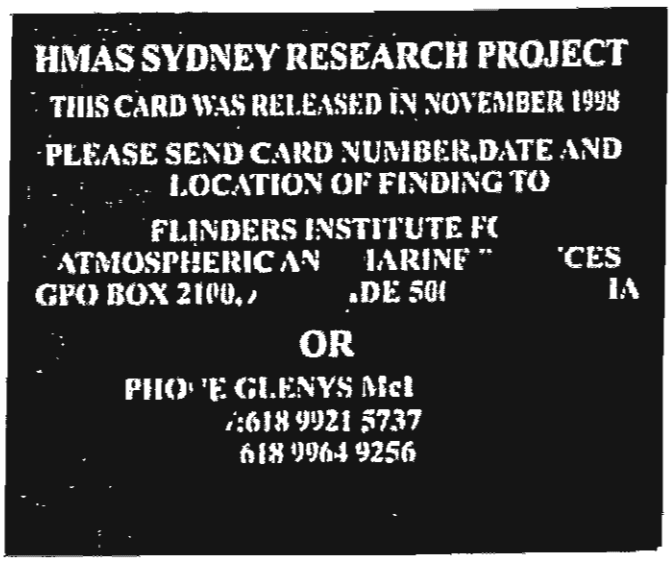
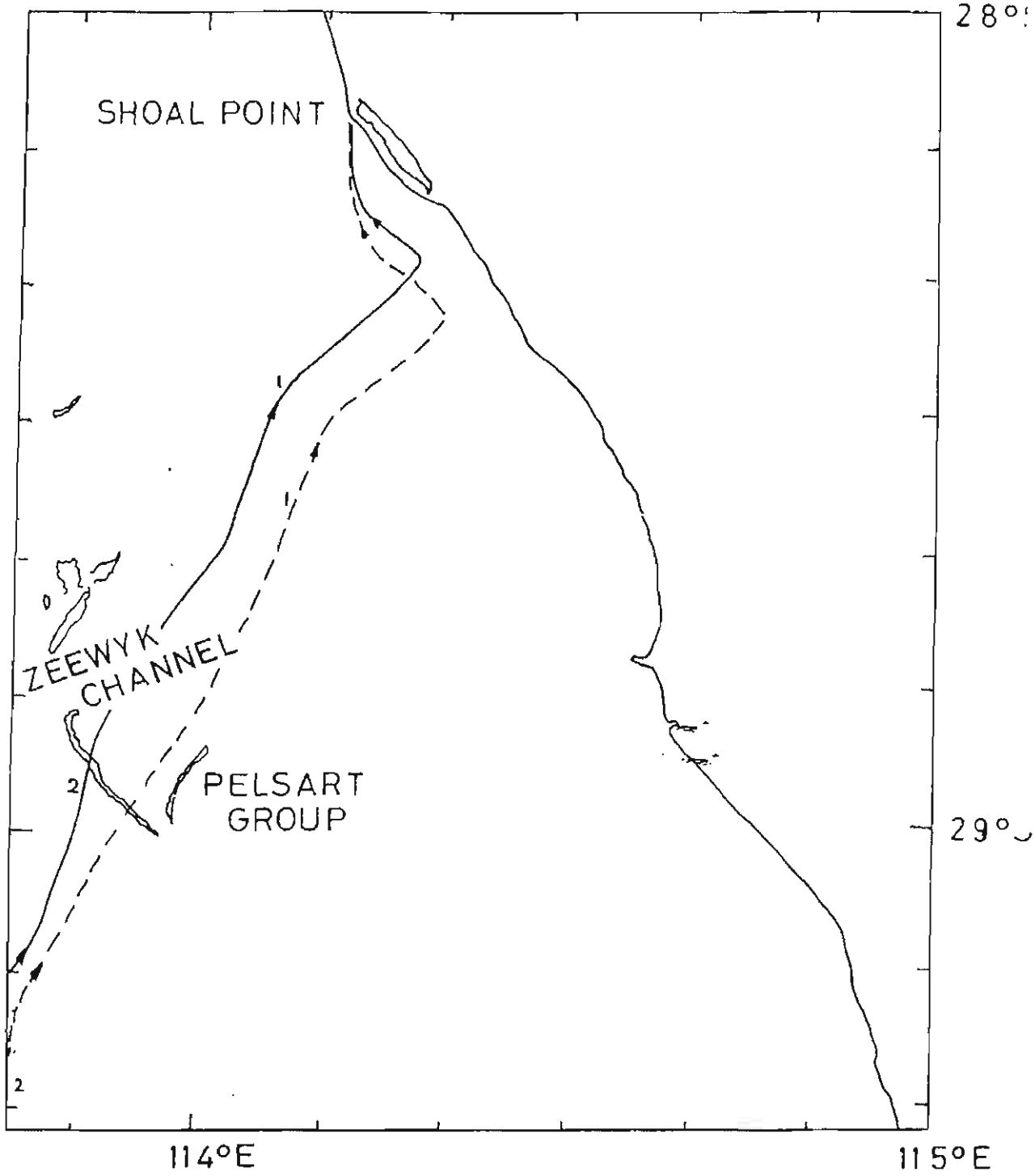


Figure 1.2 The drift cards (actual size): (a) before release, No. 00620, (b) after recovery, No. 00612.



The solid track is for a windage (W = 0.09) , and the dashed track is for a windage (W = 0.12). The numbers indicate the days out from arrival at Shoal Point.

Figure 1.3 Simulated trajectories for the arrival of a lifeboat and a rubber raft near Shoal Point on November 23 1941.

PART 2

THE DRIFT OF DEBRIS IN THE INDIAN OCEAN FOLLOWING THE BATTLE BETWEEN HMAS SYDNEY AND HSK KORMORAN

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2.1 Introduction

There have been many studies, the aim of which have been to hindcast the origin of drift objects recovered following the battle between HMAS Sydney and HSK Kormoran, see for example, Aust. Arch.(1997), which summarises the available Archival material, and Aust.Govt.(1999), which is a digest of the Nineteen Volumes of Submissions to the Inquiry into the circumstances of the sinking of HMAS Sydney, convened by the Joint Standing Committee on Foreign Affairs, Defence and Trade. The pertinent parameters are the wind and

ocean current speeds during the transit of the drifting objects, and their response to both wind and current. Unfortunately, uncertainty surrounds both these aspects of the problem.

In Part 2 of this paper, we present estimates of the drift speed for each object as a function of wind speed and current speed. The analysis uses a state-of -the art representation of the current and wind profiles near the sea surface from which, on using a simple expression for the drag of the object in the air and the water, its speed can be computed.

The method is summarized in Section 2.2, and applied in Section 2.3 to each of the recovered or observed objects. In Section 2.4, the dispersion of the objects as a group is considered, and in Section 2.5, the interpretation of the drift results is discussed. The implications for the locations of HSK Kormoran and HMAS Sydney are discussed in Section 2.6 with reference to other work, and Section 2.7 outlines the conclusions of the study.

2.2 The drift model and its calibration

The drift model is based on the experimentally determined velocity profiles in air and water shown in Figure 2.1. The mathematical formulation, which is derived in Bye (1988a), is summarized in Appendix 2.1. An important point is that in order to obtain the drift speed of the object, the speed of the ocean current, which occurs below the surface layer, influenced by the waves, is simply added to the object speed calculated from the velocity shear flow in the air and the water encountered near the sea surface. The 'object speed' takes account of both the 'leeway' and the 'wind current'.

The object speed is determined by the drag in both air and water, and the results have been computed for drag coefficients equal in both fluids, and for the drag coefficient in air being twice and quadruple that in water. This latter case occurs, for example, with a lifeboat which has a streamlined hull and a bluff shell. Figures 2.2, 2.3 and 2.4 show the object speeds in cm/s for a relative wind speed (wind speed – ocean current speed) of 10 m/s (20 knots), as a function of the height of the object in air, and its depth in water. The windage of the drifting object,

$$W = \text{object speed / wind speed}$$

e.g. for an object speed of 50 cm/s (1 knot) and a wind speed of 10 m/s (20 knots), $W = 0.05$ or 5%. The effect of increasing the air drag relative to the water drag is clearly seen. For equal drag coefficients in air and water (Figure 2.2), drifting objects of equal height above water, and depth below water have the windage, $W = 0.033$ (or 3.3%).

Before applying these results to the transit of the drift objects recovered in the search following the battle between HMAS Sydney and HSK Kormoran, it is important to compare the predictions of Figures 2.2, 2.3 and 2.4 with historic drift events where the speed of the drifting object, and the wind speed and ocean current speed during the transit are known.

(i) Drift cards

Drift cards are often used to study the surface circulation of the ocean. The results of a recent experiment in the Geelvink Channel, Western Australia, which have been described in detail in Section 1.2, indicate that the windage of the drift cards, $W = 0.021$.

In drift card experiments in the Southern Ocean (Bye,1988b), in which Circumpolar trajectories were recorded, on the other hand, the average drift speed, the average ocean current speed, and the average surface wind speed were estimated to be, respectively, 18 cm/s, 13 cm/s, and 7.5 m/s. Hence, the windage,

$$W = (0.18\text{-}0.13) / 7.5 = 0.007$$

These values of windage, which would correspond with an object of effective depth greater than its height (Figure 2.2), are due to the action of breaking waves, which cause the drift card to lose contact with the sea surface by downward jetting before resurfacing due to buoyancy. In the Southern Ocean, this effect is much more pronounced than in the Geelvink Channel, where the wavefield is much less developed. During the Indian Ocean drift experiment in which 943 drift cards were released near the site of the sinking of HMAS Sydney (Bye, 1997), the wave climate probably was intermediate between the two regions, and we will use a drift card windage, $W = 0.015$.

Using this windage, we can estimate the ocean current speed during the transit of the drift card which was recovered on the Cocos Keeling Islands on June 1 1995, with an average transit speed of 13 cm/s. On assuming an average wind speed of 5 m/s (Geiger, 1963), we find that the ocean current speed is,

$$0.13 - (0.015)\ 5 = 0.05 \text{ cm/s}$$

see Section 2.4.

(ii) Carley float

The purpose of the drift card release from near the site of the sinking of HMAS Sydney was to assess whether the Carley float found at Christmas Island (Aust. Arch. 1997) could have originated from HMAS Sydney. The recovery of a drift card on the Cocos Keeling Islands strongly supported this conclusion. It was noted however that the drift speed of the Carley float (35 cm/s) was much greater than that of the drift card (Bye, 1997). The Carley float drift speed can now be used directly to determine its windage. We find that,

$$W = (0.035 - 0.005) / 5 \quad = \quad 0.06$$

On comparing this value with Figure 2.3 (W = 0.06 corresponds to a speed of 60 cm/s in Figures 2.2 – 2.4), we see that the prediction for a drift object of the geometry of a Carley float (Ashton et al, 1993) appears to be consonant with this value. Note also that an accurate estimate of the ocean current speed is not very important for this determination of W.

(iii) Motor launch

Another interesting drift in the Indian Ocean was of a motor launch, which drifted from Ledge Point in Western Australia to Xai-Xai in Mozambique in 8 months (August 1994 – April 1995) at an average speed (assuming the most likely track) of 45 cm/s (Advertiser, 1995). For an average wind speed of 5 m/s, and assuming no net assistance from an ocean current, the windage of the motor launch would be,

$$W = 0.45 / 5 \quad = \quad 0.09$$

The results shown in Figure 2.4 for a drifting object of similar depth and height to the motor launch are reasonably consistent with this value.

In conclusion, it appears that Figures 2.2, 2.3 and 2.4 give plausible predictions for the range of drifting objects that were recovered, or observed, following the battle between HMAS Sydney and HSK Kormoran, in particular for the Carley float.

2.3 Application of the drift model to the objects recovered following the battle between HMAS Sydney and HSK Kormoran

The results to be obtained below will all assume an average wind speed of 10 m/s, and direction towards 330^0, and an ocean current of speed 10 cm/s, oriented along the wind direction. The wind estimate is based on meteorological analyses of the prevailing conditions, see Whittaker (2000), and the ocean current speed is double that estimated from the transit of the drift card released near the site of the sinking of HMAS Sydney and recovered on the Cocos Keeling Islands. This allows for the reduction in ocean current speed, relative to that occurring in the Indian Ocean off of Western Australia, which occurs on approaching the Tropics. As for the Carley float in Section 2.2, however, the ocean current speed is not very important in the estimation of the drift speed of drifting objects, controlled mainly by windage. Using these values, we will calculate the drift speed of the various drifting objects recovered by the search, which are summarized, for example, in Whittaker (2000).

(1) Carley float

The object speed of the Carley float, with a windage of 0.06 is 60 cm/s, and hence the drift speed is 70 cm/s.

(2) Lifebelts

The specifications of a modern lifering are: Mass 4.6 kg, outside diameter 60 cm, and ring diameter 15 cm (Nylex Rotomold, personal communication). From these parameters, it is easily shown that the lifering would float in seawater with a height of 13 cm above water, and a depth of 2 cm below water. On assuming equal drag coefficients for the two fluids (Figure 2.2), this configuration also leads to a windage, W = 0.06, and hence a drift speed of 70 cm/s. This is quite consistent with the Carley float and lifebelts being found in a similar location.

(3) Kennel

No data are available for the dimensions of the kennel, however it is not unreasonable that a similar windage to (1) and (2) would be applicable.

(4) Linseed oil

The observation of an almost circular patch of linseed oil of diameter about 300m (Aust. Govt., 1998) is very specific, but it is also difficult to interpret.

The mechanisms for the spread of oil on water are discussed in Hoult (1972). After a spill, initially the oil spreads inertially due to the density difference with water, then surface tension forces become important, and the speed of spreading is controlled by a balance with friction. The oil film finally obtains a maximum size at which a minimum thickness is reached, and subsequently it loses its integrity. The transition between the inertial and surface tension phases of the spreading occurs after approximately one hour, at which time the oil film would have a radius of about 400 m, see Bye (1976). To attain this stage, the oil spill would need to have a thickness exceeding its minimum viable value of $2\ 10^{-2}$ mm, and hence the volume of the spill would exceed 5000 litres. Thus, based on the above model, the observed linseed oil

patch would appear to have had a volume exceeding 5000 litres, and a recent origin, possibly only one hour beforehand.

This scenario is quite different from a drift of 200 hours duration from a distant spill, see Section 2.5. We conclude that its cause must have been distinct, but unknown, see also Section 2.4.

(5) Lifeboat

A drifting lifeboat would be expected to have a windage similar to that of motor launch. Hence, the object speed would be 90 cm/s, and the drift speed, 100 cm/s.

(6) Rubber rafts

The specifications of the rubber rafts (recovered by Aquitania and Trocas) are not known, however the height above water and the depth below water of a modern rubber boat are typically, 50 cm and 10 cm respectively, so that on assuming that the drag coefficients are similar to those of the motor launch (Figure 2.4), we obtain a windage, W = 0.13, and hence the drift speed would be 140 cm/s (2.8 knots). This estimate is probably the least certain of the set, all of which are summarized in Table 2.1.

2.4 Dispersion of the drifting objects

The dispersion of the recovered drift objects is also of interest. It was noted in Bye (1997) that the standard deviation in recovery position was consistent with the observed drift duration of 200 hours. Figure 2.5, which is reproduced from a theoretical study of surface drift (W = 0.033) in the Southern Ocean (Wolff and Bye,1998) shows a group of (virtual) drifting

objects. The alignment of the objects predicted by the theoretical study is remarkably similar to that observed in the search, assuming an upwind release, see, Chart 6 of Whittaker (2000). It is important to note also that the recovery position of the rubber rafts, and the estimated position of the lifeboat, observed earlier in the search, also lie along this upwind track. The pattern of drifting objects, therefore, is consistent with a dispersion in which the object speed dominates over the ocean current speed, i.e. for objects of high buoyancy.

A different type of pattern, often called a 'spaghetti diagram', would arise for dispersion primarily controlled by the ocean current, i.e. for objects of low buoyancy. The spaghetti diagram, which is typical of satellite tracked buoys, is primarily controlled by the eddy structure of the ocean circulation. The mean ocean current (Section 2.2) is an average over these eddy motions. Figure 2.6 shows the track of a satellite-tracked tag, which became detached from a shark on April 16 1998 (day 106) and continued transmitting until after April 1999 (John Stevens, personal communication). On November 19 1998 (day 322), by a remarkable coincidence, the tag was located at 25^0 S, 111^0 E, which is within the search area. The eddy motion in the region where the drifting objects were found, clearly shows an Equatorward mean current of a few cm/s. The linseed oil patch, which is an object of low buoyancy, would have been embedded in an eddy field similar to that represented in Figure 2.6.

2.5 Interpretation of the drift results

In order to interpret the drift results with respect to an origin for the various objects, we require the location of the recovery, the elapsed time (ET) of the transit, and also the average direction

of the wind and ocean current. We will assume an average ET of 200 hours, and a recovery position of 24^0 S, 111^0 E for all the objects, except the lifeboat which has an ET of 90 hours, and an estimated position of 26^0 S, 112^0 E, and the rubber rafts, which have an ET of 84 hours, and a recovery position of 25^0 S, 111^0 E, and an ET of 109 and a recovery position of 24^0S, 110 ½ ^{0} S, see, Chart 8 of Whittaker (2000). Using these data, together with a wind speed of 10 m/s and an ocean current speed of 10 cm/s, directed towards 330^0, the origin of the various objects is shown in Table 2.1. The mean position is approximately, 28 ½ ^{0} S, 113 ½ ^{0} E, which is to the west of the Abrolhos Islands.

2.6 Discussion

The approximate position of origin of the drifting objects is quite consistent with the results of Part 1. This position (28 ½ ^{0}S, 113 ½ ^{0}E) however differs very significantly from the battle position (26 ½ ^{0}S, 111^0E) given by the survivors. In view of the magnitude of this discrepancy, we will briefly consider other sources of evidence. It is useful to present this material in two groups : (A) in support of the Abrolhos Islands site, and (B) in support of the recorded site.

(A) <u>In support of the Abrolhos Islands site</u>

Three independent studies can be cited.

(1) The occurrence of sound and light over the sea, probably on the evening of November 19 1941 and the early morning of November 20 1941, has been extensively reported (McDonald,1993,1997). In order to investigate the feasibility of these occurrences, a study of

the propagation of sound and light in the region at the time was made by Bye and Byron-Scott (1998). The main finding was that it would not have been possible to witness a battle at the recorded site from shore, since an upper level sound duct was not present, and also the visibility threshold was only about half the required distance. A low level sound duct however did exist and the Abrolhos Island site would have been well within the visibility threshold. The low level sound duct arose, principally, because of the easterly shear in the wind below about 3000 m. The axis of sound propagation in this duct is approximately along the direction of maximum shear. Using the climatological wind data from Carnarvon, and also the open ocean synoptic data (since the original purpose of the investigation was to test whether sound originating from the recorded site, which lies on a bearing of 295 ^{0} at 330 km from Shoal Point, could have been heard by observers on the coast of Western Australia), an origin for the sound and light near 28^0 S, 113 ½ ^{0} S was deduced, which is about ½ ^{0} north of the battle position obtained from the drift analysis. The deduced origin for the sound and light, however, would be rotated southwards if the sound duct axis was also rotated due to the occurrence of an easterly, rather than a south south-easterly surface wind. For the period of the battle, it is plausible that an easterly surface wind (possibly a land breeze) may indeed have been observed at Geraldton Airport, see November 20 1941, 6 am in Table 1.2, although unfortunately all 1941 wind data have gaps between 3 pm and 6 am each day. This circumstance would have been highly favourable for witnessing a battle to the west of the Abrolhos Islands, which lies on a bearing of 230 ^{0} at about 100 km from Shoal Point.

(2) It was noted in Byron-Scott and Bye (1998) that Captain Detmers and Lieut. Captain Meyer indicate a Sun's magnetic bearing of 250^0 at sunset on November 19 1941. A sunset bearing of 250^0 would have occurred at the Abrolhos Island site, but not at the recorded site at which the sunset bearing was 251^0, and textual evidence suggests that this bearing was intended to be stated with an accuracy of 1^0 (Byron-Scott and Bye,1998).

(3) The primary purpose of the drift analysis, of course, is to locate HMAS Sydney and HSK Kormoran, but as stated in the Preface, the drift analysis is necessarily imprecise, with an optimistic accuracy on the meteorological and oceanographical variables of 10 %, which over a transit of 500 km gives a an site error of about $½^0$.

Direct evidence of the locations of the two vessels is far preferable. The only direct observation, presently available, is from the Knight Direct Location System (Aust Govt, 1999) which gives an extremely precise location for HSK Kormoran at $28^0$38.39'S, $113^0$21.86'E (KDLS Target No. 3) ,see Section 5 of Whittaker (2000), and also a probable location for HMAS Sydney at $29^0$58.53'S, $112^0$48.26'E (KDLS Target No. 1), and another 'target' south of the Abrolhos Islands (KDLS Target No. 2) which has yet to be identified. The position for HSK Kormoran is quite consistent with the drift analysis for the Indian Ocean, and the position for HMAS Sydney is consonant with the reconstruction of the drift of the lifeboat or the rubber raft in the Geelvink Channel.

(B) <u>In support of the recorded site</u>

Two broadly based arguments can be cited.

(1) The reported evidence is an internally consistent body of information compiled from several professional informants, see, for example, Detmers(1959) and Aust. Arch.(1997).

(2) There are several possible sources of error in the drift analyses, such that an alternative origin for the debris at the recorded site is plausible. We will consider the variation in the meteorological and oceanographical parameters that is required to obtain an origin for the drifting objects at the recorded site.

The drifting objects in the Indian Ocean can be divided into three groups: (i) the Carley float, lifebelts and kennel, (ii) the rubber rafts, and (iii) the lifeboat. Groups (i) and (ii) were found, respectively, at about 2 ½ ^{0} and 1 ½ ^{0}, north of the recorded site. Hence the required wind direction towards, would be 360^0 instead of 330^0, and assuming the same windages as for the Abrolhos site, the wind speed and ocean current speed would be approximately halved, so that the mean wind speed would be 5 m/s and the mean current speed would be 5 cm/s (assuming that the wind and ocean current speeds vary in the same manner). The wind analyses on which the mean wind velocity of 10 m/s towards 330 ^{0} is based, are presented in Courtney (1991) and Southern (1991), and are, in part, independently supported by the discussion on the Geraldton Airport winds in Section 1.2. The group (iii) report, however, is very difficult to reconcile with an origin at the recorded site, as a drift to the estimated position with a wind direction towards 360^0 is not plausible. The drift of a lifeboat to Shoal Point from the recorded position, also is clearly very implausible.

Another possibility is that the windages used for the drifting objects are too high, by about a factor of two. The dispersion analysis suggests that this is unlikely, see Section 2.4. The

windages can also be estimated using a conventional leeway and wind current analysis. The results indicate windage values, similar to this study, see Whittaker (2000).

2.7 Conclusion

The results of this study clearly indicate the possibility that the battle between HMAS Sydney and HSK Kormoran occurred to the west of the Abrolhos Islands (Figure 2.7), rather than at the recorded site. This realignment of history cannot be countenanced with equanimity, however, in view of a precise location, see Section 5 of Whittaker (2000), for the location of HSK Kormoran being available to test this hypothesis, it is strongly recommended, in the event that the position is found to be reproducible, that a search be considered to confirm the site by underwater technology. In the event that this search is successful, the whereabouts of HMAS Sydney can be sought with confidence using the same methods, so that the elusive ghost of past events can be laid to rest. This appears to be far preferable to an initial search in the vicinity of the recorded position, which is much less accurately known.

Appendix 2.1 Formulation of the drift model

The velocity profile in air is,

$$u' = u_0 + \gamma u_* + u_*/\kappa \ln z/z_R \qquad (A1)$$

and the velocity profile in water is,

$$u = u_0 + \gamma w_* - w_*/\kappa \ln z/z_R \qquad (A2)$$

in which the meteorological convention (z positive upwards) is used in air, and the oceanographical convention (z positive downwards) is used in water, and $z = 0$ is the mean sea level, and u' is the velocity in air, and u is the velocity in water. The friction velocities in air and water are respectively, u_* and w_* where $u_* = (\tau_S/\rho')^{1/2}$ and $w_* = (\tau_S/\rho)^{1/2}$ in which $\rho' = 1.2$ kg/m^3 and $\rho = 1025$ kg/m^3 are respectively the density of air and seawater, where τ_S is the surface shear stress, and u_0 is the ocean current (such that if the surface shear stress is zero, $u' = u = u_0$), $\kappa = 0.4$ is von Karman's constant, and γ is a constant (Bye, 1988a). Equations (A1) and (A2) are evaluated, by assuming that $\gamma = 12$, and $u_* = \frac{1}{2}(u_a - u_0)/\gamma$ in which u_a is the wind speed (Bye, 1995), and also that the roughness length in water, $z_R = a\, u_*^2 / g$ where g is the acceleration of gravity, and $a = 1$ (Bye, 1988a).

In order to determine the drift speed of an object subjected to these shear flows, we assume that there exists a balance in the drag forces such that,

$$\rho' C' \int^H | u' - u_F | (u' - u_F)\, dz + \rho C \int^D | u - u_F | (u - u_F)\, dz = 0 \qquad (A3)$$

in which u_F is the drift speed, and C and C' are respectively the drag coefficients in water and air, and H is the height in air and D is the depth in water of the object. The lower limits

(not shown) on the integrals in Equation (A3) are z_R. Equation (A3) is solved for u_F using a finite-difference approximation with a mesh interval of 1 cm in each fluid. Figures 2.2, 2.3 and 2.4 show the results for $C' = C$, $C' = 2C$, and $C' = 4C$. The relative velocity $(u_F - u_0)$ is a function of the relative speed $(u_a - u_0)$, and independent of u_0.

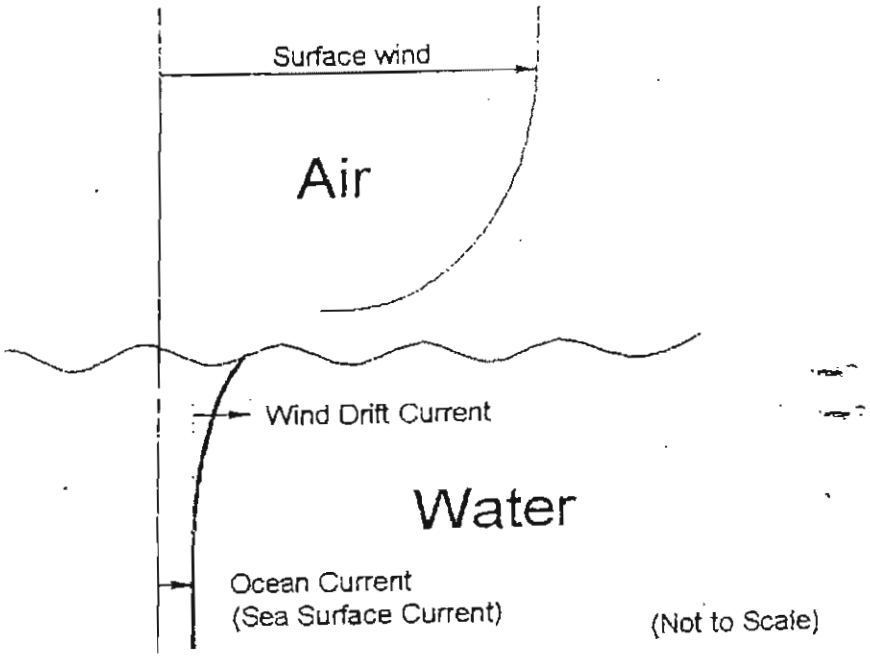
100
×60
6000 METRES MINUTE.

TABLE 2.1 Drift statistics

Object	Windage	Drift speed	ET	Transit	Recovery Posn		Origin	
	(W)	cm/s	hrs.	km	^{0}S	^{0}E	^{0}S	^{0}E
Carley float	0.06	70	200	520	24	111	28	113 ½
Lifebelts	0.06	70	200	520	24	111	28	113½
Kennel	(0.06)	(70)	200	520	24	111	(28	113½)
Linseed oil	*							
Lifeboat	0.09	100	90	330	26	112	28½	113½
Rubber raft	0.13	140	84	440	25	111	28½	113
Rubber raft	0.13	140	109	560	24	110½	28½	113½

Wind speed 10 m/s, and ocean current speed 10 cm/s, direction towards 330^0.

- see Section 2.3 (4)



(drafted by Lt. Col. T.W.Whittaker)

Figure 2.1 Air and water velocity profiles near the sea surface

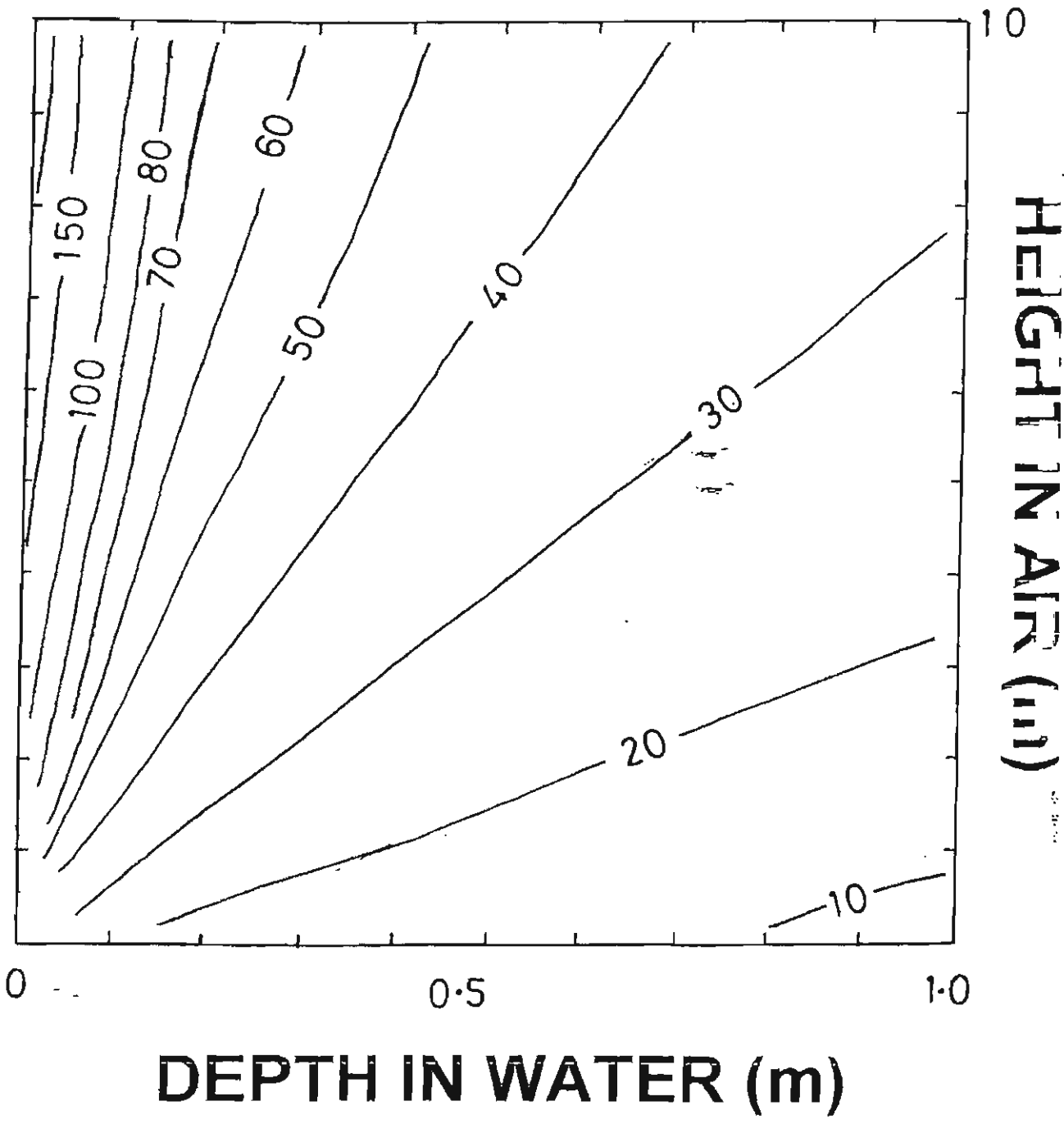


Figure 2.2 The object speed as a function of the height in air and the depth in water for equal drag coefficients in air and water for a relative wind speed of 10 m/s.

The contours show the object speed in cm/s (50 cm/s = 1 knot)

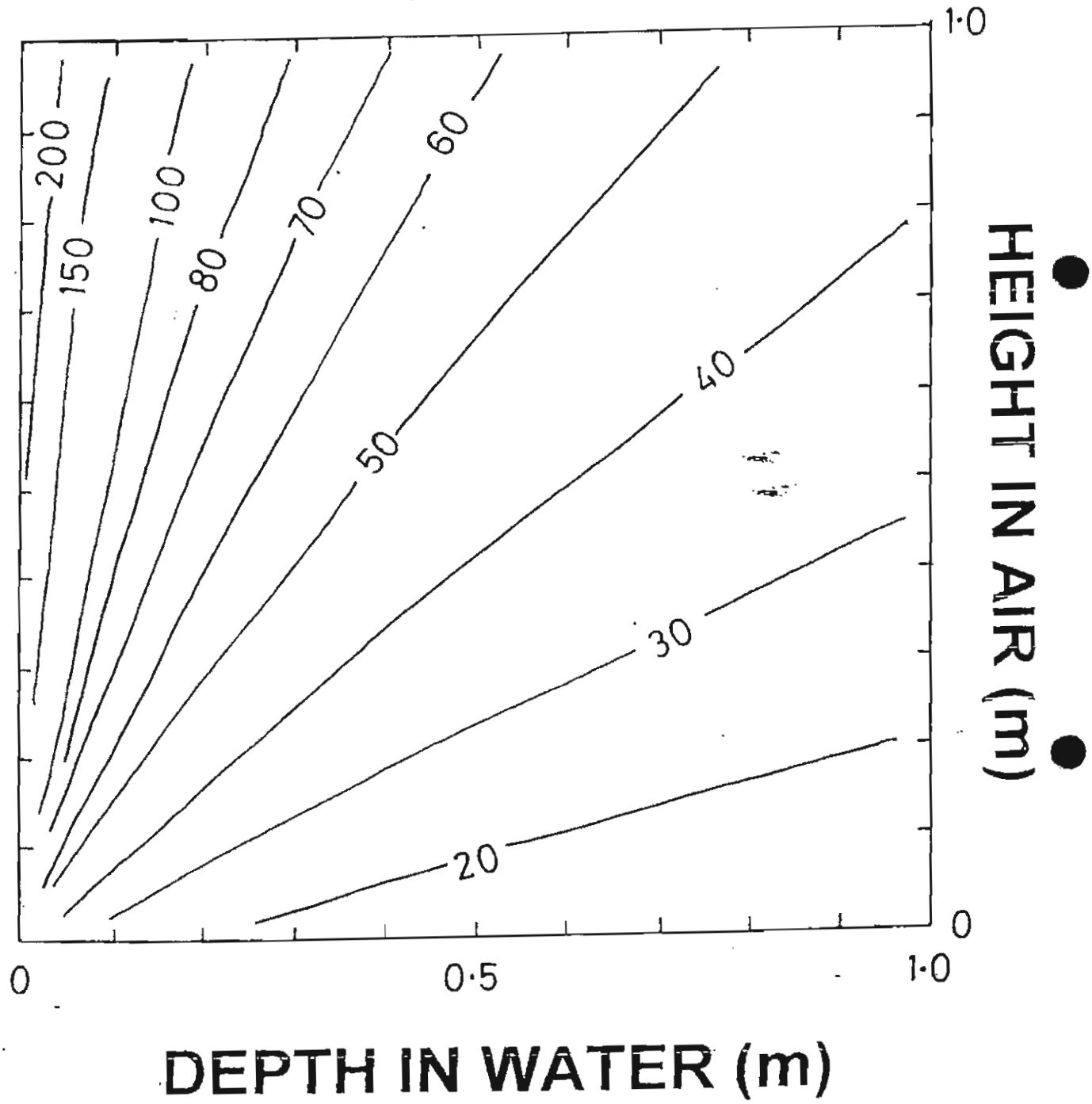


Figure 2.3 The object speed as a function of the height in air and the depth in water for a drag coefficient in air twice that in water for a relative wind speed of 10 m/s

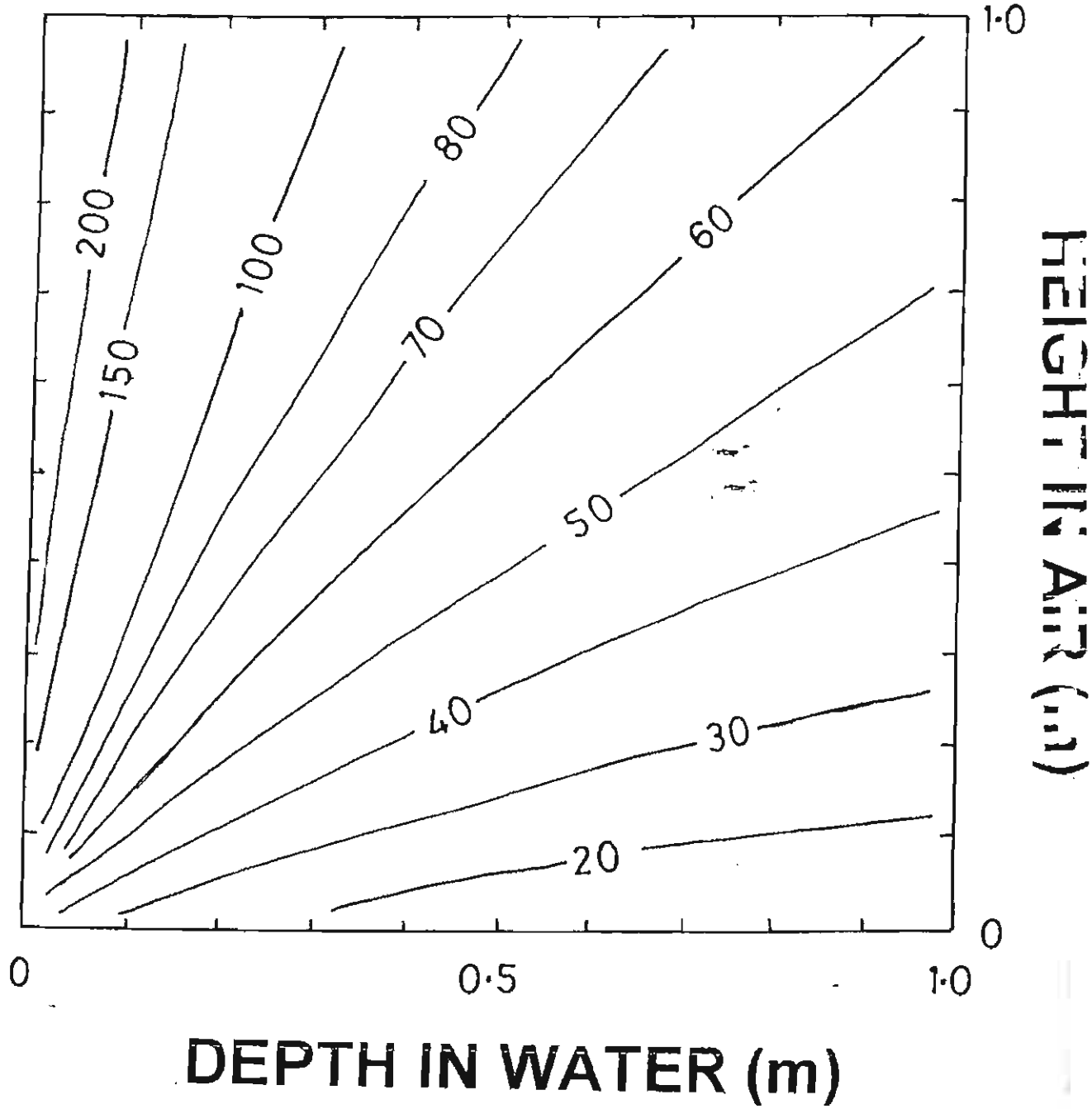
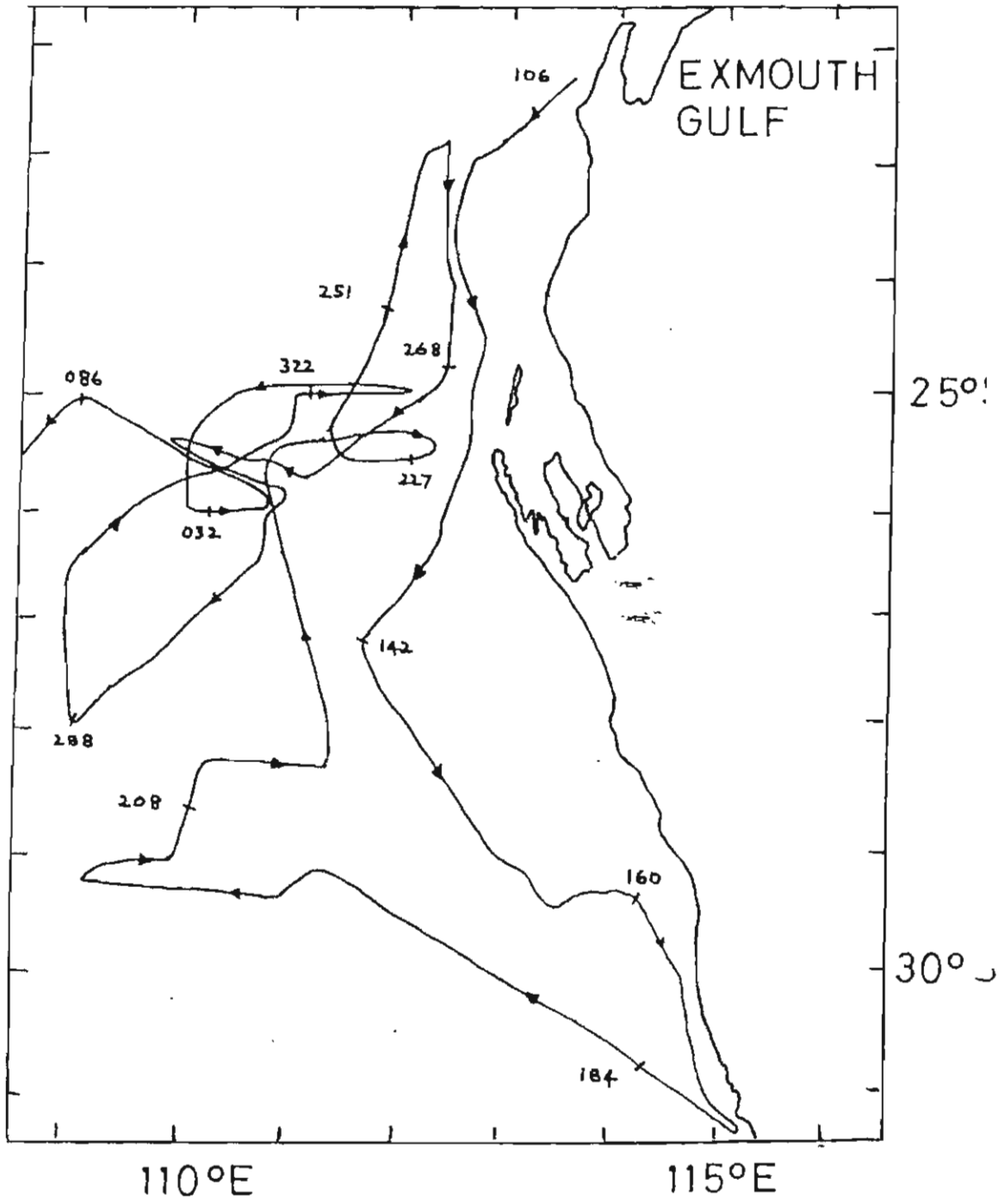


Figure 2.4 The object speed as a function of the height in air and the depth in water for a drag coefficient in air quadruple that in water for a relative wind speed of 10 m/s.

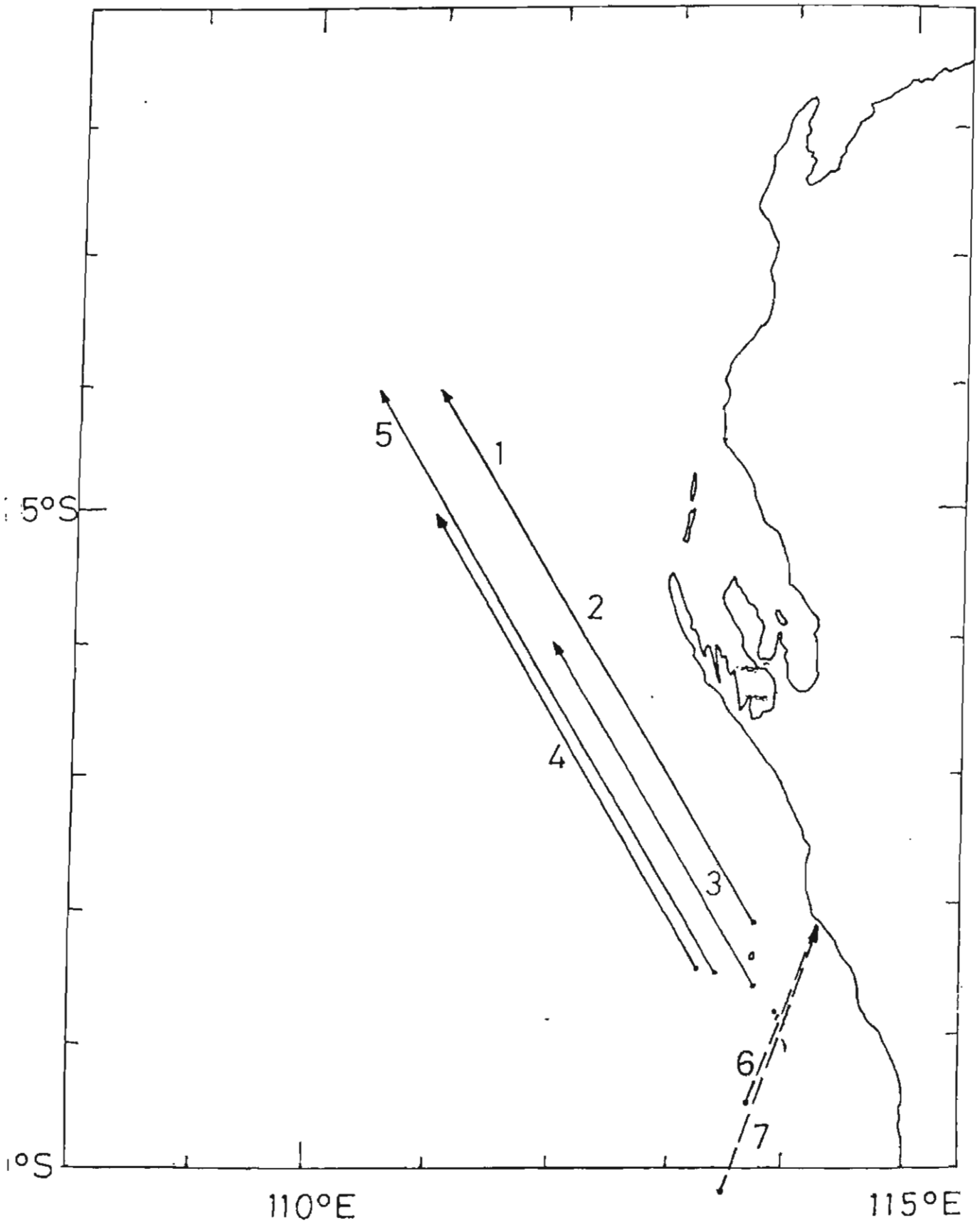
(drafted by Lt.Col. T.W.Whittaker)

Figure 2.5 The dispersion of a group of (virtual) objects of windage , W = 0.033 (adapted from Wolff and Bye (1998)).



The numbers show the day in either 1998 or 1999.

Figure 2.6 The track of a shark tag released near Exmouth Gulf, Western Australia in April 1998 (adapted from a track chart, courtesy of Dr John Stevens).



The solid trajectories correspond with the drift hindcast in Section 2.3: 1. Carley float, 2. Lifebelts, 3. Lifeboat, 4. Rubber raft, and 5. Rubber raft (Table 2.1). The dashed trajectories correspond with the drift hindcast in Section 1.3: 6. Lifeboat, and 7. Rubber raft.

Figure 2.7 Summary of the results of the drift analyses.

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Submission
by

Mr John Doohan

Convenor: End of Secrecy on Sydney group

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John Doohan

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21 Bartlett Street
WILLAGEE 6156

16 November 2001

Chairman

HMAS SYDNEY II Seminar
(Re Location of Wreck)
Maritime Museum
Fremantle

(By hand of Museum Curator,Mr M.McCarthy)

Sir,

Please,accept the attached 2 sets of papers as my 'last-minute' Submissions of material relevant to the business of this Seminar; initially,to the Archival Workshop.

I regret unavoidable delay in presenting them and,also,my inability to attend the Seminar itself.

The attached papers were originally prepared for and supplied to Federal Attorney General Hon Daryl Williams AM QC MP,at his request,and to former West Australia Attorney General Hon Peter Foss.

They deal with some specific issues of the many associated with the contentious circumstances of the unresolved loss of HMAS SYDNEY II with 645 personnel,particularly (a) the greatly unsat= isfactory evidence of KORMORAN surviving personnel,(b) the unsatisfactory conduct and management of the FADAT Inquiry into the circumstances of sinkings of SYDNEY and KORMORAN and (c) the misrepresentations,omissions and irregularities of significant evidence supplied to FADAT Inquiry by certain official agencies.

I submit that the general content of the attached Submissions are relevant to the business of this Seminar which is based mainly on the 1941 accounts of KORMORAN personnel as well as the subsequent findings of the FADAT political Inquiry.

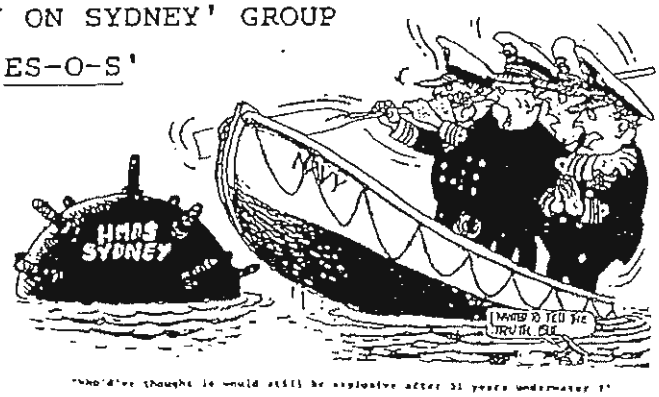
I therefore respectfully request that the attached material be accepted fully as evidence to be included and retained in the public record produced by this Seminar.

Faithfully, John Doohan

Material submitted:To Federal Attorney General,17 May 2001,21 pp;
" Hon Peter Foss,15 July 2000,12 pp.

'END SECRECY ON SYDNEY' GROUP

'ES-O-S'



Your: Ref/vv/Doohan.doc
Ours: AGFed/SYD/1

The Hon Daryl Williams AM QC MP
Attorney General
Parliament House
Canberra ACT 2600

Dear Sir,
Re: 'Loss of HMAS SYDNEY II'

With apology for delay ES-O-S Group thanks you for 7 August response to my 15 July 2000 letter with enclosed copies of our advices to former State Attorney General Peter Foss,QC,dealing with a few of the generally unknown aspects of HMAS SYDNEY story.

Thanks,particularly,for your expressed appreciation of being kept informed on progress made in HMAS SYDNEY further research.
We are anxious to maintain this informative role,in course of fostering awareness of contentious issues peculiar to still unresolved loss of ship and 645 Company; especially because since August 1997 we have sought Attorney General's investigation into circumstances allegedly cause of those deaths which,on the evidence,we allege were associated with enemy criminality.

In brief necessary review of that situation,our request for your Office involvement was initially blocked by Government's August 1997 reluctant and hurried convening of political Inquiry by the Joint Standing Committee on Foreign Affairs Defence and Trade (JSCFADAT) into all circumstances of HMAS SYDNEY's sinking;thereby temporarily debarring Attorney General's jurisdiction in relevant proceedings.

Inquiry Terms of Reference adopted by Government were drawn up by representatives of the Political/Corporate-constituted organisation HMAS SYDNEY Foundation Trust which,possessing commercial marine-search facilities,successfully lobbied some Committee members,during in-camera meetings,for Committee's recommendation that some millions of public dollars be allocated to a Trust managed search for SYDNEY's wreck.
While the Trust has exhibited scant interestin determining truth or accuracy of enemy-claimed circumstantial details of SYDNEY's sinking,Inquiry main Term of Reference (i.e.,'The Circumstances of the Sinking..') is confirmed by the Committee to embrace all circumstances relevant or influential in the loss of HMAS SYDNEY, including uninvestigated circumstances allegedly responsible for

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unresolved deaths of her 645 Company.
[Please,refer to attached copies of JSCFADAT Secretary J.Towner's letter,10 Nov.1997 and my 19 Nov.1997 reply to J.Towner,marked 'A' and 'B',respectively.]

Relevant to the jurisdiction issue,replying to Part One of Two Part Senate Question #990 on 20 November 1997,you advised Parliament that any action of yours at that time would be "inappropriate and unnecessary [because] the Minister for Defence" had already allocated responsibility to JSCFADAT to investigate and report on the circumstances of HMAS SYDNEY's sinking.
[You declined answer to Part Two of Question #990,Part Two asking if your handling of our investigation request was influenced by ASIO/AFP confirmed briefings,of consecutive Attornies General, about myself.]

On 3 December 1997 Senior Adviser Hugh Funder,on your behalf,thus informed me that JSCFADAT was charged with Inquiry jurisdiction and,further,"any investigation [of HMAS SYDNEY deaths] that the Committee may wish to make is a matter for the Committee" and referred me to the Committee itself.

However,in 13 February 1998 letter JSCFADAT Inquiry Chairman Senator David MacGibbon advised me that the Committee [whilst publicly declining compliance with Terms of Reference in two most critical areas of Inquiry and avoiding or misrepresenting many other issues of investigation] rejected responsibility to inquire into alleged criminal circumstances associated with deaths of SYDNEY's Company; Senator MacGibbon returning the onus to "the Attorney General to consider any future requests for such investigation", depending on the "conclusions and recommendations of the Committee." [Please,refer to the attached letter copy,dated 13 Feb. 1998 and marked 'C'.]

Therefore,we hereby renew our request for Attorney General's examination of highly contradictory circumstances untruthfully claimed as responsible for SYDNEY's deaths,maintaining that it is a matter for the Attorney General as conceded by Committee's Chairman MacGibbon.
We contend that the Committee's "conclusions and recommendations" [i.e.,FADAT Inquiry Report] has no valid authority to relevantly disbar the Attorney General; not just because the Committee chose not to investigate alleged circumstances of deaths [SYDNEY's or KORMORAN's],but because the Inquiry record itself confirms Committee constant failure to conduct and manage a satisfactory Inquiry into relevant aspects of SYDNEY's sinking and,equally significantly,Committee's failure to provide on 22 March 1999 a fair and accurate Inquiry Report,constituting Committee's final "conclusions and recommendations."

Certain of those "relevant aspects",generally publicly unreported are contained in my 15 July 2000 letter and enclosures to former State Attorney General Peter Foss QC,and provided to you and your Office files on the same date.
Sir,we believe that earlier-filed information ,with what appears below and in near-future instalments from ES-O-S,will meet your requirement to be kept informed of our progress in HMAS SYDNEY matters.

****

****

SYDNEY/KORMORAN events,hereunder recounted,are random inclusions and do not necessarily follow the commonly published sequence of actual or alleged SYDNEY/KORMORAN occurrences.
A major intent is to introduce suppressed or neglected relevancies for your official record and personal consideration.
Issues appear in briefest practical form,their broad outlines indicating much significant detail worthy of subsequent examination:

In early hours of daylight on 25 November,1941,a RAAF Hudson bomber crew of 14 Maritime Reconnaissance Squadron,in apparent significant deviation from a pre-set flight pattern, sighted two manned life-boats approximately 70 miles North of Carnarvon port.
Both boats were on the Western boundary of Quobba Station,one already beached,the other apparently about to beach 15 miles further North.
Subsequently learned,the two craft originated from the German commerce raider HSK KORMORAN,officially well-known to Allied IntelligenceasHSK STEIERMARK,sunk by HMAS SYDNEY in a night action of 19 November.

The Northern-most boat,beached at a spot known as Red Bluff,had been heavily overloaded for [alleged] six days with a large quantity of food stores and 57 German crew members,that number including about 19 of the raider's officers.
This boat of steel construction had no motor and was [allegedly] navigated under sail to Red Bluff,isolated from all other KORMORan boats including the one landed 15 miles further South at a location known as 17 Mile Well.
The Red Bluff boat was later salvaged by RAN's minesweeper HMAS GUNBAR. Its subsequent post-war history is relevant to this account.[Refer attached photocopy,marked 'D',recording December 1941 salvage by GUNBAR of this boat from Red Bluff.]

Alleged by the two German crews,neither was aware of the other boat's landing on that same area of coast-line.

The 17 Mile Well craft,a steel hulled cutter also [allegedly] not equipped with a motor,overloaded and under sail had for [alleged] six days contained 46 Germans,1 dog,1 monkey and very few rations

As consequence of their RAAF sightings on morning of 25 November, both boat crews in police custody were being transported by road to Carnarvon at night-fall of the same day;the two boats and food stores left on their respective landing beaches.

Initially ordered to Quobba shore for salvage of both boats,HMAS GUNBAR's commanding officer made no serious attempt to retrieve the 17 Mile Well cutter,leaving it on the beach and continuing on to salvage only the Red Bluff life-boat.
Although there was no [public] official secrecy about the Red Bluff craft with no official attempt to prevent the pilfering of the abandoned considerable stores and German equipment,local civilian access to the 17 Mile Well cutter was [reportedly] disallowed by Naval and Customs authorities.

That valuable cutter could easily have been salvaged by GUNBAR, as initially ordered by Navy.
Weather and seas were very favourable for such operations.[Refer photograph copies of attachment 'D'.]
Without recorded difficulty and heavily laden with 46 adult sailors,the cutter had originally negotiated shallows to the shore and safely beached [despite Navy claims of a too stony bottom.]
Obviously,there was sufficient water-depth for it to come in laden and be towed out empty
There appeared to be no valid reason for abandonment on that unfrequented coast,with civilian interest officially discouraged.

Speculation on official cessation of interest was avoided[at that time] by the cutter's sudden disappearance from 17 Mile Well.
Official conjecture suggested possibility of a very large wave carrying the steel hull off the beach to beyond the reef,where it probably sank in deep water.

The 'large wave' theory survived until the 1960's when,without fanfare or general public awareness,the 17 Mile Well boat reappeared,acquired in unclear circumstances by the proprietor of the Whiteman brickyard in Midland Junction,Western Australia.
The cutter was [is] largely intact,but a substantial area of the lower hull has been consumed by corrosion..
Nevertheless,there is more than sufficient remaining of the construction to clearly reveal that this boat was originally fitted with a powerful inboard motor;propellor-shaft support intact on underside of the keel and other motor evidence remaining inside the hull itself.
[Please,refer to attached photographs 'E','F','G'.Attached photocopy 'H' is of a German naval similar cutter carried by raider HSK KOMET.
The 17 Mile Well cutter about 1996 was sold at auction,by Mr L. Whiteman,to Carnarvon local organisations as accepted relic of HSK KORMORAN and is currently located at Carnarvon;above photographs taken on site in November 2000.]

My emphasis [above,in attachments and elsewhere] on inboard motor power,etc., is consequent to German/Official claims of KORMORAN's total lack of powered small craft following her sinking by SYDNEY.
The 17 Mile Well cutter and other evidence [including German archival record] points up falsities of the Nazi story - i.e., that they had no powered boats enabling them to - e.g.,search for HMAS SYDNEY personnel [alive or dead],or to speed their own [claimed] efforts to reach the Australian shore.

The last example,above,highlights the cases of the only boats to contemporaneously reach that shore - Red Bluff and 17 Mile Well - after alleged 5 days of continuous direct sailing to get there.
The fact that those 2 boats,one motorised [17 Mile Well] and one unpowered,arrived on the same area of coast at the same time naturally produces a belief that one towed the other.
[Please,refer attached extracts from HMAS SYDNEY Inquiry Vol.13, pp.68 to 74 inclusive;'The Hired Gun'.This type material included,as with Peter Foss QC previous material,to avoid lengthy typing of additional necessary detail,whilst other relevant information is often incidentally provided at the same time.]

Also remarked upon,above,and very relevant to issues of KORMORAN's motorised craft is the gross overloading of the raider's lifeboats and liferafts at times of discovery;initially by HMT AQUITANIA and the tanker TROCUS,both those German groups,26 and 25 respectively,'sardine-packed' into 2 inflated liferafts when picked up on 23rd and 24th November.

KORMORAN Captain Detmers' steel lifeboat [twin to the 28 feet-long boat of Red Bluff] was sighted at sea by RAAF on 25th November and picked up by MV CENTAUR on the 26th cram-packed with 61 men.
As already stated,the Red Bluff boat,RAAF-sighted on the 25th,was beached ashore overloaded with 57 men and large amount of stores.

The 17 Mile Well 24 feet-long motorised cutter was also jammed tight with 46 enemy personnel.

The [allegedly] very first boat RAAF-sighted at sea about 7a.m on 25th November,a wooden lifeboat,contained 40 to 45 men.
When relocated,again by RAAF on 27th,it was reported as containing between 40 and 50.
When intercepted about 2 hours later,by HMAS YANDRA,it was jam-packed with 72 men. [Please,refer p.(iii) of attached incomplete 'Interim Response' to FADAT Report.This 'Response',consisting presently of pp.(i) to (v),incidentally provides a wide range of additional SYDNEY/KORMORAN related information pertinent to Attorney General's requested attention in the matter of HMAS SYDNEY deaths.]
Strangely,another 25th November RAAF-sighted large wooden life boat picked up by MV KOOLINDA on the 26th was relatively uncrowded with only 31 occupants.

The German story about non-availability of life-saving equipment would be incomplete without recording [German-claimed] events associated with a third liferaft of a similar size and type as the two rafts ,listed above,of 23rd and 24th November.
This third liferaft was alleged by Captain Detmers during his formal interrogations at Swanbourne army base to have been loaded with the raider's badly wounded personnel,immediately following the SYDNEY/KORMORAN alleged action.

In continuing interrogation Detmers claimed a final figure of 70 wounded packed into that inflated rubber**float which almost immediately structurally collapsed in the sea,drowning all its occupants except 2 who swam to nearby lifeboats.
Detmers claimed a total of 80 KORMORAN dead,including those wounded allegedly drowned.
Australian Military Roll final figure of KORMORAN dead is 78,comprising 3 killed in the engine-room during[alleged]action and 75 drowned from the raft;the raft deaths official tally quickly accepted without query or comment as to its credibility.
[Refer to Australian Archives MP1587,File 164M.Refer also to the attached photocopy,'I',of the same size and type** liferaft as photographed from a shell-door of AQUITANIA on 23rd November;not from an aircraft as captioned. It shows 26 Germans,crammed in, with not even standing room for one more body.]

Noteworthy comment on the general overcrowding issue is that, whilst Detmers on different occasions claimed conflicting death tallies in collapse of that necessarily gigantic rubber float, i.e.,40,60,70 victims, only a half dozen or so KORMORAN Germans fleetingly recalled [?] the alleged incident.

Noteworthy again,throughout Inquiry FADAT Committee declined to address significant anomalies of the rubber float and drownings of 75 KORMORAN crew;that,an understandable [if wholly suspect] attitude whilst Committee was contemporaneously refusing to examine related circumstances of 645 SYDNEY dead,Committee aware also of my formal requests to German Government for its cooperation in both those matters.
[Please,refer to attached copies of my letters to Bundes Chancellor Dr Helmuth Kohl,24 March 1998,Dr Klaus Zeller Ambassador of Federal German Republic,18 June 1997 and response by Lt/Colonel Rüdiger Schlemm,3 April 1998; those being copies of pp.3045/3046/3047/3048,Vol.13,HMAS SYDNEY Inquiry.]

Despite its continued refusal to examine any of those SYDNEY related circumstances [and this in spite of its possession of fresh evidence refuting the German 'boat'claims] and referring SYDNEY deaths examination back to Attorney General,FADAT Committee's March 1999 Report directly misrepresented the German incredible tale,of collapse of a small rubber float,by substituting"a subsequently capsized lifeboat."[Refer FADAT Report,p.97,6.107.] Simply put,that particular misrepresentation attempt raises two additional problems for the continuing record:

(1) Most wounded victims of heavy artillery do not remain upright and require to be in a lying position.Many of them thrash about in considerable pain.
Where was the lifeboat large enough to accomodate such casualties among the 75 heavy -wounded?

(2) With 319 KORMORAN able bodied crew in attendance capable of righting the "capsized lifeboat" in necessary course of alleviating the boat shortage,where did that extra fantastically large lifeboat disappear to eventually?
"Nowhere",this writer maintains,"because it didn't exist in the first place."

The overloaded state of KORMORAN's life-saving craft [except Kool-inda's boat?] at the times of rescue [capture] is greatly relevant to evidence that motorised boats carried and sustained enemy survivors prior to those events;boats [believed] later scuttled. A confirmed presence of powered small craft destroys yet another tall tale of the raider crew,raising the credible question as to whether those incredible and extravagant lies may be associated with total disappearance of SYDNEY flotsam and entire Company.

First step in confirming KORMORAN's known possession of various types and number of motor-boats is study of the raider's original log-book [= KTB,=Kriegstagebuch,=Daily War Diary] commenced on day of her Commissioning,9th October 1940.
Of relevant interest,Detmers' Secretary/Mines Officer Leut. Heinz Messerschmidt in 1998 claimed that he and Detmers compiled separate Daily War Diaries.[Refer Submission #66B,Vol.9,pp.2039/2040.]

For Attorney General's continued awareness:

This log covers the period through to-allegedly- 24th October, 1941 when it is claimed to have been transferred- with a copy - to German supply ship KULMERLAND; the copy again transferred by KULMERLAND,with KORMORAN's captured Allied seamen,to German prison ship SPREEWALD for passage to Germany,SPREEWALD then claimed as mistakenly sunk by a German submarine,the log-copy lost.
The original log was transported to Japan by KULMERLAND and claimed deposited with the German Naval Attaché at Tokyo in December 1941.

Provenance and continuing credibility of the original log content becomes uncertain subsequent to 15th April 1941 entry,where the English translation author Barbara Poniewierski-Winter inserts the following comment;emphasis mine:

"[#From here,the log is no longer the original;it is apparently a copy made in Tokyo from the duplicate sent with KULMERLAND. Original lost on SPREEWALD.]" ???????

On 19th April 1941,KORMORAN vacated the South Atlantic and duly entered Indian Ocean and the Australia Station,where occurred the secrecy and fabrications associated with the raider's activities [and her crew's involvement] until,during and after interception and sinking by HMAS SYDNEY.
However,her original log entries can be regarded as generally valid,certainly where it lists and describes essential equipment issued to her for use as a commerce raider of Kriegsmarine.
As the Attorney General would expect,I allude specifically to her small boats;particularly the motorised craft and roles they may have played in aftermath of both ships' sinkings,when the fate of SYDNEY's 645 Company became a national contentious issue,today uninvestigated and unresolved.

KORMORAN's Chief Petty Officer Otto Jorgenson's 1941 interrogation records the raider had "..8 lifeboats on board,6 steel,2wood" Jorgenson at that time did not mention the 43 feet-long midget motor torpedo boat (MTB),nor did he identify motorised craft.
[Refer Australian Archives MP1587,File 164M;also attached pp.(iv) and (v),'Interim Response' to FADAT Report.]
The 2 wooden boats were not issued to KORMORAN,but acquired later during operations.

The original log entries at time of KORMORAN's fitting-out do not list the number of standard size (non-motorised) life boats,normally intended for about 40 persons and survival essentials;water, rations,sail(s),mast(s),oars,etc.
Jorgenson's "6 steel lifeboats" may have omitted the motorised boats,which the Germans in contradictory manner claimed had been destroyed by SYDNEY's gunfire or the ship-board blaze itself.
The raider's complement was put generally at 400

The log does record that KORMORAN was fitted out with 2 double-

ended 24 feet-long naval design steel cutters slung on davits Port and Starboard,both craft motorised;each cutter constructed to accomodate about 30 persons and survival essentials. [Refer to attached photocopy 'H'.]
The log records they were operational the whole life of the raider afloat.It is recorded the Port cutter,in charge of Chief Petty Officer Kohn,is the 17 Mile Well previously motorised boat.

Recorded by the log,KORMORAN was initially fitted out with a "barely seaworthy" motor-boat as Captain's pinnace. This was immediately replaced by a smaller 5 metre [16 feet] long fishing steam-cutter accomodating 15 to 20 and also slung on davits.

On 3 November 1940,in Gotenhafen Basin,the log records that the "E.Boat [was] adjusted and taken aboard". The "E.Boat", Kriegsmarine identified as LS3 with crew of 8 or 9,throughout the log is referred to by Detmers as the "E.Boat" or the "MTB". Length 13 metres [43] feet,2 180 horse-power motors and listed as Main Armament of KORMORAN [refer attached p.(v),'Interim Response'.], LS3 is recorded by the log as operational throughout the life of the raider.
Detmers,in interrogation,denied knowledge of this boat being aboard KORMORAN,his crew gave incredibly contradictory descriptions of its appearance,capabilities or uses and Australian naval authorities did not try very hard to find out.[KORMORAN's log was not available until long after war's end.]

So,we progress! We have all the evidence we should require,from the enemy record itself [supported by remains of the 17 Mile Well cutter presntly exhibited in Carnarvon] that the raider KORMORAN/STEIERMARK possessed at least 4 motorised small craft capable of towing other boats,supplying other boats drifting for days in the Northward-flowing current before suddenly making for land after,perhaps,searching out things which later searchers could'nt find; 4 motorised boats the drifting Nazis said they didn't have, even one!

Therefore,where may we find persuasive evidence that the Nazis lied [and lie today] about those motor-boats,just as they lied about nearly everything else.
Surprisingly,[leaving aside the 17 Mile wreck in Carnarvon] the enemy record continues to support us in that regard.
We are already aware,from German source itself ,that CPO Kohn's 17 Mile Well motorised Port cutter was lowered from the abandoned raider on night of 19 November ,1941; [eventually,5 days later, arriving on aQuobba beach in company with an unpowered standard lifeboat.]

One of those sources was a KORMORAN Prize Officer,Lt.Wilhelm Bunjes,who informs us at MP1587,File 164M,Folio 175:"When the raider was abandoned the starboard boats could not be lowered,so only the port ones were used." [Refer attached p.(iv),'Interim Response.] Bunjes' statement about the starboard boats is worthy of close investigation.

From her German survivor interviews,Barbara Poniewierski-Winter, officially-credentialled alleged expert and historian in SYDNEY/ KORMORAN affairs,records:"KORMORAN's cutter was lowered and manned under command of CPO Telegraphist Paul Kohn." [Refer 'HMAS SYDNEY:Fact,Fantasy and Fraud,p.141;also p.(iii),'Interim Response']

"One boat with 46 men had come ashore on Quobba Station..near the 17 Mile Well..This was CPO Kohn's boat,the port cutter,the boat with the best chance of reaching shore." [Barbara Poniewierski-Winter,'HMAS SYDNEY:Fact,Fantasy and Fraud."]
Why "the best chance"? Because it had a motor?

A December 1943 German Secret Report to "Commanders Only,Berlin, Chief Naval Command",presently in Germany's Freiberg National Archives clearly identifies more than Kohn's lone motorised cutter active in whatever occurred when 645 SYDNEY personnel disappeared [including the embarrassing 'Unknown' Sailor buried on Christmas Island.Refer 'ES-O-S'Advice to Hon Peter Foss,presently on Federal Attorney General's file.]
This Report was delivered to Germany by KORMORAN's medical officerDr Siebelt Habben,returned to the Third Reich in 1943 prisoner exchange,the Habben Report,like so much other Terms of Reference-demanded material,failed investigation by FADAT Committee or even a comment in the Committee's 1999 Final Report.
Canberra failed to take delivery of available Habben Report after it been made ready,by Germany's Freiberg Archives,for Canberra to take delivery.
Habben,incidentally,had been in the boat beached at Red Bluff.
Referring to the KORMORAN lifeboats carrying her survivors,his Report informed:

"..Due to their big capacity,their stability in swell and their good motor,these boats have been particularly successful during the rescue mission." [Refer p.(iii),'Interim Response',attached;also,W.A.Maritime Museum Report No.143,pp.26/27/28/29/30,this Report including the "fresh evidence refuting the German 'boat' claims" at p.6,para.3 above.]

Examples of T.O.R.-demanded material published in Inquiry Submissions,ignored by FADAT Inquiry Committee and omitted comment in Committee's 1999 Report are demonstrated in Attachment 'J'.[Refer p.4,W.A.Maritime Museum Report No.143,Author Jochen Franke.]

As initially emphasised,sir,the amount of T.O.R.-required,but officially denied,HMAS SYDNEY circumstantial and factual material is so voluminous it cannot be restricted to less than several instalments,if it is to justify your expressed appreciation of our keeping you relevantly informed.
In essence,above and attachments [some attachments additionally incidentally relevant] deal almost exclusively with KORMORAN's small boats [especially motor*boats] and rafts,mainly because of raider's survivors' obvious lies and contradictions regarding the post-action existence of those*boats;because of credibly held beliefs that those*boats may have facilitated dispatch and disappearance of SYDNEY survivors and flotsam;because eventual and essential scuttling of those*boats would explain the impossible [long-term] overcrowding of discovered KORMORAN boats;because German record itself records launching of one of those*boats [#],

[#];because of recent discovery of remains of one of those*boats [refer above] and because recently confirmed German archival official record reveals that KORMORAN's motorised boats played an active role subsequent to SYDNEY/KORMORAN action.

Historical fact is that the Germans did not head for shore,as so claimed,immediately after KORMORAN's sinking but remained well to seaward in the West Australian (Northerly) Current,where 3 boats were RAAF-detected on the sixth day, 25th November;some miles separating each boat. [2 rafts with total of 51 men were rescued - captured - in the general area 1 and 2 days before.]
Although occupants were well-nourished when captured,those boats and rafts contained minimal food supplies.

The Red Bluff boat,containing nearly all the raider's officers and heavily equipped with stores including the medical supplies, was already on Quobba beach on 25th,after [probably] being towed there.
Why that group,with Kohn's cutter,was there on Quobba at that time we may never know;but it is unbelievable that an officer-led highly disciplined German commando [even though Nazi] would abandon allegedly grossly overloaded small craft to luck,starvation and the elements;specially as the Captain was in one of the boats. In fact,it should have been entirely detrimental to their own interests in all the circumstances pertaining.

However,on available evidence it is believable that the unpowered boats still engaged [?] at sea in the Northerly current may have had [continuing?] supply and assistance from unknown number of motor-boats,recorded by German Military as so "successful during the rescue mission."
[Above,at p.9 [#] refers to Detmers' Deck and Engine Room Logs; CRS,B5823,Australian Archives,Victoria,for German further record of "all boats" being launched. These logs are greatly significant also inasmuch the Engine Room Log reveals that the German-alleged Gunnery duel could not have occurred.Relevant details will appear in our next instalment to Attorney General.]

On the issue of powered-boats involvement with KORMORAN's standard lifeboats,there appear to be only 3 logical scenarios for the raider crew remaining adrift at sea in the current for best part of a week. [Purpose of 'last-minute' run to shore by Kohn's powered cutter and Lt.Meyer's Red Bluff lifeboat may only be conjectured.]:

(1) The Germans were hoping to be rescued by one,or all of the 3 Japanese pearling-fleet mother ships (KOKOKU MARU, ARAFURA MARU,NEW GUINEA MARU) rendezvoused 18th and 19th November on Northwest Australia pearling grounds with 6 Japanese ocean-going luggers.

(2) They were hoping to 'take-over' a merchant ship in which to proceed to [e.g.,] neutral Timor or Japanese Caroline Islands Mandate.

(3) They were engaged [assisting?] in obliterating all [discernible] human and flotsam HMAS SYDNEY evidence on the surface of,or surfacing in,the Northerly-flowing current.

In alleged and known#circumstances KORMORAN's 319 survivors should have expected RAAF long-range reconnaissance aircraft to discover them by,at latest,end of the first post-action day;Thurs-day 20th. [In fact,they must have been astounded by RAAF subs-

-quent inactivity.] In the event,scenario (1) had no chance of success in the German expectation of imminent discovery and the Japanese ships still some hundreds of miles to the North.
[#Known and alleged circumstances include,at very least,the QQQQ signals twice transmitted by KORMORAN,intercepted by Australian shore stations,by Navy's Chief Petty Officer Crawford Young in the tug UCO nearby at sea and apparently by*** HMAS SYDNEY,also.
***HMAS SYDNEY's confirmed signalling to shore stations during her interception of KORMORAN,on night of 19 November,will be made known to Attorney General at soonest-possible ES-O-S next advisory instalment.]

In regard to scenario (2),the♀record notes KORMORAN survivors con-sidered capturing an Allied merchant ship,that report awarded credence by MV CENTAUR's Captain Dark refusal to take on board the raider's Captain Detmers and his [60] survivors,because of Dark's fear of losing his ship to the Germans.
The issue here is German denial of [confirmed] possession of mot-or powered boats and elaborate [but contradictory] lies told in that regard.
The raider crew was not in breach of Rules of Engagement in att-empting to capture an enemy merchant vessel.
There was absolutely no reason,scenario (2) ,to deny the powered boats which could have,within 2 days,assisted all survivors to shore in safety and relative comfort.
If capturing a ship had been the only reason for prolonged drift-ing in the current,there was no need at all to lie about possess-ion of those "successful" boats with"their good motor".
[♀'HMAS SYDNEY:Fact,Fantasy and Fraud';Barbara Winter,p.170.]

Of course,scenario (3)could well be conjunctive with scenario (2) i.e., hopefully completing a'search and destroy' operation,to with luck capture the means to reach neutral [soon to be Japanese occupied] territory,or the Japanese Mandate itself;a potentially successful scenario in the immediate post-action period,with pass-enger [hostages] ships such as CENTAUR,GORGON,KOOLINDA in,or about to enter,the local area.
Repeat,scenario (2) did not necessitate the attempted secrecy and obvious lies which followed capture of the KORMORAN Nazis.

Scenario (3),however,incorporates all the essential reasons for secrecy and deception,totally unnecessary in (1) and (2) above.
Opinions,beliefs,outright allegations and sworn evidence have long-sustained a related scenario that SYDNEY was not sunk by the raider;rather,that KORMORAN was by design intercepted and sunk by SYDNEY ina night action,following which SYDNEY was immediately surprise-attacked and sunk by extraneous [non-combatant nation] naval unit accompanying KORMORAN in support of a different oper-ation subsequently not accomplished;i.e.,sinking of His Majest-y's Troopship AQUITANIA.
[Material,including sworn Deposition andKORMORAN 1941/42 interr-ogation evidence,explanatory of that "related scenario" will form part of early further ES-O-S informative instalment to Attorney General.]
Briefly,scenario (3) envisages a situation where SYDNEY has been suddenly destroyed by undeclared [as yet unidentified] assailant, that act itself fraught with political and strategic ramification

so severe that elimination of all SYDNEY survivors [and flotsam, if possible] becomes urgently essential,thus greatly compounding existing criminality;such strategic deception not unknown during WW2,in previous wars and since.

If belief in scenario (3) is shown to be valid [that option having significant support,e.g., KORMORAN's Heinz Grossman 1941 interrogation evidence,his ASIO 1951 interview, ASIO's 1998 SYDNEY Inquiry response],with KORMORAN crew conducting or assisting elimination of SYDNEY survivors and flotsam,motorised boats would have been indispensable,for speed and range,in locating Carley floats and men in the water;particularly at night,which available evidence indicates was the case.

As already stated,there exists sufficient evidence to claim that the raider crew had those boats subsequent to demise of SYDNEY and thus were equipped for activity envisaged in scenario (3). Again the question;for which other reasons should they deny having that equipment?

Again,why did they all claim to have immediately set out for the coast,when at least 215 of them remained for days in the current which also carried the physical evidence of SYDNEY's destruction? [Heinz Grossman's 1951 testimony,toASIO's Colonel Spry et al,describes clearly a 'spread' of torpedoes fired by a Japanese submarine accompanying KORMORAN,SYDNEY's immediate sinking followed by the raider crew "hearing" from their lifeboats Japanese small-arms and machine-gun fire throughout that night,of 19/20 November,until about 10 a.m. when it ceased.
Understandably,Grossman did not include Nazi participation in the shooting or hunt for SYDNEY survivors.]
Australian and Detmers' own published record informs of Detmers' abiding fear that he might be arraigned on war crimes charges associated with sinking of HMAS SYDNEY,the fear causing his 1945 stroke in Australian POW camp.

Detmers' confessed fears at that time,until his 1976 death surely included fear of exposure of the KORMORAN motor-boats 'cover up'; because,simply,there was no necessity for that 'cover up' other than circumstances of scenario (3).

Simply,again,if the German [greatly contradictory]accounts of the SYDNEY/KORMORAN action had been true there would not have arisen necessity for FADAT Inquiry Report [at p.47;4.114] recording the Committee's 1999 formally stated view that "a strong case can be made" for a totally new 1997 German change of 1941 story,i.e., that a previously undisclosed "secret" weapon [underwater angled torpedo tube] was the immediate and major factor in SYDNEY's destruction; that the alleged 1941 hour-long fast-moving artillery duel was a greatly contradictory fabrication,that the Committee's own Report now endorses a very different account of the 1941 alleged action and,consequently,denies 'credibility' of Detmers and his raider crew.
At that point [p.47;4.114] the Committee's rejection of originally claimed crucial events initiated urgent requirement for a qualified re-evaluation of the history.

We,ourselves,continue to distrust any political Committee's resolve or qualifications to do that; e.g.,the FADAT HMAS SYDNEY Report and Inquiry ancillary record inform that the Committee had no intention to fully comply with its set Terms of Reference and did not so comply. [Refer FADAT Report,p.21,4.2].

The Report records,also,that the Committee had no intention to examine German-claimed technical details of the alleged action between SYDNEY and KORMORAN and,in fact,did not do so.[Refer FADAT Report,p.21,4.2].

Aside from KORMORAN motor-powered/over-loaded/falsely-recorded boats issues,there are numerous examples of Committee omissions of "technical details" of alleged action and of Committee's unquestioning acceptance of associated obviously untruthful accounts and blatant contradictions.
What can be more important to [honest] investigation of HMAS SYDNEY's "mystery" sinking than the "technical details" of that action alleged to have sunk her with total loss of 645 good men?

Sir, with apology,my personal circumstances pertaining at this particular moment dictate that I conclude this further document of record.
When convenient,your comment on above and attached would be appreciated,please.

Thank you for your attention.

Faithfully, John Doohan

(John Doohan);Convenor
21 Bartlett Street
WILLAGEE 6156

17 May 2001

W/- attachments as above, with additional pp.7/8/9/10/11/12 of separate Declaration.

(25). Further indication that full implementation of Terms of Reference, Capital Cities Hearings evidence and Report itself were not the Committee's aims is obvious by its Report [abridged by me] at p.3,1.12:
"In making this report,the Committee...decided to limit its comments and conclusions to those matters on which it itself took direct evidence and felt able to comment."

Apart from limiting its Terms of Reference-required examinations to just some of the major issues,the Committee omitted from its Report any sort of comment or conclusion on a number of very significant matters on which it took direct evidence [at Hearings and in submissions] and felt able to comment.
Those numerous matters omitted included the confirmed falsifications of Japanese submarine record [Attachment 'N',Item 20 above/ Perth Hearings Transcript,pp. 284,285] and greatly significant evidence of Commodore (RAN,ret'd) Rory Ward Burnett;Brisbane Hearings,p.534.
Commodore Burnett testified to Chairman Senator David MacGibbon and Committee members that while he,Commodore Burnett,was a Lieutenant [in 1957] his Senior Admiral[Naval Officer Commanding] called him in for private and personal interview.
The Admiral then informed him that he [NOC] and the Naval Board did not agree that there was any blame that need attach to Captain Joseph Burnett [in the loss of HMAS SYDNEY].
As the German/Official public account conveniently fixes the blame on the deceased Captain Burnett,a Committee comment at the least was called for.
The transcript shows that neither comment nor question followed Commodore Burnett's information to the Committee.

(26). "..the technical details of engagement" [Item 25,above] and the German 1997 change of story:

Greatly important factors in probe for truth in the SYDNEY/KORMORAN Affair are those which Committee "..did not aim to examine in minute detail"i.e.,the "technical details" of the alleged engagement.
Particularly from the moment SYDNEY allegedly drew abeam and level with KORMORAN and the raider allegedly opened fire with deck guns and above-water torpedo tubes,those "technical details" of the German/Official stories - e.g.,the claimed movements and positions of both ships,speeds,battle damage,distances,timing,gunnery details and much,much more - are recognisable fabrications unsustainable when all the facts are sought and examined. None the less,the Committee professes to believe all those "details".
If so,why is it,at the Inquiry Report's p.47,4.114,"The Committee believes a strong case can be made that the KORMORAN's underwater torpedo capacity played a major role in the defeat of SYDNEY" [?].
By introducing this new 1997 development of previously unclaimed underwater torpedo capacity and strategy the Committee now endorses as acceptable the German failure,until 1997,to reveal previously unadmitted 1941 underwater tubes' alleged abilities;that failure,56 years later claimed to be a strategy to conceal a war-time secret weapon which allegedly brought SYDNEY to her death throes before any of those claimed one-hour-long engagement "technical details" could have occurred.

Detailed German/Official account of the alleged SYDNEY/KORMORAN battle cannot be accomodated here for simple reasons which include,(i) space and time prohibitions;(ii) continuing general ignorance of even the official story "details" [as evidenced by Defence Department advice to the Inquiry Committee;e.g.,see Canberra Hearings Transcript]; (iii) This Declaration evidence,sworn on behalf of HMAS SYDNEY bereaved and the public interest, properly must be heard and evaluated [with all other available evidence] by a Defence Force joint Board of Inquiry requested through correct legal channels,by ES-O-S,on 25 January 1999 and continuing to be requested.

Nevertheless,the Committee's sudden unexplained assessment, that KORMORAN's so lately-revealed 'secret weapon' was a major factor in deaths of SYDNEY and her 645,deserves immediate brief comment; if only to point up a basic fact that the Committee's enthusiastic and hasty substitution of the weaponry used disregarded that a consequent necessary change in the order of alleged battle totally 'wiped out' the German elaborate accounts of a subsequent wide-ranging ocean duel:

The official story relates that,after 1½ hours hot pursuit of the fleeing KORMORAN by an amiable "trusting" SYDNEY,the Australian cruiser [at 20-plus knots] overhauled the [14 knots] raider, drew level in suicidal position on KORMORAN's starboard beam,demanding the alleged Dutchman's secret call-sign, which she apparently did not possess.

KORMORAN,closely covered by SYDNEY's main armament,in space of 6 seconds lowered her alleged Dutch colours,raised the Nazi battle flag,brought her own armament into firing positions,dropped her deck railings and opened single shot ranging fire.
SYDNEY at action stations did nothing,her "white-coated pantrymen" standing idly at the railings.[Contrarily,some Germans said SYDNEY fired first;Lt.Bunjes,that KORMORAN was hit mortally at that time].
The raider's first and second ranging shots [4 seconds apart] were both 'misses' ['over' and 'under'],the third [range-corrected three guns salvo] destroying the bridge and starting large fires amidships.
Immediately KORMORAN's first artillery salvos were fired,German Captain Detmers [his torpedo officer corroborating] claims that he fired two torpedoes,from his starboard above-water twin tubes, at the Australian cruiser [which in this particular official version is allegedly 1200 yards distant,level and parallel with the raider at speed of 14 knots; 2 other versions - one Detmers'- of the German "Officers' Story" have SYDNEY stopped and nearly stopped].
Detmers' first torpedo passed close ahead of SYDNEY's bow,the second hit and exploded between 'A' and 'B' turrets,putting them out of action. SYDNEY's bows simultaneuosly sank 6 feet,her screws visible above the water.
During these events,the cruiser was being raked by KORMORAN's lighter-calibre weapons,particularly the starboard 3.7cm anti-tank gun,its layer [Jacob Fend] later awarded an Iron Cross First Class by Detmers,for his outstanding performance of killing all SYDNEY bridge officers with that starboard anti-tank gun. [Contrarily,

.../9.

(26) Jacob Fend's subsequent interrogation record-MP1587/File 164M - categorically informs that,throughout the alleged action,he was stationed on the port-side 3.7cm anti-tank gun which did not fire a shot and that he did not see SYDNEY until he was leaving KORMORAN in a life boat].

In brief,the German/Official account goes on to paint,in "technical details",an action in which SYDNEY allegedly absorbs about 500 heavy artillery shells,1 alleged torpedo,thousands of automatic projectiles and which continues for minimum 1 hour in an area of ocean on Starboard and Port sides of KORMORAN,where SYDNEY - a smashed and gunless torpedoed inferno attempts to ram and then torpedo the still-speeding raider.

The entire official account of SYDNEY/KORMORAN alleged battle depends on many alleged events,a few of which are indicated in the above drastically abbreviated sketch of the alleged action.[None of those 'events' can survive an effectice unbiased scrutiny,which is what we are seeking].

The new [1997] KORMORAN former-crew members' attempts ['supported' by FADAT Committee Report's endorsement of those attempts] to 'move the goal-posts' by introducing a 'secret weapon' [and consequently a totally different scenario] 'enables' the desperate excuse to now disown the 1941 impossible ad hoc stories,on plea that it was essential [in German war-time interests] to conceal a 'secret strategy' allegedly practised by one particular Nazi commerce raider.

In more direct terminology,if the general public can be officially persuaded to accept the 'brand-new' secret weapon scenario and the 'reason' for its 56 years concealment,some very embarrassing [and incriminating] baggage will have been dumped overboard; but, that also means the beginning of rewriting of the SYDNEY/KORMORAN Affair.

In following Item 27 I shall endeavour to more clearly explain the 'secret weapon' official option;i.e.,the attempted new 'history'.
Before doing so,in relation to the Committee's decision [Inquiry Report,p.3,l.12] "to limit the comments and conclusions to those matters on which it itself took direct evidence",included in evidence heard at Perth Hearings [Transcript,pp.252/253/254] but totally ignored by Inquiry Report is Detmers' secretly documented "Action Report;Deck and Engine Room Log" demonstrating that,in first few minutes of SYDNEY's [alleged 5.30 pm] meeting with KORMORAN,SYDNEY's shells had completely destroyed the raider's engines and engine room which,blazing fiercely,was immediately abandoned;leaving KORMORAN lying dead in the water,powerless.
In those conditions there could not have been the claimed battle, subject of "the technical details" which the Committee "did not aim to examine in minute detail", despite Acting Chairman Taylor's exclamatory comment;"This is vital evidence and we will want more in writing from you in due course." [Transcript,p.256].
It was clearly never intended to ask for anything "in writing" by ES-O-S,as is shown the next day,per Attachment 'O'.

(27).For 56 years the German/Official story has maintained that the major causes of SYDNEY's total loss were [apart from her alleged 'sloppy' general performance] KORMORAN's overwhelming accurate gunnery and the immediate massive damage and fires resulting. One of two torpedoes allegedly fired from KORMORAN's starboard above-water tubes [claimed at about the raider's 9th gunnery salvo] then struck the cruiser,forward,between 'A' and 'B' turrets,[alleged contradictory events of a claimed continuing hour-long action being further matters for requested Board of Inquiry]

KORMORAN was equipped with 6 torpedo tubes; 4 situated above-water just below main deck and forward of the bridge superstructure, in twin mountings Port and Starboard. Heavy steel shutters built into the ship's sides camouflaged these 4 weapons and had to be raised in an action.

Submerged below the water line,one on each side,were 2 more tubes Until 1997 the 6 torpedo units were officially claimed to be on fixed firing lines with no traversing ability,the line of fire 90 degrees off the fore and aft centre-line,the torpedoes' aim controlled by steered movements of the raider itself.
The under-water torpedoes could not be fired with accuracy,or without danger to the mothership if that ship's speed was in excess of 3 knots.
According to the official 1941 to 1997 history,during SYDNEY's alleged pursuit and right through the claimed action KORMORAN's speed was never below 14 knots.
In any event,allegedly only the starboard above-water twin tubes were fired after the alleged gunnery action was well under way.

That is what the KORMORAN Germans claimed in 1941 and for 56 years after.Any substantial change,now,in that story negates the whole enemy 'evidence' on which is based the official 'acceptance' that 645 Australian and Allied Defence Forces personnel 'disappeared' - "presumed dead" - as result of legitimate action allegedly occurred and as consistently claimed [but inconsistently described].

Not surprisingly,the "substantial change" has at last come about [see Item 26,p.9 comment,above],endorsed,without explanation, as quite acceptable by FADAT Committee's Inquiry Report on belated word of two former KORMORAN crewmen; Torpedo Officer,Lt.Greter and ordinary seaman/gun server Herman Ortmann.

Some time preceding the August 1997 announcement of HMAS SYDNEY Inquiry,Greter claimed to Murdoch News Limited journalist David Kennedy that KORMORAN's 2 underwater tubes were not on fixed firing line of 90 degrees off fore and aft centre line [i.e., that fixed line requiring the targetted ship to be generally abeam -at the claimed close range -,the raider's speed not above 3 knots].
Greter now alleged to Kennedy that those 2 tubes were,instead, fixed at an angle of 135 degrees astern of KORMORAN's course heading [i.e.,45 degrees astern of the centre line,thus also allowing a greater speed than 3 knots].

(Item 27,cont'd)

In about the same time period,Herman Ortmann [who as an 18 years-old ordinary seaman gave suspect evidence in 1941] 'corroborated', within 1 or 2 degrees,Greter's new claims;which now were that SYDNEY had not drawn abeam of KORMORAN with subsequent gunnery and other alleged events [described above] ,followed by 2 above-water tube torpedoes and an hour-long battle to the death.

The old story is jettisoned for the new; that when SYDNEY was, at speed,still well astern of KORMORAN's starboard quarter and before any alleged gun salvoes,or any other alleged events,one only torpedo was fired from the raider's under-water 45 degree angled tube,detonating in SYDNEY's port forepart;"her bows almost severed between 'A' and 'B' turrets." [Cmdr R.J.Hardstaff,RAN (ret'd), p.47, 4.112,FADAT Inquiry Report].
Cmdr Hardstaff assesses the torpedo damage to SYDNEY on the German descriptions of alleged hit on the cruiser and by his own [and others'] knowledge of what a torpedo can do [in the German-alleged circumstances of that moment].
The Germans have consistently claimed SYDNEY overhauled KORMORAN at minimum 20 knots,one report stating she nearly overshot the raider when drawing abeam,then reducing speed to KORMORAN's 14 knots before demanding her "secret sign." Of course,that was the old 'jettisoned'story.
At 20 knots [or even 14] a torpedo in her forepart would have opened up SYDNEY's hull like a can-opener with greatly destructive forces coming immediately into play,the momentum of her 8,000 tons funnelling a massive volume of water pressure against her inside hull and bulkhead structures.
In those moments SYDNEY,if she had not straightway foundered, should have ceased to be a mobile or a fighting unit and the undamaged KORMORAN could have continued into the darkness [for the documented evidence will indicate to joint Board of Inquiry that night had already fallen at that time].

In either 'event',old story or new story,there would have been absolutely no necessity for the elaborate [and greatly contradictory]German tales of 'cut and thrust' duel to the death across a sunlit ocean,from the moment SYDNEY allegedly received that fateful torpedo; unless something much more criminal was there to conceal.

Apart from those particular aspects,I again express concern that FADAT Committee "did not aim to examine in minute detail the technical details of the engagement"; and that the Committee Report, without explanation,endorses 'drop of a hat' departures by former enemies from their original stories relating to 645 SYDNEY dead. Again,I raise the question of Inquiry conduct and management.

.../12.

(28) Among other significant examples of FADAT Committee and FADAT Report either ignoring or omitting "vital" material submitted to them,by ES-O-S and others,are 'background' events connected with the Australian War Memorial (AWM) 1993 Report on the forensic investigation of SYDNEY's damaged Carley float salvaged by HMAS HEROS in November 1941.

In 1991 I was personally involved in persuading then-Minister Nick Bolkus to initiate the AWM reluctant forensic probe into that float to determine if the "exploded munitions" fragments,therein, also contained spent machine gun projectiles as had been alleged.

In 1993 [the probe surviving official funding starvation of the project] the AWM forensic team's Report of that investigation was formally published and publicly circulated;i.e.,[in part] that metallic fragments,therein,were definitely pieces of heavy and lighter calibre "exploded munitions" of the types carried by KORMORAN. Allegedly,none of these "exploded munitions" were machine gun projectiles.

However,just after publication of the AWM 1993 Report,the team's metallurgical expert analyst,Professor Dudley Creagh [of Canberra National University Defence Studies],in 2 **published interviews formally repudiated those initial conclusions,insisting that the fragments were pieces of SYDNEY's structural steel and brass,with no similarity whatsoever to "exploded munitions".[SYDNEY Inquiry, ES-O-S Submission,Vol.9,pp.2127/2128; Ditto Vol.19,p.4555 **].

Notwithstanding Professor Creagh's expert repudiation,the unaltered AWM Report still officially stands as the sole authority in the public domain,which includes FADAT HMAS SYDNEY Inquiry Report; for,without question or comment,FADAT Report endorses the AWM 1993 Report as a bona fide conclusion,which causes me to believe that some FADAT Committee members either did not read through the ES-O-S submissions or deliberately rejected them.
FADAT Committee noticeable behaviour supports my claim at Item 19 and Item 23,p.5 that some submissions were ignored or simply not addressed.

In fact,as well as raising again the questions of conduct and management of SYDNEY Inquiry,Professor Creagh unwittingly poses a further query: did any of KORMORAN's "munitions" hit SYDNEY at all? That is something for a joint Board of Inquiry to consider.

(29) Item 2 (a),above,refers to status of all relevant Archival material.
In the case of Japanese submarine I-124 I have dealt [in this Declaration and Attachment 'N'] with the relevant US/Japan falsifications of I-124 record. There is a good deal more relevant material omitted from FADAT Committee general comments and its Report, over the whole field of relevant Archival material.

..../13

An undisclosed quantity,greatly significant in its relevance,[e.g KORMORAN's Dr.Habben 1943 Report to German Naval Intelligence, p.(iii),Attachment hereto] is held in German Federal Republic [Freiburg] Archives;full Report appears FADAT Vol.18,p.4431;8 pp. Some FADAT Committee members were aware of that situation,Australian Government knew of it also,because at least as early [orlate] as 1990 it was doing high level Diplomatic deals with German Government [avoiding Australian public fuss in the process] in order to terminate the SYDNEY/KORMORAN Affair without disturbing the status quo of official records; but apparently it was not the aim of any of the parties to examine German SYDNEY-relevant material at FADAT Inquiry.[FADAT Report,3.14,p.19].

None of this revealing material appears to be held in Australian Archives,even though British Admiralty seized it at 1945 cessation of hostilities,holding it until late 1970's before returning it to Germany in such disordered condition that,recently,German authority predicted it would be another 10 years before a very large quantity of German raider-associated record can be restored to order sufficient for research purposes.[FADAT Inquiry Volume 18,p.4412].

The Australia/Germany 1990 Diplomatic Deal appears to be another of the occasions when FADAT Committee decided to limit its comments and conclusions on certain matters on which it took direct evidence.
I refer to the Inquiry Submission evidence [FADAT Report,6.63, p.87] by Captain Joseph Burnett's son Commodore (RAN,ret'd) Rory Burnett,where he states [abridgement and emphasis mine]:
"There is certainly no obligation to give the German version <u>any official seal of approval</u>,despite recent pressure from KORMORAN survivors to have themselves cleared of any possible guilty conduct. On the contrary,there is an obligation to ensure...that while doubt exists,as it always must,<u>no official sanction is given to the German version</u>."

Perhaps without Commodore Burnett's knowledge,certainly without the general knowledge of SYDNEY's bereaved families and Australian public,Australian Government formally and quietly sanctioned the Nazi-German version,in Kiel Naval Base,North Germany,on 12th and 13th July 1990;and HMAS SYDNEY IV,with its boy-sailors,was the chosen instrument for the publicly undisclosed "seal of approval".

SYDNEY IV,in the Northern summer of 1990,commenced a 'world tour' inclusive of Europe and Scandinavia;Stockholm,Sweden,intended to be last port of call in the Europe/Baltic schedule.
Arrived in Stockholm,it transpired that in a very late change of programme SYDNEY IV was to make a surprise call into Kiel,home of the German Navy,with ostensibly nothing significant planned for the visit [as far as the ordinary 'mess-deck sailors'were aware]. July 11th,a day out of Stockholm she berthed in Kiel where immediately it became evident that,in fact,a great deal of planning had taken place well before at the highest levels of Australian and German Governments and military.

Clearly,Kiel was the politically top level publicly restricted Phase One of the 'put HMAS SYDNEY II to bed' operation,Phase Two intended to be the following 1991 Australian 50th anniversary of her sinking;nostalgically billed by Australian politicians as 'Australia Remembers',but with no indication that the political 'forgetting' had been celebrated 15 months before in Kiel,Australian bereaved uninvited and none the wiser.
Instead,the Australian Ambassador travelled quietly to Kiel,from Bonn,to provide low-key seal of official Diplomatic approval.

Local North German media had been organised to interview selected members of the ship's Company,KORMORAN ex-crew had been brought specially to Kiel to attend a Captain's Dinner aboard SYDNEY IV, an official cocktail party arranged for dignitaries and ship's officers,a 'beery pub night' with local citizens turned on for the Australian mess-deck ratings.
An expensive metal ornamental plate,inscribed "HMAS SYDNEY",was in readiness for presentation to Commanding Officer,Commander B.D Robertson at the "official" cocktail party.
The Commander,with ship's Company,was booked to lay wreaths,next day at the Laboe German Navy Memorial,in shadow of the NAZI battle flag,displayed officially and permanently only in Laboe.
Even a young German Navy sailor,extended-family of a SYDNEY IV junior sailor was at hand for them to be photographed together.
Doctor Goebbels could not have done it better!

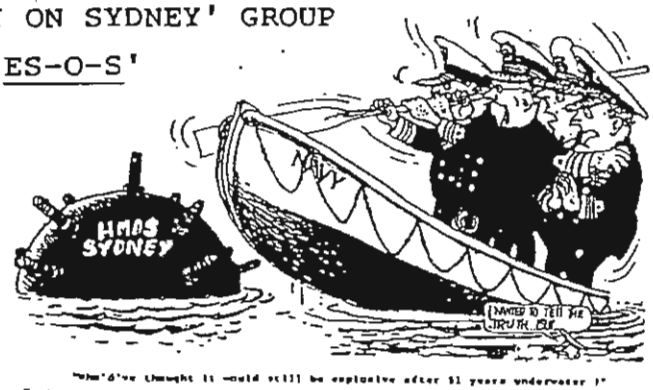
All events,locations,people,military facilities [including SYDNEY IV] were organised well in advance of this Australian naval unit suddenly appearing on 'unscheduled,insignificant' visit in Germany's chief naval base.
All events took place on carefully pre-arranged schedule impossible without significant record created between Australian and German Diplomatic and military arms of Governments;the 'KORMORAN and EMDEN Association' necessarily providing low-key visible 'public face' of the real host,German Federal Republic.
A necessary record must therefore have been created between Australian Government and that German 'private' Association,also.

Those created records,official and quasi-official,undeniably are HMAS SYDNEY II-related material;the final Salute [or the final insult?]
Why were they not produced for Inquiry? Why were they ignored by FADAT Inquiry Report? Where are they now?
As far as my inquiries were able to confirm,the one information source on the Kiel Operation is a souvenir booklet,generally photographic and specifically published in very limited number [at Defence Department expense?] for participating few SYDNEY IV Company. Its title:'HMAS SYDNEY IV World Tour;1990'.
A passage therein records the voyage [and Kiel ceremonies] as "in diplomatic and professional terms the most significant in the history of the Royal Australian Navy."
That publication was not traceable,for me,in State or Commonwealth Library Services.
Australia Remembers? Why not???

.../15

'END SECRECY ON SYDNEY' GROUP

'ES-O-S'



15th July,'00

Hon Peter Foss

Attorney General
Government of Western Australia

Dear Sir,

For the ongoing public record,please regard this communication and attachment as further to my telephone contact with staff member Ms van Kampen on 19th June last.

General information about this 'ES-O-S' Group is available in 'Infolink;Government & Community Information Database',if desired

Catalyst for contact with your office is the Carmelo Amalfi recent report on Christmas Island's Unknown Sailor [or 'Identity Unknown'] advising of your intended response to Edward McGowan's expected request for survey of the Island's European old cemetery ('The West Australian',June 17th,2000.]
You will be aware that a significant section of Australian public regards the Unknown Sailor as a direct link with sinking of HMAS SYDNEY II in November,1941.

For 58 years confusing,contentious political presentation to the general public of HMAS SYDNEY II alleged history,compiled from various sources [including,particularly,22nd March 1999 FADAT Inquiry Report],has not fulfilled the public desire to know the true facts of SYDNEY's loss with her 645 Company.

Likewise,'The West Australian's Amalfi report does little to diminish confusion of the uninformed;despite the reporter and his Editor being generally aware [before the published article] of most events related further below.

Mr Foss,in the possible event that you may be not fully informed of officially ignored background relevant to your consideration of the McGowan request,an abridged explanation may serve to dispel some confusion revisited by the 'West's publication.

It is not my intention to detract from McGowan's case [nor any others']
To the contrary,my aim is to illustrate the need to publicly examine an apparently deliberate deception by undisclosed agency purporting that a specific Christmas Island grave holds the remains of an unidentified seafarer which,if eventually examined, bear no physical or genetic similarities to any of HMAS SYDNEY's medical/personal records; to obvious detriment of claims such as McGowan's if the legend of the 'Identity Unknown' [Unknown Sailor]

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had become the universally accepted history of that particular grave and its long-interred remains.

However,the identity of those remains was comparitively recently disclosed, I having substantially contributed to disclosure. Notwithstanding the significance of concealment and rediscovery, those details have been publicly suppressed by officialdom and media.Requirement for urgent examination still remains as to why and how that 'one off' concealment came about in the first place.

****

The description 'Identity Unknown' is the Christmas Island old cemetery Register identification of a grave until 1995 generally purported to be the burial plot of the decomposing*corpse* found in a Carley float drifting near the Island on 6th February 1942. [**'The 'Unknown Sailor'.]
That particular grave is one of the cemetery's 10 established graves and is the only one where the identity record,at a later unknown date,inexplicably disappeared from the cemetery register and from where an identifying headstone had been removed by an unknown agency and [as transpired] hidden in the area.
Use of the old cemetery was discontinued following the last burial in 1950.
Within living memory there was an identifying headstone on the 'Identity Unknown' grave at that time.

Over the last 20 to 30 years,War Graves Commission and Federal governments have declined to investigate submissions contending the same grave may be that of a crewman escaped from HMAS SYDNEY in November 1941; the official refusals to investigate based on argument [rejected by FADAT Inquiry Report] that the float and corpse could not be from SYDNEY but,rather,from different warship or merchant ship,[the 'Identity Unknown' grave not disputed as place of burial

In 1994,because I reasonably believe on the evidence that the Christmas Island corpse of February,1942,constitutes official embarrassment in the believed 'cover up' on loss of HMAS SYDNEY, I constructed the timber cross with metal memorial plate inscribed to the Unknown Sailor and 644 SYDNEY Company [featured in Amalfi report],shipped it to the Island in MV SINA and arranged for a visiting priest to consecrate the grave and its immediate surroundings in a ceremony dedicated to the Unknown Sailor and the rest of SYDNEY's people.

The event,privately filmed from beginning to end,was well attended by the resident population. The regional contingent of Australian Federal Police was present in official capacity,with its senior member delivering the Epilogue. Video record is available for viewing.
Australian main-stream media has always declined to make use of the video [at no charge to them],or to report the ceremony and efforts and arrangements preceding it. Documented confirmation of my own 'black-listing' by at least 'The West Australian' and ABC for past many years is apparently partly responsible for reluctance to publicly inform on what is surely an Australian history-associated event.

Apart fromother available evidence, that video record clearly dem-onstrates official level (AFP) and public acceptance of the 'Identity Uknown' grave as burial place of the corpse of the Carl-ey float of February 1942.

Without comment on my own thoughts at that time as to legitimacy of that acceptance,aside from paying tribute to HMAS SYDNEY's Company I hoped the consecration might focus mainland public att-ention on officially-ignored requests of SYDNEY-bereaved relat-ives to determine status of the Unknown Sailor.
Subsequent to the ceremony,a former resident,John Kerr,returned to the Island after having been sent South to the mainland for a formal education and remaining there in employment.

Upon his return home he learned locally of the ceremony and tel-ephoned me with information that,as a child,he often played in the old cemetery and on that particular grave,that at the time it had a headstone,the identification details not remembered but certainly not the sailor's.
John Kerr also told me,during that first contact,that he clearly recalled an earthen burial mound a short distance lower down the cemetery slope and that it was believed locally to be the grave of the sailor.
He agreed with my request that he search surrounding jungle grow-th in not-hopeful quest for a probably heavy tombstone,which he had remembered as being on the grave now registered as 'Identity Unknown'.
Surprisingly,he did find it in an old open hole with other debris ,the headstone wrapped around with a large remnant of conveyor belting.
Its identifying inscription,perfectly legible [photographs in my possession] record the grave as being that of Norman Howard,phos-phate Company European Overseer,died 6th March 1924 [almost 18 years prior to SYDNEY's loss],aged 32 years.
A lower portion of the headstone then still embedded beneath the surface of the 'Identity Unknown' plot exactly fitted the curving break of the recovered inscribed portion.

John Kerr immediately informed the Island's Federal Police and the local amateur [?] historian,pharmacist Graham Collins.
He returned to the cemetery area with police and Collins.
They examined and photographed the headstone,the details recorded by police and by Collins.
Kerr,who had contemporaneously advised me of the discovery and examination,later told me that the headstone was subsequently left lying abandoned on the ground with apparently no more offic-ial interest shown. He,himself,had taken a considerable number of colour photographs of the headstone,the'Identity Unknown' grave with my timber cross on it,surrounding graves and the spot he re-membered as the "sailor's" burial mound;the mound no longer vis-ible.He brought me,from the Island,photographs and negatives [in my possession currently.]
Some time shortly after his informing Federal Police,Kerr abrupt-ly ceased all communication with me,not responding to correspond-ence,the silence continuing currently.

[I reasonably consider that Kerr's abrupt and apparently permanent break with me may have been influenced by possible AFP reference to confirmed AFP/ASIO-created false and dangerous 'record' - fortuitously FOI-disclosed - covertly maintained about myself in AFP Bureau of Criminal Intelligence and ASIO files;officially categorised as 'Secret','Confidential' and 'Restricted''
I have no criminal record or association.
One of multiple reasons for my raising that matter with you is that alleged aspects of my officially-concocted reputation have been published in FADAT HMAS SYDNEY Inquiry Parliamentary Volumes as strong attempts to discredit my significant evidence submitted to that Inquiry.

Because similarly untruthful material about myself is confirmed as covertly long-maintained in Western Australia government areas - e.g.,Police Dept's,DCW,SGIO,to name a few - if your office asks, in these Christmas Island/HMAS SYDNEY matters,for briefing on me I believe it was necessary in my own interest to acquaint you with the immediately above circumstances.]

Returning to main topic of this letter,official reluctance to resolve the question of identity of the Unknown Sailor is once more indicated by AFP reactions to the recent developments.
AFP,at 1994 consecration of 'Identity Unknown' grave,publicly conceded it to be the sailor's 1942 burial place and represented Australian Federal Police in formal uniformed capacity.

A few months later,finding of the Norman Howard headstone,with AFP subsequent involvement in relevant examination and [surely] official reporting of the revealed identity made very clear,to all concerned that the sailor's remains do not lie beneath the wooden cross.

Despite full awareness of that situation,wide belief of further official 'cover up' was boosted when,on 3rd December 1997, AFP Deputy Commissioner A.J.Mills by letter advised Attorney General (Canberra) that the 'Identity Unknown' plot,"a noted historic site", on 3rd December 1997 was still the burial place of the 1942 Carley-float corpse "believed to be..a sailor from HMAS SYDNEY".
The Deputy Commissioner went on and quoted to Attorney General the inscription on my wooden cross still [currently] marking Norman Howards grave.

The Deputy Commissioner advised Attorney General that "The AFP does not intend to prepare a separate submission" to the HMAS SYDNEY Inquiry and concluded his letter with the words "You might be pleased to include the above information in any co-ordinated response to the [Inquiry] Sub-Committee".
Attorney General,[apparently],did present to the Inquiry a submission which included full copy of the AFP letter with its perpetuation of the 'Identity Unknown' deceptive legend.
Attorney General,[apparently],in an attachment of his submission endorsed that false legend with the following:

"..A prominent cross marks the gravestone erected for an unknown sailor whose corpse was found on a liferaft which drifted past the island during World War II. The body is believed to be that of a crewman from the Australian Navy vessel HMAS SYDNEY.." [Submission #109, pp.2505 to 2511,Inquiry Vol.11.]

P.5. (Attorney General/'ES-O-S')

Further to Deputy Commissioner A.J.Mills' letter to Attorney General (Canberra),he writes the following,at p.2505,Inquiry Vol.11:

"A comprehensive search of [AFP] records did not identify any mat-erial relating to the sinking of HMAS SYDNEY.."

In fact,there were significant telephone,correspondence and FAX exchanges,devoted to sinking of HMAS SYDNEY,between AFP and myself. Written exchanges are recorded on 29th January '93;10th March '93;8th June '93;9th June '93;18th June '93.
On 11th March,'93,with my witness Gordon Laffer I met in interview with Officer T.O'Neill at AFP Regional headquarters,Perth. Subject of interview was loss of HMAS SYDNEY and her entire 645 Company.
At the interview we requested among other issues Australian Federal Police to meet with our 'ES-O-S' Group and SYDNEY Research Group,so that we may lay information and/or complaint re indicated unlawful circumstances associated with the disappearance of HMAS SYDNEY and her 645.
At end of interview Officer O'Neill informed us that his relevant report would be directed to his Commissioner,AFP.[Refer Submission 99C,pp.4232,4233,Inquiry Vol.17.]

On 18th June,'93,I received from AFP Assistant Commissioner Investigations,J.G.Valentin,a letter formally refusing AFP meeting or Co-operation in the relevant matters pertaining to loss of HMAS SYDNEY and her Company. [Refer Submission 99C,p.4233,Inquiry Vol.17.] It is reasonable to believe that those contacts with AFP,aside from my Christmas Island involvements and long-standing covert files,should have generated considerable AFP internal drafts and memos relating to HMAS SYDNEY.
However,as also shown by Norman Howard/'Identity Unknown' AFP Submission inaccuracies,there has been reluctance,or failure, by AFP to reveal significant information in that agency's possession relevant to HMAS SYDNEY Inquiry and FADAT Committee has ignored that situation. [Refer Submission 99D,pp.4537,4538,Inquiry Vol.19

Dealing still with secrecy and near secrecy exhibited by various official bodies,in relation to disappearance/reappearance of Norman Howard's identity and headstone and the saga of the sailor's takeover of Howard's grave-site,Christmas Island Shire Council and the Ministry of Regional Development have also failed to report any one of those details in their HMAS SYDNEY Inquiry Submissions which dealt exclusively with the Christmas Island graves ,despite the Shire Council being advised in 1995 of Identity Unknown/Norman Howard revelations.

FADAT Inquiry Committee's 22 March 1999 Report totally ignored all events of disappearance of cemetery record and headstone of Norman Howard and to the recovery of that headstone; the Report stating only that "a cross and plaque" was incorrectly placed "on the grave site of Norman Howard,a British Phosphate Commission Overseer who had died in 1924"; and this was an Inquiry where the FADAT Committee was charged by its Terms of Reference to investig-ate the practicability of locating the grave of an alleged body from HMAS SYDNEY..allegedly buried on Christmas Island !!

Nearest the Committee "investigation" approaches to removal and concealment of significant evidence relevant to Terms of Reference objectives is the 1999 Report [at p.120] that "the grave of Mr Howard" has "a well-defined surround,but no headstone in place". Further,the Report fails to inform the uninformed public that the absent headstone has been recovered [but not in place].
Neither does the Report reveal that the wooden cross,honouring SYDNEY's dead,still stands [now set in cement block] as identification on Norman Howard's gave.

Continuing deception,or gross incompetence???
FADAT Inquiry Committee was fully advised in my 'ES-O-S' written submissions and Capital Cities Hearings evidence,of all Christmas Island Unknown Sailor events as above.

At p.2,aboveis my contention that the concealment and rediscovery [of Norman Howard] details have been publicly suppressed by[print and electronic] media,which continues to canvas directly and not so directly the false legend of Howard's grave being that of the Unknown Sailor.
Below are two local examples; the first,a direct suppression of known facts:

(1). During Friday,17th December 1999 6p.m. news telecast,Perth Channel 9 showed a film file segment recalling 20th Century major event,the loss of HMAS SYDNEY II.
Via voice and image,viewers were informed [as up-to-date fact] that a Christmas Island grave holds the body of a sailor believed escaped from HMAS SYDNEY II on occasion of her [alleged] sinking by the German raider KORMORAN.

Channel 9 News Dept Management staff were fully informed in 1995 of the Howard revelations and were also provided with a copy of 1994 'grave consecration' video,which was immediately returned to me with a declining letter.
In March 1998,one year and nine months prior to the December 1999 national news telecast,my submissions to FADAT Inquiry revealing full details of Norman Howard revelations had appeared in Parliamentary-published Volume #9 [at pp.2085/2086.

In March 1999,nine months prior to December 1999 newscast, FADAT Inquiry Report was Senate-tabled. [For your possible information, Mr Foss,on 29th June 2000,one year and three months later it was most briefly and unsatisfactorily 'responded' to by Government.]
The Report,itself,among many other shortcomings [including omiss-ions,errors of fact,misrepresentations,unprofessionalprocedure] omitted [suppressed] the events of cemetery record disappearance, removal and concealment of headstone,search and relocating of that item.
The Report,however,whilst not recording those all-important events did [only] state that the wooden cross had been incorrectly erected on the grave of another person named Norman Howard.
An uninformed public could not deduce the true facts from that vague information,whereas media was well aware of them.

(2). Second Example: Carmelo Amalfi's print-media report by omiss -ion indirectly suppresses the significant Norman Howard ev- ents by illustrated graphics depicting only the 'Identity Unknown (Sailor's) grave,with an accompanying photograph of the wooden cross with its dedication to the sailor and HMAS SYDNEY;inferring still that the sailor's remains lie in that grave.

Photograph of a Christmas Island surveyor standing close to and looking down upon the 'Unknown' grave has a caption informing he stands near the spot where the sailor is believed to be buried.
Nowhere a word about the Norman Howard believed deception.
Why was that relevantly essential information suppressed,because the reporter certainly was aware of it.
On June 15th,last,two days before 'The West Australian' published his report Carmelo Amalfi pressed me for information on the Christmas Island grave and learned the full details of the Norman Howard story [which I expected him to know from required reading of Inquiry's 'ES-O-S' submissions and the FADAT Inquiry Committee edited Report.]

He thus possessed a national interest 'scoop' for an exclusive article [after all,nobody seems game to touch it].
Apparently,some form of restraint caused him to ignore that in- formation.
Further to that,Brian Rogers,former News Editor at Perth Channel 9 is now Amalfi's Editor at 'The West Australian' and aware of the Norman Howard connection.

Mr Foss,as indicated at p.1 above,a main aim in bringing the above issues to your attention is to point up the official sec- recy and consequent public ignorance generated,since November of 1941,about all aspects of HMAS SYDNEY's loss; in this instance the secrecy and contrived legend which denies an identity to the remains of the sailor buried on Christmas Island.
Since Edward McGowan's request for your relevant involvement it seemed appropriate to acquaint you with background perhaps not formerly known to you; e.g., Norman Howard events,particularly.

Howard's fortuitous re-emergence gave substance to impressions of a subsidiary 'cover up' on HMAS SYDNEY apparent origin of the sailor and Carley float; enough for us to appreciate McGowan's valid request,to yourself,for unbiased search and examination of the sailor's remains,if unearthed.
However,that request may have been 'headed off at the pass', by Canberra already.

A reading of Government's 29th June 'response' to FADAT Report Recommendation #6 indicates,colloquially,that the fox is again in charge of the hen-house;i.e.,Navy [Defence Dept.] at H.Q. level will "participate" with War Graves and Dept.of Transport and Reg- ional Services in "attempt" to locate the sailor's remains; furth -er,that subject to legal and other approvals and clearances,Navy [again read Defence Dept.] will commence [and control?] an invest -igation into the "issues"relating to the location attempt.
Additionally,special legislation may have to be passed,permitting exhumation.

To us,that 'response' indicates Federal control of a programme which can last indefinitely,the 58 years-old record demonstrating that Federal governments,Labor and Conservative,in bi-partisan accord have resisted every independent effort to determine the truths of HMAS SYDNEY tragedy.
Navy,itself,is the one Australian Defence Service which has consistently opposed open inquiry into SYDNEY's loss and,especially, into the Carley float and corpse of Christmas Island;even to the admitted extent of destroying significant file documents and the one surviving remnant of that Carley float.

Office of Australian War Graves has consistently declined to recognise the 1942 corpse as that of a WW2 Serviceman.

Ministry of Transport and Regional Services [with Christmas Island Shire Council] failed in its Inquiry submissions to acknowledge the events of Norman Howard apparent deception;Shire Council in its 23rd March 1998 submission to Inquiry [p.2606,Vol. 11] provided significantly misleading information,apparently with knowledge of Regional Services. Both agencies were aware of the Norman Howard events.

The Defence Department,compelled to reluctantly agree to and, in effect,conduct the 1997 Inquiry,as early as 1992 through its Minister Robert Ray formally advised Liberal MP Peter Shack and 'ES-O-S' that the HMAS SYDNEY file "is closed" and that no more effort should be expended on an event of "fifty years ago."

In all circumstances outlined,herein [and there are others] this 'ES-O-S' Group believes that the Government-favoured agencies identified in the 'response' are not likely,in foreseeable future to prove,or disprove,identity of the Unknown Sailor.

We should also be surprised if you,yourself,are not approached to reject Edward McGowan's request on the basis that proposed Navy relevant "investigation" is to be solely a Federal operation.
In that respect,it is our understanding that West Australian government has considerable involvement in administration of Christmas Island Territory.
In that belief and if persuasion is attempted,on behalf of Australian HMAS SYDNEY-bereaved and in the public interest we respectfully ask you to explore the extent of your presumed authority and,if authority exists,act with compassion on McGowan's request.

Mr Foss,as expressed above the aims of this letter are various;to attempt explanation of a background which I believe is necessary to be known in the circumstances of McGowan's request,and also the public need to examine the significant deception [associated with Norman Howard identity concealment] which initiated false legend of Unknown Sailor's place of burial.

Additionally it is intended to serve as a document of record in ongoing effort to obtain honest examination of all the [many] known circumstances of SYDNEY's loss with the lives of 645 Australian Defence Forces personnel.

It is therefore appropriate to record here a particular matter of record which Australian media and Government for the past 18 months have declined to make public knowledge; i.e.,that SYDNEY-bereaved members of this 'ES-O-S' Group on 25th January,1999,made legally represented formal Application to Director of Legal Services for a Joint Board of Inquiry to be held into all the known and alleged circumstances of loss of HMAS SYDNEY II and presumed deaths of 645 Company. [See attached p.1 of that Application.]

Grounds of Application include lack of previous mandatory Board of Inquiry and failure of FADAT Joint Standing Committee to conduct 1997 satisfactory similar investigation.
Application is now widened to claim that FADATJSC failed on 22nd March,1999,to provide a fair and accurate Report on all relevant circumstances. [e.g.,relevant to your interest in these matters, comment appears herein,above,on failure of the Report to fairly and accurately address issues concerning the Unknown Sailor of Christmas Island.]

National and West Australian media,print and electronic, advised of the Application,declined to publish on general statement that it was of insufficient public interest.

Mr Foss, I having declared this letter a document of record it seems not inappropriate to conclude with a relevant example demonstrating,to you and publicly,that the claimed 'cover up' on HMAS SYDNEY II does not end with the Unknown Sailor.
I beg your tolerance for inclusion,herewith,of material [from my elsewhere directed relevant Statutory Declaration] describing the semi-covert operation conducted by Australian/German governments and their Defence Forces [with participation of KORMORAN former crew] on 12th/13th July,1990,in Kiel Naval Base,North Germany.
The Kiel operation was apparently intended to ease international official tensions still existant around SYDNEY/KORMORAN 'history',but without the knowledge,consent or participation of SYDNEY-bereaved or Australian general public.
Hopefully,it may make more rational to you our distrust of Federal control in these matters. [See attachments,page-numbered 12/13/14.]

Again,media has been informed of all the details and is not interested in publishing same. ["Not of sufficient public interest".]
Evidence is that public is <u>deeply</u> interested and should become even more so when eventually made aware [as will be] that so much significant information is being withheld;therefore,this and subsequent document/s of record.

Mr Foss,Group members and I thank you for your attention,so far.
Your earliest convenient response and comment will be appreciated

Sincerely,

(John Doohan;Convenor,'ES-O-S'
21 Bartlett Street,WILLAGEE
6156

With attachments.

C.c: To interested parties,identified above.

(28) Among other significant examples of FADAT Committee and FADAT Report either ignoring or omitting "vital" material submitted to them,by ES-O-S and others,are 'background' events connected with the Australian War Memorial (AWM) 1993 Report on the forensic investigation of SYDNEY's damaged Carley float salvaged by HMAS HEROS in November 1941.

In 1991 I was personally involved in persuading then-Minister Nick Bolkus to initiate the AWM reluctant forensic probe into that float to determine if the "exploded munitions" fragments,therein, also contained spent machine gun projectiles as had been alleged.

In 1993 [the probe surviving official funding starvation of the project] the AWM forensic team's Report of that investigation was formally published and publicly circulated;i.e.,[in part] that metallic fragments,therein,were definitely pieces of heavy and lighter calibre "exploded munitions" of the types carried by KORMORAN. Allegedly,none of these "exploded munitions" were machine gun projectiles.

However,just after publication of the AWM 1993 Report,the team's metallurgical expert analyst,Professor Dudley Creagh [of Canberra National University Defence Studies],in 2 **published interviews formally repudiated those initial conclusions,insisting that the fragments were pieces of SYDNEY's structural steel and brass,with no similarity whatsoever to "exploded munitions".[SYDNEY Inquiry, ES-O-S Submission,Vol.9,pp.2127/2128; Ditto Vol.19,p.4555 **].

Notwithstanding Professor Creagh's expert repudiation,the unaltered AWM Report still officially stands as the sole authority in the public domain,which includes FADAT HMAS SYDNEY Inquiry Report; for,without question or comment,FADAT Report endorses the AWM 1993 Report as a bona fide conclusion,which causes me to believe that some FADAT Committee members either did not read through the ES-O-S submissions or deliberately rejected them.
FADAT Committee noticeable behaviour supports my claim at Item 19 and Item 23,p.5 that some submissions were ignored or simply not addressed.

In fact,as well as raising again the questions of conduct and management of SYDNEY Inquiry,Professor Creagh unwittingly poses a further query: did any of KORMORAN's "munitions" hit SYDNEY at all? That is something for a joint Board of Inquiry to consider.

(29) Item 2 (a),above,refers to status of all relevant Archival material.
In the case of Japanese submarine I-124 I have dealt [in this Declaration and Attachment 'N'] with the relevant US/Japan falsifications of I-124 record. There is a good deal more relevant material omitted from FADAT Committee general comments and its Report, over the whole field of relevant Archival material.

An undisclosed quantity,greatly significant in its relevance,[e.g KORMORAN's Dr.Habben 1943 Report to German Naval Intelligence, p.(iii),Attachment hereto] is held in German Federal Republic [Freiburg] Archives;full Report appears FADAT Vol.18,p.4431;8 pp. Some FADAT Committee members were aware of that situation,Australian Government knew of it also,because at least as early [orlate] as 1990 it was doing high level Diplomatic deals with German Government [avoiding Australian public fuss in the process] in order to terminate the SYDNEY/KORMORAN Affair without disturbing the status quo of official records; but apparently it was not the aim of any of the parties to examine German SYDNEY-relevant material at FADAT Inquiry.[FADAT Report,3.14,p.19].

None of this revealing material appears to be held in Australian Archives,even though British Admiralty seized it at 1945 cessation of hostilities,holding it until late 1970's before returning it to Germany in such disordered condition that,recently,German authority predicted it would be another 10 years before a very large quantity of German raider-associated record can be restored to order sufficient for research purposes.[FADAT Inquiry Volume 18,p.4412].

The Australia/Germany 1990 Diplomatic Deal appears to be another of the occasions when FADAT Committee decided to limit its comments and conclusions on certain matters on which it took direct evidence.
I refer to the Inquiry Submission evidence [FADAT Report,6.63, p.87] by Captain Joseph Burnett's son Commodore (RAN,ret'd) Rory Burnett,where he states [abridgement and emphasis mine]: "There is certainly no obligation to give the German version <u>any official seal of approval</u>,despite recent pressure from KORMORAN survivors to have themselves cleared of any possible guilty conduct. On the contrary,there is an obligation to ensure...that while doubt exists,as it always must,<u>no official sanction is given to the German version</u>."

Perhaps without Commodore Burnett's knowledge,certainly without the general knowledge of SYDNEY's bereaved families and Australian public,Australian Government formally and quietly sanctioned the Nazi-German version,in Kiel Naval Base,North Germany,on 12th and 13th July 1990;and HMAS SYDNEY IV,with its boy-sailors,was the chosen instrument for the publicly undisclosed "seal of approval".

SYDNEY IV,in the Northern summer of 1990,commenced a 'world tour' inclusive of Europe and Scandinavia;Stockholm,Sweden,intended to be last port of call in the Europe/Baltic schedule.
Arrived in Stockholm,it transpired that in a very late change of programme SYDNEY IV was to make a surprise call into Kiel,home of the German Navy,with ostensibly nothing significant planned for the visit [as far as the ordinary 'mess-deck sailors'were aware]. July 11th,a day out of Stockholm she berthed in Kiel where immediately it became evident that,in fact,a great deal of planning had taken place well before at the highest levels of Australian and German Governments and military.

Clearly,Kiel was the politically top level publicly restricted Phase One of the 'put HMAS SYDNEY II to bed' operation,Phase Two intended to be the following 1991 Australian 50th anniversary of her sinking;nostalgically billed by Australian politicians as 'Australia Remembers',but with no indication that the political 'forgetting' had been celebrated 15 months before in Kiel,Australian bereaved uninvited and none the wiser.
Instead,the Australian Ambassador travelled quietly to Kiel,from Bonn,to provide low-key seal of official Diplomatic approval.

Local North German media had been organised to interview selected members of the ship's Company,KORMORAN ex-crew had been brought specially to Kiel to attend a Captain's Dinner aboard SYDNEY IV, an official cocktail party arranged for dignitaries and ship's officers,a 'beery pub night' with local citizens turned on for the Australian mess-deck ratings.
An expensive metal ornamental plate,inscribed "HMAS SYDNEY",was in readiness for presentation to Commanding Officer,Commander B.D Robertson at the "official" cocktail party.
The Commander,with ship's Company,was booked to lay wreaths,next day at the Laboe German Navy Memorial,in shadow of the NAZI battle flag,displayed officially and permanently only in Laboe.
Even a young German Navy sailor,extended-family of a SYDNEY IV junior sailor was at hand for them to be photographed together.
Doctor Goebbels could not have done it better!

All events,locations,people,military facilities [including SYDNEY IV] were organised well in advance of this Australian naval unit suddenly appearing on 'unscheduled,insignificant' visit in Germany's chief naval base.
All events took place on carefully pre-arranged schedule impossible without significant record created between Australian and German Diplomatic and military arms of Governments;the 'KORMORAN and EMDEN Association' necessarily providing low-key visible 'public face' of the real host,German Federal Republic.
A necessary record must therefore have been created between Australian Government and that German 'private' Association,also.

Those created records,official and quasi-official,undeniably are HMAS SYDNEY II-related material;the final Salute [or the final insult?]
Why were they not produced for Inquiry? Why were they ignored by FADAT Inquiry Report? Where are they now?
As far as my inquiries were able to confirm,the one information source on the Kiel Operation is a souvenir booklet,generally photographic and specifically published in very limited number [at Defence Department expense?] for participating few SYDNEY IV Company. Its title:'HMAS SYDNEY IV World Tour;1990'.
A passage therein records the voyage [and Kiel ceremonies] as "in diplomatic and professional terms the most significant in the history of the Royal Australian Navy."
That publication was not traceable,for me,in State or Commonwealth Library Services.
Australia Remembers? Why not???

.../15

Submission
by

John C. Dunn
Kim Kirsner

University of Western Australia

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Locating HMAS Sydney and HSK Kormoran by Temporal Triangulation

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Temporal triangulation is a technique developed by the authors to determine the likely point of origin of pairs of objects that are assumed to move at the same speed in a straight line from a common point of origin. The method is applied to the two lifebelts and two life-rafts recovered by search and rescue in the days following the sinking of HSK Kormoran and HMAS Sydney. The results of this technique coupled with historical evidence concerning estimated wind-speed and direction supports the view that the present location of HSK Kormoran lies in a circular arc of ocean bounded approximately by the points, 26°00′S 109°20′E and 25°30′S 111°30′E.

Background

The search for the wrecks of HSK Kormoran and HMAS Sydney has generated a variety of radically different solutions. Even scientists with broadly similar backgrounds and approaches have supported solutions that are hundreds of kilometres apart. Perhaps surprisingly, this conflict is most clearly represented in the oceanographic domain.

Using a model developed specifically for Search and Rescue operations by the Australian Maritime Safety Authority, and professionally guided assumptions about wind, current, wind-driven current, and leeway, Sam Hughes (Hughes, 1991; Kirsner & Hughes, 1993) proposed that the wrecks are probably in the area defined by a 50nm circle centred at 26°30′S 111°30′E. This region is depicted in Figure 1 as the blue circle H.

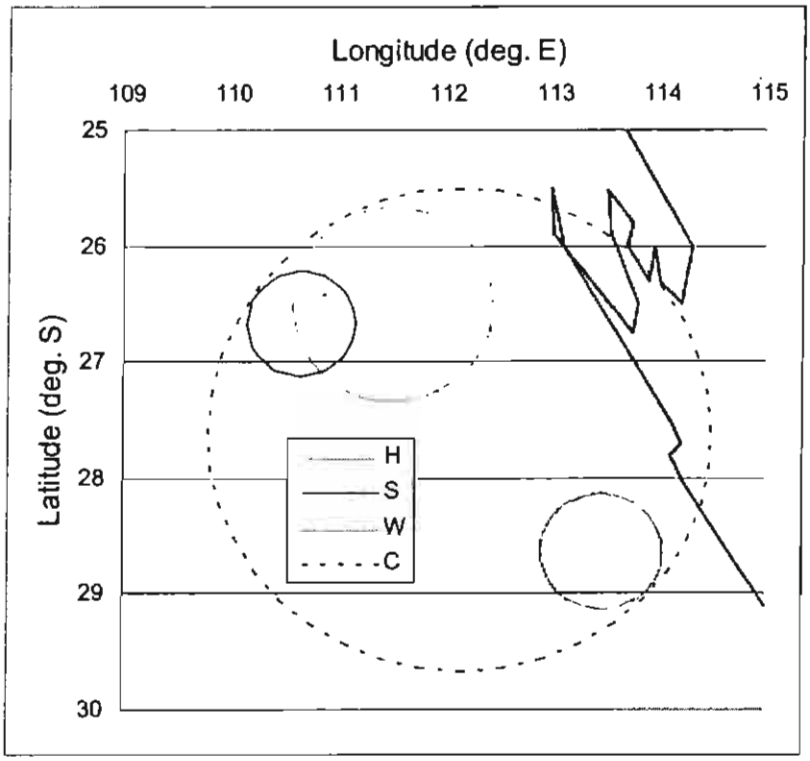
Figure 1 also includes a region defined by two oceanographers, John McCormack and Ray Steedman (McCormack & Steedman, 1991). McCormack and Steedman used a completely different approach. Whereas Hughes' analyses were based on meteorological reconstructions provided by Courtney (1991) and Southern (1991), McCormack and Steedman selected recent periods with weather patterns similar to those that held between November 19 and 29, 1941, and developed a quantitative model for the wind based on known wind values for those periods. They concluded that the wrecks are probably in a 50 km circle centred at 26°40′S 110°40′E. The relevant area is depicted in Figure 1 as the red circle S.

Figure 1 also includes a position defined by Warren Whittaker, a navigator (Whittaker, 2000), and endorsed by John Bye, a physicist (Bye, 2001). The original argument for a position to the south of 28°S involved techniques that do not appear to have received independent support from the scientific community, namely map-dowsing and the Knight Direction Location System. However, Bye (2001) used evidence from drift card experiments to support the general area advocated by Whittaker (2000). The relevant position is indicated in Figure 1 by the green circle W of radius 30nm.

These data define just three possible conditions. The first condition is that Hughes (1991) and McCormack and Steedman (1991) are incorrect. The second condition is that Whittaker (2000) and Bye (2001) are incorrect. The third condition is of more concern however. It is that estimates of the amount of error associated with these solutions are out by an order of magnitude. According to the third condition, all of the target positions are viable because they are mere samples from an error circle that has a radius of the order of 125nm. Put in other words, the specific target positions proposed by these authors can all be

preserved if it is assumed that they belong to a central point at 27°35'S 112°08'E with a radius of 125nm. This area is depicted in Figure 1 as the dashed circle C.

Figure 1. Hypothesized search areas and locations for HSK Kormoran /HMAS Sydney (H=Hughes; S=McCormack & Steedman; W=Whittaker; C=Combined).



It should be noted however that the area of the combined circle (ignoring the presence of land) is almost 50,000nm^2, and that it would therefore increase the potential search area and/or reduce the role of oceanography in the search. With this problem in mind, we have turned to a new and different approach to the problem. This approach does not involve any assumptions about wind, current, wind-driven current or leeway. The approach developed in this article is termed *temporal triangulation*[1].

Debris from the Sydney/Kormoran

During the search and rescue following the battle between HMAS Sydney and HSK Kormoran, six free-floating, unpropelled, objects were recovered. They are listed in Table 1 and described in the Appendix. Of particular interest are the two lifebelts and the two life-rafts. For present purposes, these are referred to as the *critical objects*.

[1] This method was developed independently by the authors for the present analysis. It is possible that the method is already well-known in fields unfamiliar to them.

Table 1. Details of objects recovered during initial search and rescue attempt (see Appendix for descriptions).

Object No.	Type	Recovery Vessel	Date	Time (hrs)	Latitude	Longitude
1	RAN lifebelt	Wyrallah	27/11/41	1815	24•22′S	110•49′E
2	Lifebelt (German)	Wyrallah	28/11/41	0801	24•10′S	110•54′E
3	Life-raft (German)	Aquitania	23/11/41	0700	24•35′ S	110•57′E
4	Life-raft (German)	Trocas	24/11/41	1500	24•06′S	111•40′E
5	RAN Carley float	Heros	28/11/41	1100	24•07′S	110•58′E
6	Dog kennel	Heros	28/11/41	1100	24•07S	110•58′E

Limitations of hind-casting

The time and location of the various objects recovered from HMAS Sydney and HSK Kormoran provide information concerning where these objects were released from the vessels concerned, presumably close to their current unknown locations. One way of using the information in Table 1 is to attempt to reconstruct the conditions of wind, wave, and current over the period in question in order to track the objects to their presumed source. This approach is called *hind-casting*. While, in principle, hind-casting is a valid technique, in practice it suffers from serious limitations. These concern high levels of uncertainty concerning the direction and magnitude of the prevailing winds, direction and magnitude of ocean currents, including wind driven current, and estimates of leeway for each object. For this reason, the present analysis relies on an alternative approach, here called temporal triangulation.

Temporal triangulation is based on the simple idea that similar wind-driven objects travel at similar speeds under similar meteorological and oceanographic conditions. On this basis, it is possible to identify a set of possible points of origin for the critical objects. Although we later refine this set of points using information concerning wind-speed and direction, in principle, the method does not rely on this or any other oceanographic or meteorological information. We discuss the proposed method in two parts. In the first part, temporal triangulation is given a precise mathematical form. In the second part, the method is applied to the data from Table 1.

Mathematical description

Consider two objects, A and B, that move from their points of origin, O_A and O_B respectively, to their points of recovery, R_A and R_B respectively, over periods of time, t_A, and t_B, respectively. Now make the following three assumptions:

(1) The two points of origin are identical. That is, $O_A = O_B = O$.

(2) The trajectories of the objects from O are straight lines on the XY plane.

(3) The average speed of the two objects from origin to recovery are identical.

Let (x_0, y_0) be the coordinates of O on the XY plane and let (x_A, y_A) and (x_B, y_B) be the coordinates of R_A and R_B respectively. Then, by assumption (2), the total distance traversed from O to R_A is given by,

$$d_A(x_0, y_0) = \sqrt{(x_A - x_0)^2 + (y_A - y_0)^2} \tag{1}$$

and the total distance from O to R_B is,

$$d_B(x_0, y_0) = \sqrt{(x_B - x_0)^2 + (y_B - y_0)^2} \tag{2}$$

The average speeds of the two objects over these distances are,

$$\begin{aligned} v_A(x_0, y_0) &= d_A(x_0, y_0)/t_A \\ v_B(x_0, y_0) &= d_B(x_0, y_0)/t_B \end{aligned} \tag{3}$$

Let V_{AB} be the set of points, (x, y), such $v_A(x, y) = v_B(x, y)$. That is,

$$V_{AB} = \{(x, y) \mid v_A(x, y) = v_B(x, y)\} \tag{4}$$

In general, V_{AB} describes a circle, here called the *circle of equal speed*, which is parameterized by the following equation,

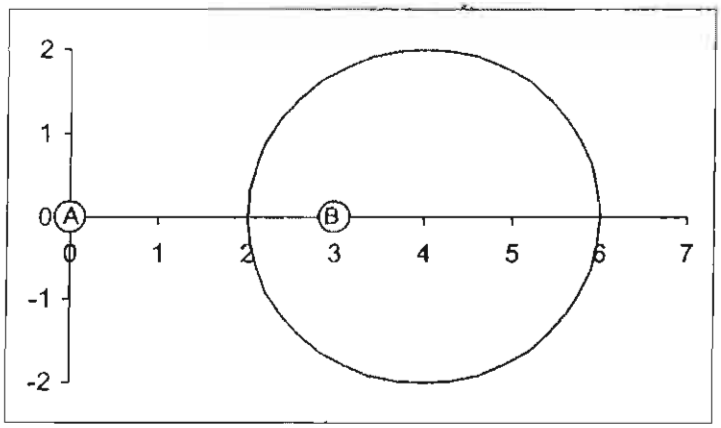
$$\begin{aligned} x &= b(d_x \cos\theta - d_y \sin\theta + d_x a) + x_A \\ y &= b(d_y \cos\theta + d_x \sin\theta + d_y a) + y_A \end{aligned} \tag{5}$$

where $a = t_A/t_B$, $b = a/(a^2 - 1)$, $d_x = x_B - x_A$, and $d_y = y_B - y_A$. The radius, r, of the circle is given by $r = bd$, where $d = (d_x^2 + d_y^2)^{\frac{1}{2}}$, and its centre is the point, (x_c, y_c), given by $x_c = abd_x + x_A$ and $y_c = abd_y + y_A$. Therefore, the circle also satisfies the following equation,

$$(x - x_c)^2 + (y - y_c)^2 = r^2$$

An example of such a circle is illustrated in Figure 2 for the points, $R_A = (0, 0)$ and $R_B = (3, 0)$, and for the times, $t_A = 2$ and $t_B = 1$. Based on these values, $a = 2$, $b = \frac{2}{3}$, $d_x = 3$, and $d_y = 0$. Therefore, the distance between the points, $d = 3$, the radius, $r = 2$, and the centre of the circle is the point, $(x_c, y_c) = (4, 0)$.

Figure 2. The circle of equal speed, V_{AB}, for points A and B.



Since, by assumption (3), $v_A(x_0, y_0) = v_B(x_0, y_0)$, the point of origin, O, is contained in V_{AB}. That is, $O \in V_{AB}$. Thus, consideration of one pair of equivalent objects limits the point of origin to the circumference of a circle. If there are two pairs of objects, then two (hopefully different) circles of equal speed are defined. Therefore, the origin is further constrained to be one of two points corresponding to the intersection of these circles. Suppose there are two pairs of objects, $\{A, B\}$ and $\{C, D\}$, and each member of a pair moves at the same rate and all four objects share the same origin, O. Since we have, $O \in V_{AB}$, and $O \in V_{CD}$, it follows that $O \in V_{AB} \cap V_{CD}$. The point of origin is thus constrained to be one of two points corresponding to the intersection of the circles. This is the basic principle of temporal triangulation[2].

Application to search for HSK Kormoran/HMAS Sydney

Table 2 presents the relevant data for undertaking temporal triangulation. The elapsed time to recovery is based upon an assumed temporal origin of 1800 hrs on November 19, 1941.

[2] Further refinements are possible by adding further pairs of objects.

Table 2. Spatio-temporal locations of objects recovered from HMAS Sydney and HSK Kormoran.

Object No.	Type	Elapsed Time (hrs)	Point of Recovery	
			Latitude (deg. S)	Longitude (deg. E)
1	RAN lifebelt	192.25	24.4	110.8
2	Lifebelt (German)	206.0	24.2	110.9
3	Life-raft (German)	85.0	24.6	111.0
4	Life-raft (German)	117.0	24.1	111.7
5	RAN Carley float	209.0	24.1	111.0
6	Dog kennel	209.0	24.1	111.0

With respect to the four critical objects (two lifebelts and two life-rafts), we make the following three assumptions:

(1) The critical objects share a common point of origin.

Comment. While this assumption is unlikely to be correct, it may be approximately correct. Over a search space of perhaps 100nm^2, a difference of up to 10nm between their respective points of origin may be tolerable.

(2) From the point of origin to its point of recovery, each critical object moved in a straight line on the *XY* plane (a geodesic on the surface of the earth).

Comment. Although this assumption is unlikely to be correct, it may be a good approximation. Note that violation of this assumption will lead to an *over-estimate* of the distances actually traversed.

(3) The average speeds of the two lifebelts are equal, and the average speeds of the two life-rafts are equal.

Comment. Again, this assumption is likely to be only approximately correct. Note that average speed does not imply that the objects move at a *constant* speed over the time periods in question. For the average speeds to be the same for each pair of objects, we assume that they are physically similar enough to be propelled by current and wind at the same rate. This appears to be a more viable assumption for the two life-rafts which differ only in that one 'raft' consisted of two individual rafts lashed together. It is less clear that this assumption is met by the two lifebelts. In addition, since one member of each pair was recovered prior to the other, we assume that the net action of current and wind remained the same during the period from recovery of the first object to recovery of the second.

Method

Circles of equal speed were calculated each for two lifebelts and the two life-rafts using relevant data from Table 2. Longitude and latitude were converted to points on the *XY* plane with coordinate axes oriented north-south and east-west and an arbitrary origin[3]. Once

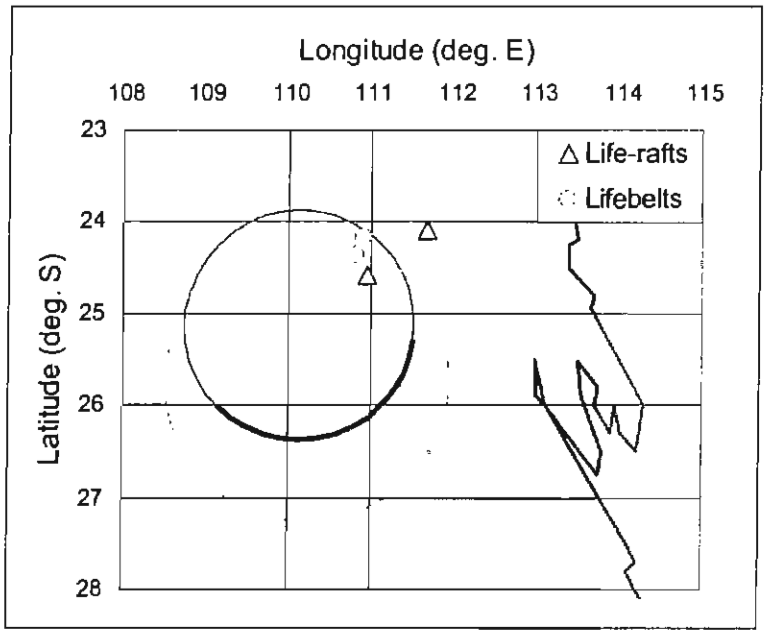
[3] The origin actually used was 24°00'S 111°00'E.

converted to xy-coordinates, equation (5) was used to generate the relevant circles of equal speed. The resulting xy-coordinates for these circles were then converted back into longitude and latitude and displayed graphically.

Results

Figure 3 presents the circles of equal speed for the two lifebelts and the two life-rafts. In addition, the points of recovery for the two sets of objects are also shown. The circle of equal speed for the lifebelts is shown in blue and the circle of equal speed for the life-rafts is shown in red. These circles intersect at the points, 24•56′S 108•47′E and 24•33′S 111•22′E.

Figure 3. Points of recovery and circles of equal speed for the two lifebelts and two life-rafts. See text for explanation of the highlighted arc.



Discussion

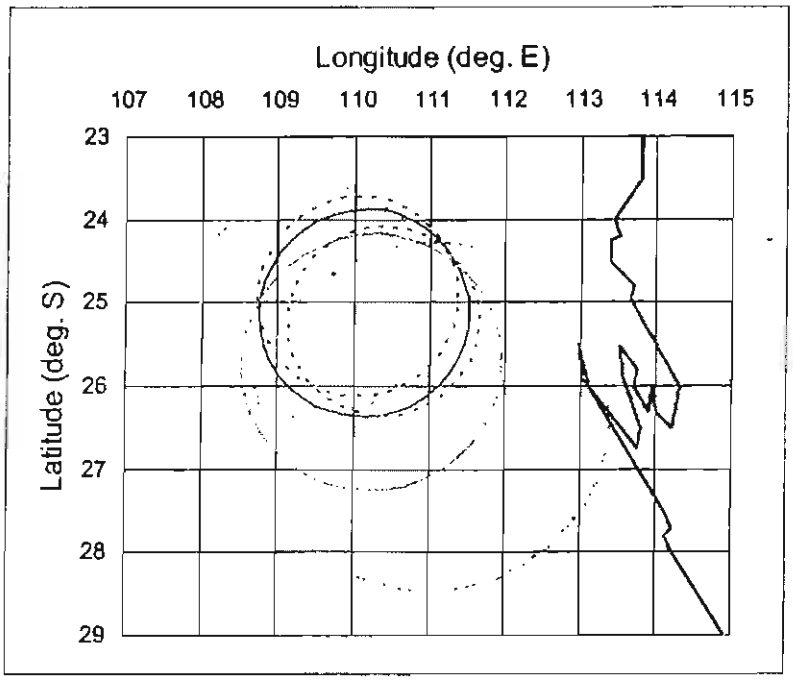
The current method indicates that the common point of origin for the four critical objects is either 24•56'S 108•47'E or 24•33'S 111•22'E.. Although this result is consistent with the method as described, we do not believe it to be a reliable estimate for three reasons. These

reasons concern differences in informational content, historical data concerning the direction and magnitude of prevailing winds and hence object movement, and estimates of the average speed of movement. We discuss each of these in turn.

Informational content

The value of temporal triangulation depends upon the informational content of the two recovery locations and times. The greater the separation of the two recovery points in space and time, the greater the informational content. For example, if each object in a pair was recovered at the same location and at the same time (c.f. Carley float and dog kennel), then the data would have zero informational content. It would be useless to apply temporal triangulation in this case as the data do not constrain a common point of origin. An analogous situation occurs in fixing a point as the intersection of two compass bearings. If the two bearings are identical, the point cannot be fixed.

Figure 4. Circles of equal speed based on deviations of ±3nm from points of recovery.



The recovery points of the two lifebelts have lower informational content than the recovery points of the two life-rafts. How much so is shown in Figure 4. This figure plots the circles of equal speed for the two pairs of objects induced by relatively small changes in the positions of recovery points. For both pairs of objects, the recovery points were moved ±3nm in the east-west direction and ±3nm in the north-south direction. The dashed circles in Figure 4 show the resulting circles of equal speed. This shows that while small perturbations in the recovery points of the life-rafts has a relatively small effect on the size and location of the circle of equal speed, the effect on the lifebelts is enormous. For this reason, we treat the circle of equal speed for the lifebelts as unreliable and choose to place much greater weight on the circle of equal speed for the two life-rafts and for the remainder of the analysis. In fact, we treat the point of origin of these objects as being unconstrained by differences in the recovery points of the two lifebelts.

Because of the lack of suitability of the recovery points of the two lifebelts, the principle of temporal triangulation cannot be directly applied. However, given the underlying assumptions, the point of origin is still expected to lie somewhere along (or near to) the circle of equal speed of the life-rafts. We now turn to this question and use historical information concerning wind-speed and direction and plausible estimates of leeway to constrain the point of origin to an arc of this circle.

Wind direction

Several attempts have been made to reconstruct the direction and magnitude of prevailing winds in the area surrounding the recovery points for the period in question (e.g. Courtney, 1991; Southern, 1991). While there is uncertainty concerning the magnitude of the

wind, the evidence does strongly indicate that for the period in question that the direction of the wind was more or less from due south. This provides a means of restricting the circle of equal speed to a plausible subset of points. In particular, to those points on the circle that lie approximately to the south of the two life-raft recovery points.

For each point on the life-raft circle of equal speed the "northerliness" of the hypothesized trajectories of the four critical objects was calculated as follows. Let $P=(x,y)$ be a point on the circle of equal speed for the life-rafts and let $Q=(x,y+1)$ be a point to the north of P. Let $R_i=(x_i,y_i)$ be the recovery point for critical object i. Then the cosine of the angle, θ_i, between the vectors $\vec{PQ}$ and $\vec{PR_i}$ is given by,

$$\cos(\theta_i)=\frac{(y_i-y)}{\sqrt{(x_i-x)^2+(y_i-y)^2}}$$

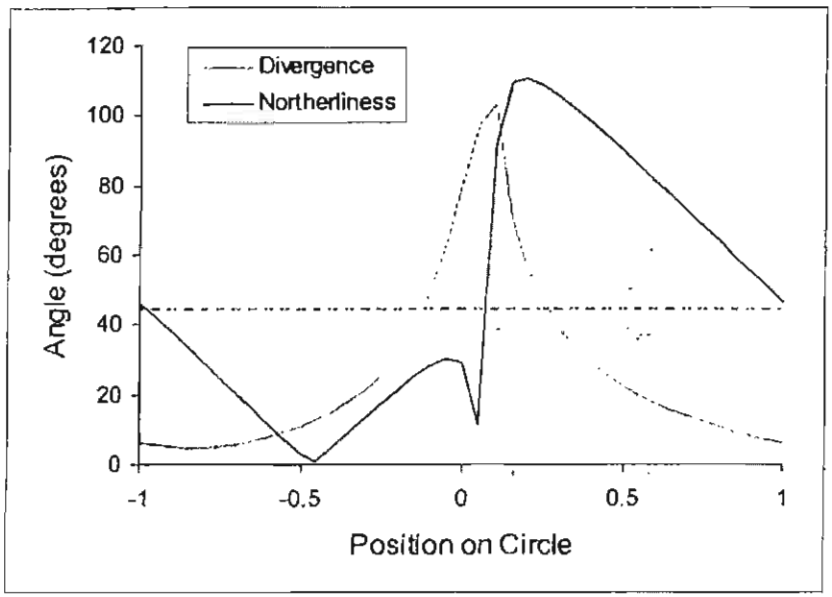
A measure of the degree to which all four critical objects follow a northerly path from P is given by the angle whose cosine is the average of the cosines for each critical object. That is,

$$\theta=\cos^{-1}\left(\tfrac{1}{4}\sum_i\cos(\theta_i)\right)$$

This angle (in degrees) is plotted as a function of the position of P on the circle in Figure 5 (red line). The smaller this angle, the closer to due north is the average direction of movement of the critical objects.

The position of P should be interpreted as follows. The value of zero corresponds to the intersection of the circle of equal speed with the line segment connecting the two recovery points. Negative values correspond to points on the southern semicircle that are passed moving in a clockwise direction from the zero point to the point on the circle directly opposite. Similarly, positive values correspond to points on the northern semicircle that are passed moving in an anti-clockwise direction.

Figure 5. Mean angle of "northerliness" and mean angle of divergence as a function of position on the life-raft circle of equal speed. The dashed line corresponds to the proposed cut-off of 45°.



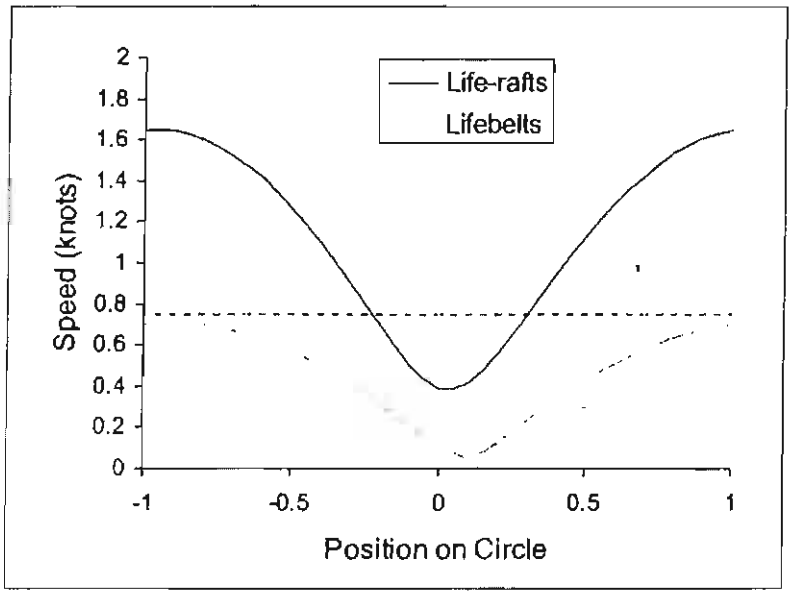
The angle of northerliness plotted in Figure 5 is based on the four of recovery points. For points on the circle that are close to these points, this estimate may be misleading. Specifically, while the net movement of all four points may be due north, most of the actual movement of the objects is in either the east-west or west-east directions. That is, movement of the critical objects is dominated by divergence rather than common fate. For this reason, a measure of divergence is also plotted (in blue) in Figure 5. This is defined as the average angle (in degrees) between each pair of vectors, $\vec{PR}_i$ and $\vec{PR}_j$, for $i \neq j$. Figure 5 shows that for points on the circle close to position zero, and hence close to the recovery points, the hypothesized trajectories are dominated by divergence rather than common fate.

If we assume that the movements of the four critical objects was primarily south to north, it is possible to identify a plausible subset of points on the circle of equal speed. Such points would be consistent with an approximately northerly trajectory with minimal levels of divergence. While the definition of "approximate" in this context is necessarily arbitrary, for illustrative purposes we have chosen an angle of 45°. That is, a point P on the circle of equal speed is defined as a plausible point of origin if its angle of northerliness and its angle of divergence is less than or equal to 45°.

Average speed of movement

By definition, the average speed of movement of the two life-rafts is the same for each point on the circle of equal speed. However, this speed differs from point to point. This speed is plotted in Figure 6 as a function of position on the circle. The average speed for the two lifebelts is also plotted as a function of position.

Figure 6. Average speed of the life-rafts and lifebelts from each point on the life-raft circle of equal speed. The dashed lines correspond to the proposed cut-off points of 0.75 knots for the life-rafts and 0.3 knots for the lifebelts.



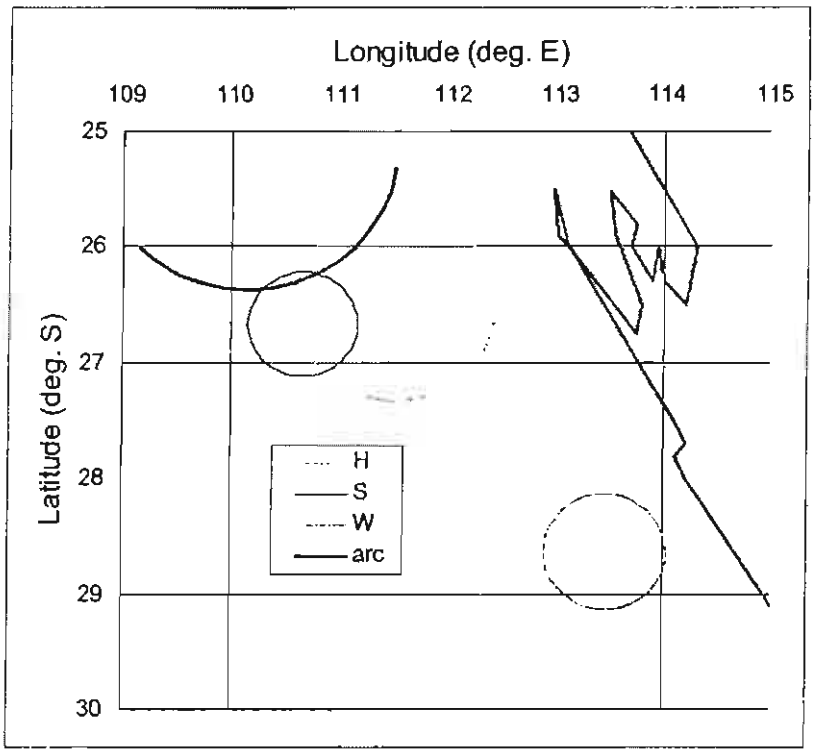
The speeds of the life-rafts range from 0.4 knots to 1.5 knots. Is each speed within this range equally plausible? While it is difficult to be precise, some guidance may be gained from estimates of wind magnitude and life-raft leeway. According to Courtney (1991) the average wind-speed for the period in question was approximately 20 knots. According to Hughes (1991), the estimated leeway of a life-raft of the type found on HSK Kormoran is approximately 7%, although this value may be an overestimate (Allen & Plourde, 1999). Based on a leeway of 7% and average wind-speed of 20 knots, the speed of the life-rafts would be approximately 1.4 knots. If the leeway value is an overestimate and the wind-speed is less, then the average speed would be less. For example, if leeway is close to 5% and mean wind-speed was 15 knots, then the average speed of the life-rafts would be only 0.75 knots. Although it is to some extent arbitrary, this may represent a lower bound on plausible speed. As a final constraint, if the leeway of the life-rafts is estimated to be between 5-7% of wind-speed, so the leeway of the lifebelts has been estimated to be 2-3% (Hughes, 1991). On the same basis as above, the average speed of the lifebelts should then lie between 0.3 and 0.6 knots.

A plausible arc

As a consequence of the foregoing, a point P on the circle of equal speed is defined as a plausible point of origin if its mean angle of northerliness *and* its angle of divergence is less than or equal to 45° *and* the average speed of the life-rafts is greater than 0.75 knots *and* the average speed of the lifebelts is greater than 0.3 knots. Points satisfying these criteria are highlighted in Figure 3 and suggests that true point of origin of the life-rafts lies somewhere

along the portion of the circle of equal speed between 109°20′E and 111°20′E. Figure 7 shows this arc in relation to the search circles shown in Figure 1.

Figure 7. Plausible arc in relation to the hypothesized search areas and locations for HSK Kormoran/HMAS Sydney (H=Hughes; S=McCormack & Steedman; W=Whittaker).

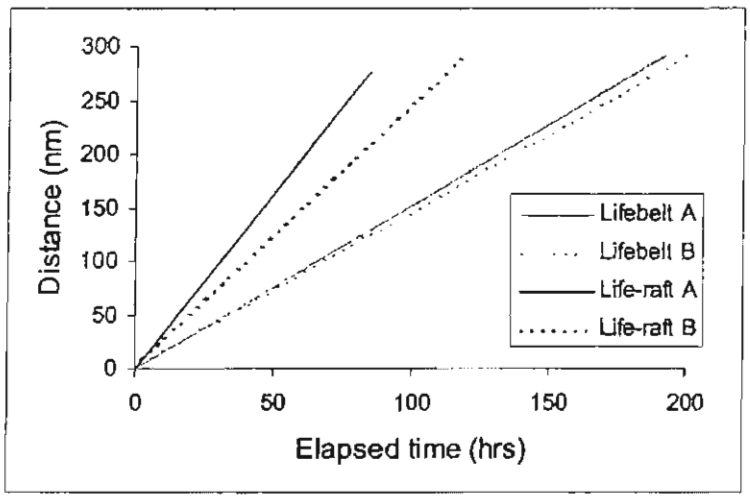


Is a more southerly origin possible?

As Figure 7 shows, the results of the present analysis appear to rule out points of origin lying much further south than 27°S. The principal reason for this is that from such southerly points of origin, in order to arrive at their recovery points at the appropriate time, the two life-rafts must travel at substantially unequal speeds. For example, consider the point, 28°38′S 113°22′E which has been suggested as the potential location of the HSK Kormoran (Knight & Whittaker, 2001). Figure 8 is a plot of the distances between this point and the recovery points of each of the four critical objects as a function of elapsed time. The slope of the line connecting each point and the origin is equal to its average speed of movement. As the figure shows, while the average speeds of the two lifebelts[4] are approximately equal (both about 1.5 knots), the average speeds of the two life-rafts are different (3.3 and 2.5 knots, respectively).

[4] Lifebelts A and B correspond to Objects 1 and 2, respectively, in Table 1, and life-rafts A and B correspond to Objects 3 and 4, respectively.

Figure 8. Position in time and space of the four critical objects with respect to 28°38′S 113°22′E.



How can the disparity in speeds be accounted for? One approach is to question the three assumptions underlying temporal triangulation. The first of these assumptions is that each object of a pair originated from the same point in time and space. Since the calculated speeds of the two lifebelts are equal, only the different values for the life-rafts are troublesome for this position. If life-raft A began its journey earlier and closer to its point of recovery, then it would have moved at the same (lower) speed as life-raft B. Alternatively, if life-raft B entered the water at the same location as life-raft A but later, it too could have travelled to its recovery point at the same (higher) speed as life-raft A. However both these scenarios are less parsimonious than the proposal that both rafts entered the water at approximately the same time and place, and it cannot be independently corroborated.

The second assumption underlying temporal triangulation is that the various objects each move in a straight line. If life-raft B did not move in a straight line (e.g. it took a zig-zag path) then it may have reached its recovery point by moving at the same speed as life-raft A.

However, it would now be necessary to explain why the two objects, originating at the same time from the same location, managed to take such different paths.

The third assumption underlying temporal triangulation is that similar objects move at the same average speed. It is possible that due to differences in structure, or numbers of personnel on board, or the presence or absence of a drogue, the two life-rafts did travel at different average speeds. The present analysis is vulnerable to this criticism if it can be shown to be true. Alternatively, because life-raft A was recovered 32 hrs before life-raft B, it is possible that they both moved at the same speed until the first life-raft was recovered, after which life-raft B moved at a different speed. However, for this to work, life-raft B must have moved at 3.3 knots for 85 hrs and then at 0.3 knots for the remaining 32 hrs. Obviously, this sudden change in speed must also be explained in some way.

As well as failing to explain the difference in average speeds of the two life-rafts, the southern location requires what appear to be implausibly high speeds for all four objects. As noted earlier, leeway has been estimated to be 5-7% for the life-rafts and 2-3% for the lifebelts. If the speed of life-raft A was at least 3.3 knots (and if its trajectory is non-linear it would be greater than this), then this would give an estimated wind-speed of 50-70 knots. For the lifebelts, similar calculations also result in wind-speeds of the order of 50-80 knots. These values fall far outside the range reported by Courtney (1991) and Southern (1991) and seem implausibly high[5].

Conclusion

The present analysis is based on three premises; (1) information concerning the locations and times of recovery of the four critical objects, (2) three assumptions concerning the points of origin of these objects, their trajectories and rates of movement, and (3) a range of plausible values for wind-speed and direction and leeway of the critical objects. Importantly, the analysis does not depend upon adopting a particular set of values for wind and leeway. Rather, a range of plausible values are used to constrain the likely points of origin. On this basis, the analysis points to an arc of ocean lying between 26°00′S 109°20′E and 25°30′S 111°30′E as the area most likely to contain the wreck of HSK Kormoran. While points in the vicinity of this arc include a relatively large search area, the results are broadly consistent with the search areas previously proposed by Hughes (1991), Kirsner and Hughes (1993), and McCormack and Steedman (1991). Taken as a whole, these results suggest that a point near the intersection of these three estimates would be a useful starting point for any search. This point is on or about 26°20′S 110°40′E.

[5] Recent work by Allen & Plourde (1999) suggests that the leeway estimates for the life-rafts may be as low as 3%. If true, the hypothesized speeds of these objects from the southern position appear to be even less likely.

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Appendix

Descriptions of Objects Recovered 8-9 days Following the Battle

1. RAN lifebelt. An inflated RAN lifebelt, with a snapped securing tape, was found by HMAS Wyrallah, one of the 'search' vessels, in position 24°22'S 110°49'E (according to Winter and Summerrell) or 24°22'S 110°46'E (as shown on the Mercantile Movements Section (MMS) plotting sheet). It was recovered at 1815 WAST on 27 November 1941.

2. Lifebelt (German). A partially burnt, black German lifebelt and two small German 4-man metal floats lashed together (and containing the body of a dead German) were found by HMAS Wyrallah in position 24°10'S 110°54'E. Time of recovery was 0801 WAST on 28 November 1941.

3. Life-raft (German). Two rubber rafts, lashed together and contained 26 Germans, were found by HMT Aquitania in position 24°35'S 110°57'E at 0700 WAST on 23 November, 1941. This was the earliest 'contact' with survivors or flotsam resulting from the battle. The moment is preserved in a report from one member of the crew on the Aquitania

> "Just before 0600 on Sunday 23 November, a cabin boy on the liner transport Aquitania saw a low-lying raft bobbing on the pearly morning sea. The 26 men on the poorly equipped raft has seen her long ago, and were waiting anxiously for a sign that they had been noticed. Although they had taken off their jackets to improvise a sail (italics supplied), they were largely at the mercy of wind and currents, which were dragging them too far north (p145).. It was nearly two hours before Aquitania had them safely on board, at ...."

4. Life-raft (German). A rubber raft containing 25 Germans was found by the British tanker Trocas in position 24°06'S 111°40'E at 1500 WAST on 24 November 1941. Cmdr Hardstaff has theorised that Trocas may actually have rescued the men at position 24°06'S 110°40'E, which is closer to the direct route from Sunda Strait to Fremantle (Trocas was en route from Palembang). It should be noted however that the MMS plotting sheet, which shows Trocas' noon positions, is consistent with the original reported location for the rescue (all of the way-points plot in a substantially straight line). Note: 'Drift' of the rafts due to meteorological and ocean current effects may have been compromised by reports of survivors, "using their jackets as sails".

5. RAN Carley float containing an empty lifebelt was recovered by HMAS Heros (also one of the 'search' vessels) in position 24°07'S 110°58'E. This was "only just floating, with damaged flooring hanging down". Time of recovery was 1100 WAST on 28 November 1941.

6. Dog kennel recovered at the same location and time as the Carley float. "A green box resembling a dog kennel" was found by Heros. (N.B. Kormoran did have a dog on board). Time of recovery was 1100 WAST on 28 November 1941.

Submission
by

I. Farquhar-Smith

I. Farquhar-Smith

Dale, Copy to Mrs Olsen pse.
Also add F.S to the list of interested persons.
23/11

I Farquhar-Smith
4 Heysen Close
Pymble
NSW 2073

Department of Defence.
Naval Historical Directorate(Cp4-1-014)
Canberra ACT 2600

Dear Sir

Your Reference CN2001/4773 NHD 192/2001 of the 11September 2001

Thank you for your invitation to the HMAS SYDNEY (11) wreck seminar, unfortunately I am unable to attend at that time. I would be very interested to receive copies of the various reports, if that is possible.

I enclose some personnel views on this matter, these may be submitted to the Seminar, if considered relevant.

(1) As a navigator of about that period 1944 to 1965, Navigation was very different to what is done to day. There was no radio navigation in use in the area that was used by ships.
The Kormoran would have taken a Noon latitude, then between 1400 and 1500 taken a PM sight for longitude using the DR latitude run up from Noon, query were these sights affected by refraction? the early reports of the lookouts suggests they could have been. (I had the experience while anchored off Port Adelaide of practising "sights,"on one occasion there was refraction and my sight put the ship 10 miles from her position.)
Following the sighting of the Sydney, Kormoran's navigator would have kept a rough log of the various, alterations of course and speed till the action started, afterwards he gave a DR position to the boats, it only needed to be a rough one, as sailing Eastward he knew that they would find Australia.
The Sydneys movements after the action would only be known approximately.

(2) I personally am opposed to the search, if found and inspected, it would not clear anything up,the final flare up the Germans reported was possibly a magazine explosion which suggests there would be just scattered wreckage. Once the site is discovered and declared a "war grave". How long would it be before some passing submergible and tender would drop by and collect souvenirs, as has happened to the Titanic.

Yours Sincerely

Ian Farquhar-Smith

Submission
by

Stan Gratte

Stan Gratte

Forwarded
12/11/01.

292 Beach St
Wonthella
Geraldton
6530
29/10/01

The Navy History Director
Campbell Park Offices
Canberra CP4-1-14
Canberra ACT 2600.

Dear Sir,

I would like my letter to be read, at the forthcoming Seminar on the HMAS Sydney Sinking. I am a local Historian, having been 28 years President of Geraldton Historical Society but above all I was the first to write publicly on the matter. My 2 writings to Sydney (the town) papers go back to 1971 and I have attended most Seminars on the HMAS Sydney with some input.

The following information is factual and results from my research & knowledge. The information refutes the idea that people at Port Gregory heard and saw the battle.

Firstly, In 1971, I wrote articles into the Sinking, in our local paper. I particularly asked that the woman (Mrs Porter as I found out later), who heard gunfire on the night of November 19th 1941, come forward and contact me. She did not. Now there are over fifty people who heard the gunfire. This includes a person who heard the Sydney calling for help on the town radio and a two year old boy who saw the battle. Do I have to detail how ridiculous both those are.

Most others claim to have been at a school breakup party, organised by the Parents, at a school near Port Gregory and saw, seeing and hearing Star shells and gunfire ~~at~~ early in the night.

One must ask, why did they not tell someone, particularly the Police, at the time. I know that everyone including the children, as I was one, were realizing if nothing else but 'the Sydney at that time'. We all knew her well, as we had.

been encouraged aboard her, only a couple of weeks before and many families, including mine, had entertained the crew of Sydney.

Above all, please note. November is harvest time in our area. No farmer would leave off harvest to go to a social meeting at that time of the year as he could lose his crop to a thunderstorm or fire and no doubt some grain would be shed if it is not harvested. I have recently made a habit of saying to farmers in November: Would you go to a meeting next Wednesday (the Sydney was sunk on a Wednesday). The usual answer (if polite) is "don't be stupid".

In other words. There could not have been a Parents get together at the School in November. However, in these days, Schools ~~sta~~ had holidays in May and August and did have "break up parties" and parents get together as older people will remember. Therefore we must look to those dates to find out what people did see at Yallabatharra School.

Geraldton became the centre for a large portion of Australias army as they were brought back from the Middle East for regrouping and training, prior to departing for New Guinea. We had 40,000 troops in the area (See Australia's Forgotten Army ISBN 0 644 17768 0.) This necessitated Geraldton being fortified, as it was the only fuel supply to the troops.

One part of the fortifications was what became known as Geraldton Fortress. This consisted of two four inch naval guns with two searchlights and later two twenty five pounder field guns. They were situated on Sandhills at Bluff Point, which is just north of Geraldton and were of course, built in to the hill. Most importantly. These guns had a range of 16000 yards, with a field of fire of 150°.

Please Note. On August 27th 1942 - School holiday time, a practise shoot was held with 400 high explosive rounds and 200 star shells. The shoot was commenced in the afternoon, and at 8 Pm star shells were used. Quite a fireworks show.

I would be reasonably sure that the shoot would be to the Northwest, as the ~~shuffle~~ shuffling area to the west contains, market Boungo and possibly shuffling.

Some of the people who sighted the shooting at Port Gregory said they saw flashes or light reflected onto Mt Albert and Mt Victoria. The view from these hills is exclusively to the South West. Geraldton would be a direct line over sea, distant about 90 Km I would think. The star shells would be clearly visible and the sound of gunfire, heard.

Again on ~~21~~ 17th December a shoot was held to train the Volunteer Defence Corps. I don't have details of this shoot but I expect it was similar to the first. Once again it would be exactly on the date at which you would expect a Social occasion at Yallabatharra School.

The above information is from records at Canberra War Museum. Also Reg Kidd of Geraldton Fortress Engineering Section in his memoirs "Geraldton Guardian 20/10/1995" gives fuller details and I can present further information if needed. However I believe you will agree that these shoots are what was heard by the people at Yallabatharra and they were not, and could not have been on November 19th 1941

Yours faithfully

Stan Gratte.

STAN GRATTE.

Submission
by

CMDR R. Hardstaff (RAN Ret'd)

CMDR R. Hardstaff (RAN Ret'd)

SEARCH FOR HMAS SYDNEY & HSK KORMORAN

Tel: (02) 9427 2466
R.J. Hardstaff
2 Upper Cliff Road
NORTHWOOD NSW 2066
4-9-01

Dr J.A.T. Bye
School of Earth Sciences
The University of Melbourne
Victoria 3010

Dear Sir,

I wish to advise that I received an invitation from Dr D.M. Stevens, Director of Naval Historical Studies, Department of Defence, Canberra, to join your Oceanographic Workshop for seminar- HMAS Sydney Wreck Location, to be held at Fremantle on 16 November, 2001.

I understand that my nomination was put forward from Canberra, and I have advised Dr Stevens that I am willing to serve in that capacity as required by you. I am enclosing information of my naval background if such is of any interest to you. I do not have a facsimile machine nor am I connected to the internet system etc.

I forwarded some details of my thoughts concerning both HMAS Sydney & HSK Kormoran, mainly in reply to that paper printed by T.W. Whittaker on 10 September, 2000, which he was kind enough to provide. At the time, I advised him of my disagreement with his views, but we are all entitled to our own opinions on these matters, and only positive wreck locations will clarify the German version of events on 19 November 1941.

In my opinion, only a search for both ships will help solve the problem and an RAN survey of the blank gap between Cape Inscription and North Island will go a long way in this matter, to eliminate any site wreckage on the continental shelf area.

Whilst the hydrographic survey and charting of the Australian coastline remains the responsibility of the Australian Hydrographer in his Office at Wollongong, the overall responsibility remains with the Deputy Chief of Naval Staff, Department of Defence, Canberra to see that this is done.

I look forward to hearing from you and any instructions to research other items related to this long overdue assignment. Yours faithfully.

R.J. Hardstaff.

REGINALD JOHN HARDSTAFF

Statement of Service

Date of Birth	6-5-22
Entered RAN - Cadet Midshipman (Special Entry)	31-1-40
Midshipman	1-9-40
Acting Sub Lieutenant	1-8-42
Sub Lieutenant	28-12-42
Acting Lieutenant	16-4-43
Lieutenant	9-11-43
Lieutenant Commander	1-4-51
Acting Commander	31-10-56
Lieutenant Commander	21-3-58
Acting Commander	5-9-67
Discharged on Retirement	27-7-72

Naval & Specialist Service Categories-

Branch	Seaman
Hydrographic Surveyor- Charge Grade since	1-1-55

POSTINGS (HMA Ships unless stated otherwise)	From	To
CERBERUS- RAN College (Flinders Naval Depot)-	31-1-40	22-8-40
CANBERRA (CA)-on passage to India & UK	23-8-40	4-9-40
AUSTRALIA (CA) (including passage HMS Royal Sovereign (BB) from Capetown to Freetown)	5-9-40	23-9-41
NAPIER (DD)	24-9-41	27-11-41
HMS QUEEN ELIZABETH (BB)	28-11-41	7-3-42
HMS FARNDALE (DD) & RN Courses in UK	8-3-42	11-9-42
HOBART (CL)-A/ Navigator & Watchkeeper	12-9-42	9-11-43
SHEPPARTON- Navigator & Assistant Surveyor	10-11-43	17-8-44
MORESBY- as above	18-8-44	16-12-45
LACHLAN- as above	17-12-45	6-5-46
PENGUIN	7-5-46	30-6-46
WARREGO- Navigator & Assistant Surveyor	1-7-46	29-12-46
BARCOO- as above	30-12-46	9-7-47
LACHLAN- Executive Officer & A/Surveyor	10-7-47	26-7-48
KUTTABUL(HO)- Superintendent Chart Depot	27-7-48	6-1-49
BARCOO- Supply Officer & A/Surveyor	7-1-49	30-8-49
LACHLAN- In Command & A/Surveyor	31-8-49	4-10-49
HMNZS LACHLAN- Executive Officer, thence Navigator & A/Surveyor	5-10-49	22-9-51
PENGUIN	23-9-51	30-10-51
KUTTABUL(HO)- Superintendent Chart Depot	31-10-51	9-12-51
PENGUIN- awaiting passage to UK	10-12-51	31-12-51
CERBERUS II-(London Depot)- passage	1-1-52	2-2-52
HMS COOK- Exec Officer & A/ Surveyor	3-2-52	14-3-54
CERBERUS II (London)- passage to Australia	15-3-54	30-4-54
PENGUIN	1-5-54	11-8-54
BARCOO- Executive Officer & A/Surveyor	12-8-54	27-4-55
KUTTABUL (HO)- Deputy SOHS	28-4-55	30-4-56
WARREEN- In Command & Charge Surveyor	1-5-56	30-10-56
WARREGO- In Command & Charge Surveyor	31-10-56	22-1-58
PENGUIN (Balmoral Naval Hospital) & Kuttabul(HO)	23-1-58	14-3-58
WARREGO- In Command & Charge Surveyor	15-3-58	21-3-58
KUTTABUL (HO)- Assistant Hydrographer	22-3-58	4-9-67
KUTTABUL (HO)- Deputy Hydrographer (RAN)	5-9-67	27-7-72

Note; HO for Hydrographic Office, SOHS-Senior Officer Hydrographic Service
On retirement, granted Honorary Rank of Commander, Royal Australian Navy, Emergency List (1972).

SURVEYING

Associate of Institution of Surveyors(Australia)	9-4-59	
RAN Hydrographic Service		
-Assistant Surveyor	4th Class	10-11-43
- as above	3rd Class	1-7-45
- as above	2nd Class	1-1-48
- as above	1st Class	1-1-51
- Charge Grade Surveyor	Charge	1-1-55

Campaign Medals

1939/45 Star, Africa Star, Pacific Star, War Medal, Australia Service Medal, Defence Medal & Tobruk Medal.

RAN Hydrographic Service 1973 to 1987

Rejoined HO initially as civilian drafting officer, thence Technical Officer (Surveying).	6-2-73
Assumed duties of Notices to Mariners Officer	April 1973
Senior Technical Officer(Surveying) Grade 2	18-1-74
Retired for Long Service Leave	30-6-86
Completed Long Service Leave	5-5-87

RAN Hydrographic Service- Mid February 1994 to 31-10-94

Served as a consultant for disposal of 4400 files & documents to Australian Archives, prior to office move to Wollongong on 4-11-94

1997-1999

From early 1997 to 5-3-99, carried out Notices to Mariners research, as required for Legal Documentation, involving twelve selected Australian Nautical Charts, in a Crown Copyright Action against an overseas Electronic Chart System manufacturer, which was successful in May 2000..

SEARCH FOR HMAS SYDNEY & HSK KORMORAN

R.J. Hardstaff
2 Upper Cliff Road
NORTHWOOD NSW 2066
8-9-01

Dr J.A.T. Bye
School of Earth Sciences
The University of Melbourne
Victoria 3010

Dear Sir.

1 In checking some calculations, I notice that some minor errors have crept into my typing, probably due to having no vision in my left eye since November, 1999, due to low platelets and internal bleeding.

2 Amended sheets are enclosed for submission dated 31-8-01, and noted errors are:-

page 1 KDLS 3 longitude should read 113 deg 21.9 min E. in para 1.
APK longitude should read 113 deg 48.6 min E in para 4
Para 7, last line- 8.3 min E should read 8.1 min E.

page 3 para 18- Wyrallah date should read 28 November 1941.

page 4 No 18- Meyer longitude should read 111 deg 00 min E
No 20- KDLS 3 longitude should read 113 deg 21.9 min E
Miscellaneous contact -KDLS 2 longitude should read 112 deg 37.4 min E

3 A comparison of bearings and distances from *Kormoran* estimates to that of *Wyrallah* recovery of German items at 280800H in 24 deg 10 min S, 110 deg 54 min E, is as follows:

No.1	357 deg 50 min	142.1 nm	No 12	346 deg 51 min	143.8 nm
No. 2	357 deg 50 min	144.1 nm	No.13	357 deg 09 min	110.1 nm
No.3	341 deg 28 min	136.7 nm	No.14	357 deg approx	120 nm approx
No. 4	345 deg 24 min	140.5 nm	No.15	340 deg 40 min	153.7 nm
No. 5	007 deg 35 min	151.3 nm	No.16	327 deg 31 min	154,1 nm
No.6	006 deg 21 min	151.9 nm	No.17	101 deg 24 min	50.6 nm
No. 7	344 deg 09 min	154.6 nm	No.18	358 deg 10 min	170.1 nm
No. 8	343 deg 48 min	170.1 nm	No.19	004 deg 09 min	150.4 nm
No.9	329 deg 26 min	162.6 nm	No.20	333 deg 37 min	299.6 nm
No.10	355 degb 32 min	128.4 nm	No.21	069 deg 59 min	128.5 nm
No. 11	346 deg 56 min	144.7 nm	No.22	325 deg 17 min	215.9 nm

4 A comparison of bearings and distances from *Sydney* estimates to that of *Wyrallah* recovery of RAN lifebelt at 271815H in 24 deg 22 min S, 110 deg 49 min E, is as follows:

No.23	342 deg 36 min	132.5 nm
No.24	355 deg 22 min	128.4 nm
No.25	326 deg	263 nm
No.26	342 deg 26 min	353 nm
No.27	334 deg 54 min	351.2 nm
KDLS 2	342 deg 35 min	324.3 nm

5 The results in paras 3 & 4 have been calculated using logarithms & meridional parts formulae, where Tan track = d. long over d meridiional parts, and distance in nautical miles = d. Lat Sec track for Rhumb line track & distance. Tables for meridional parts will be found in Inman's nautical tables or Admiralty tables N.P. 239 based on the International Spheroid, publication H.D.229.

Yours sincerely.

R.J. Hardstaff

SEARCH FOR HMAS SYDNEY & HSK KORMORAN

References:

A My Submission to JSCFADT in Volume 1, page 45 etc.

B My Submission JSCFADT in Vol 13, pp. 3141, 3142.

C Loss of HMAS *Sydney* 1941; Search for Wreck of HSK *Kormoran* -LtCol T.W.Whittaker OBE Retd. published 10 September 2000

1 Much has been written over the years but very little done, either by RAN or others to carry out searches or even investigate locations identified by Knight & Whittaker (at their own expense), for KDLS 3 & KDLS 1 in 28 deg 38.4 min S, 113 deg 21.9 min E & 29 deg 58.5 min S, 112 deg 48.3 min E, which they believe to be *Kormoran & Sydney.*

2 I do not agree with these identifications nor do I have any technical knowledge of L.C. Knight's equipment and its location & selection capabilities. My wreck findings are based on the limited German evidence available and my own naval experience, indicating that HSK *Kormoran* lies in 26 deg 38.7 min S, 111 deg 41.9 min E and HMAS *Sydney* in 26 deg 28.35 min S, 111 deg 32.60 min E. being about 150 nm & 205 nm NNW of KDLS 3 & KDLS 1 respectively.

3 From my plot in ref'ce B, at 190900z Nov., *Sydney* (IPS) would have been in 26 deg 16.5 min S, 111 deg 57.6 min E, bearing about 334 deg. distant 22 nm from *Kormoran* , with the latter (IPK) on course 025 deg. at speed 11 kts in 26 deg 36.4 min S, 112 deg 08.6 min E, heading for a landfall (distant 125 nm) off Geographe Channel, Shark Bay, with supposed intention of minelaying operations.

4 At 191030z Nov, my battle action site estimate was in the vicinity of 26 deg 42.3 min S, 111 deg 46.8 min E, when *Kormoran* became disabled by fire in the engineroom after receiving some shell hits from *Sydney.* The difference of latitude & longitude between *Kormoran's* sighting position (IPK) at 190900Z Nov & my wreck site (after demolition) is 2.3 min N & 26.7 min E. Application of these differences to KDLS 3 gives an amended sighting position (APK) for *Kormoran* in 28 deg 36.1 min S, 113 deg 48.6 min E, located in Middle Channel, Houtman Abrolhos. (Applying differences of latitude & longitude of 19.5 N & 11.0 W from (IPS) above, *Sydney* 's amended position (APS) is in 28 deg 16.6 min S, 113 deg 37.4 min E at the beginning of action.)

5 Admiralty charts available in 1941 in Houtman Abrolhos area were BA 1056 & BA 1723 as follows: (a) 1056- "*Cape Couvier to Champion Bay*" at scale 1: 660 900, first published 2 January 1879, and updated by last New Edition dated 27 July 1917 and (b) 1723- "*Houtman Rocks and adjacent coast*" at scale 1: 255 000, first published 26 August 1845, updated by last New Edition dated August 1887. Chart limits of BA 1723 were between latitudes 28 deg 12.5 min S to 29 deg 15.5 min S and longitudes 113 deg 12 min E to 114 deg 48 min E, with larger scale plans of *Recruit & Good Friday Bays* at scale 1: 36 300, inside western chart border and occupying about one quarter of this standard "half-size" chart (24 x 18 inches).

6 From the above amended sighting positions (APK & APS) relative to KDLS 3, a battle pursuit in the vicinity of Houtman Abrolhos would have been hazardous indeed for all concerned, under any conditions. If *Kormoran* had continued on her "declared approach to Geographe Channel", she would have surely made a landfall in the vicinity of Shoal Point, which is about 210 nm SSE of her proposed minelaying area under cover of darkness, resulting in some confusion and embarrassment for her bridge watchkeepers.

7 The KDLS 1 site for *Sydney* is about 85 nm SW of KDLS 3, and in view of reputed 5-6 hour elapsed time after "battle cease fire" and German reports that she was proceeding southwards at slow speed (at about 5 kts) against a deduced NNW current (0.8 to claimed 1.5 kts), maximum distance made good would be 30 less 9 nm, i.e. 21 nm separating both vessels on sinking. Also, as *Kormoran* claimed that a torpedo hit between A & B turrets was obtained, it raises the question of battle damage sustained and why the forward magazine did not explode immediately and sink *Sydney* in the initial stages. A recent claim by Wes Olsen that *Kormoran* fired two upper-deck torpedoes (speed of 27 kts) at *Sydney* steaming at 14 kts on starboard beam & distant 1500 metres to achieve a single hit, is wishful thinking. A hit was only possible if *Sydney* had been under way at 2.5 kts or less, in other words, she stopped to lower a boat. Whittaker states that Dr J. Bye's *Sydney* wreck site is 29 1/2 deg S, 113 1/2 deg E, with a deduced flotsam drift direction of 330 deg. This position is 51.6 min S & 8.1 min E of KDLS 3.

9 The selection of a battle site west of Houtman Abrolhos and KDLS 3 for *Kormoran* , is no doubt influenced by other factors:- (a) *Koolinda's* boat recovery report "that they steered towards a light" (now being proclaimed as North Island light), (b) oral history of a naval battle seen or heard from near Port Gregory and Kalbarri on the evening & night of 19 November 1941 and (c) oral history that debris believed to have come from *Sydney*, was washed ashore at Shoal Point on about 23 November 1941.

10 With ref'ce to para 9 (b), distances from shore observers are well beyond the sea horizon and will depend on observers elevation. As for "hearing or sound" reports, the Chairman of Joint Standing Committee discounted any distances beyond 30 to 35 miles, based on advice from WW I "diggers with artillery experience". I did refer to a report from Mrs Ivy Mallard & husband, living on Carrarang Station, Shark Bay (between Steep Point and Zuytdorp Point), some 150 nm north of KDLS 3, but 95 nm from my site. I also referred to Lynette Silver's book *Krait* , recording that bombing of Singapore was heard at Rengat & Priji Radja, Sumatera. These places are 126 & 115 nm from Singapore(FADT pp. 439/440 at Sydney on 22-5-98).

Glenys McDonald (Vol 1, pp 172,185 & 186) quotes <u>compass</u> bearings of light & sound sources as being 295 deg., plotted as <u>true</u> bearings on chartlets from Port Gregory area, passing NE & well clear of Houtman Abrolhos; also a plotted bearing from Geraldton of 308 deg. is 11 nm NE and clear of Eastern Islet. It is assumed that Whittaker is referring to the same information. (A computed true bearing from Port Gregory to my *Kormoran* wreck site is 302 deg 30 min, but distant about 173 nm.)

11 With ref'ce to para 9 (c), Shoal Point is in position 28 deg 07 min S, 114 deg 11 min E approx, and would lie about 023 degrees distant 90 nm from J. Bye's *Sydney* wreck site in para 8 above. The debris would need to travel this distance in 96 hours approx at 0.94 kts and pass through Houtman Abrolhos (which extend in a SSE direction for a distance of about 46 nm), bearing in mind his deduced flotsam direction of 330 deg. and winds from the SE.

12 The coastal shelf to depth of 200 metres, between 25 deg 30 min S & 28 deg 00 min S (or Cape Inscription to North Island approx.) has not been surveyed to modern standards, and is charted from old Admiralty surveys in the main, with a small area covered by National Mapping Bathymetric survey south of Cape Inscription. (In the latter survey, only one line in four by RAN standards was run by a National Mapping chartered vessel) HMAS *Moresby* was not tasked to survey this specific area, but she did run some lines of soundings on passage, to & from Fremantle to northern survey grounds, carried out searches for magnetic anomalies as requested by WA Museum, and investigated "bumps" located during regular surveys. The suggested sites in deep water beyond the coastal shelf are not within the normal survey limits, and specific instructions to include, would need authorisation at a higher level. New "*Leeuwin Class*" survey ships may be limited in this latter capability as EDO AN/UQN deep echo sounder is no longer used nor Deep Side Sean Sonar borne. (New RAN minesweepers may have suitable sonar equipment capability, or ready access to it.)

13 <u>Von Malapert's Diary</u> My computations for this boat trip differ greatly from those shown in Chartlet No 10 of ref'ce C above. I consider that more land sightings should have been made of conspicuous features on Dirk Hartog & Dorre Islands if the author is correct. From ET 71 to ET 134 (Steep Point to Red Bluff), the SSE counter current of equivalent strength, would have hampered boat progress. My deduced boat departure point was 15 nm SSE of my *Kormoran* wreck site & in 26 deg 53.4 min S, 111 deg 46.3 min E.

14 <u>*Trocas & Evagoras* Position & Report.</u> *Trocas* recovered survivors in 24 deg 06 min S, 111 deg 40 min E and <u>not as adjusted by me</u> in 24 deg 06 min S, 110 deg 40 min E. as stated in ref'ce A above. Also, a report that *Evagoras* recovered an RAN lifebelt in 24 deg 06 min S, 110 deg 49 min E is incorrect. These corrections do affect the various tables & chartlet illustrations in ref'ce C above.

15 <u>North Island Light.</u> The light (of range 15 nm) was not in existence in 1941, but established during late 1966 and completed by March 1967, as promulgated by Notices to Mariners. In my opinion, the statement made "about rowing towards a light", does not mean that they saw a light, but only knew of its existence from a chart. Cape Inscription lighthouse was in existence at that time, although some lesser lights inside Shark Bay, were lit as required for harbour use only e.g Babbage Island & Carnarvon Jetty Head. It has been suggested that fishermen may have erected a light for their own use, but I found no evidence of such in RAN Hydrographic Office records. An uncharted light would have been illegal and indeed a navigational hazard i.e. an illegal ruse once employed by early shipwreckers.

16 Smoke Report from Dirk Hartog Island. A smoke report was previously reported as being made on 20 November, but now appears as 19 November 1941 in ref'ce C above. The height of eye (HE) by an observer in the most likely spot near Cape Inscription, would have been about 123 feet for a distance of 12.8 nm to sea horizon. Smoke rising beyond the horizon could be from 200-500 feet, giving an extra distance of 16.2 to 25.7 nm, totalling 29.0 to 38.5 nms. If *Sydney* had been abeam at 191000H Nov, and on track from her RV with HMS *Durban* , she would have been about 73 to 80 nm off Dirk Hartog Island, according to known June & October tracks, and well beyond the viewing range of local observers. The track shown in chartlet No. 1 is nonsense in my opinion.

17 Smoke bursts of short duration only, did occur at sea but always earned a sharp rebuke from the bridge. Prolonged smoke-making was only ordered to mask movements of shipping under attack or during bombing raids and when surface forces intended making torpedo attacks etc on enemy units. Minor vessels such as tugs, were not bound by the same stringent naval regulations for various reasons and it was never the intention to attract attention of enemy surface ships & submarines, or even friendly coastal observers.

18 Recorded estimated wreck sites for both *Sydney & Kormoran* are listed in attached Appendix . I would suggest a search area for both ships be limited by selected drift rates and directions, based on bearings of 162.5 & 167.5 degrees from *Wyrallah's* flotsam site in 24 deg 10 min S, 110 deg 54 min E at 0800H on 28 November 1941. These limits covering about 195 sq miles are (a) 26 25 S, 111 28 E, (b) 26 25 S, 111 41 E, (c) 26 40 S, 111 46 E, & (d) 26 40 S, 111 31 E. If search time was limited, I would be satisfied with a reduced area of 50 or 100 sq nm or circle of radius 4 or 5.6 nm, from my own stated wreck sites.

19 Magnetic Courses & Bearings. *Kormoran* was fitted with gyro compass equipment and statements made during interrogation are recorded as true bearings etc, not magnetic. The references made by Whittaker on page 25/26 in ref'ce C above are incorrect, and my computation for a bearing of the sun at sunset is 248.35 degrees True, for either 26 30 S or 28 30 S latitudes. With local Variation at that time being 3 degrees West (and ship's deviation unknown), this would give a bearing of 251.35 degrees Magnetic, before applying any deviation correction to a magnetic steering compass course, in the event of a gyro compass breakdown. Navigational chart plotting is carried out using TRUE "references" only, but where only a magnetic compass is available, Magnetic bearings or courses must be converted to True readings for chart work.

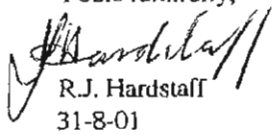
20 Distances from KDLS 3 site (posed as *Kormoran*) are as follows:

North Island	23 nm
Kalbarri	70 nm
Port Gregory	54.5 nm
KDLS 1 (posed as *Sydney*)	85 nm, on bearing 200 degrees.

21 Distance of the sea horizon in nautical miles (nm) are as follows:

A 1000 ft mines destruction flash (Detmers)	36.3 nm
Kalbarri-Port Gregory observers (at abt 200 ft)	16.2 nm
Total sea distance	52.5 nm Note:- for Kalbarri observers, there are some coastal features between Red Bluff (650 ft) and Bluff Point (200 ft) which may obscure any SW view towards North Island and Houtman Abrolhos.

Yours faithfully,



R.J. Hardstaff
31-8-01

To:-
Dr J.A.T. Bye
School of Earth Sciences,
The University of Melbourne. Vic 3010

SEARCH FOR HMAS SYDNEY & HSK KORMORAN
APPENDIX

Reported Wreck Sites for HMAS *Sydney* & HSK *Kormoran*

Kormoran Estimates

1	Detmers, T.A. (a)	26 deg 32 min S, 111 deg 00 min E
2	Detmers, T.A. (b)	26 deg 34 min S, 111 deg 00 min E
3	Fugro Survey Pty Ltd	26 deg 19.6 min S, 111 deg 41.8 min E
4	Fugro Survey (Von Malapert Diary)	26 deg 26 min S, 111 deg 33 min E
5	Gill. G.H.	26 deh 40 min S, 110 deg 32 min E
6	Olsen, W	26 deg 41.0 min S, 110 deg 35.5 min E
7	Hardstaff, R.J.	26 deg 38.7 min S, 111 deg 41.9 min E
8	Hardstaff (Von Malapert Diary)	26 deg 53.4 min S, 111 deg 46.3 min E
9	Hughes, S. 1991	26 deg 30 min S, 112 deg 25 min E
10	Hughes (Von Malapert Diary)	26 deg 30 min S, 111 deg 00 min E
11	Hughes (in circle 50 sq nm ie radius 4 nm)	26 deg 31 min S, 111 deg 30 min E
12	Kirsner, K. Nov 1992	26 deg 30 min S, 111 deg 30 min E
13	Kirsner, K.	26 deg 00 min S, 111 deg 00 min E
14	Kirsner, K & Dunn, J. a few miles north of	26 deg 15 min S, 111 deg 00 min E
15	Laffer, G.1991	26 deg 35 min S, 111 deg 50 minE
16	McDonald, Ean 1991	26 deg 20 min S, 112 deg 25 min E
17	Montagu, J	24 deg 00 min S, 110 deg 00 min E
18	Meyer, H (ex Kormoran)	27 deg 00 min S, 111 deg 00 min E
19	Steedman, R. (in circle 35 nm radius)	26 deg 40 min S, 110 deg 42 min E
20	Whittaker, T.W. & Knight, L.C. (KDLS 3)	28 deg 38.4 min S, 113 deg 21.9 min E
21	Eagle, J. (battle site)	24 deg 54 min S, 108 deg 42 min E
22	King, D.R.E.	27 deg 11.7 min S, 113 deg 12.9 min E

Sydney Estimates

23	Hardstaff, R.J.	26 deg 28.4 min S, 111 deg 32.6 min E
24	Kirsner, K & Dunn, J. 10-20 nm south of	26 deg 15 min S, 111 deg 00 min E
25	McDonald, Glenys	28 deg 00 min S, 113 deg 32 min E
26	Whittaker, T.W. & Knight, L.C. (KDLS 1)	29 deg 58.5 min S, 112 deg 48.3 min E
27	Bye, J.A.T.(quoted by Whittaker)	29 deg 30 min S, 113 deg 30 min E

Mysterious contact

Whittaker, T.W. & Knight, L.C. (KDLS 2) 29 deg 31.5 min S, 112 deg 37.4 min E. This contact is no longer being claimed as relevant to proposed search.

R.J. Hardstaff
31-8-01

SEARCH FOR HMAS SYDNEY & HSK KORMORAN

02-9427-2466
R.J.Hardstaff
2 Upper Cliff Road
NORTHWOOD NSW 2066
2-10-01

Dr J.A.T. Bye
School of Earth Sciences
The University of Melbourne
Victoria 3010

Dear Sir,

VMT your letter and copies of Drift & Sun Bearing reports, with quiz sheet on various items raised in my letter of 8-9-01.

Item 1. As a gyro compass system with repeaters, was installed in Kormoran for use either by bridge observers, helmsmen as well as gunnery & torpedo departments to clarify an exact line of bearing for target identification and discharging torpedoes with the correct setting, a Course Order to steer 250 degrees into the Sun would be easier for the helmsman to focus upon than an ungraduated portion of the circle, namely 251 degrees, as compass circles are normally only labelled every ten degrees. In my opinion, the selected "escape" course should be basically at right angles to the line of sight of the enemy, to give maximum deflection with the speed of "flight" of the ship pursued. However, it may have been Detmers idea to cause some discomfort to the pursuers staring into the general direction of the sun.

In the interrogation notes for Meyer, "4. 30 Kormoran turned into sun, full speed towards sun 250 degrees (WSW)". The WSW is probably only an addition to clarify the general direction of the heading, being 247 degrees 30 minutes in value, and inserted by the notes compiler. For Detmers, " at 4 o'clock ships time on 19th, sighted cruiser and altered course from North to South-west (250 degrees), increased to full speed etc". The directions appear to be general headings with additional clarification.

If Detmars had instructed the helmsman to steer 250 degrees Magnetic, this would have meant 253 degrees True, assuming that there was nil ships's Deviation affecting the magnetic course (which would have been most unlikely in any case)

Item 2. The use of accurate locations is the result of a mean of logarithmic calculations and results to the nearest mile would have little influence, so suggest for Sydney 26 28 S, 111 33E and for Kormoran 26 39 S, 111 42 E. The reason for my position being to the NW is that given in my submissions No 8-E in Vol 10 p 2493 etc. and No. 8-I in Vol 11, p 2719 etc., when at 1750 G, Sydney was on course 269 deg , having fired torpedoes, before suffering further shell damage and forced reduction of speed to "Slow" (about 5 knots).

Using the rounded positions of both ships above, d.lat is 11 m and d.long is 9 m., giving dmp 12.231, and distance 13.66 m on bearing 323 deg 39 min (or about NW by 3/4 N), which is reasonable after an elapsed time of about 5 1/4 hours approx.

Item 3 Reference submission Vol 1-p.47 I found the drift to be 345 degrees, 0.77 knots, and the reciprocal bearing is 165 degrees from the Wyrallah recovery sites of items from both ships, in positions 24 10 S, 110 54E for K and ormoran & 24 22 S 110 49E for Sydney. Allowing for a 5 degree band or 2,5 degrees variation in drift direction, this gives 342.5 & 347.5 degrees for back bearings of 162.5 & 167.5 degrees.

Item 4. Speed of 24.8 knots average for KDLS 3 site.
Oil capacity- 1723 tons
Radius of action @ 13 kts- 7320 nm ie total distance 14,640 nm
Radius of action @ 30.5 kts- 1900 nm ie total distance 3,800 nm
Distance Fremantle to RV - about 1680 nm, therefore oil remaining 1525 tons (expenditure 198 tons approx.)
Distance RV to KDLS 3 at high speed- about 1370 nm, oil remaining about 904 tons ie about half capacity.
Note These are only rough calculations

There is no reason for a ship at top speed to make any smoke, only a careless stoker on watch, and they had plenty of fuel to accomplish these happenings.

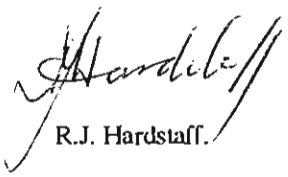
SEARCH FOR HMAS SYDNEY & HSK KORMORAN

Item 5- Detmers engagement position of 26 34 S, 111 00 E. With no doubt sunsights taken two hours before or after noon (for a "meralt" position), when an accurate latitude would be observed, only would there be less accuracy for a precise longitude, depending whether am or pm sunsights were successful. The estimate of longitude following the chase would not be precise and at best a "guestimate" if sights had not been observed. It is most likely that Dermers would not have personally observed sunsights and a noon entry in the deck log by the navigator would have been recalled as the basis for his statement later, in aaddition to the rough position quoted in the QQQ signal at 1700 G (1800 H) on 19 November 1941.

Item 6. Diamantina Cruises. I would have certainly seen their cruise reports but their operations were planned by theAssistant Hydrographer (Oceanography) and my main concern was editing & planning of nautical charts. Gascoyne & Diamantina were commissioned in June 1959, with Gascoyne'slast cruise in 1965 and Diamantina in 1979. From memory, Whitmore, Dillon and Brook were AH(O)'s during this period. Limitations on the use of two boilers would come from the Fleet Standing Orders, although control of ships in the west was handled by local NOIC/DNOWA. I used to hold cruise reports for incorporation in Leadline to Laser, The RAN Hydrographic Service 1920-1995, but I destroyed them last year in a clean out. By the way, do you have a copy of the latter book, for your own personal record ??.

Time seems to be slipping by and I suppose the draft of Oceanographic Workshop report will be circulated for perusal , prior to being handed by 1 November 2001. I have advised Dr Stevens in Canberra that I will be attending the Seminar and have requested a Registration Application Form, otherwise I might miss out. All the best in your deliberations as you have been handed a very sticky problem. In the meantime, I will study the Research Papers enclosed.

Yours sincerely,



R.J. Hardstaff.

SEARCH FOR HMAS SYDNEY & HSK KORMORAN
APPENDIX

Reported Wreck or Battle(#) Sites for HMAS *Sydney* & HSK *Kormoran*

Kormoran Estimates

1#	Detmers, T.A. (a)	26 deg 32 min S, 111 deg 00 min E
2#	Detmers, T.A. (b)	26 deg 34 min S, 111 deg 00 min E
3#	Fugro Survey Pty Ltd	26 deg 20 min S, 111 deg 42 min E
4#	Fugro Survey (Von Malapert Diary)	26 deg 26 min S, 111 deg 33 min E
5	Gill. G.H.	26 deh 40 min S, 110 deg 32 min E
6	Olsen, W	26 deg 41 min S, 110 deg 36 min E
7	Hardstaff, R.J.	26 deg 39 min S, 111 deg 42 min E
7A	Hardstaff R.J. from BA 5213 chart data	27deg 05 min S, 111 deg 46 min E
8	Hardstaff (Von Malapert Diary)	26 deg 53 min S, 111 deg 46 min E
9#	Hughes, S. 1991	26 deg 30 min S, 112 deg 25 min E
10#	Hughes (Von Malapert Diary)	26 deg 30 min S, 111 deg 00 min E
11#	Hughes (in circle 50 sq nm ie radius 4 nm)	26 deg 31 min S, 111 deg 30 min E
12#	Kirsner, K. Nov 1992	26 deg 30 min S, 111 deg 30 min E
13#	Kirsner, K.	26 deg 00 min S, 111 deg 00 min E
14#	Kirsner, K & Dunn, J. a few miles north of	26 deg 15 min S, 111 deg 00 min E
15#	Laffer, G.1991	26 deg 35 min S, 111 deg 50 minE
16#	McDonald, Ean 1991	26 deg 20 min S, 112 deg 25 min E
17	Montagu, J	24 deg 00 min S, 110 deg 00 min E
18#	Meyer, H (ex Kormoran)	27 deg 00 min S, 111 deg 00 min E
19#	Steedman, R. (in circle 35 nm radius)	26 deg 40 min S, 110 deg 42 min E
20	Whittaker, T.W. & Knight, L.C. (KDLS 3)	28 deg 38 min S, 113 deg 22 min E
21#	Eagle, J.	24 deg 54 min S, 108 deg 42 min E
22	King, D.R.E.	27 deg 12 min S, 113 deg 13 min E

Sydney Estimates

23	Hardstaff, R.J.	26 deg 28 min S, 111 deg 33 min E
23A	Hardstaff, R.J., from BA 5213 chart data	27 deg 06 min S, 111 deg 38 min E
24#	Kirsner, K & Dunn, J. 10-20 nm south of	26 deg 15 min S, 111 deg 00 min E
25#	McDonald, Glenys	28 deg 00 min S, 113 deg 32 min E
26	Whittaker, T.W. & Knight, L.C. (KDLS 1)	29 deg 58 min S, 112 deg 48 min E
27	Bye, J.A.T.(quoted by Whittaker)	29 deg 30 min S, 113 deg 30 min E

Mysterious contact

	Whittaker, T.W. & Knight, L.C. (KDLS 2)	29 deg 31.5 min S, 112 deg 37.4 min E. This contact is no longer being claimed as relevant to proposed search.

R.J. Hardstaff
31-8-01

Note- Amendments or additions have been underlined.

HMAS SYDNEY Track Extracts only

Fremantle to Sunda Strait

Saturday 31 May 1941		
1817		Rottnest Lt abeam 4m Co 270d Sp 10 kts
2000	31d 57m S, 115d 10m E (obs)	a/c 326d
2010		Recovered PV's Inc Sp to 12 kts
2050		Rottnest Lt dipped brg 116.5d- 27m
Sunday 1 June 1941		
0800	30d 00m S, 113d 40m E (DR)	
1200	29d 31m S, 113d 06m E (obs)	a/c 330d
2000	28d 04m S, 112d 14m E (obs)	
Monday 2 June 1941		
0625		Co & Sp as req for Dawn Encounter exercie with *Zealandia*
0700		Resumed Stn 1m ahd of *Zealandia*
0800	25d 55m S, 110d 45m E (DR)	
1200	25d 15m S, 110d 17m E (obs)	a/c347d
1402		Sighted unknown vessel
1415		Inc Sp to 18 kts
1425		Ship identified. Red Sp to 12 kts
1854		a/c 077d
2000	23d 44m S, 110d 12m E (obs)	a/c 346d
Tuesday 3 June 1941		
0800	21d 20m S, 109d 40m E (DR)	
1200	20d 24m S, 109d 30m E, (obs)	a/c 345d
2000	18d 54m S, 109d 04m E (obs)	
Wednesday 4 June 1941		
0800	16d 45m S, 108d 30m E (DR)	
1200	15d 55m S, 108d 17m E (obs)	
2000	14d 30m S, 107d 50m E (DR)	
Thursday 5 June 1941		
0800	12d 25m S, 107d 15m E (DR)	
1200	11d 25m S, 107d 05 M E ((obs)	Currents experienced 1200/3 -0700/4 Set 12m 350d (i.e. 0.63 kts)
2000	9d 58m S, 106d 39m E (obs)	
Friday 6 June 1941		
0600		a/c 320d
0800	8d 23m S, 105d 38m E (obs)	
1200	7d 54m S, 105d 10m E (obs)	
1300		Turned over escort to *Danae*

Sunda Strait to Fremantle

Friday 6 June 1941		
1325		a/c 150d. Sp. 19 kts
2000	9d 28m S, 106d 12m E (DR).	a/c 162d
Saturday 7 June 1941		
0800	13d 07m S, 107d `17m E (obs)	
1200	14d 17m S, 107d 39m E (Obs)	
2000	16d 40m S, 108d 24m E (obs)	
Sunday 8 June 1941		
0800	20d 16m S, 109d 35m E (obs)	a/c 160d
1200	21d 30m S, 109d 57m E (obs)	
2000	23d 42m S, 110d 43m E (obs)	Red Sp 17 kts
Monday 9 June 1941		
0800	27d 03m S, 111d 57m E (obs)	
1200	28d 06m S, 112d 24m E(obs)	
1900		a/c 140d, Sp 15.5 kts
2000	30d 10m S, 113d 20m E (DR)	
Tuesday 10 June 1941		
0430		Loom of Rottnest Lt brg 129d. a/c 180d
0455		Raised Rottnest Lt brg 118d 27m
0500		a/c 135d

HMAS SYDNEY Track Extracts only

0515		Dec Sp 12 kts
0518		Streamed PV's. Inc Sp to 20 kts
0530		a/c 090d
0600		a/c as req for carrying out XM 80 with Rottnest & Fortress
0635		Catapult AC
0655		Dec Sp to 12 kts
0657		Recovered PV's Inc Sp to 18 kts
0705		Fairway Buoy abeam, a/c as req for entering harbour etc
0745		Secured H berth Fremantle

Fremantle to Sunda Strait

Saturday 14 June 1941		
1135		Slipped & proceeded
1200	31d 58m S, 115d 42m E (obs)	
1500		a/c 330d Sp 20 kts
2000	30d 33m S, 114d 16m E (obs)	
Sunday 15 June 1941		
0800	27d 08m S 112d 03m E (obs)	a/c 342d
0941		Dec Sp to 15 kts
1015		Inc Sp 20 kts
1200	25d 55m S, 111d 37m E (obs)	
2000	23d 24m S, 110d 49m E (obs) .	Dec Sp 19 kts
Monday 16 June 1941		
0800	19d 50m S, 109d 38m E (obs)	
1010		Dec Sp to18 kts
1200	18d 39m S, 109d 13m E (obs)	
1605		Dec Sp to 12 kts
1615		Stopped. Lowered both cutters
1650		Hoisted both cutters. Proceeded Sp 19 kts, Co 342d
2000	16d 29m S, 108d 30m E (obs)	
Tuesday 17 June 1941		
0715		a/c to close *Danae & Zealandia*
0745		*Danae* parted company

Sunda Strait to Fremantle

Tuesday 17 June 1941		
0745		Proceeded with *Zealandia* Co 163d, Sp 11 kts
0800	12d 58m S, 107d 11m E (obs)	
1200	13d 36m S, 107d 25m E (obs)	
2000	15d 02m S, 107d 48m E (obs)	
Wednesday 18 June 1941		
0800	17d 00m S, 108d 20m E (DR)	
1200	17d 35m S, 108d 34m E (obs)	
2000	18d 59m S, 109d 00m E (obs)	
Thursday 19 June 1941		
0800	20d 55m S, 109d 40m E (DR)	
1200	21d 31m S, 109d 49m E (obs)	
2000	22d 56m S, 110d 23m E (obs)	
Friday 20 June 1941		
0800	25d 10m S, 111d 16m E (obs)	
1200	25d 58m S, 111d 36m E (obs)	
2000	27d 33m S, 112d 09m E (obs)	
Saturday 21 June 1941		
0800	29d 42m S, 113d 29m E (obs)	
1200	30d 29m S, 114d 00m E (obs)	

1802		Rottnest Lt raised brg 110d- 27m
1820		Co & Sp as req for entering channel and harbour etc
2000	31d 58m S, 115d 42m E (obs)	
2045		Secured D berth Fremantle

Fremantle to Sunda Strait

Sunday 28 September 1941

0955		Slipped & proceeded to sea
1200	31d 56m S, 115d 16m E (obs).	Escorting Convoy US 12B
2000	30d 29m S113d 47m E (obs)	

Monday 29 September 1941

0600		a/c 345d
0800	27d 48m S, 112d 00m E (obs)	
1200	26d 52m S, 111d 33m E (obs)	a/c 350d
2000	24d 52m S, 111d 08m E (obs)	

Tuesday 30 September 1941

0800	21d 57m S, 110d 33m E (obs)	a/c 345d
1200	20d 56m S, 110d 14m E (obs)	
2000	19d 05m S, 109d 37m E (DR)	

Wednesday 1 October 1941

0800	15d 57m S, 108d 37m E (obs)	
1200	15d 01m S, 108d 17m E (obs)	
2000	13d 27m S, 107d 44m E (obs)	

Thursday 2 October 1941

0800	10d 56m S, 107d 00m E (obs)	
1200	10d 09m S, 106d 50m E (obs)	Currents-1100/2-1900/2-Set 8m- 290d
2000	8d 50m S, 106d 02m E (obs)	

Friday 3 October 1941

0800	7d 44m S, 104d 01m E (obs0	
0830		RV *Danae & Glasgow*

Sunda Strait to Fremantle

Friday 3 October 1941

0841		Turned over escort. Proceeded Co 155d Sp 18 kts
1200	8d 24m S, 104d 15m E (obs)	Currents- 1900/2- 0600/3- Set5m-270d 0600/3- 1800/3- Set 7m- 230d
2000	10d 22m S, 104d 56mE (obs)	

Saturday 4 October 1941

0800	13d 24m S, 106d 39m E (obs) .	a/c 160d
1200	14d 32m S, 107d 06m E (obs)	
2000	16d 49m S, 107d 47m E(obs)	

Sunday 5 October 1941

0800	20d 10m S, 109d 05m E(DR)	
1200	21d 16m S, 109d 32m E (obs)	
2000	23d 28m S, 110d 29m E (obs)	

Monday 6 October 1941

0800	*25d 35m S*, 111d 45m E (DR)	Latitude appears to be in error- suggest 26d 55m S in lieu
1200	27d 48m S, 112d 07m E (obs)	
1500		a/c 145d
2000	29d 45m S, 113d 21m E (obs)	

Tuesday 7 October 1941

0330		Raised Rottnest Lt brg 106d- 27m
0340		Co & Sp as req to patrol off end of channel
0422		Sighted HMT *Queen Mary* brg 340d
0705		Launched AC
0800	31d 53m S, 115d 08m E (obs)	
0815		Co & Sp for entering harbour
1051		Secured E berth Fremantle

R.J. Hardstaff
2 Upper Cliff Rd
NORTHWOOD NSW 2066
4-10-01

Dr J.A.T. Bye
School of Earth Sciences
The University of Melbourne
Victoria 3010

Dear Sir,

I dashed off a quick reply to your letter of 25 Sept, which only arrived about 1400 on Tuesday 2 Oct, and the mail seems to be a bit slow in my opinion.

Re your drift analysis from your cards in Geelvinck Channel, your results agree with the remarks contained in Australia Pilot Vol V, (1972) on page 160 in area Shark Bay to Champion Bay as follows-

"A current generally sets N through the passages, and at times may attain a rate of 3 knots; during the winter, with a succession of NW gales, the current runs in the opposite direction.

In the offing the current generally sets NW, with a maximum rate of 2 knots during the greater portion of the year; when N and NW winds prevail it sets in the opposite direction, though not so strong, but the tendency is to set a vessel towards the coast."

In West Approaches and Channels leading to Shark Bay, current advice is given as follows-

"It has been reported on several occasions that a strong S-going current or set towards the land is experienced at times in the approach to Geographe Channel, between Cape Cuvier (24 13 S, 113 23E) and Bernier Island; this usually occurs prior to W or NW winds. Instances have occurred of vessels being set considerably ahead of their reckoning when bound S.

Tidal streams enter Shark Bay by Geographe Channel and Naturaliste Channel on the flood tide, meeting near Uranie Bank; the maximum rate at springs is about 1.25 knots."

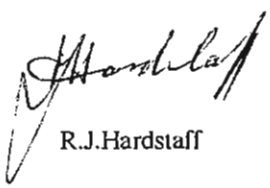
I seem to have misplaced my copy of the Admiralty Routeing Chart, BA 5126 for November, but a Lifeboat Chart- BA 5213 Indian Ocean, shows a daily rate offshore for Nov to Apr, of 10 to 35 miles northerly drift, in the supposed engagement area for Kormoran & Sydney in 26 00 S 111 00 E.

The following is stated in user notes-

"The strength of the current is much influenced by the wind that is blowing at any given time. Where the drift or amount of movement is stated to be <u>10 to 35 miles per day</u>, the lower figure should be taken if the wind is calm or blowing in the reverse direction to the current arrow, and the higher figure if a gale is blowing in nearly the same direction as the current arrow. For light or moderate winds in the direction of the current arrow an intermediate figure should be assumed depending upon the force of the wind."

You may be well aware of all these things from your own research, but I just draw attention to same as a member of the workshop team.

Yours sincerely,



R.J.Hardstaff

SEARCH FOR HMAS SYDNEY & HSK KORMORAN

R.J.Hardstaff
2 Upper Cliff Road
NORTHWOOD NSW 2066
6-10-01

Dr J.A.T. Bye
School of Earth Sciences
The University of Melbourne
Victoria 3010

Dear Sir,

With reference to my letter dated 4-10-01, and using the data given on BA 5213- Lifeboat Chart for Indian Ocean- November to April and the wind speeds from the standard Beaufort Scale for calm conditions to strong gale (47 knots), the following results were obtained.

From Beaufort Scale graph, for 24 kts, daily drift ditance 23.0 nm; for 18 kts, run is 19.5 nm, from stated distances 10 to 35 nm, the latter quoted for gale force winds (47 kts).

For Kormoran drift of 200 hours only and wind data quoted by Whittaker, 24 knots for 127 hrs(133 less 6) to ET 133, and 18 knots for 73 hrs.
Flotsam recovery at 24 10 S, 110 54 E with my drift direction 345 degrees.

For Sydney drift of 186 hours, as above wind speeds, 24 kts for 127 hrs to ET 133 and 18 kts for 59 hrs.
Flotsam recovery at 24 22 S, 110 49 E, with my drift direction 345 degrees.

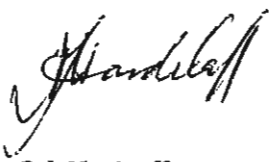
Kormoran.
127 hrs= 5.29 days @ 23.0 nm. drift distance = 121.67 nm
73 hrs= 3.04 days @ 19.5 nm, drift distance = 59.28 nm
200 hrs= 8.33 days for total drift distance= 180.95 or 181 nm
Based on 24 10 S, 110 54 E, d.lat= 174.8 m or 2d 54.8 m, d.long= 51.7 m, which gives a wreck site27 04.8 S, 111 45.7 E. or 27 05 S, 111 46 E

Sydney.
127 hrs= 5.29 days @ 23.0 nm, drift distance = 121.67 nm.
59 hrs= 2.46 days @ 19.5 nm, drift distance = 47.97 nm
186 hrs= 7.75 days for total drift distance= 169.64 or 170 nm.
Based on 24 22 S, 110 49 E, d.lat= 164.2 m or 2d 44.2m, d.long= 48.6m, which gives wreck site 27 06.2 S, 111 37.6 E or 27 06 S, 111 38 E

The above wreck sites show that Sydney would lie 262 deg 03 m distant 7.2 nm from Kormoran or basically to the west as indicated by Linke in statements to David Kennedy, andbeing on or near the horizon when observed by crew at a late hour, depending on their HE (height of eye).

The above calculated "lifeboat sites per BA 5213" are all S & E of my original estimates and naturally do not fit in with the KDLS sites by Knight & Whittaker. The source explosion bearings (295 degrees) atated by Ms G. McDonald appear to be definite and like the supposed light on North Island which certainly was not in existence, this information has been misapplied to link Houtman Abrolhos as the likely action site area.

Yours sincerely,



R.J. Hardstaff.

R.J. Hardstaff
2 Upper Cliff Road
NORTHWOOD NSW 2066
17-10-01

Dr. J.A.T. Bye
School of Earth Sciences
The University of Melbourne
MELBOURNE VIC 3010

Dear Sir,

VMT your letter of 11 October which I received on Tuesday 16 October. I have not got a clean copy of Aus Chart 416 or 417 on hand, but will use a dyeline copy of ORMS sheet "Hartog" of the same scale at 1: 1 000 000. I hope this will meet your requirements as time is running out before your presentation to Canberra. (To include the Houtman Abrolhos wreck sites, I have attached a blank paper sheet showing sites only but no reef topography.)

In my opinion, the course 250 deg has no special significance or link to the reputed sunset bearing, but is most likely relevant to their standard evasion tactics based on an enemy bearing, maximum deflection for interception and steady firing ranges alterations for *Kormoran* gunners.

Re your query 3, I suggest my five degree direction band width be ignored as it was only an idea of reducing the area of search & limiting the number of other estimates in the area. The KDLS 3 & 1 sites are of course definite contacts by Whittaker & Knight, which should be investigated initially, but these are not necessarily *Kormoran & Sydney* as previously stated.

In my letter dated 2-10-01, I made a typing error in the first paragraph of Item 2, fourth line- for 1750 H, read 1750 G (or 1850 H). An updated page is enclosed, plus page 4 of my letter dated 31-8-01, which includes the estimates based on lifeboat chart BA 5213 & identification of battle sites. I have also enclosed extracts from the *Sydney* Fair Deck Log, covering the tracks from June to October 1941, as recorded for 0800, 1200 & 2000 daily positions. Note- The position for 0800 on 6 Oct is incorrect for latitude. A copy No 517 of "Leadline to Laser, The RAN Hydrographic Service 1920-1995" has been forwarded with my compliments.

Re your query 2, I ignored all lifeboats, carley floats etc except small items such as lifebelts & a German body etc, with a low windage profile. Naturally, recorded flotsam recoveries would be to the nearest mile, but naval stated positions would be better than those made by RAAF search aircraft.

I had a clean out of various papers some time ago and I cannot locate the actual calculations I made, but I tried to link them in with the limits of all the tracks made by *Sydney*. Having passed these estimates to Joint Committee FADT in Canberra, I have no desire to start all over again, now that I have no vision in the left eye and evidence of cataract development in the right eye.

I have included your QQQ position longitude 111 deg 15 min E at 26 deg 34 min S , Detmers engagement position (26 34 S 111 E) and your analysis of *Kormoran* wreck sites for 26 deg 40 min S for both 110 deg 41 min E & 110 deg 56 min E, associated with the Technical Report No. 15 on page 8, Section 3 (i) as suggested by you. Battle sites are labelled with symbol (#), recovery sites with name of ship & object and Von Gosseln's boat, plus date/time group where relevant. I hope this chartlet will be satisfactory to you.

Yours sincerely,

R.J. Hardstaff.

SEARCH FOR HMAS SYDNEY & HSK KORMORAN

R.J. Hardstaff
2 Upper Cliff Road
NORTHWOOD
NSW 2066
30-10-01

Dr J.A.T. Bye
School of Earth Sciences
The University of Melbourne
MELBOURNE VIC 3010

Dear Sir,

Believe it or not, I was handed your preliminary draft at 1100L today, so someone must have been "on the ball" for once. I hope that you were successfull in contacting Kevin Slade at HO Wollongong, to get a dyeline copy of ORMS sheet Houtman Abrolhos, at scale 1:1,000,000.

As far as searches are concerned, perhaps the Hydrographer should be consulted, especially if either a survey ship, either *Leeuwin or Melville* is considered and results are to be used for charting as well. You refer to the use of a fishing vessel, unspecified for inshore work, but it would need to have adequate winching facilities and davits tolift equipment over the stern, without damage. The usual nets are in a different category and only need adequate rollers.

The Hydrographic Office could supply you with a dyeline copy of the hydrographic survey carried out south of 28 degrees S, done by HMAS Moresby.

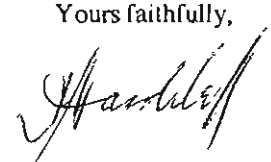
On unmarked page 11, section 3.2, line 8, the word "priori" appears incomplete and no doubt should read "priority".

On unmarked page 12, section 4.2. line 5, the chart scale is missing one "zero"i.e 1:1,000,000

On unmarked page 13, section 4.3, The Northern search area.. I agree with the calculation 2640S, 11041 at the end of first para. In the second para, for 1800H long of 111 15E, and a run of 6 nm from your assumed average speed of 12 kts only and having sailed two-thirds of final transit, this would give a longitude of 111 09 E approx. Kormoran's speed was supposed to be 14 kts made good and having stopped briefly to fire a submerged torpedo at Sydney, total run for one hour fifty minutes less time lost to fire a torpedo, say about 10 mins, this gives a run for one hour thirty mins at 14 kts a distance of 21 miles.
In the first instance, this would give a position of 26 41.5S 110 37.0E and in second instance, longitude 111 08E approx. but there is nothing in it really. However, I would prefer to see "a westing of 6" in lieu of "an easting of -6" in line 7 of second paragraph, since ship was travelling Westwards.

On unmarked page 16, at end of section 5.2, perhaps an additional option could be added i.e. "or a survey ship, either *Leeuwin* or *Melville* , to complete the hydrographic survey of the gap between latitudes 25 30S & 28 00S, along the WA coast, in addition to above nominated search areas."

Yours faithfully,



R.J. Hardstaff

Submission
by

G. Hielscher (RAN Ret'd)

G. Hielscher (RAN Ret'd)

Dr D.M.Stevens
Director of Naval Historical Studies
Naval History Directorate
Department of Defence (Navy)
CP4-1-41
CANBERRA, ACT 2601

I am Glen Hielscher, 4 Beach Road , REDHEAD. NSW 2290

I served in the RAN during WW2, and I am familiar with the Naval procedures of that time.
I have sailed lifeboats (fortunately not in life saving situations)
I have had considerable experience over many years, in small boats, in all kinds of seas, including storms.

Please accept the attached two part submission to the November 16th Seminar into the possible location of the wrecks of *HMAS SYDNEY* and *HSK KORMORAN*

My submission is based on the diaries of Kapt Lt Henry Meyer, and Kapt Lt Von Malapert
.Part 1 commences their voyage from 26S x 111E.
Part 2 commences their voyage from the vicinity of the Abrolhos Islands.

If the wreck of *HSK KORMORAN* can be located in the vicinity of the Abrolhos Islands , then the wreck of *HMAS SYDNEY* is probably also in that area.

Yours Sincerely
Glen Hielscher

Submission by Glen Hielscher

Part 1

Assuming that Detmer's battle site is correct, and the wind was force 4 (12 to 16 Knots) from the SSE." KORMORAN" would be drifting at approximately 1 knot towards NNW from the time of her disablement at about 1800 on Nov 19th until she blew up at midnight .

We must then assume that the lifeboats were rowed or towed to a safe distance of at least 3 nautical miles probable Easterly to get them well away from the exploding 400 mines, from that point according to Von Malapert they drifted all night. Total drift of about 14 miles closer to 26S x 111E.

Assuming then that Meyer was correct when he said he left 26S x 111E at 8AM on November 20th I have tried to plot the course he took using his own direction steered, and his estimated distance traveled.

Because of the lack of detail regarding times and force of all the wind changes mentioned in the Meyer Photo diary and the Von Malapert Diary. I have had to use the average wind speed and direction as given be (Courtney1991) and (Southern 1991)which was 21.3 knots towards 330 degrees . 5% of the average wind speed is use as leeway (Australian Maritime Safety Authority) to which I have added the 0.2 knots of current(WAMM report 71) giving a total leeway of 1.25 knots towards 330 degrees .

As Meyer seems to have calculated his distance traveled from noon to noon I have also calculated from noon to noon
At noon on Nov 21st I have them at 25-20S x 111-07 E
At noon on Nov 22nd, I have them at 24-49S x 111-26 E
At noon on Nov 23rd I have them at 23-59 S x 111-26E
At noon on Nov 24th I have them at 23-44S x 111-50E
At this point they were 96 nautical miles from Red Bluff on a bearing of 296 degrees from Red Bluff. And from there to Red Bluff they would have to travel 96 nautical mile on a course made good of 116 degrees which was impossible because lifeboats are unable to sail that close to the wind . nor could they sail 96 nautical miles against the wind in the remaining 20 hours.

In making these calculations I have not included the wind surface current , and have not allowed for the added leeway caused by the wind on the sails,. Nor have I tried to calculate the added miles when they were running before the wind with the foresail, all or these extra calculations would have driven them further to the North and West of North.

On arrival at Red Bluff Von Malapert estimated they had traveled 183 nautical miles so I have added an arc to the map with a radius of 183 Nautical miles

My Conclusions :-

(a) They did not begin their journey from 26S x 111E .

(b) To arrive at Red Bluff at 8AM on November 25th they had to begin their journey much closer to the coast

(c) They had actually traveled much further to the North than I have calculated

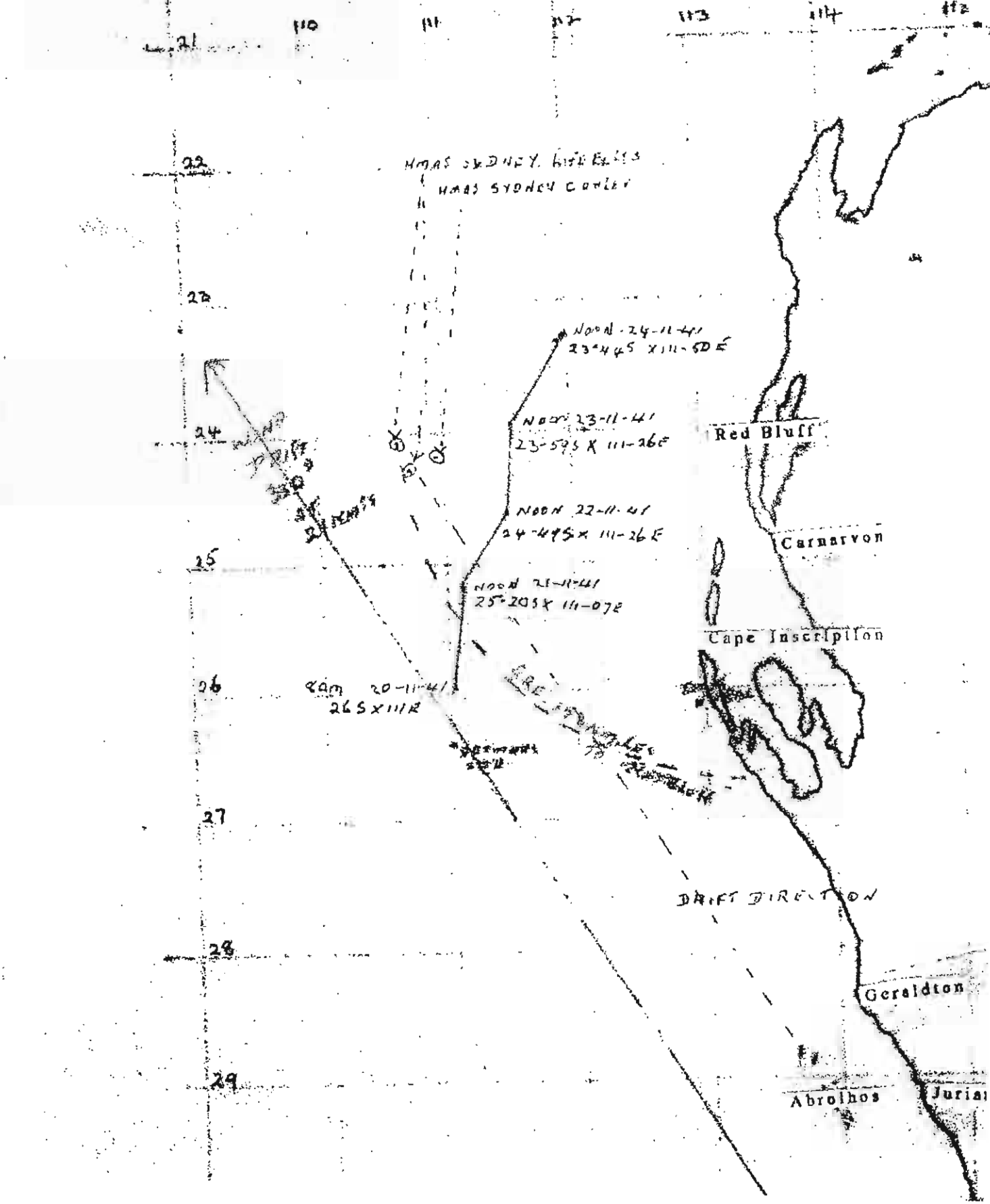
(d) They did not estimate leeway caused by windforce.

(e) No where do they mention a wind force greater than force 6 (Strong Breeze, 22 to 27 Knots) and the Big seas they encountered would not be generated from a strong breeze. And there would be no need to stream a sea anchor in a wind less than force 7.

For those without knowledge of seamanship,I have enclosed a copy of the Beaufort Scale to show how wind force, and wave height is calculated

Chart 1

Submission by Glen Hielscher Part 1
Meyer's lifeboat Voyage commencing 26S x 111E



BEAUFORT SCALE WIND FROCE

Beaufort Number	International Scale 1939 Destriptive Term	Wind speed in Knots	British & U.S. Scale Descriptive Term	Windspeed in knots
0	Calm	0 > 1	Light	less than 1
1	Light Air	2 > 3	Light	1 > 3
2	Light Breeze	4 > 7	Light	4 > 7
3	Gentle Breeze	8 > 11	Gentle	8 > 12
4	Moderate Breeze	12 > 16	Moderate	13 > 18
5	Fresh Breeze	17 > 21	Fresh	19 > 24
6	Strong Breeze	22 > 27	Strong	25 > 31
7	Moderate Gale	28 > 33	Strong	32 > 38
8	Fresh Gale	34 > 40	Gale	39 > 46
9	Strong Gale	41 > 48	Gale	47 > 54
10	Whole Gale	49 > 56	Whole Gale	55 > 63
11	Storm	57 > 65	Whole Gale	64 > 72
12	Hurricane	more than 65	Hurricane	73 > 136

At 25 knots or force 6 white caps begin to form on the crest of waves

A heavy sea is raised when strong winds blow for many hours over large ocean areas

Fetch ..... Distance over which the wind blows

Wind Velocity ..... Average speed of the wind over the fetch

Wind Duration .....How long the windblows

Table 1 Wave height in feet for various wind velocities and Fetches

Fetch in nautical miles		Wind velocity in Knots 10	20	30	40	50	60	
10	miles	2	3	5	7	9	10	feet
20		2	4	7	9	12	14	
50		2	6	10	14	18	22	
100		2	7	13	17	25	30	
500		2	10	20	31	45	55	
1000		2	10	21	35	50	70	

Table 2 Wave height in feet for various wind velocities and duration

Wind duration in hours		Wind velocity in Knots 10	20	30	40	50	60	
6	hours	2	5	10	14	20	25	feet
12		2	7	13	20	30	35	
24		2	9	17	30	40	55	
48		2	10	22	35	45	70	

Submission by Glen Hielscher Part 2
Meyer's lifeboat voyage commencing at 28-38S x 113-25E

I have repeated the above exercise adding a wind driven current of 3% of the wind speed, and 1% of wind speed added to leeway, for added leeway caused by the sails assuming the sails were up for half of the time , giving a total average leeway of 2.1 knots.

This time I will begin the voyage from the KDLS target 3 site, 28-38-26 S x 113-22-26 E and again I will assume that they rowed or were towed about 3 miles in an Easterly direction to escape the blast from the exploding mines.

I have done this because it was customary in the event of abandoning a ship for the motor boats to gather all survivors on rafts or in lifeboats or supported by other flotsam , and link them together with their painters and tow them a safe distance from the sinking ship, and distribute the survivors as evenly as possible amongst the lifeboats , and organize the provisions in proportion to the numbers in each boat.

I have assumed therefore, that around midnight they began drifting from position 28-38 S x 113-25 E. and Von Malapert said they drifted all night. . Meyer began his voyage at 800 hours on November 20th
I have calculated that by 8AM on Nov.20th they had drifted to 28 –23-30 S x 113-15-36E and by Noon Nov 20th they had sailed 3 miles and were in position 28-13-42 S x 113-14 E.
Meyers diary for Nov 21st is confusing reading from two photo backs. I have use the days run of 24 miles steering ENE, so their noon position would be 27-19 S x 113-08 E
At Noon on 22nd after steering ENE for 36 miles , I have them at 26-21 S x 112-55 E
At Noon on 23rd After steering NE & days run 18 miles, I have them at 25-28 S x 112- 41 E
At Noon on 24th After steering ENE, & days run 40 miles, I have them at 24-26 S x 113-24 E with Red Bluff 21 miles away bearing NNE which is very close to the dairy position where Meyer says he sighted the High Cliffs from a distance of 15 miles .

I surprised myself when my calculations led me to this position. I had proved the voyage could not have commenced from 26S x 111E so decided to repeat the exercise in more detail from the KDLS target 3 site as an exercise.
I can only hope now that the people adjudicating this seminar will import a navigator to check my calculations , before consigning my submission to the recycle bin.

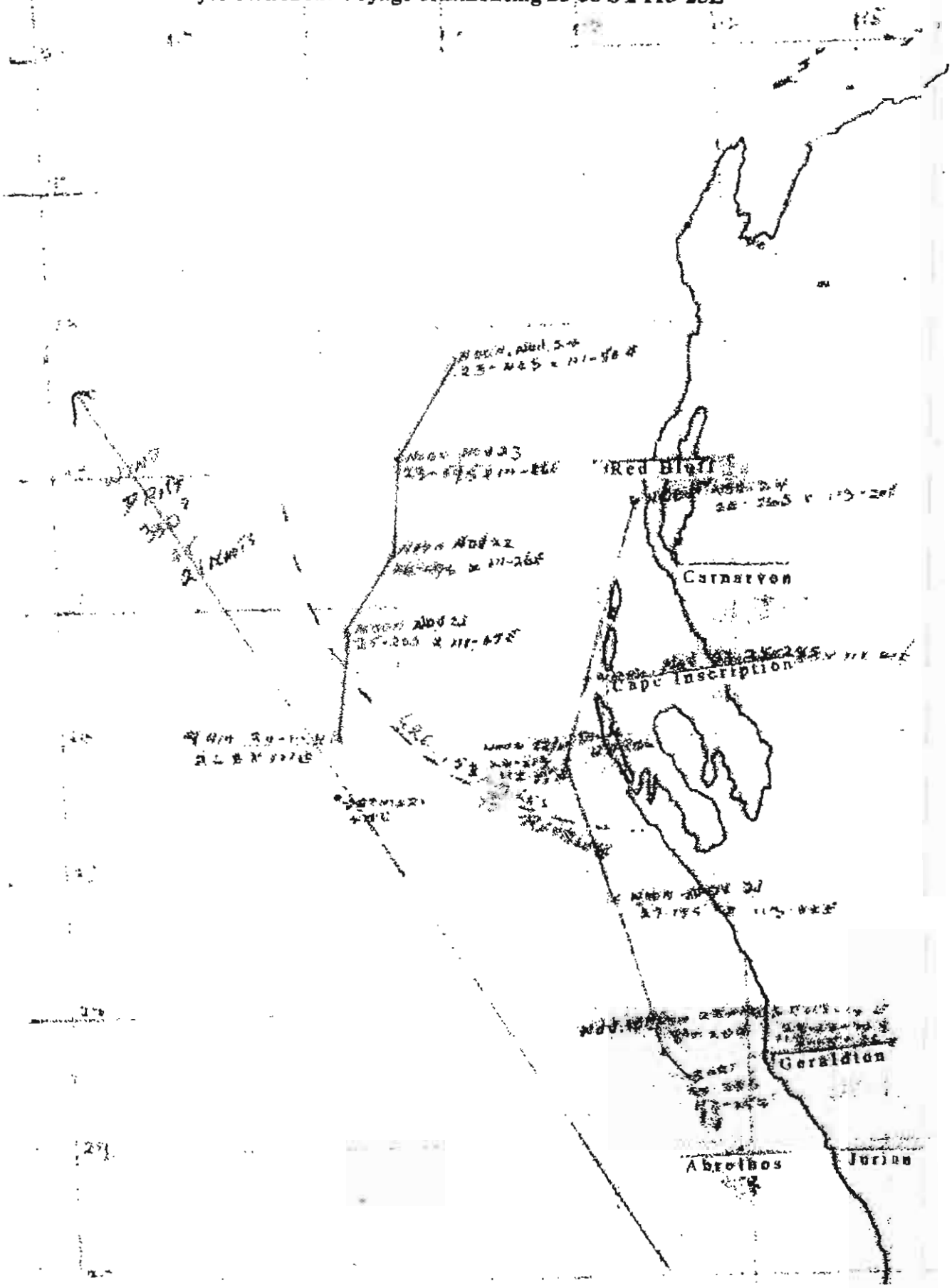
These calculations take them very close to Dorre Island and Berner Island, .This can be explained by the fact that the calculations are done on average wind speeds , when in fact they experienced strong winds from the evening of the 21st which would have placed them further to the west.. Also , while my map was traced the latitude and Longitude lines had to be added freehand and may be a little out of position , but the calculations should be fairly accurate .

Conclusions:-

(a) Meyers Diary is accurate regarding distance traveled and course steered .
(b) Meyers Voyage did not begin from 26S x 111 E
(c) Meyers Voyage began slightly west of the Abrolhos Islands
(d) Meyer was in a lifeboat attempting to save the lives of 57 sailors and tried to reach the coast as quickly as possible, and did so to the extreme ability of the lifeboat, He did not need to calculate the leeway caused by wind and current.
(e) KDLS Target 3 is probably the wreck of KORMORAN

Chart 2

Submission by Glen Hielscher Part 2
Meyer's Lifeboat Voyage commencing 28-38 S x 113-25E



Jh please
copy to.
O, A+O.
JH.

26 Macquarie Street
Belmont NSW 2280
PO Box 499
Belmont NSW 2280
Ph: (02) 4947 9711
Fax: (02) 4947 9722
Freecall: 1800 804 307

JILL HALL
Federal Member For Shortland

forwarded 12/11/01

Jh:cg

1 November 2001

Dr D M Stevens
Director of Naval Historical Studies
Naval History Directorate
Department of Defence (Navy)
CP4-1-41
CANBERRA ACT 2600

Dear Dr Stevens

Enclosed is a copy of a submission recently received from Mr Glen Hielscher of 4 Beach Road, Redhead, regarding the Seminar into the possible location of the wrecks of *HMAS SYDNEY* and *HSK KORMORAN.*

Your consideration of the matters raised by Mr Hielscher would be greatly appreciated.

Kind regards

Jill Hall MP
Federal Member for Shortland

Submission
by

Air Commodore [R] D.W. Hitchins

Air Commodore [R] D.W. Hitchins

Air Commodore [R] D.W.Hitchins
45 Kooraru Close
Tea Gardens NSW 2324
29 Oct 01

Tel 02 49 971885

Dr David Stevens
Naval History Directorate
Dept Defence CP4 - 1 - 41
Canberra ACT 2601

Dear Dr Stevens,

Concerning the forthcoming review of matters relating to the loss of HMAS Sydney. I have followed this enquiry with interest from the beginning. One aspect particularly concerns me..

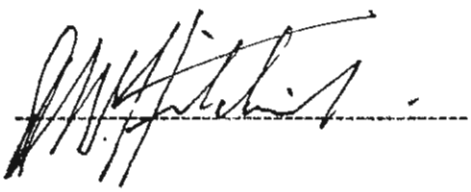
I understand that the ocean area westwards from the WA coast, between Lat 25.5 degrees S and 28 degrees S has been excluded from any search .The Bureau of Mineral Resources [now part of the Australian Geological Survey Organization] surveys have been confined to areas north and south of this area. One wonders why. Were they told to keep out?

Commander Hardstaff has also raised this matter. The Transcript of Proceedings of Defence Sub-Committee on Friday 22 May 1998, FADT 438 and FADT 445 refers.

There appears to be some expert opinion that the Sydney may lie in this region. Are you able to explain why it has apparently been deliberately avoided.?

I would be grateful for your consideration of this question.

Yours Faithfully



Forwarded to A Workshops
5/11/01

Submission
by

HMAS Sydney Search Pty Ltd

HMAS Sydney Search Pty Ltd

HMAS Sydney Search Pty Ltd (ACN 096 017 275) has been established to facilitate the search for HMAS Sydney. HMAS Sydney Search Pty Ltd has been established as a Pty Ltd company to ensure there is no possible conflict of interest and to ensure full accountability under Australian law.

The Trust Deed of HMAS Sydney Search Pty Ltd specifically and explicitly precludes profit making by Trustees for any purpose associated with the wrecks of HMAS Sydney and HSK Kormoran.

HMAS Sydney Search Pty Ltd will focus on the technical issues associated with the search for HMAS Sydney and other vessels lost off the coast of Australia and, when appropriate, raise and manage funds, and implement search operations.
The specific objectives HMAS Sydney Search Pty Ltd are as follows:

42 MARITA RD

- Provide expert oceanographic advice to assist with the search for HMAS Sydney, and other vessels lost off the coast of Australia.
- Provide expert advice in regard to the archival, historical and cognitive issues and activities associated with the search for HMAS Sydney.
- Provide expert advice on the search technologies required to design and manage a search for HMAS Sydney, HSK Kormoran and other vessels lost off the coast of Western Australia.
- Collate and facilitate access to Internet based databases containing archival information about the location of HSK Kormoran and HMAS Sydney.
- Raise funds and manage a search for HMAS Sydney and HSK Kormoran
- Implement a Virtual Memorial to HMAS Sydney.

NEDLAN

HMAS Sydney Search Pty Ltd will operate in the search for HMAS Sydney as a not-for-profit-organisation with experts in the various fields donating their time and resources wherever possible.
It is run by an initial management board comprising the Directors, initially Ted Graham, Kim Kirsner and Don Pridmore, and the Foundation Sponsors.

WESTERN AUSTRALIA 60

HMAS Sydney Search Pty Ltd looks forward to co-operating with other groups and individuals to facilitate the search process generally.

Contributions and in-kind donations will be sought to carry out the objectives of the Company and to defray running costs.

EMAIL: INFO@FINDINGSYDNEY.C

The Internet will be used to manage and disseminate archival information and will form the basis of the virtual memorial to HMAS Sydney. The address of the Internet site is www.findingsydney.com.

INTERNET: WWW.FINDINGSYDNEY.C

Submission
by

Sam Hughes

Australian Maritime Safety Authority

Sam Hughes

Australian Maritime Safety Authority

Locating HMAS Sydney and HSK Kormoran by Computer Generated Net Water Movement System.

Sam Hughes

Australian Maritime Safety Authority

Acknowledgements: 1. Technical assistant from Mr Scott Lillington (Net Water Movement Project Officer), Mr Stuart Coupland (AMSA Systems Officer) and Mrs Lyn Murray (AMSA Systems Officer).

2. Mr Keith Baker, CPO RAN Rtd, (HMAS Perth –WW II) for persistent encouragement and for his vision that the Sydney will be found.

Introduction

The Australian Maritime Safety Authority's submission to the 1991 Forum offered a possible solution based on "modern Search and Rescue Planning Techniques (Hughes 1991). Developments over the past 10 years have not changed these techniques markedly until recent times. With better and more detailed information becoming available on leeway data and with the quantum increase in speed and capacity of computer programming, SAR planning techniques are changing. Australia, through the Australian Maritime Safety Authority, has been active in this field and has had under development for some time a computer based system designed for solving the net water movement problem.

Whilst the system is still in a development stage and caution with results should be exercised, it is felt, none the less, that some value can be gained by utilising the system to assist with the Kormoran/Sydney location problem.

Net Water Movement (NWM) System

The NWM system utilises near real time data to determine the surface ocean currents responsible for carrying floating objects. As inputs it has real time data for large-scale ocean circulation and associated fronts and eddies from satellite altimeter data, astronomical tidal data, the Bureau of Meteorology's numerical weather models for the wind conditions and bathometric data modelling of the continental shelf. The result is calculated vectors in a grid providing the direction and speed of the water movement in a given area. The SARTrack component module will then calculate for the effect of the wind on the object itself (leeway) to determine the expected drift. The system is also used to provide input for Oil Spill Trajectory Modelling in marine pollution incidents.

Core Components of the System

The following details the major aspects of the system:

a. Data Sources:
   - Australian region and global wind predictions and bathometric pressure are downloaded from the Bureau of Meteorology twice daily
   - Geostrophic current data sourced from the Topex-Poseidon satellite is downloaded from CSIRO daily
   - Bathymetry compiled from a number of sources is stored at AMSA
   - Tidal influences compiled by the National Tidal Facility are stored at AMSA
   - Leeway characteristics sourced from the US Coastguard are stored at AMSA

b. Incident and Scenario Input screens in the AusSAR System provide key information about the location or route of the incident, the search target, the splash time and search time.

c. The GCOM3D module calculates the surface water movement in the area during the incident using the wind, current, bathymetric and tidal data.

d. SARTrack determines the probable movement of the search object(s) from the splash point given their leeway characteristics and the surface water movement. Five hundred "dots" are dropped in the water for each search object and independent calculations done on each using a Monte Carlo probabilistic simulation to obtain the potential search area.

e. The Geographic Information System display is used as a "movie player" to show the currents and movement of the search objects.

f. The system can also accept winds by manual input

g. A hindcasting facility is also available.

Leeway.

Recently published United States Coast Guard leeway field experimental data (Table 1) has been used with the AMSA NWM system.

Table 1 -Recommended Leeway Speed and Direction Values for Search Planning Tools

Leeway		Target	Class	Leeway Speed (cm/s)		Diver-gence	$S_{y/x}$
Level 1	Level 2	Level 3	Level 4	Slope (%) W_{10m}	Y-intercept (cm/s)	Angle (deg)	cm/s
				1.1	3.5	40	> 15
	Vertical			0.5	3.8	24	> 10
PIW	Sitting			1.2	0.2	24	1.38
	Horizontal	Survival Suit	face up	1.4	5.3	40	1.85
		Scuba Suit	face up	0.7	4.3	40	5.92
		Deceased	face down	1.5	4.0	40	> 10
	Maritime	No Ballast Systems		4.2	1.6	38	> 15
			no canopy, no drogue	5.7	10.9	32	10.4
			no canopy, w/ drogue	4.4	- 10.3	38	4.1
			canopy, no drogue	3.7	5.7	32	2.1
Survival			canopy, w/ drogue	3.0	0.0	38	>15
	Life Rafts	Shallow Ballast Systems and Canopy		2.9	- 0.2	30	> 15
			no drogue	3.2	- 1.0	30	0.9
Craft			with drogue	2.5	0.7	30	4.2
			Capsized	1.7	- 5.2	11	2.1
		Deep Ballast Systems & Canopies	(See Table 8-1A for Levels 4-6)	3.0	0.8	18	7.9
	Other Maritime Survival Craft	life capsule		3.8	- 4.1	30	1.4
		USCG Sea Rescue Kit		2.5	- 2.1	10	4.0
	Aviation Life Rafts	no ballast, w/canopy	4-6 person, w/o drogue	3.7	5.7	32	2.1
		Evac/ Slide	46-person	2.8	- 0.6	20	4.0

Sub -Table 1A
(Sub-table for Maritime Life Rafts with Deep Ballast Systems and Canopies)

	Leeway	Target	Class	Leeway Speed (cm/s)		Diverg - ence	$S_{y/x}$
Level 3	Level 4	Level 5	Level 6	Slope (%) W_{10m}	Y-intercept (cm/s)	Angle (deg)	cm/s
Maritime Life Rafts with Deep Ballast Systems and Canopies	4-6 person capacity			2.9	2.0	20	8.6
		without drogue		3.8	- 2.1	20	4.4
			light loading	3.8	- 2.1	20	4.5
			heavy loading	3.6	- 1.5	20	2.5
		with drogue		1.8	1.4	16	3.1
			light loading	1.6	2.7	32	3.0
			heavy loading	2.1	0.0	27	2.7
	15-25 person capacity			3.6	- 4.4	14	5.4
		w/o drogue	light loading	3.9	- 3.1	12	2.9
		with drogue	heavy loading	3.1	- 3.6	12	3.3
	Capsized			0.9	0.0	16	2.2
	Swamped			1.0	- 2.2	11	2.0

Table 1 (Continued)
Recommended Leeway Speed and Direction Values for Search Planning

Leeway		Target	Class	Leeway Speed (cm/s)		Diverg -ence	$S_{y/x}$
Level 1	Level 2	Level 3	Level 4	Slope (%) W_{10m}	Y-intercept (cm/s)	Angle (deg)	cm/s
Person-Powered Craft	Sea Kayak	W/ Person on	aft deck	1.1	12.5	20	3.52
	Surf board	*w/ person*		2.0	0.0	20	>10
	Windsurfer	w/ person and mast	& sail in water	2.3	5.2	16	2.32
Sailing Vessels	*Mono-hull*	*Full Keel*	*Deep Draft*	3.0	0.0	65	>10
		Fin Keel	Shoal Draft	4.0	0.0	65	>10
Power Vessels	Skiffs	Flat Bottom	Boston whaler	3.4	2.1	30	1.8
		V-hull	Std. Conf.	3.0	3.9	20	4.1
			Swamped	1.7	0.0	20	3.0
	Sport Boats	Cuddy Cabin	Modified V-hull	6.9	- 4.1	25	2.9
	Sport Fisher	Center Consol	Open cockpit	6.0	- 4.6	30	3.3
	Commercial Fishing Vessels			3.7	1.0	65	> 15
		Sampans	Hawaiian	4.0	0.0	65	>10
		Side-stern Troller	Japanese	4.2	0.0	65	>10
		Longliners	Japanese	3.7	0.0	65	>10
		Junk	Korean	2.7	4.9	65	3.9
		Gill-netter	w/rear reel	4.0	0.3	45	3.0
	Coastal Freighter			2.8	0.0	65	> 10

Table 1 (Continued)
Recommended Leeway Speed and Direction Values for Search Planning Tools

Leeway		Target	Class	Leeway Speed (cm/s)		Diverg -ence	$S_{y/x}$
Level 1	Level 2	Level 3	Level 4	Slope (%) W_{10m}	Y-intercept (cm/s)	Angle (deg)	cm/s
	F/V debris			2.0	0.0	14	> 10
Boating	Bait/wharf box			1.3	13.8	42	4.50
Debris	holds a cubic	lightly loaded		2.6	9.2	20	2.96
	meter of ice	full loaded		1.6	8.0	44	2.70
	Immigration	Cuban refugee	w/o sail	1.5	8.7	23	1.5
Non-SAR	Vessel	raft	w/ sail	7.9	-8.9	45	5.4
	Sewage Floatables	Tampon Applicators		1.8	0.0	7	3
Objects				2.8	0.0	14	>15
				3.7	0.0	14	>15
		Vials	Large	4.4	0.0	13	3
	Medical		Small	3.0	0.0	14	6
				1.8	0.0	7	>15
	Waste	Syringes	Large	1.8	0.0	7	3
			Small	1.8	0.0	7	2

Leeway speed (cm/s) = [Slope (%) * Wind Speed (m/s)] + Y-intercept (cm/s) (8.1)

An example of using this equation for PIW for winds of 10 m/s is shown below:

Leeway speed (cm/s) = 1.1 (cm/s)/(m/s) * 10 m/s + 3.5 cm/s = 14.5 cm/s

To convert Leeway speed in cm/s to knots multiply by 0.0194385.

The seventh column in Table 1 is the divergence angle in degrees. The eighth column is the standard error of the estimate ($S_{y/x}$) for the leeway speed versus wind speed equation. The standard error is not used in the present search planning tools, but it is anticipated that it will be used in future versions of search planning tools

Kormoran/Sydney Application

Despite best technology the three variables remain in solving this problem - water movement, wind and leeway. Whilst the NTW system allows the manual input of 1941 winds it cannot do so for ocean current and tides. Professional people have estimated the wind for that period in 1941, in that location, but there must be a degree of uncertainty, particularly wind strength. Although the knowledge of leeway movement has increased, no precise data is available for the objects recovered from Sydney and Kormoran.

The following diagrams (figures 1 to 9) show the NTW system outcome for several selected targets. It should be noted that although November 2001 Ocean Current has been used, similar current movement for the particular area might have been somewhat different during November 1941. Overall oceanic current movement is well known and predictable but eddy system can vary and very much affect the local region (see figure 6).

Leeway: For the purpose of the exercise the following leeway speed from Table 1 has been used, as best guess:

(1) Lifebelts and Dog Kennel – FV Debris = 2%
(2) Liferafts and Carley Float - 15/25 person liferaft with drogue, heavy loaded = 3.1%

Current. Ocean current is actual November 2001 current – it is not possible to input manual (best guess) current from 1941.

Winds for the period November 1941 (Table 2) have been used for leeway. Wind generated current has not been considered and is not calculated in the NTW system. Wind current is observed as part of the Geostrophic current (see figure 6)

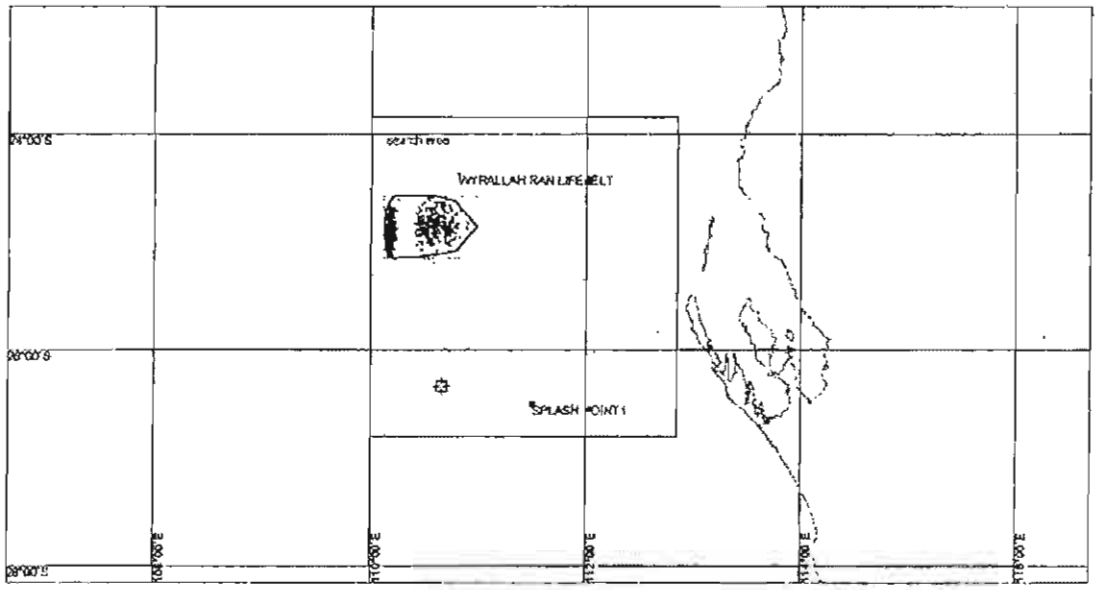
TABLE 2

ESTIMATED WINDS AT 26 00S 111 00E NOVEMBER 1941
(Provided by the Bureau of Meteorology Perth 1991)

Date	9am		9pm	
	Degrees	Knots	Degrees	Knots
17	200	08	200	08
18	200	08	180	12
19	170	16	160	19
20	150	15	150	14
21	160	15	170	20
22	170	21	160	27
23	160	28	150	24
24	150	18	160	20
25	180	25	180	24
26	180	19	200	16
27	250	14	230	12
28	190	17	-	-

Figure 1. The RAN lifebelt located by the Wyrallah on 271815 Nov 41 is shown at position 24 22S 110 49E.

The NWM solution is using a splash point of 26 30S 110 30E, clearly show that a drift (NWM) to the northwest has been experienced during the period. Clearly the Splash Point could be manipulated to have a better coincidence of position.



In Figure 2 the splash point has been moved to new position 26 30S 111 30E, this fits more closely to the expected hind-cast location for such a drift.

Figure 2. Search area for FV debris (RAN Lifebelt) from position 26 30S 111 30E.

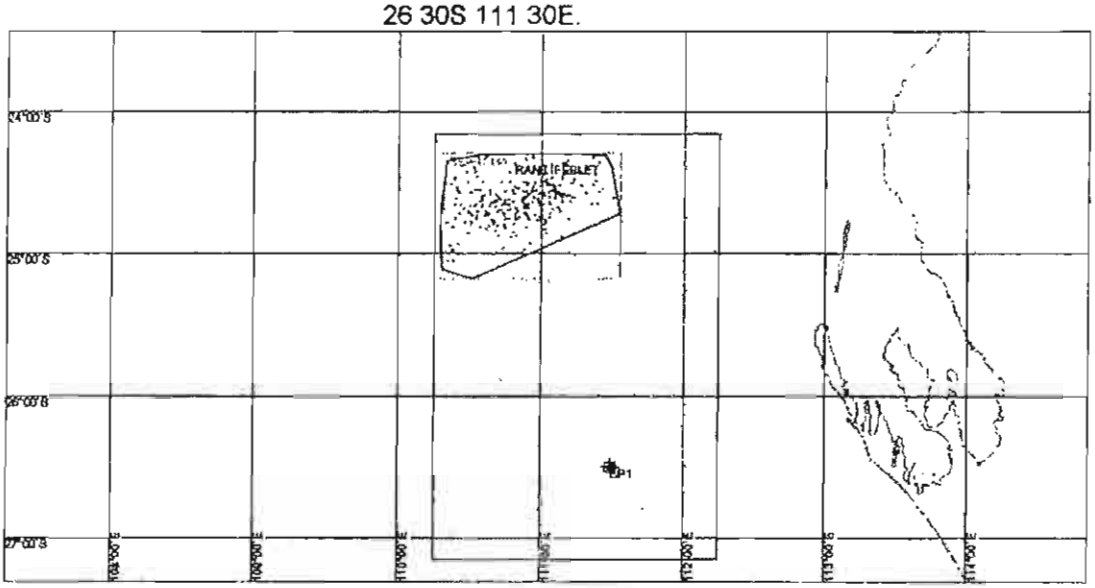


Figure 3 shows the position of the Carley Float in the northwest. The grey arrows point to current direction with speed in knots. The yellow arrows point down wind at metres per second and not knots as shown. Arrows are for that hour at the end of the run and are not an average of the whole period. This solution assumes that the Carley Float splash point was 26 30S 110 30E. Clearly with this current the splash point would need to be closer to 27 00S 112 00E.

Figure 3. Carley Float from position 26 30S 110 30E. 1941 Manual winds are metres per second and not knots as shown.

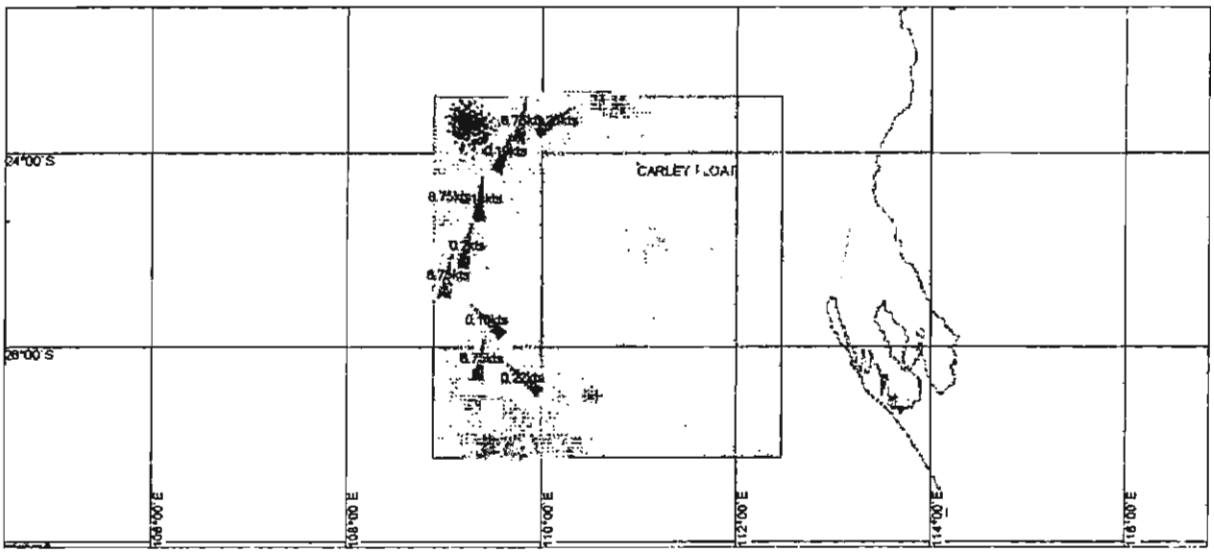


Figure 4. This picture of the Carley float NWM solution positions the splash point at 26 30S 111 30E but a tidy hind-cast would have the splash point closer to 26 30S 112 00E.

Figure 4. Carley Float from Splash Point 26 30S 111 30E.

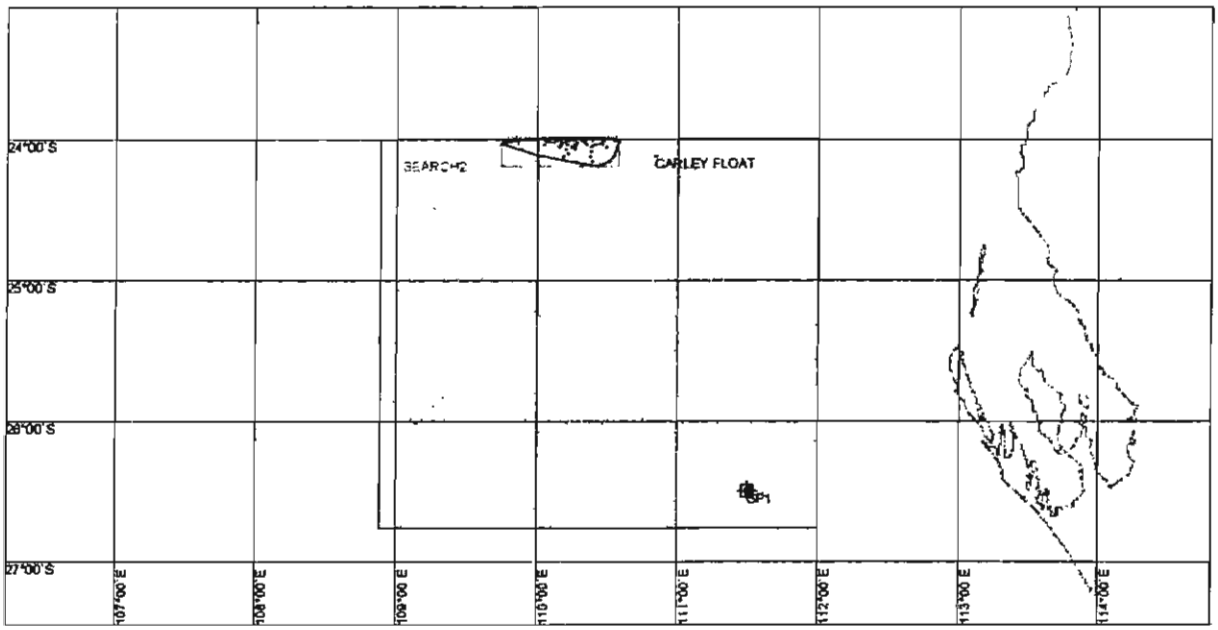


Figure 5 shows the Dog Kennel from Kormoran if launched from position 26 30S 110 30E. A splash point around 26 00S 112 00E would give a much better hind-cast solution.

Figure 5. Dog kennel from SP 26 30S 110 30E using 1941 manual winds and 2001 ocean currents

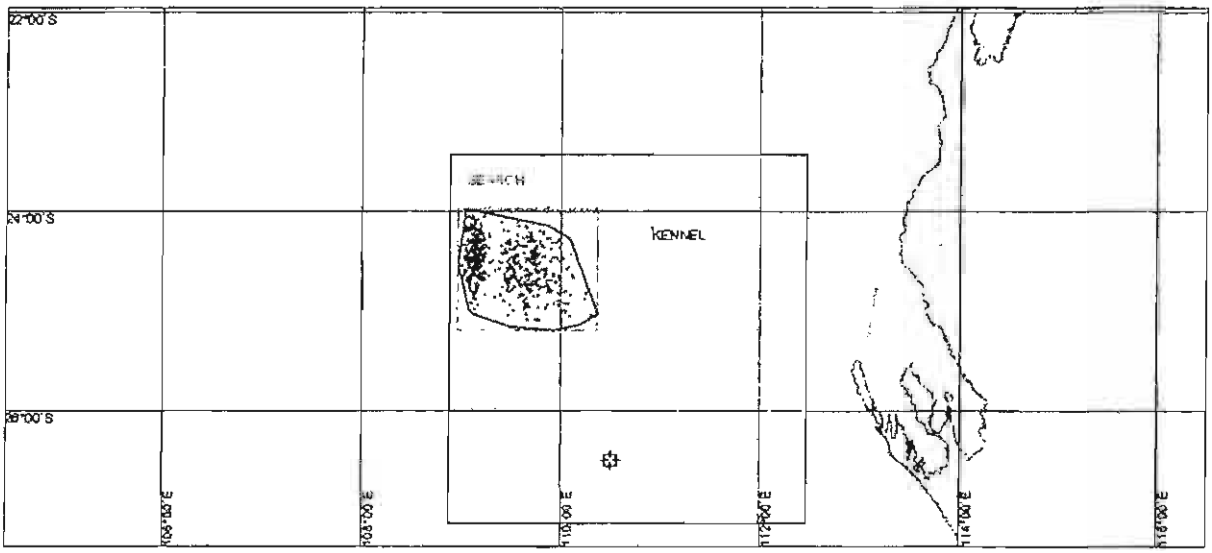


Figure 6 - *This graphic visualisation of Geostrophic Ocean Current (for 10th November 2001) clearly shows the local variations in current movement, including wind current.*

Figure 6. Geostrophic Current 10th November 2001

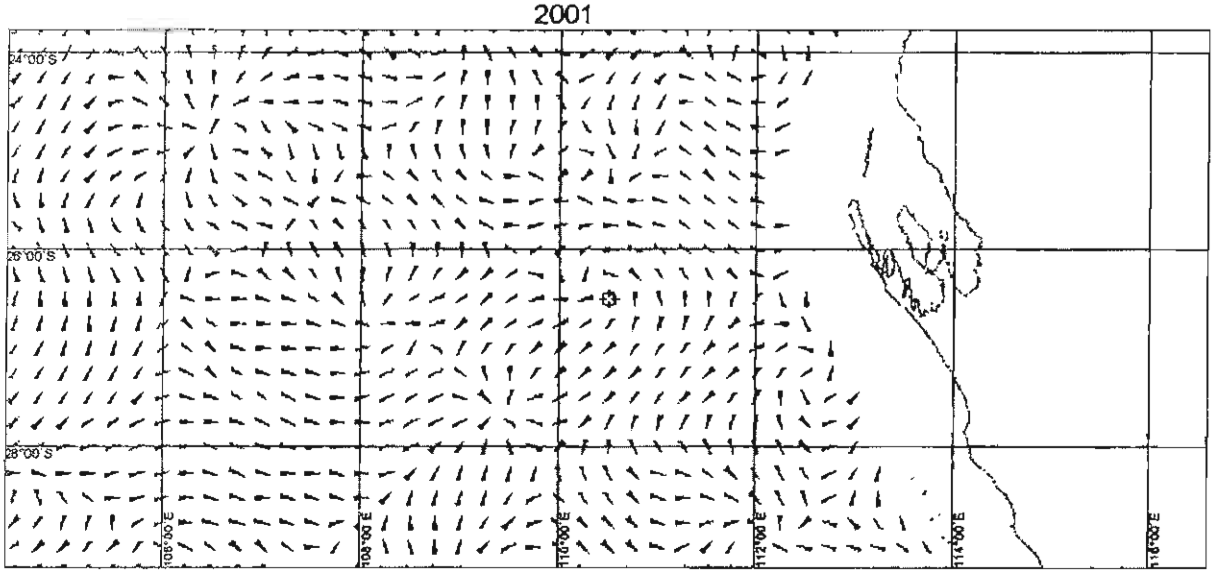


Figure 7 and 8 shows the results of two stages of NWM for FV debris (lifebelt) from position 28 38.29S 113 21.86E. Note the difference in current and wind direction over the period.

Figure 7.

FV debris (lifebelt) search area 5 days after release

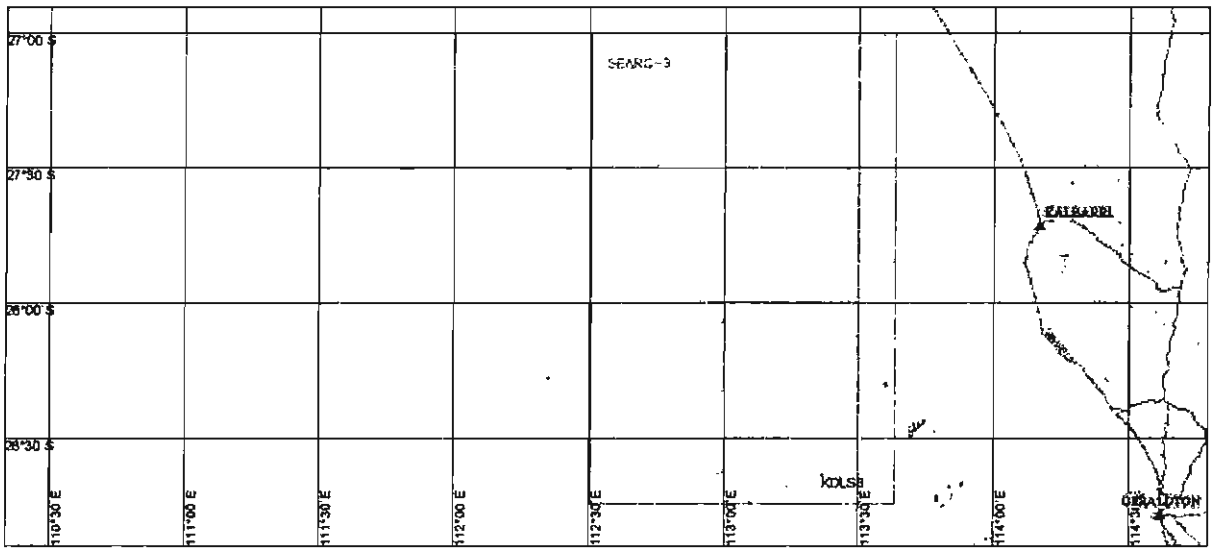


Figure 8

FV debris (lifebelt) search area 7 days after release.

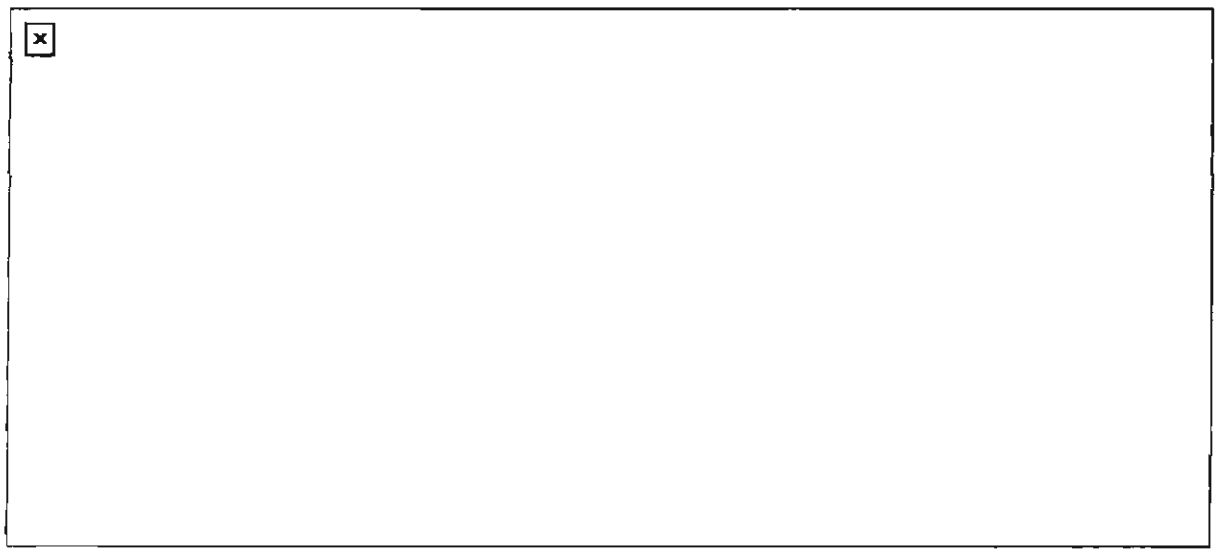
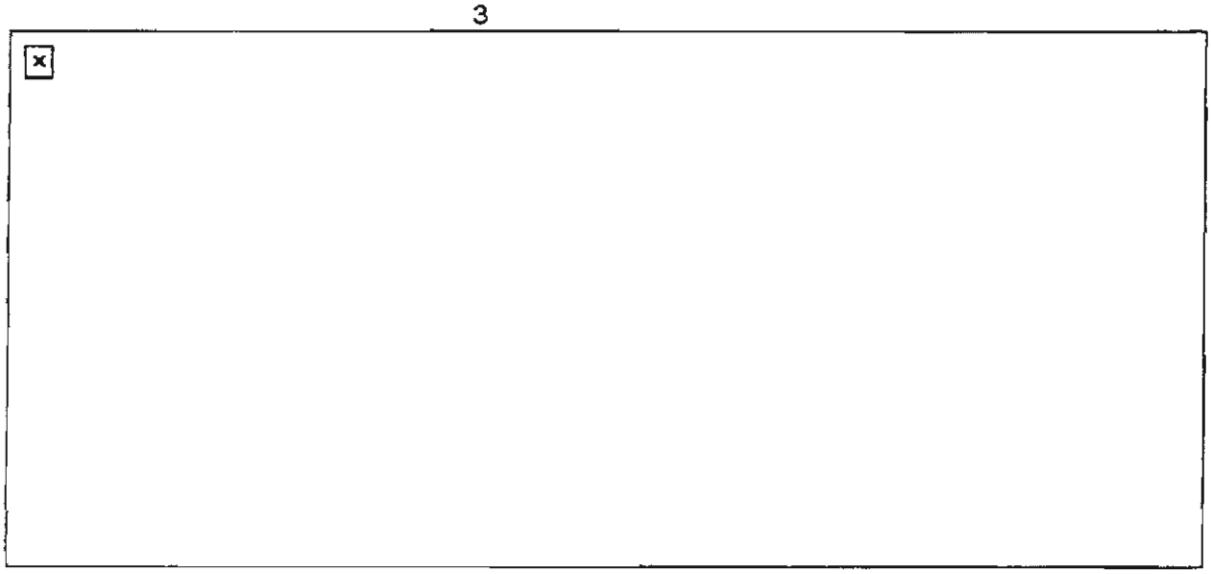


Figure 9 is the resultant NWM of FV debris (lifebelt) after 8 days from the position of KDLS3. This NWM solution is some 200nm southeast of the location of the recovered lifebelt.

Figure 9. FV debris (Lifebelt) search area from KDLS 3



Conclusion.

Due to time constrains and computer space limitations, this paper has not been able to use all objects that were located. Objects selected were done so to demonstrate the NWM system and in particular the graphic visualisation of Geostrophic Ocean Movement. The NWM systems shows that previous simplistic predictions of ocean current, based on empirical data, must be used with some caution when attempting to predict drift. Local variations of current due to the Coriolis force have always been difficult to calculate. The NWM system measures these variations and removes this equation.

Whilst still subject to the normal hindcasting constraints imposed by imprecise information about the 1941 environment and the leeway movement of the recovered objects, solutions produced by the NWM suggests an area somewhere between 26 00S to 27 00S and 111 00E to 112 00E, to be the high probability location. It may be possible to further refine this location when the NWM system is operational and the hind-cast programme becomes available.

The probability of the point of origin being in the vicinity of 28 38S 113 22E must be considered to be low.

The NWM also has shown that the general drift over the period was to the northwest at about 1 knot. This rate was also observed during the same period in 2000 when an emergency radio beacon was tracked by satellite, having been lost overboard from a fishing vessel.

The Net Water Movement system and associated SAR programmes being developed by AMSA will probably be the most advanced SAR planning system in the world. When fully operational the system should provide the best tool for helping solve problems such as this, which has challenged those interested in finding the location of the HMAS Sydney and the KSK Kormoran, for all these years.

Submission
by

Mr George Jackson
With a supplementary paper by
Peter Boichel
Geoff Chilman
John Francis
George Gresham (Jackson)
Dick Kagi
Peter Moir and others

Mr George Jackson
With a supplementary paper by
Peter Boichel
Geoff Chilman
John Francis
George Gresham (Jackson)
Dick Kagi

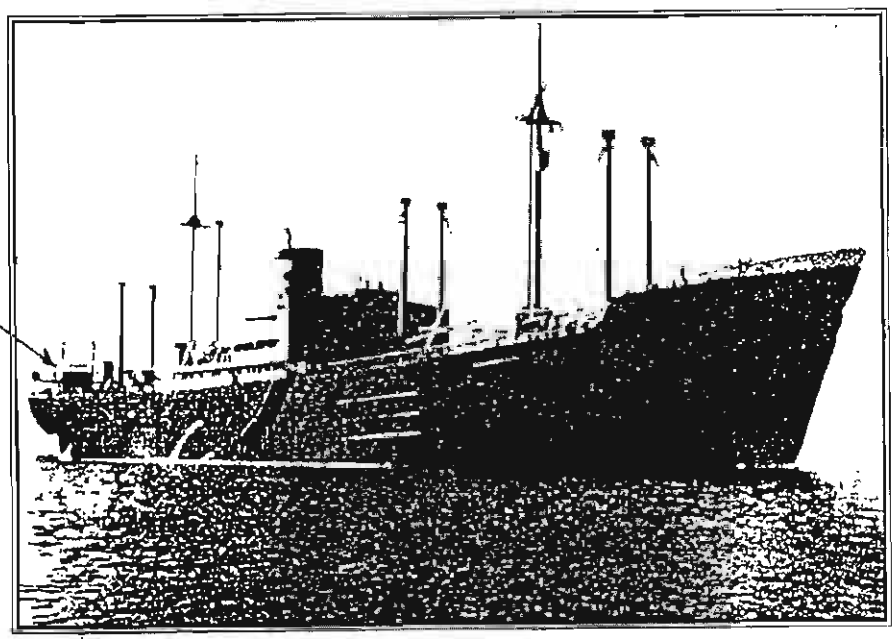
Kriegsmarine Ship Kormoran
KMS Kormoran. ***Hilfskreuzer number VI11....HSK VI11.....Schiff 41***

When Stiermark was taken over for conversion she was known as Schiff number 41
When conversion was nearly complete she was identified as Hilfskreuzer number 8
When Commissioned into the Kriegsmarine she became KMS Kormoran

.....The innocent and harmless looking Freighter.....
[Photograph courtesy of Battye Library in Perth, Western Australia]

8,736 tons.....164 m in length.....20.2 m in width.....8.5 m draught

Monday, 9th December 1940.....Thursday 20th November 1941



The photograph of *Steiermark* (*Kormoran*)
issued to British warships in October 1941.
Courtesy WA Newspapers

Note the huge 'Packing Crate' carried on the stern as Deck Cargo

You will note that we have marked KDLS position 3 on our Chart and we ask if there is any possibility that this could be the resting place of HMAS Sydney.
Two of our team are leaving no stone unturned in their efforts to have this site checked, we await a response from Woodside Petroleum about the use of their $35,000 a day underwater camera device, we hope to contact Fugro Survey Pty Ltd within the next day or two

I and other members of our research team were quite excited about the possibility of attending the 2001 Forum to be held in Fremantle later this year and we await your reply.

Yours faithfully,

17/5/01

George G Jackson

Our research team includes:

Mr. Peter Boichel,
Chart and Map Shop,
14 Collie Street,
Fremantle. 6160

Mr. Geoff Chilman,
11 Lind Court,
Quinns. WA 6030

Mr. John Francis,
34 Cordillia Street,
Coolum Beach Q 4573

Mr. Dick Kagi,
18 Gibney Street,
Cottesloe. WA 6012

Mr Peter Moir,
1 Ewers Place,
Booragoon WA 6154

George G Jackson. Unit 108, 1 Kingsway Road, Landsdale WA 6065.
Tel (08) 9409 9914 EMail gresham@one.net.au .

D.M.Stevens,
Director of Naval Historical Studies,
Sea Power Centre,
Dept. of Defence (Navy),
CP1-1-18
Canberra
ACT 2601.

Dear Sir,
Re: HMAS Sydney 1935 –1941
Together with a few other dedicated amateur researchers / historians, I have been researching the story of HMAS Sydney / KMS Kormoran for more than thirty years on a part time basis.
We have quite possibly read and studied everything that has ever been published about HMAS Sydney from the time she was laid – down until her sad demise.
We have had contact with other researchers in other countries including Germany and in addition, I personally have had access to some German papers that were in the possession of a former Officer of the Kriegsmarine who lived in Melbourne but who sadly, passed away before most of his documents could be translated from the German.
Two of these reports are detailed in my Research papers " The 2269 days of HMAS Sydney", I can send you a disc of those 39 pages if you are interested.
We are also in constant touch with Lindsay Knight (Knight Direct Location System) and his associate Warren Whittaker in Albury NSW.
We have spent countless hours studying various reports / opinions of weather conditions, we have spoken with Master Mariners, Meteorologists, Ocean – Racing Yachtsmen and anyone else who had an understanding of our coastline.

In WA, Professor Kim Kirsner of the University of WA has examined our work and it was he who suggested that I get in touch with you.
My fellow researchers and I are interested only in facts, over the years we have read so much rubbish, some even presented as factual, about this sad event and while we realise that, at this late stage, nobody will ever learn the true facts, we remain as enthusiastic as ever.

I have included some of our basic ideas in the enclosed Chart, our starting point was the known recovery points of survivors and flotsam.
In our first chart we used the bearings supplied by Korvettenkapitan Teodore Detmers but the enclosed Chart uses the position of KMS Kormoran calculated by Professor Kim Kirsner after back – tracking the lifeboat containing sailor von Malapert
This position was closely confirmed by Sam Hughes of the Maritime Safety Authority you would no doubt be aware of those calculations

We do have one more point that we believe should be placed in the public arena and that deals with the reason why HMAS Sydney deviated to the south during the battle.
After exhaustive enquiries, we obtained professional opinion from Mr Bob Chilman of Mount Gambier in South Australia who served on Sydney's sister ship, HMAS Hobart during World War Two
We are informed that when Hobart was **closed-up for action**, several **Emergency Teams** were sent to different parts of the ship We assume the same occurred aboard Sydney
Several [possibly five] Radio Teams went to their designated posts and **Two Emergency Steering Teams** were sent below
One of these teams was deep in the stern, if steerage was lost on the Bridge, they expected to receive instructions on their Intercom System
We suggest that this team would have at least felt the impact of shells and torpedo and it is quite conceivable that the leader of that team , in the absence of any Intercom messages, and aware that the rate of hits was not diminishing, may have made a Command decision to set Sydney back to her original course for Fremantle, which we suggest was around 162 degrees
And we suggest that this is a reasonable assumption of why Sydney changed course !
Sadly of course, we will never ever know !

The Chairman,
Fremantle Forum on HMAS Sydney, 16.11.2001

When an associate researcher who was based in London, decided to research the wartime activities of HMS Cornwall, a ship on which an uncle was killed during World War Two, he sent me some of his results in the belief that it may throw some light on why Captain Burnett quite obviously took HMAS Sydney close to the German Armed raider KMS Kormoran, and I quote :

When HMS Cornwall intercepted the Armed German Raider Pinguin on Thursday the eighth of May 1941, she opened fire at long-range and maintained sustained bombardment on her victim, long after she had ceased to be a threat to any shipping.
In a British Admiralty investigation of the event, the Captain was severely chastised for continuing the bombardment as it was the opinion of the Board of Inquiry that this had caused the death of at least 200 Allied prisoners of the 225 that had been aboard Pinguin
The actual wording of the reprimand was *" inexpeditious use of ammunition'*

This resulted in an Admiralty General Order and I quote ;

No Captain is permitted to open fire on any vessel <u>until that vessel has been identified BEYOND ALL DOUBT</u>

The pressure that this order placed upon every Captain of each one of His Majesty's warships must surely have been enormous, the reasons for the issue of that order was obvious, that was to protect the lives of British and Allied prisoners.
If a Captain was to issue orders to fire upon a vessel that he truly believed to be an enemy, and that ship proved to be poorly-crewed foreign ship that just did not understand signals, or possibly an unarmed German Supply Ship that the Admiralty were very keen to capture by boarding, then disgrace and demotion would almost certainly follow.
It is now suggested that Captain Burnett WAS OBEYING HIS ORDERS when he took HMAS Sydney close to what appeared to be a Merchant Ship in an effort to identify that ship BEYOND ALL DOUBT

The warship that could withstand heavy, accurate and short-range gunnery has not yet been built and it WAS MOST DEFINITELY NOT THE LIGHT CRUISER HMAS SYDNEY
We are informed that the human brain is unable to react instantaneously to any outside stimulation and it would not matter whether or not HMAS Sydney was CLOSED-UP FOR ACTION or on a lesser degree of readiness.
KMS Kormoran had two massive advantages while Sydney was closing :
She knew her target was an enemy vessel and
She could aim and range her guns while they were still hidden
And at a range of about 1,500 yards, it would be hard for trained gunners to miss their target, the sudden and possibly unexpected assault upon Sydney would have caught any vessel by surprise and, <u>however hard it may be for us to accept</u>, it is quite likely that our proud ship was doomed to destruction within the first few minutes

Message to : Wes Olson, **as Chairman at the Fremantle Forum**

From : George Jackson, 108 / 16 Kingsway Road, Landsdale 6065
Tel 9409 9914 EMail gresham@dingoblue.net.au

Subject : Presentation at Forum

Several weeks ago I sent a six or seven page submission to David Stevens and asked that I be permitted to present those suggestions to the Forum.
He advises that he passed them on to the relative Chair Person.
Since speaking to you last Tuesday, I realise that I have had had an honest misconception and some faulty research about a couple of items and I ask if you, as Chairman, can now withdraw those documents from the Agenda ?
However there still remains a couple of items that I believe should be brought to public attention and I suggest to you that this new information affects previous reports that have made criticisms of Captain Burnett I believe that every scrap of what appears to be valid evidence, deserves discussion in the public arena

Is there any way that this can be presented to the Forum ?

Kindest regards,

George Jackson

WAMM George Jackson 9/6/09 99/68

Proof Copy No. 2
27/8/2001

THE 2269 DAYS OF H.M.A.S. SYDNEY

The British "Amphion" Class Light Cruiser
HMS Phaeton, completed Tuesday 24. 9. 1935
and renamed H M A S Sydney on that day
Disappeared Indian Ocean Wednesday 19.11.1941

A study undertaken by a group of amateur researchers in an effort to ascertain the true facts of a Naval disaster.
An In – House project under the guidance of:

Peter Boichel
Geoff Chilman
John Francis
George Gresham (Jackson)
Dick Kagi
Peter Moir and others

Perth Western Australia

January 2001.

IN MEMORIUM

Petty Officer H.B.Shipstone, who perished with his ship HMAS Sydney in November 1941 had written this moving prayer before he made the final trip and we publish it as a memorial to the gallant crew

---

A SAILOR'S PRAYER

Let me live, O Mighty Master, Through this war, yet if I'm slain,
Tasting triumph and disaster, Joy and not too much of pain,
Let me roam the raging waters, For a while to love and laugh,
And when I am beneath the ocean, Let this be my epitaph –

'There sleeps one who took his chances
in that war – crazed tragic hell,
Battled luck and circumstances,
Loved and laughed but fought and fell,
Victor then, he did no crowing,
Wounded, he did not wail,
Cursed and swore but kept going,
Never let his courage fail,
He was fallible and human,
Therefore loved and understood,
By his fellow men and women,
Whether good or not so good,
Kept his spirit undiminished,
Had a laugh for every friend,
Fought for Freedom till it finished,
Lived loved and laughed until the end.

Sincere thanks to Maureen, daughter of Petty Officer,
Harry Woodrow Tassel,
H.M.A.S.Sydney
who also perished with his ship and shipmates, 19th November 1941

A 35-year search for the truth.

There appears to be no logical reasons why the loss of *HMAS Sydney* on Wednesday 19th November 1941 should ever have been shrouded in secrecy and mystery, the only reason that the true and full details are still not acknowledged today (2001) is that for reasons unknown and completely inexplicable to us all, our Government has declined to tell us all the facts that are almost certainly known to them or at the very least, to one of their Agencies.
We do have some facts, we know exactly where survivors and flotsam were recovered, we know the usual route that *HMAS Sydney* sailed when travelling between Fremantle and Sunda Strait, we have the benefit of some wonderful research, we can be sure that strong coastal winds were being experienced and the report about positioning of one of the lifeboats was a remarkable achievement.

Let us return to the year 1941 to examine a report:

From. Chief of Naval Staff Commodore John Walter Dunford.
To. Australian War Cabinet.
Date. Thursday 4 th December 1941.
Subject. Engagement between *HMAS Sydney* and German Armed Raider *Kormoran.*
This engagement took place in position 111 degrees east and 25 degrees south on 19th. November 1941.
HMAS Sydney made the first sighting at a range of 15 miles.
The " *Raider"* altered course from 000 degrees to 025 degrees and made no reply.
At closer range the " *Raider"* which was flying the Dutch flag made " *Straat Malakka"* by light.
At 1650 hours both ships were on a parallel course, speed 15 knots.
Sydney, which was abaft of the *Raider's* beam, distance less than 2 miles was in *'action stations'* and made " make your signal letters ".
Stiermark immediately opened fire with guns and torpedoes, her first salvoes hitting *Sydney's* bridge and starting a fire forward.
Sydney opened fire simultaneously but her first salvo was 'over'.
Early in the action the cruiser was hit by a torpedo under "A" turret, resulting in "A" and "B" turrets being jammed
Sydney's torpedo tubes were hit by a further salvo and a bad fire was started resulting in the destruction of her aircraft,
The action was broken off after about half an hour and *Sydney*, burning fiercely and down by the bow proceeded at 5 knots.
The *Raider* which had received a vital hit, was now on fire amidships with her engine room out of action.
At about 1815 hours the *Raider's* crew abandoned ship and at midnight, the vessel that had been scuttled, blew up.
It is believed that *Sydney* sank about 2300 hours. End of report.

Question
How was this information [much of it of extremely doubtful accuracy] obtained ?
This report is concise, it gives the original sighting range together with sighting of the Dutch flag, advises that *Sydney* was closed for action, states that forward turrets were jammed (surely there is no way that German survivors could have known this fact ?) the only reasonable explanation is that this information came from *Sydney* and the only method of signals was by radio.
Some German survivors gave evidence that they observed white-clad figures lining the rails of *Sydney* as she drew close, if this is factual then the "closed-up "report must be in doubt.

Time constraints would almost certainly preclude this information coming as a result of interrogation of German survivors for several reasons:
RAN Intelligence Officer, Lieutenant-Commander James Lumley Rycroft, was sent to the town of Carnarvon with a German-speaking interpreter to interrogate 103 survivors who had landed on Tuesday 25th November. Author and Researcher Barbara Winter, in her book *Fact,Fantasy and Fraud,* was very critical of the standard of interrogation by Australian Authorities.
We understand that initial informal interrogations commenced Wednesday 26th. November
But on Friday 28th November, Rycroft sent a report to Fremantle and the question must be asked "*what amount of time would be necessary to interrogate 103 survivors to record and transcribe their statements, to cross-check these reports to ascertain if they were fairly consistent and to prepare an interim report to his office.*" Remember also that a further 62 survivors, including the Commander (*Detmers*) and Second-in-Charge *(Foerster*) were landed at Carnarvon on Friday,28th.
It has been recorded that the formal and detailed interrogations began:

[a] Of Officers, on Monday 1st. December 1941 at the HQ 5th.Garrison Brigade Swanbourne and

[b] Of other ranks at the country town of Harvey [about 87 miles south], on 1st and 2nd December 1941 at Number 11 Internment Camp.

The complement of *Kormoran* was recorded as 400 Officers and crew, it was stated that 79 were lost at sea on or around 19th. November and a further 2 died during the cruise. On pages 273 / 274 of his book '*HMAS Sydney, Loss and Controversy, 'Revd Tom Frame* provides the names of those lost at sea, a wonderfully researched book that is highly recommended to all interested parties.
The liner *Aquitania* landed 26 survivors at the port of Sydney on the east coast these were interrogated by Captain Farncomb, Commander of *HMAS* Canberra, leaving 293 German-speaking survivors to be questioned in Western Australia.
It is quite ridiculous to suggest that the mammoth task of interrogation, even if it was only superficial, was completed within a period of two days, unfortunately for those of us who believe that the truth is of vital importance, it would appear that time itself has intervened and it is now impossible to retrieve long hidden or destroyed records which may have given us the satisfaction of hearing the story from the Australian view.
But it appears that, when the Chief of Naval Staff informed the Australian War Cabinet on Thursday 4th. December 1941 that:

[1] *Sydney* made the first sighting at 15 miles range

[2] The *Raider* altered course from 000 to 025 degrees, and at 1650 hours, both ships were on a parallel course.

[3] *Sydney* was at "action stations".

[4] A torpedo from *Kormoran* struck the port side resulting in turrets A and B being jammed he was supplying some actual facts that could only have come from *Sydney* ? Whilst a report from *Korvettenkapitan Detmers* claimed that no fire was received from the forward turrets, he could not possibly know that this was because they were jammed, surely it would be reasonable to assume that only those aboard *Sydney* would be aware of this fact.

The basic facts

His Majesty's Australian Ship *Sydney* was lost, presumed sunk with all hands in the Indian Ocean after an exchange of fire with the German *Hilfskreuzer KMS Kormoran* during the afternoon of Wednesday 19th. November 1941.

Historical records provide a thorough description of that encounter from:

Korvettenkapitan [Commander] *Teodore Anton Detmers.*

Battlewatchoffizer Oberleutnant zur See [Lieutenant] *Joachim von Gosseln.*

Executiveoffizer Kapitanleutnant [Lieutenant Commander]*Kurt Foerster.*

Navigator Kapitanleutenant [Lieutenant Commander] *Heinz Meyer.*

and more than 300 other survivors, plus two further reports published in Germany after the war had ended, one could reasonably assume that this information could be proved or disproved by release of radio signals to and from *Sydney* and from the findings of the Board of Inquiry that was conducted at Fremantle by the RAN from Monday 1st. December 1941.

[The Advisory War Council minute 842 of 18th. March 1942 refers to "the findings of a Naval Court of Inquiry" and Archival note NAA: MP1049/5, 2026/19/6 appears to confirm that such an Inquiry took place.] It should also be noted that RAN Intelligence Officers advised that they generally considered that, with few exceptions, the survivors provided a truthful explanation of the events leading-up to the encounter, the battle and the aftermath.

We do know that in June 1942, an RAN Officer informed the Australian War Cabinet that: "Captain Burnett had not followed his orders by getting too close", **surely, in all credibility, this statement could only have been the official findings of the Board of Inquiry ?**

Where are the records of this Board of Inquiry hearing ? Where are they stored or have they been destroyed ? If so by whom ?

Answers to these questions are desperately needed !

Background

Any encounter between a purpose-built warship and a non-armour-plated vessel would normally produce only one result, while a reinforced hull and superstructure would supply protection against incoming fire, their own naval shells would tear-through the relatively thin hull of any passenger/cargo/merchant ship with disastrous results.

There were many examples during World War Two when an *Unterseeboote* could quite simply sink their merchant-ship targets with only a few rounds from their 75mm.PAK *Panzerabwehrkanone* cannon, so just imagine the extra destructive power that the 150mm. naval guns would possess, surely a few hits along any waterline would cause massive damage to any non - armoured hull and would usually result in that ship sinking.

When the British 200mm.gun cruiser *Dorsetshire* sighted the German *Hilfskreuzer KMS Atlantis* (HSK 001) in the South Atlantic on Saturday 22nd.November 1941, (just 3 days after the *Sydney/Kormoran* meeting) she was refuelling *Unterseeboote* U.126 so was identified as an enemy at long-range and *Dorsetshire*, cruising at speed out-of-range, systematically destroyed her with accurate fire while remaining undamaged .

[When *Atlantis* was abandoned, *Dorsetshire* declined to rescue survivors as U.126 may have still been in the area and posed a serious threat]

But had *Atlantis* been disguised as a cargo-carrying vessel, cruising in a shipping lane, the result could have been quite different, remember that only a minute percentage of ships at sea were German Surface Raiders.

Only 9 *Hilfskreuzers* were commissioned by the *Kriegsmarine*

1.	*Pinguin*	2766grt. *	Complement 420	Sailed 15.6. 1940.
2.	*Komet.*	3287grt.	270.	9.7. 1940.
3.	*Thor*	3862grt.	345.	6.6. 1940
4.	*Michel*	4740grt.	400.	8.6. 1940
5.	*Stier*	4778grt.	324.	14.7. 1940.
6.	*Orion*	7021grt.	377	6. 4. 1940
7.	*Atlantis*	7600grt	350.	11. 3. 1940
8.	*Widder*	7851grt	363.	6. 5. 1940
9.	*Kormoran.*	8736grt.	400.	9.12. 1940

* huge complement for it's size and weight

In the context of losses to U – Boats in 1941, (1,086 merchant ships with a gross tonnage of 5,266,623 tons were lost between September 1939 and October 1941), Britain announced that she had a merchant fleet of more than 5000 ships, so with thousands of ships plying the oceans of the world, warship commanders had to be absolutely certain of the true identity of any prospective target before they could even contemplate offensive action. (Naval Commanders were obliged, under the Rules of War, not to open fire on any vessel until identification had been confirmed.)

Let us return to the year 1942 and examine a statement issued by the Chief of Naval Intelligence in Western Australia, Commander Rupert B.M. Long :

"There has now been accumulated a mass of confirmatory information which leaves no doubt that there are no survivors from HMAS Sydney"

"There are reasons however, why the full analysis should not be published, the principle that such an analysis would still not be accepted by some people as being absolute confirmation of the loss of all the Sydney's complement."

"It is intended not to publish anything further concerning this action and it's results, unless the Board is forced by Ministerial pressure, to write a Ministerial Statement"

That appears to be the very start of a 'cover-up', a cover-up that has endured for more than 59 years up to the year 2000. We must ask the question "Why ?"

Surely it is time to appeal to the present Navy Minister to call for a Ministerial Statement, a statement that was so arrogantly refused by a Naval Officer in 1942 ?

It is quite likely that the Senior Naval Staff who made this decision are long - dead, one point that we can be quite certain about is that an Officer with the rank of Commander, would not be permitted to make such a decision **without orders from more senior staff.**

In the 26 months of war prior to 19.11.1941, Britain and her Allies suffered severe losses in the War at Sea. 4 Aircraft Carriers, Courageous (17.9.39), Glorious (8.6.40), Eagle (11.8.41) and Ark Royal (13.11.41) had been sunk, 2 battleships, Royal Oak (14.10.39) and Hood (24.5.41) were lost, 13 Destroyers, Exworth (21.1.40), Glowworm (8.4.40), Harding (10.4.40), Hunter (10.4.40), Daring (18.4.40), Wakeful (29.5.40), Acaster (8.6.40), Ardent (8.6.40), Whirlwind (5.7.40), Exmoor (25.2.41), Bath (19.8.41), Broadwater (18.10.41) and Cossack (23.10.41) were lost and it would appear to be reasonable for Australian Authorities to delay news of the loss of *HMAS Sydney,* probably on the basis of morale within Australia alone.

Of course *HMAS Sydney* was not the first or only RAN ship to vanish without trace:

.1. On Sunday 14th. September 1914, *HMAS AE1*, a submarine, was lost with all hands while on patrol off the Duke of York Islands, no trace of this vessel was ever found.

2. On Sunday 18th.June 1944, the supply ship *HMAS Matafele* , that had been commissioned on Friday 1st.January 1943, was lost while en-route between Townsville, Queensland, and New Guinea, once again we can find no evidence that she was ever found. As we have no positive information about the circumstances of this loss, why not a hue and cry about that loss of life ? At least we were at war with Japan at that time !

Surely our Naval and Parliamentary authorities must have realised that their failure to tell the true facts would create a hotbed of rumours, for this was the pride of our Navy and this is exactly what did occur. We have all listened to rumours that a Japanese Submarine was involved, that *Kormoran* attacked while flying a Dutch flag or even a white flag. It mattered not to these rumour mongers that the position of every one of the 46 "I" Class submarines that Japan operated, was plotted as at Saturday 15th. November 1941 and that they were all ready to go to war against the USA and that no Japanese submarine was within 1500 miles of the WA coast !

Rumours continued that Australian survivors were machine - gunned in the water after abandoning ship and that the sinking of *Sydney* was part of " a grand deception by Churchill and Roosevelt" Yet more and more rumours followed, all unsubstantiated, some fired by a loathing of the Japanese, some spread quite innocently by well – meaning but ill – informed patriots while others appeared to have had political overtones where one group appeared determined to denigrate all things Governmental and to spread unfounded rumours designed to unsettle citizens.

Many questions remain unanswered :

1. Did the Board of Inquiry confirm the German version of the encounter ?
2. Did *Sydney* close to within 1500 yards the supposedly Dutch merchantman *Straat Malakka*
3. Was the forward turret of *Sydney* [A], operational?
4. Was Captain Burnett ordered to seize the un-armed German supply ship *Kumerland?*
5. What are the exact orders sent to *Sydney* by radio? Is there any logical reason why these message copies have not been produced for all to read?
6. What radio messages were received from *Sydney* when:
   [a] Changing course to inspect an unidentified vessel over the horizon ?
   [b] As she approached this vessel ?
   [c] Did *Sydney* ask for the current position of the Dutch ship *Straat Malakka?*
   [d] Did *Sydney* advise base that she was being fired upon or was about to open fire ? We must remember that, once " Closed up for Action" orders were issued, personnel operated according to set rules, they did not need further approval to act, and this was a basic requirement to ensure continuity if Command Staff were killed.

What we do know for certain is that the Royal Navy were keen to capture a German supply ship as all their previous efforts had failed due to scuttling before they could place a boarding party aboard.

We could safely say that it is almost beyond comprehension that *Sydney* would not have transmitted radio messages to her base on 19th. November, she was in home waters, the chance that she would meet an enemy warship that could out-gun her were absolutely zero, there could be no reason to maintain radio silence and Radio Staff had their " Closed up standing orders"

If we were to ask if it was possible that even an inexperienced Captain like Joseph Burnett would sail into point-blank range of an offensive ship without his crew closed-up into battle condition, we would all answer "of course he would not act in this manner". But it was required by the Rules of War Instructions issued by the British Admiralty that Commanders had to ascertain the identity of every vessel before they engaged in offensive action

But it would be fair to comment that, no matter how prepared the crew were, a sudden and accurate attack with the massive fire-power that *Kormoran* possessed would almost certainly negate those precautions

Former RAN Lieutenant Alister Templeton has made a public statement that, while *Sydney* was escorting the troopship *Aquitania* and three other vessels to Singapore in October 1941, *Sydney* intercepted an unidentified vessel on Friday 3rd.October, Captain Burnett took *Sydney* to within a few hundred yards of the stranger before illuminating her with a searchlight, he had to be quite positive of the stranger's identity.

Templeton stated that he was only "about 6 feet from the light" and had an uninterrupted view of the event.

Templeton also confirmed that forward (A) turret of *HMAS* Sydney was out – of - action and in his opinion, had that stranger been an *Armed Raider*, then his ship would have had little chance of survival.

Inquiry

We know that it is standard practice in both the Royal Australian Navy and the Royal Navy to conduct an inquiry whenever a ship is lost and the Royal Navy were to receive a copy of all Inquiries by any Commonwealth Navy.

The loss of *HMAS Canberra* on Sunday 9th.August 1942, provides us with a perfect example of how this practice operates.

HMAS Canberra was commissioned at Clydebank on Saturday 9th.July 1928 and was destroyed 15 years later on Sunday 9th.August 1942 in a battle with a cruiser squadron of *Dai Nippon Kaigun (Japanese Navy)* commanded by *Kaigun Shoso (Admiral) Gunichi Mkawa,* off Savo Island.

Canberra was taken by surprise and severely damaged by torpedoes and gunfire, her Captain Frank Edmund Getting and more than 80 crew members were killed in action (U.S. Destroyers sank her as she was too badly damaged to tow or salvage).

A Naval Board of Inquiry chaired by Rear Admiral G.C.Muirhead - Gould was formed and on Wednesday 30th.September 1942, reported to the Australian War Cabinet that:

"*HMAS Canberra* was not in a state of readiness when she was attacked by Japanese warships "

There can be no doubt whatsoever that a Naval Board of Inquiry was convened to report upon all of the circumstances surrounding the loss of *HMAS Sydney* and it is quite ridiculous for the Royal Australian Navy or the Navy Ministry to deny this fact. [refer to archival documents listed on page 4]

This Board did sit in Fremantle, Western Australia from Monday 1st.December 1941,and we believe that a statement from Captain John Augustine Collins (later Rear Admiral) in which he is reported to have remarked, *"Sydney would not have been lost had I been in command."* tends to strengthen our belief.

This gentleman was a highly respected and experienced Naval Officer, he had always displayed modesty and although he was proud of his achievements he seldom boasted, so, when he made this statement, surely he could only have been in possession of all the known facts, a source that could only have come from the findings of this Board of Inquiry.

Even if a shore base had sent a radio signal to Captain Burnett suggesting that a *Raider* was suspected of being in the general area, we now have evidence from telegraphists who were engaged in the interception of radio signals within Australia that it was their normal practice to refer to both armed surface raiders and their supply vessels as " *Raiders*", so any order given to attempt to intercept a *Raider*, if indeed such an order was transmitted, could also have included a harmless supply ship. Is this what Captain Burnett was attempting when he took *Sydney* close to the stranger? Or was he simply following identification procedures as instructed ?

What do we actually know about *HMAS Sydney* ?

We know that in 1934 the Australian Government resolved to purchase three British-built light cruisers.

The Royal Navy had built five *Leander* Class light cruisers:

HMS Leander was completed on Friday 24.3.1933, paid-off 1948 broken up 1950

HMS Achilles was completed on Thursday 6.10.1932, paid off 1946, scrapped in India 1978

HMS Neptune was completed on Sunday 12.2.1934 and was sunk 19.12.1941 [766 dead]

HMS Orion was completed on Wednesday 18.1.1934, paid off 1947, scrapped Scotland 1949

HMS Ajax was completed on Friday 12.4.1935, paid off 1948, scrapped 1949

This class of light cruiser had a loaded displacement of 8,950 tons to 9,200 tons.

They were about 554 feet long , 55 feet wide with a 16 foot draught

Propulsion was by 4 shaft Parsons Turbines developing 72,000 shp

They carried 1.800 tons fuel oil, range was 10,300 miles [at 14 knots]

Maximum speed was 32.5 knots, the complement was 570, their main armament was 8 x 6 inch Mk23 Guns, 4 x 4inch Mk5 guns, 4 x 4inch Mk16 guns, 3 x 4 barrelled 0.5 inch machine guns and 2 x 4 banks of 21 inch torpedo tubes. A Walrus seaplane was carried on a catapult launcher

Armour consisted of 1.25 inch deck, 1 inch on gun turrets, 1.5 inch on bulkheads and 3.5 inch on magazines

One of their weak spots was that their 554 feet long hull was armour-plated for only 84 feet

The *Leander* Class was modified and three new light cruisers, designated *Amphion* Class were built:

Their loaded displacement was slightly less than *Leander* at 8.850 tons to 9,150 tons

They were 562 feet long, 56 feet wide with a 16 foot draught

Their power plant remained the same, 4 Turbines = 72,000 shp, they had the same fuel oil capacity of 1800 tons, their range was increased slightly to 10,700 miles, complement was 570.

Armament remained unaltered from the *Leander* Class

Armour plating remained the same strength **but the hull armour was increased from 84 feet to 141 feet amidships** which left a huge area of hull both forward and aft, susceptible to damage

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HMS Amphion was laid down on Monday 26th June 1933 at Portsmouth Dockyard
Launched on Friday 27th July 1934
Re named *HMAS Perth* on Thursday 25th July 1935
Completed on Monday 6th July 1936
Sunk on Sunday 1st March 1942

HMS Apollo was laid down on Tuesday 15th August 1933 at Devonport Dockyard
Launched on Tuesday 9th October 1934
Completed on Monday 13th January 1936
Re named *HMAS Hobart on* Friday 29th September 1938
Scrapped in Japan 1962

HMS Phaeton was laid down on Saturday 8th July 1933 at Swan Hunter Dockyard
Launched on Saturday 22nd September 1934
Completed on Tuesday 24th September 1935
Re named *HMAS Sydney on Tuesday 24th September 1935*
Sunk on Wednesday 19th November 1941

(HMAS Sydney was 560 ft. long, 57 ft. wide, had a 16ft. draught and was 8,850 loaded tons)

Let us now examine that non-armoured hull of the *Amphion* Class light cruiser

Only 141 ft. of her 560 ft length was armour – plated. Armour plating on the *Leander* Class had protected only 84 ft. of the hull , amidships but the *Amphion Class* was able to provide an additional 57 ft. [Remember this point when a *Kormoran* torpedo is discussed later]

But no warship was ever built that could withstand heavy short-range gunnery

HMAS Sydney was commissioned under the command of RN Captain J Fitzgerald and joined the Second Cruiser Squadron in the Mediterranean on Thursday 31st August 1935

Her first visit to her home - port occurred when she sailed into Sydney Harbour, NSW, on Wednesday 11th.August 1937, and on Thursday 16th.November 1939, Captain John Augustine Collins of the Royal Australian Navy was appointed Captain, none were to know that *Sydney* had just over 2 years to live.

Early in November 1940 she was slightly damaged when colliding with a wharf in Fremantle and on Friday 26th.September 1941 her forward "A" turret was jammed to port while sailing in heavy seas in the Great Australian Bight. (Lieut. Templeton observed that this turret was still out-of-action on Friday 3rd.October 1941, so we must ask if it was still in this condition 46 days later.)

We do know that *Sydney* departed from Fremantle on her final voyage on Tuesday 11th.November 1941 to escort *Zeelandia* to Sunda Strait and after handing over escort duties to *HMS Durban,* around noon on Monday 17.11.1941 and began her return trip to Fremantle, her ETA being the morning of Thursday 20th. November. [*Zeelandia* fell victim to Japanese aircraft and was sunk in Darwin Harbour Thursday 19.2.1942]

What we do know, and we congratulate and thank Kim Kirsner , Sam Hughes and the Western Australian Maritime Museum for their truly remarkable research which has shown the usual route used by *HMAS Sydney* when sailing between Sunda Strait and Fremantle together with the exercise to plot the course of the *Meyer / von Malapert* lifeboat, which in turn, allows estimation of the position of *KMS Kormoran* at both the point of abandoning ship and at the sighting position Wednesday 19th.November 1941 was the day that she is understood to have sighted masts on the southern horizon and changed course to investigate the identity of that vessel.

What do we actually know about KMS Kormoran ?

Kriegsmarine Ship KMS Kormoran [also known as HSK VIII and Schiff 41]

(HSK identifies her as a *Hilfskreuzer,* Schiff 41 indicates her production number was 41)

Steiermark was a passenger / freighter built by Krupp Germania Werfe at Kiel in 1938 for the Hamburg Amerika Line, specifications show her weight as 8,736 tons, she was 164m [515.1ft] in length, 20.2m [66.3 ft] wide with a draught of 8.5m [30.5 feet] and she had successfully completed her sea trials.

But before she entered service, the *Kriegsmarine* took over and converted her to an Armed Merchant Cruiser or *Hilfskreuzer (this means "helping" cruiser).* at *Deutsche Werft AG* during 1939 / 1940.

This conversion included fuel tanks to hold enough diesel oil for her to cruise for a full year, she was fitted with three decks, six holds and six bulkheads. Power was supplied by four 9 cylinder diesel engines each 4,000 horsepower, = 16,000 hp.

Four 149.5mm [5.9 inch] guns (classed as six inch,) were mounted forward of the Bridge, 2 port, 2 starboard, one 75mm [3 inch] *Panzerabwehrkanone* Anti–tank high–velocity cannon and two 20mm *Maschinegewehr* [Machine guns] were mounted near the prow, two 20mm *Maschinegewehr* were mounted mid – ships, one port and one starboard.

Two more 149.5mm main guns were mounted towards the stern and two 37mm multi – barrelled *Flugabwehrkanone* anti aircraft guns were mounted on the stern. Six 525mm [21 inch] Torpedo tubes were mounted mid – ship with two tubes submerged below the water-line, all armaments were cleverly camouflaged. Four of her main guns could bear on either port or starboard at the same time, she had two *Heinkel Arado Ar196V Float Planes* and one high speed *Leichtes Schnellboot Class 3* [Light Speed Boat], 41 feet long, to assist in mine sowing, (these were carried in holds,) plus a mine – storage area to store up to 350 mines (in dispute,390 mines)

***Steiermark* bad ceased to exist, the name *Kormoran* was chosen**

The largest and newest German Surface Raider was commissioned on Tuesday 10.9.1940 and sailed from Gotenhafen in early December 1940 commanded by *Korvettenkapitan Teodor Detmers* bound for Norway. She left Stavenger on Monday 9th. December 1940 disguised as the Soviet freighter *Vyacheslav Molotov* and broke-out into the Atlantic without sighting any other vessel.

On Tuesday 7th.January 1941 she stopped the 3729 ton Greek merchant ship *Antonis*, removed her crew and scuttled her.

On Saturday 18th.January the 6987 ton British tanker *British Union* was torpedoed and sunk.

The 11,900 ton refrigerated ship *Afric Star* became their third victim on Wednesday 29th. January and less than 4 hours later, the 5723 ton British freighter *Eurylocus* was sunk.

On Tuesday 25th February she met the *Hilfskreuzer KMS Pinguin* commanded by *Korvettenkapitan Kreuger* to replenish supplies. [At this time *Pinguin* had accounted for over 130,000 tons of Allied shipping]

On Sunday 16th March, she met the *Panzerschiffe KMS Admiral Scheer* [which had sunk over 150,000 tons of shipping.] and shortly afterwards, they met an *Unterseeboote* . [Identity not recorded.]

On Saturday 22nd March, *Kormoran* sank the 3552 ton British tanker *Agnita* with torpedo after scuttling attempts failed and the 11,305 ton Canadian tanker *Canadolite* was captured on Tuesday 25th. March [a prize - crew delivered her load to occupied France.]

On Friday 4th. April, after prisoners were transferred to a German tanker, *Kormoran* sank the 8,022 ton British merchantman *Craftsman* on Wednesday 9th. April and 3 days later, the 5486 ton Greek tanker *Nicholas DL* became victim number eight.

On Saturday 19th. April, they rendezvoused with the *Hilfskreuzer KMS Atlantis* commanded by *Kapitan zur See Bernard Rogge*, (later to become Admiral of the West German Navy). *Rogge* provided intelligence information about Indian Ocean shipping and on Thursday 24th. April, disguised as the Japanese ship *Sakito Maru*, she sailed into the Indian Ocean.

But it would be more than 2 months before her 9th victim was sighted, the 4153 ton Jugoslavian cargo ship *Velebite* was sunk, followed a few hours later by the 3472 ton Australian *Mareeba* which took a load of sugar to the bottom.

In mid July 1941,the disguise *Straat Malakka* was adopted but again it would be 2 months before their next (and final merchant ship) victim, the 3941 ton Greek cargo ship *Stanatios G Embricos* was sunk on Monday 22nd. September. Almost two months would elapse before her next and final encounter with an Allied vessel.

On Thursday 16th October 1941, she met her supply ship *Kumerland* (disguised as an American ship) 600 miles west of Fremantle to replenish supplies and upon completion of this task, [which took several days], *Kormoran* remained in that remote area of the Indian Ocean to conduct engine service and repair before she headed for 26 degrees of latitude to sow mines in shipping channels off the W.A. coast. Two areas had been selected for the sowing of mines, *Geographe Channel* as the main entrance to the Port of Carnarvon and the Darwin to Fremantle shipping channel, after which *Kormoran* would head for the Bay of Bengal in the search for more victims.

Detmers had more than 300 mines in stock, and he was reasonably satisfied with his haul of 11 ships totalling approximately 68,000 tons of shipping destroyed.

But at 1555 hours on Wednesday 19th. November 1941, *Korvettenkapitan Teodore Anton Detmers* was advised that a ship had been sighted on the northern horizon and by 1930 hours at the latest on that same fateful day, *Korvettenkapitan Detmers* had issued the order "*Alle Mann aus dem Schiff, rettungsboote und Flosse zu Wasser* ", that is "Abandon Ship".

One more piece of the puzzle quite possibly fits - in at this time.

After resupplying *Kormoran*, the supply ship *Kumerland* reported that she was surprised to sight what she thought to be a British merchantman in ballast, travelling fast and heading in a northerly direction , there could be little doubt that she in turn, sighted the German ship.
Did that unidentified merchant ship advise Fremantle of that sighting ?
Did Fremantle in turn advise *Sydney* that an unidentified ship had been seen and warn her to be on the lookout for this unarmed supply ship ?
Without message confirmation from Australian Authorities, we will never ever know !

Can we identify the area of engagement ?

There have been a minimum of 15 estimates about the site of the engagement and it is difficult indeed to arrive at a conclusion.

Eleven of these fifteen different sites are all within a reasonably close radius, generally in a south-westerly direction from the Port of Carnarvon in Western Australia.

We have thoroughly investigated every claim and, in our opinion, the only claim that has been supported by scientific evidence, is that proposed by *K.Kirsner* (University of WA) and *Sam Hughes* (Australian Maritime Safety Authority) and we submit that opinion without prejudice.

It is known that *Oberleutnant zur See Reinhold von Malapert* who was in the lifeboat commanded by *Kapitanleutnant Meyer* that reached the coast north of Carnarvon, maintained a diary in which the course that the lifeboat steered / drifted was recorded.
These two gentlemen, using reciprocal compass bearings, back-tracked this lifeboat back to the position that they were satisfied represented the launching position of that boat.
This position was plotted as 25.57S / 111.09E (alternatively 26.00S / 111.30E)
(Details on p 7 WAMM Dept of Maritime Archaeology report No 71)
Between the sighting of *HMAS Sydney* and the abandon ship procedure of *KMS Kormoran*, we are satisfied that the German ship sailed for about 90 minutes on a bearing of 253 degrees at (possibly) 12 to 14 knots and we suggest that she sailed for 20 nautical miles during that time. Both ships sailed on a bearing of (possibly) 260 degrees for less than 30 minutes before *Sydney* deviated in a southerly direction, estimated to be 153 degrees,
During this time a further 5-8 nms could have been covered, and when we place *Kormoran* 25 nms in an easterly direction, we find that she is in an almost exact position where *Sydney* had sailed at the very least, five times between June and September 1941 when she sailed across the 26th parallel. This would not be effected if *Kormoran* was moved a further 2 to 3 nms eastwards.

We submit therefore, that the most likely position where the two vessels sighted each other was in the vicinity of 25.47S / 111.38E.

What do we know about the two Commanding Officers ?

Surname	Burnett	Detmers
First names.	Joseph	Teodore Anton.
Date of birth.	26.12 1899.	22.8.1902.
Naval Records.		
Cadet	1913	
Midshipman Cadet	1914	
Midshipman	1917	
Sub Lieutenant	1918	
Fahnrich zur See		1921 [Midshipman Cadet]
Oberfahnrich zur See		1925 [Sub Lieutenant]
Oberleutnant.zur See		1927 [Jnr Lieutenant]
Lt Commander	1928.	
Commander	1932.	
Kapitanleutnant		1933 [Lt Commander]
Captain.	1938 *	
Korvettenkapitan.		1937 [Commander]
Fregattenkapitan		1941
Kapitan zur See		1942. [as a POW.]
Discharged	on death 1941	1947
Date of death.	19/11/1941 presumed	4/11/1976
Place of death.	K I A.	Hamburg. Germany.

*Captain Burnett assumed command of *HMAS Sydney* in Fremantle, 14.5.1941, we are led to believe that this was his first wartime command

Korvettenkapitan Detmers achieved a prominent place in German Naval history, *Kormoran* became the only *Hilfskreuzer* ever to destroy an enemy warship.
He was promoted to the rank of *Kapitan zur See* and was awarded the *Ritterkreuz* (*Knights Cross)* to his *Eisernekreuz* (*Iron Cross)* as a prisoner of war.
He returned to Hamburg as a hero, he wrote a book titled *Kormoran der Hilfskreuzer der die Sydney versenkte* , and he died at Hamburg in 1976 aged 74 years.
At least until 1991, German survivors met on 19th November each year to honour the memory of their comrades
On the 50th Anniversary, that group published this Memorial notice :

1941 - 1991
IN MEMORY
of H.M.A.S. Sydney and her
brave crew, lost in action
off the West Australian coast
19th November 1941

THE KORMORAN ASSOCIATION
Germany
19th November 1941

Their own Memorial in Hamburg is inscribed, ***Unferen gefallen KAMERADEN***

The Encounter on Wednesday 19.11.1941

The author neither speaks or writes the German language and takes this opportunity to thank a fine old gentleman, Mr Kurt Meyer (1903-1978) for so freely supplying and translating documents from his extensive collection of German papers and records. Most of this information and data is provided with the German Ranks and description of weapons that were described in original records held by Mr. Meyer. These records included articles written in Germany after the war, primarily for German consumption ***and to the best of my knowledge has never been made available to any other researcher, at least in Australia. Sadly much more data was available that was never translated, time just ran out !***

Report from the papers of *Kurt Meyer* who served in the *Kriegsmarine* during WW11.

Marineoberstatz *(Surgeon Lt. Commander)* ***Siebel Habben.***

In the late afternoon of 19th. November 1941 I was working in my quarters, the only treatment that that I had dispensed over the past two days was to repair a crushed finger for a seaman who had been working on the mines deck.

Earlier I had been on deck enjoying the warmth of the sun on a beautiful day, no cloud, no wind, a bright, clear day

Quite suddenly the klaxonhorn sounded three shrill blasts, an Oberfahnrich announces that smoke had been sighted on the horizon.

There was no great concern, we had been in this position many times before, I prepared my instruments in case we suffered casualties then, after donning my life-jacket in the normal manner, I went up on deck just in time to hear the dreaded call "Feindlicher kreuzer in sicht " (enemy cruiser in sight).

I looked up to see a frightening sight, a sleek warship was coming up on us at a very fast speed, bow waves were streaming out and rising almost to deck-level, it appeared that we were about to be rammed when, quite suddenly the bow - wave vanished, the warship took station behind us and commenced signalling by flag. [Our *Kapitan* always referred to enemy warships as the " Grey Steamship Company"]

Although most of our group, trying to look like ordinary seamen with nothing much to do, were a little concerned, we had absolute confidence in *Kapitan Detmers* and his Officers. Our *Kapitan* was a thorough gentleman, a man who placed human life above most other things, one who treated his Officers and crew in the best manner any leader of men could and we were confident of our disguise [unless our ship was observed by aircraft from above which would reveal our deck cargo of mines]

Only one member of our group could read the flag messages and he assured us that they covered our Dutch identity, but quite suddenly he alerted us that the warship, now clearly identified as the Australian Cruiser *Sydney*, had asked for our 'secret' code letters.

We heard our hydraulic lifts operating and only seconds later our unprepared ears were subjected to a shattering roar as all of our armament opened - up at the same time.

We were semi – stunned as, in all previous encounters, we had only ever used one of our heavy guns to overcome merchant ships.

I remained on deck to see our first salvo crash into the warship, their bridge vanished in a gigantic explosion, smoke and debris was everywhere, the noise on our deck was unbelievable for it now seemed that every gun of every calibre was firing non-stop.

At this time I went below as my services would almost certainly be required.

As *Sydney* had closed our starboard side, I saw groups of white-clad figures lining the rails amidships and another group between the two forward turrets, it is doubtful that they were

expecting trouble and doubtful in the extreme if they were prepared. The damage to the warship and those exposed crew, caused by our initial salvoes must have been horrendous.
Although I did not witness the event, I was told by an injured crew - member that one of our torpedoes struck *Sydney* near the bow and this man was of the opinion that the whole bow had gone.
When the firing had ceased after a surprisingly short time , I went back on deck and was astonished at the lack of damage , the warship was some distance away and it appeared to me that she was ablaze from stem to stern.
Shortly after I came on deck, orders were given to "abandon ship" as our engine-room was on fire, our fire-fighting equipment was not working, and it was not possible to clear our magazines and supply of mines.
I boarded a lifeboat and it was fully dark when *Kormoran* was engulfed in a massive explosion.
End of quotation

Report from the papers of *Kurt Meyer*, formerly of the *Kreigsmarine.*
Battlewatchoffizer Oberleutnant zur See Joachim von Gosseln
It is the 19th. November 1941, *Kormoran* is sailing about 150 miles south - west of the Port of Carnarvon, Western Australia.
Apart from the busy mine crew who are preparing mines for sowing within the next few days, the attitude aboard is quite peaceful and relaxing, the weather and the ocean is quite calm.
The Officer's mess is relaxed, coffee is being consumed along with a smoke and it feels more like a holiday cruise than a fighting trip.
We have been quite successful but our afternoon is disrupted when a bridge messenger enters to advise *Korvettenkapitan Detmers* that our lookouts have sighted masts on the horizon.
Once on the bridge I checked course and speed, the other vessel could not yet be seen but our lookouts had reported a change-of course to intercept.
Of course we immediately knew that the intruder was an enemy, the masts were obviously those of a warship, our task was destroy enemy shipping and not to engage in an unequal fight, for a *Hilfskreuzer* can never match an armoured warship.
We alter course towards the late-afternoon sun, we can now see the mast tips from our bridge, our lookouts are ordered down, our crows nest is lowered to avoid disclosing our identity, we have changed course twice, we have recognised the enemy as a British light cruiser, it is travelling fast directly towards us and as it slows – down, it comes within range of our masked guns.
She is now close enough to be identified as the Australian *HMAS Sydney* and we are puzzled that she has approached so close, although she has completed the safety manoeuvre of remaining aft of our starboard, if she stays at this acute angle she could quite easily blow us out of the water without our main armament being able to respond.
Sydney hoists a flag signal "What ship "
In keeping with our role as a merchant ship we hoist "*Straat Malakka*", it is 1730 hours
Next question was "Whence from and wither away ".
We answer "From Batavia to Lorenzo Marques ".
We are amazed to see *Sydney* sailing slowly on a parallel course only two kilometres from us, we can clearly see white uniforms on the bridge and deck..
The next signal is "Give me your secret signal ".
Korvettenkapitan Detmers immediately responds to our impossible situation our *Reichskriegsflagge* is run-up, the Dutch flag lowered, armoured bulkheads raise into position, hydraulic lifts raise our guns which have been pre-aimed and ranged , our railings tip over, the

camouflaged covers drop to reveal our 37mm.*Flugabwehrkanone*, other auxiliary cannon and our 20mm. *Maschinegewehr*.
We have been through this procedure many times before and our best time was 8 seconds between the time we raised our Battle – Flag and commenced firing,
Korvettenkapitan Detmers calls '*Feuerlaubnis*' (at liberty to fire)
We are surprised that there appears to be no response aboard *Sydney*, we have changed from a not-too - smart merchant ship into a fighting ship.
Our first main salvo appears to cause massive damage, both front turrets receive direct-hits, their bridge has disappeared, their superstructure is damaged along with their aircraft and catapult.
We continue firing with everything we have, our 37mm.the 20mm.and all other secondary armament, we are pouring continuous fire into *Sydney* from stem to stern, she is absorbing terrible punishment, we aim and fire 2 torpedoes.
Fire is now coming from the rear turrets of *Sydney*, we receive a massive blow to our engine-room which causes much damage, including a fire.
Although *Kormoran* is hit on the starboard side, all of our main armament remains undamaged and we are still hitting *Sydney*.
Suddenly one of our torpedoes strikes forward of her bridge area, I see a huge sheet of flame, steam and water and her bows settle, it appears that *Sydney* is sinking, but her bows rise again.
Quite suddenly *Sydney* changes course to a southerly direction, I think she is trying to ram us but she passes our stern exposing her starboard side to our guns at short-range.
She fires several torpedoes but we turn to allow them to pass by
Something is wrong with her steering, she continues in a general southerly direction, heavily on fire, she has absorbed 30 minutes of massive punishment and I am surprised that any ship could survive such damage.
As the distance between us increases, *Korvettenkapitan Detmers* calls "Batteries halt feure ", it is almost impossible to adapt to the relative silence, the battle has lasted for less than 30 minutes, our engine-room finally fails, we are stationary in the water, we have no chance of dousing our fires, our stock of ammunition and mines cannot be cleared, it is only a matter of time before fire engulfs them.
"Abandon-ship " orders are issued, quite remarkably we still have 5 seaworthy lifeboats plus a number of rafts which are loaded - up and we shove - off.
The fires aboard seem to have abated , away in the distance I can see a light on the ocean with an occasional brighter glow, I assumed that this was caused by exploding ammunition aboard *Sydney*.
Then quite suddenly our scuttling charges explode and our proud ship sinks below the waves
All of a sudden we are in complete silence, surrounded by darkness, we had lost sight of the glow that was once *Sydney*.
Not a single man of her crew was ever found.
They fought a good and brave fight. End of quotation

It is of interest to note that *Oberleutnant zur See Joachim von Gosseln* claimed that *Kormoran* was "about 150 miles south-west of Carnarvon at the time of sighting". Our chart position is 142 miles s/w of Carnarvon, very close indeed to support that claim

Report.

Korvettenkapitan Teodore Anton Detmers.

Mr Meyer was not in possession of a German report from this source, all we have is the public report made by the RAN Chief of Naval Staff, Commodore John Walter Dunford.

On the afternoon of 19th. November, *Kormoran* was proceeding on a course of 025 degrees at 11 knots at position 26.34 degrees east, 111 degrees south.(on 4/12 he stated 25 degrees)

The sea was moderate, swell from the south - west, the weather was fine and visibility was very good.

At 1555 hours a report was received from *Subleutnant Rudolf Janssen* that a sailing vessel was visible off the port bow. (Heat-haze was suggested as reason for identification problems)

Directed to make constant reports, *Subleutnant Wilhelm Bunges* reported two sailing vessels which was altered to "several ships "when two smoke-trails became visible.

The next report was what *Detmers* had hoped to avoid, the contact on the horizon appeared to be a warship and it could only be an enemy vessel

Detmers had the alarm sounded, the *Raider* altered course towards the west and had engines ordered "full-ahead ".

The warship was now identified as a " Perth class ", after noting that that the Cruiser was now on an intercept course, *Detmers* ordered a smoke - screen as speed increased.

It was at this time that the engine-room located a problem and had to shut - down engine number 4, *Detmers* knew that dusk was still two or three hours away and that *Kormoran* would not have the time necessary to escape.

He still wanted to avoid action and hoped that the warship would lose interest but the Cruiser, now thought to be the Australian light cruiser *Sydney,* had closed to a range of about 10 miles and at 1635 hours signalled "NNP "with a signal light. *Detmers* claimed that he could not understand this signal and did not respond.

The Cruiser then signalled *Kormoran* to stop, *Detmers* responded by ordering the signal letters for the Dutch merchantman *Straat Malakka* to be hoisted.

With the Cruiser drawing nearer to *Kormoran* over the next 30 minutes, number 4 engine was available again and a speed of 14 knots could be maintained with less strain on the engines.

At 10,000 yards the main range - finder on *Kormoran* was retracted to maintain her identity as an innocent merchant ship.

At 1645 hours the Cruiser was visible off *Kormoran's* starboard quarter and the range continued to close. At 1700 hours, *Detmers* ordered the radio room to signal "*QQQ Straat Malakka 26S / 115E* (**Patently false as 115E is inland from the coast)**

Fifteen minutes later the Cruiser appeared to alter course to place herself broad on *Kormoran's* beam

At 1725 hours the Allied ship signalled "*Hoist your secret call-sign*", while the Chief Yeoman on the Raider's deck fumbled with the signal pennants, the Cruiser may have stopped.

According to *Detmers,* she seemed completely unsuspecting of *Kormoran's* true identity.

At 1730 hours with the Cruiser somewhat more than a mile away,in excess of 2,000 yards *Kormoran* revealed her identity, the Dutch flag was struck and a German battle ensign raised in it's place.

The time taken by the *Raider* to reveal her true identity was six seconds as the crew had been earlier ordered to stand-by-to-fire their guns and torpedoes.

As the Cruiser appeared to drift astern, the engine in her aircraft running, the *Raider* slowly turned to 260 degrees to improve the angle – of - fire for her torpedoes while not interfering with the firing-arcs of her guns.

The point – of - aim for the torpedoes was the Cruiser's stem and stern.

With her camouflage removed, *Kormoran* opened-fire with a salvo that fell short of the Cruiser, *Detmers* could not recall which ship fired first but believed it may have been the Cruiser by half - a -second.
The second salvo from the *Raider* was also unsuccessful, however salvoes three, four and five struck the Cruiser's bridge and gunnery-direction tower, *Kormoran's* anti-aircraft and starboard 37mm. cannon directed accurate fire into the Cruiser's Bridge, her torpedo tubes and her aircraft.
It was not until *Kormoran's* fifth salvo that the Cruiser returned fire from "X" turret, the two forward turrets "A" and "B" did not fire at all, while two or three salvoes from the aftermost turret "Y" passed over *Kormoran* , but she was hit in her funnel and engine - room.
Kormoran fired two torpedoes towards the Cruiser after the eighth or ninth salvo, at least one torpedo struck under the Cruiser's forecastle about 20 metres from her bow, which was almost submerged by the blast
With *Kormoran* maintaining her course of 260 degrees, the Australian Cruiser veered hard to port and it appeared that she was trying to ram *Kormoran* , but she crossed the wake of *Kormoran* .
Kormoran was then fired upon by the Cruiser's after-turrets and a pattern of four torpedoes, *Detmers* turned *Kormoran* towards the torpedoes which passed ahead and astern of *Kormoran.*
At 1745 hours *Kormoran's* engines failed completely, the ship's fire fighting equipment was out – of - order.
Kormoran again fired at the Cruiser which was heading in a southerly direction at slow speed, burning fiercely between the bridge and the forward funnel.
At 1825 hours *Detmers* ordered his guns to cease fire, the range was about 12,000 yards or nearly seven miles.
Detmers then ordered scuttling action, the Cruiser was now about 20,000 yards (11 miles) heading approximately 153 degrees.
By 2100 hours, three lifeboats and a quantity of floats had been lowered, manned and cast-off, while 124 men, including most of the Officers, remained on board to man the guns in case the Cruiser returned but at 2330 hours the final lifeboat with 57 men aboard, cast-off.
With the quantity of smoke now coming from the mines area increasing, a charge was set in the forward oil – tank the timer activated for midnight and the final lifeboat left *Kormoran.*
At 0030 hours the charge detonated, the mines exploded and *Kormoran* sank slowly by the stern.
End of report.

It was not until Sunday 30th. November 1941, eleven days after *Sydney* disappeared that Australian Prime Minister John Curtin officially announced the loss. *HMAS Sydney* had 'lived' for 2,269 days between being commissioned and disappearing.
It has been recorded that a Carley Float, similar to those carried by Australian warships, was recovered close to Christmas Island on Friday 6th. February 1942 and that a mummified male corpse was aboard. Although many are of the opinion that this float came from *Sydney,* this fact has never been proved despite extensive testing and examination over many years. (**Refer to table 7.1 of the march 1999 Parliamentary Report for other sources)**
It was reported that the corpse was buried on Christmas Island.

A possible reconstruction of the encounter, note the word 'possible'

On Wednesday 19th November 1941, *HMAS Sydney* was steering approximately 162 degrees on a line from Sunda Strait on her usual route along the Sunda Strait to Cape Leeuwin shipping channel towards her home – port of Fremantle in Western Australia where her ETA was during the morning of the following day.

At the same time the German *Hilfskreuzer KMS Kormoran* was steering a northerly course and unknown to her Commander, was almost on a collision course with *Sydney.*

Both vessels, (according to the 'Detmers' report), were roughly around 111 degrees of longitude, **(we question this position)** the sea was moderate, weather fine, visibility good.

At 1555 hours, *Subleutnant Rudolf Jansen* reported to *Korvettenkapitan Detmers* that masts had been seen on the northern horizon, reportedly "fine on the port bow", a change-of-course to 253 degrees was ordered to take *Kormoran* into the late – afternoon sun. The mast position indicated that that the unidentified vessel was now on an intercept course she was identified first as a warship, then as a British Cruiser of the *Perth class*, finally as the Australian light cruiser *HMAS Sydney,* of the British *Amphion Class.*

It is almost certain that the Germans had all the specifications of this class of warship, there could also be little – doubt that they were aware of the two major weak - links of this class of vessel:

1. Typical of the Light cruiser of the 1930's, *Sydney's* hull was armour-plated for less than one-third of it's length and shells and torpedoes striking either ' forward' or ' aft' , should cause immense hull damage.
2. The gunnery – control - tower and all communication cables to the four main turrets were exposed to damage in the bridge area. (Both of these points were made public during construction but overall performance would have been jeopardised with any further heavy armour – plating)

The fact that the aiming-points for the two torpedoes launched by Kormoran were "forward" and "aft" is surely ample proof of this point, the Germans were obviously aware of that weakness !

At a range of "about four miles," *Sydney* ran – up the alphabetical flags asking "what ship".

Kormoran, still desperate to avoid an engagement with a purpose-built warship, an engagement which should have been extremely one – sided, deliberately fumbled her reply, the letters indicating the Dutch merchantman *Straat Malakka, (PKQJ).*

At this time *Detmers* ordered the 'QQQQ' distress signal in International Code to inform all and sundry that they were in danger of attack from a warship of unknown identity. *Detmers* was hopeful that *Sydney* would intercept this signal and decide not to waste any more time in investigating an obviously harmless cargo vessel

It is not beyond the realms of possibility that it was this signal which contributed to *Sydney* approaching in a careless manner, if indeed that is what occurred, maybe accepting that QQQQ message as *' Bona Fide.'*

It was reported that *Sydney*, drawing closer and closer, signalled "Whence from, wither away " by flag.

Kormoran is reported to have replied, "From Batavia to Lorenzo Marques"

Sydney then asks for her "secret" code letters (*Detmers* was not aware that these consisted of the two letters of his international identification "PQKJ")

It was at this point that *Detmers* realised that offensive action, no matter how one-sided it would become, was the only course of action left to him [that is, apart from surrender and it is our understanding that this had been previously discussed and rejected by all aboard..]

As no factual information regarding the actual encounter has ever been released by Australian Authorities, we can only record suggested details of the action based upon interrogation reports and other reports made in Germany after World War Two, some of which I have been privileged to have had access to.

We have previously detailed information of survivors and interrogations and the statement by RAN Intelligence Officers and the Parliamentary Inquiry, that they believed that they were given mainly truthful answers.

Sydney and Kormoran are both steering a course approximately 250 / 260 degrees and heading into the late-afternoon sun.

Sydney had changed course from approximately 162 degrees to intercept *Kormoran* and was sailing a parallel course somewhere between 1500 yards and 6500 yards apart, both these distances and anything in - between, is generally considered to be point - blank range for naval guns.

Survivors expressed surprised that *Sydney* had not only approached close to *Kormoran,* but was sailing alongside, thus exposing her entire port side to the substantial armament of *Kormoran.*

(After the encounter, *Detmers* recommended one crew member for the award of the *Eisernekreuz,* his *PAK40, 75mm anti-tank gunner,* no further detail appears to be available . We only assume that this gun made a major contribution to the destruction of *Sydney.*) We do know that the armour-piercing shells that these guns usually fired, were designed to penetrate almost four inches of tank armour and there was most definitely, no armour plating of that thickness aboard *Sydney*

Comment.

In the heat of battle it would be unusual for any two witnesses to observe exactly the same results and in this case we have that perfect example:

1. *Marineoberststatz Habben and Battlewatchoffizer von Gosseln*, both claim that the first salvo demolished *Sydney's* bridge, destroyed her aircraft and struck both forward turrets.
2. *Korvettenkapitan Detmers* thought that the first two salvoes missed their target !.

There is much doubt about how many shells were fired by *Kormoran. Oberleutnant zur See Fritz Skeries* stated that only nine seconds elapsed between rounds, which could have resulted in 6 rounds each minute from each of the four guns or approximately 140 shells in 23 minutes, 140 x 4 = 560. (*Oberfähnrich zur See Jorgensen* believed that his gun fired " about 140 rounds " so we can assume that 140 rounds per gun is a reasonable estimation).

These guns were operated by experienced and highly trained gunners who had the time to carefully select their targets from hidden turrets, they had two added advantages, firstly they had radar guidance which had already proven itself and secondly, that their armour – piercing shells were fused at the rear which ensured that they exploded after they had penetrated the hull.

Internal damage to *Sydney* and it's crew must have been absolutely shocking.

In addition, the constant stream of 37mm.Anti-aircraft shells fired from multiple barrels and reported to be concentrating on the Bridge area in an effort to dispose of command staff, coupled with the rapid – firing high velocity 75mm. Anti – tank gun firing from the prow and at least two 20mm. Machine guns firing from the starboard side, must surely have made occupancy of the open decks of *Sydney,* absolutely impossible.

After "about 30 minutes" *Sydney,* which had been on a westerly parallel course, quite suddenly veered to a southerly direction and passed the stern of *Kormoran* thus exposing her previously undamaged (?) starboard side to the guns of *Kormoran*

K.ormoran ceased – fire at 1825 hours when her target was about 12,000 yards distant. [*Kormoran's* main guns are reported to have had an effective range of 15,000 yards]

The very obvious question that arises is, "**why did *'Sydney'* deviate ?**

For many years, researchers have been at a loss to explain why *Sydney* made this sudden course change. A crew member from *HMAS Hobart*, Mr Bob Chilman of Mount Gambier, tells us that one of the emergency steering teams are placed aft, deep inside the hull to manually adjust the rudder if and when it became necessary.
Now in May 2001, thanks to Mr Lindsay Knight, his navigator Warren Whittaker and the KDLS system, we now have a claim that the wreck of *Sydney* lays in approx. 4,500m of water at position 29.58.4064S and 112.48.4164E, but only camera inspection would be able to prove this claim.
When we examine this position we note with interest that this is on a course of 162 degrees from the *Kirsner/Hughes* position, we know that 162 degrees is the established course that *Sydney* maintained when returning to Fremantle from Sunda Strait and we must surely wonder if that Emergency Steering Crew managed to turn their ship towards home base when they realised what a terrible battering she was absorbing. If this is what actually caused the change of course, then that team are surely heroes , it was not their fault that the ship did not reach port !

There appears to be little doubt that *Sydney's* bridge was destroyed early in the encounter and now, no person will ever know how that destruction affected command of both ship and it's gunnery.

The Government Research Guide, The loss of HMAS Sydney, reports:
On Friday 21.11.1941, 15 visitors to Dirk Hartog Island on returning today, reported that at 1000 hours on Thursday 20.11.1941, a Destroyer was sighted 7 miles off steering south at high speed, throwing off smokescreen and all on fire.

We will never know the identity of that vessel, unless it was the tug Uco.

The damaged Carley Float that presently rests in our National War Museum in Canberra, was recovered from position 24.07S / 110.58E, nine days after the encounter, no person knows the time or position that it entered the water Remember also that this Float was not damaged by flames and all damage was caused by shrapnel from naval shells.
The fact that nearly 80% of the crew of *Kormoran* survived and that lifeboats and rafts remained seaworthy after the battle had concluded, must surely indicate to even the most inflexible of those Australians who still have doubts, that *Sydney* did not inflict much damage to *Kormoran*, however much they would like to think that such a result is unacceptable. Surely it is time to accept the fact that, under the pressure of total war , even the best of the best can still make errors of judgement. *Kormoran* did receive crippling damage by shellfire from *'Sydney'*, her funnel that carried the engine oil-heating system was holed and allowed burning oil to destroy the engine room, but the facts remain for all to see :

[1] 319 Officers and crew survived, out of a crew of 400.
[2]. 5 lifeboats and several rafts remained seaworthy at the end of the battle..
[3]. Some loss of life was reported as a result of the "abandon-ship " exercise.

Brief but confirmed facts about the recovery of *Kormoran* survivors and flotsam

(1) **A Cutter with sails was launched with 46 survivors.(possibly a 50-man boat)**
Commanded by *Oberfahnrich zur See Paul Kohn*, this boat reached the Australian coast at Quobba Station north of Carnarvon on Monday 24th. November, on the fifth day at sea.

(2). **A steel lifeboat with sails was launched with 57 survivors, (50-man capacity?)**
Commanded by *Kapitanleutnant Heinz Meyer*, this boat reached the Australian coast at Red Bluff on Tuesday 25th.November on the sixth day at sea.

(3) **A work-boat was launched with 70 survivors. (Possibly a 50-man capacity)**
Commanded by *Oberleutnant Joachim von Gosseln* , this boat was picked-up by *HMAS Yandra* at position 24.59S / 112.22E at 1200 hours on Wednesday 26th. November, on the seventh day at sea and was taken to the Port of Carnarvon.

(4) **A lifeboat was launched with 31 survivors. (Possibly a 50-man capacity)**
Commanded by *Leutnant zur See Hans Kuhl*, this boat was picked - up by the coastal freighter *MV Koolinda* at position 24.07S / 112.47E on Wednesday 26th November on the seventh day at sea and was taken to Carnarvon.

(5). **A steel lifeboat was launched with 62 survivors. (Possibly a 50-man capacity)**
Commanded by *Korvettenkapitan Detmers* , this group was located by the *S.S Centaur* at 2300 hours at position 24.30S / 111.35E on Wednesday 26th November on the seventh day at sea and was taken under tow to Carnarvon. But it was swamped in the wash of *Centaur*, quite possibly due to it's overloaded state and was replaced by two *Centaur* lifeboats that were towed to Carnarvon. **(Photographs available)**

(6) **A rubber raft was launched with 26 survivors. (Possibly a 25-man capacity)**
This raft was picked-up by the troopship *Aquitania* at 0600hours on Sunday 23rd. November at position 24.35S / 110.57E, survivors were taken to the Port of Sydney on the east coast of Australia. This recovery occurred approx 120 miles west of Carnarvon on the fourth day at sea

(7). **A rubber raft was launched with 25 survivors. (Possibly a 25-man capacity)**
This raft was picked-up by the Shell Company tanker *Trocus* at position 24.06S / 111.40E at 1500 hours on Monday 24th November, on the fifth day at sea and was taken to Fremantle. Note that the recovery position is in dispute, position may be 24.06S / 110.40E

(8). **A German lifebelt** was recovered at position 24.10S / 110.54E by *HMAS Wyrallah* at 0800 hours on Friday 28th November, on the ninth day after the encounter.

(9). **Four German rafts** were recovered at position 24.10S / 110.54E at 0900 hours on Friday 28th.November by *HMAS Wyrallah*. These rafts had been lashed together, the body of one German sailor was aboard and he was subsequently buried – at - sea after his clothing had been removed for identification purposes. Stencil on raft displayed identity marks " **OTRC 11 / 39"**

(10). **An RAN lifebelt** was recovered at position24.22S / 110.49E [dispute 24.06S / 110.49E] by *HMAS Wyrallah*, at 1815 hours on Thursday 27th November, on the eighth day after the encounter.

(11). **An RAN lifebelt** was recovered by the Freighter Evagoras at position 23.06S / 110.47E on Thursday 27th. November, on the eighth day after the encounter.

(12). **But probably the most important find of all** was made by *HMAS Heros* on Friday 28th November at position 24.07S / 110.58E. A Carley float was recovered from a pool of oil
This remarkable find is detailed in the WAMM Report No 71 (page 6)
The Carley Float is in the National War Museum in Canberra.
What some thought was a dog-kennel was unfortunately not recovered so we will now never know

(13) **A Catalina** search plane sighted an oil slick at 23.49S / 110.10E. *HMAS Wyrallah* searched but reported that she was unable to find any trace of an oil slick

Let us now summarise the points at which these recoveries were made;

23.06S*/ 110.47E	**Evagoras**
24.02S / 113.27E	**Coast at Red Bluff**
24.06S / 111.40E	**Trocus**
24.07S*/ 110.58E	**Heros**
24.07S / 112.47E	**Koolinda**
24.10S / 110.54E	**Wyrallah**
24.17S / 113.24E	**Coast near 17-mile well**
24.22S*/ 110.49	**Wyrallah**
24.30S / 111.35E	**Centaur**
24.35S / 110.57E	**Aquitania**
24.59S / 112.22E	**Yandra**

*** Note that these four were all un – manned light – weight rafts / floats adrift.**

A thorough examination of all of the recoveries,
The first recovery.
The *Aquitania* recovery between 0600 – 0800 hours on Sunday 23.11.1941 at 24.35S / 110.57E was made (we estimate) 83 hours after *Kormoran* was abandoned, we do not know the exact time of launching but the possible short time that elapsed should surely give at least a rough idea of how far a raft with 26 adult male survivors could drift in that time ?
If the average weight of individuals was 10 stone, the load could be more than 1.1 tonnes, but if it was 12 stone, the survivors weight could be more than 1.4 tonnes. In either case, there can be no doubt that the raft was heavily loaded
How deep would the cockpit of this raft sink below the ocean surface with this weight ?
And would this low-laying raft be blown by any prevailing wind ? The flotation edge of a raft may attract wind-power to speed it's rate of drift ?
If so, what strength would the winds have been ? And what speed and direction ? Who knows ?

From these facts, can we form some reasonable idea about the position of the encounter ?
Korvettenkapitan Detmers reported that the area of battle was in a westerly direction from the sighting position at 26.34S / 111.00E but the *Kirsner / Hughes* position, calculated by back-tracking the lifeboat in accordance with the *von Malapert* diary, indicates that the 'abandon ship' exercise most probably took place around 25.57S / 111.09E (alternatively 26.00S / 111.30E)
Kormoran sailed on a course of 253 degrees for about 90 minutes after the sighting [suggest 20 nms] then less than 30 minutes, possibly on 260 degrees (suggest a further 5 - 8 nms) during an exchange of gunfire and until the engines and power failed at 1845 hours

Thanks to the efforts of Mssrs *Kirsner / Hughes* and to *the WA Maritime Museum*, it was revealed that *HMAS Sydney* made five trips from Fremantle to Sunda Strait between 1.6.1941 and 6.10 1941 sailing along the Sunda Strait to Cape Leeuwin shipping route and on each of these trips, she crossed the 26th parallel between 111.22E and 111.39E, to cross five times within a 17 mile-band, establishes a reasonable pattern which we could expect to be repeated.

A specialist adviser, a retired Master Mariner, suggests that this would almost certainly be a chosen course to or from Fremantle with no known obstacles, which would enable any vessel to sail at speed without the navigational risks that a course closer inshore may provide

When *Kirsner / Hughes* conducted their exercise to back-track the Red Bluff lifeboat from compass bearings maintained by *Oberleutnant zur See von Malapert*, the resulting estimated position at the time of sighting, **appears to be almost directly in line with one of *Sydney's* previously established lines-of-travel.**

And if indeed *Sydney* complied with her 'norm' from 17/11 to 19/11, then a vessel in the *Kormoran* position nominated by *Detmers* could not possibly have sighted masts on that horizon.

According to survivor reports, *Kormoran* began to abandon ship from 'around' 1900 hours and *Detmers* claims that his lifeboat was the last to leave around 2330 hours and while we have no idea about the launching sequence, if we assume that the *Aquitania* raft was the first to be launched close to 1900 hours, we can assume that it drifted:

For a maximum of 5 hours on 19.11.1941
24 hours on 20.11.1941
24 hours on 21.11.1941
24 hours on 22.11.1941
6 hours on 23.11.1941
Estimated total 83 hours

The point of recovery of this raft appears to be 83 nautical miles from the *Kirsner / Hughes* position of the *Kormoran* 'abandon – ship ' position.

A drift of 83 nms in approximately 83 hours equates to a drift rate of one knot.

Of course the truth is that nobody knows all the facts and it would not be possible to obtain answers to these questions that would reasonably satisfy everybody involved or interested in this sad chapter of our history.

A fellow researcher who took the time to consult with experienced Maritime Personnel has submitted a theory (that is of course subject to question) that we could reasonably expect that loaded rafts could drift at a variable rate, somewhere between 0.5 and 1.0 knots roughly in a northerly direction but after a delay of almost 60 years, **accurate forecasting is an absolute impossibility.**

We have not been able to obtain any positive forecast of ocean conditions or wind velocity, there have been several what we can refer to as "educated guesses" but sadly, they all appear to be able to estimate coastal winds and seas from archival evidence but they cannot prove beyond doubt, what conditions were being experienced more than 100 nautical miles out at sea.

We do not know if or when, the south-flowing Leeuwin Current was encountered

Respected Historian and Researcher Barbara Winter writes that she believes the rate of ocean drift in our area of interest to be 0.7 knots and also records that **The Australian Pilot Vol V** has estimated the same direction of drift at 0.5 knots, yet another confirmation of the drift rates.

A drift rate of 1 knot does appear to be within drift speed estimates..

The second recovery of survivors was effected by the Shell Company Tanker *Trocus* when 25 adult males in a Raft were located at position 24.06S / 111.40E on Monday 24.11.1941 and this appears to be 114 nms roughly north of the 25.57S / 111.09E 'abandon-ship' position.
Most of those 25 Germans were in poor condition, severe sunburn, eye inflammations and salt-water ulcers from immersion in salt water were common, some had broken bones.
Using the same theory as the *Aquitania* raft, we can assume that they drifted for an additional 30 hours, a total of 113 hours and that the weight of survivors was also around 1.1 to 1.4 tonnes, again a fully- loaded raft.
A drift of 114 nms in 113 hours equates to a drift rate again of 1 knot, well within our estimated rate of drift.

The third recovery of survivors was made by *Centaur*, a passenger / cargo vessel that usually did the Fremantle to Singapore trip.
62 adult males in a heavily loaded lifeboat were recovered at position 24.30S / 111.35E around 1700 hours on Wednesday 26.11.1941 and it is here that we can make our own educated guess about weather conditions that this lifeboat experienced during the seven days that it was adrift.
Once again we refer to the writing of Barbara Winter, her ability to read and write the German language enabled her to more fully understand statements made by survivors. She records several errors that were apparent in interrogation reports and pointed out that many German words have no English equivalent. Just one brief example of her thorough research indicates the problem.
The German word for **Forecastle,** or the area of a ship forward of the mainmast, is **Back** and when she examined these reports she found that it had been typed as **Stern,** an obvious and misleading error by inexperienced personnel. There were other honest mistakes.
Important points that Barbara Winter raised was that this lifeboat had a tare weight of about one ton,**(confirmed at a gathering of Master Mariners in Fremantle in July 2001)** the weight of 62 adult males was possibly between 3.9 and 4.7 tonnes and that survivors reported that :

[a] This boat had minimum freeboard, (possibly only space for 50 adult males.)
[b] Due to overcrowding, many men had to take turns standing up due to a shortage of seating space and that they had to take extreme care to avoid swamping their lifeboat.

With such crowding, it automatically follows that there would have been minimum space to allow 'bale out' excess water that entered the boat.
A retired Master Mariner who has greatly assisted our research, has expressed his opinion that this lifeboat could only have had limited freeboard and suggests that it could only have survived seven days adrift if it encountered mild to calm ocean conditions. Had it been swamped by heavy weather while carrying such a heavy load, he has extreme doubt if it could have remained afloat, even with inbuilt buoyancy tanks. **But we do not know displacement figures of this lifeboat**
It appears that a report that heavy weather from the south with winds exceeding 20 knots that **could possibly** have existed, were restricted only to coastal areas and were not experienced by this boat and it's crew.

We have one further piece of evidence that appears to support our theory about the possibility of the swamping of the heavily loaded *Kormoran* lifeboats. When *Centaur's* Captain decided to tow this lifeboat rather than risk embarking 62 (possibly armed) Germans, the lifeboat was indeed swamped under tow and began to sink. Two lifeboats were launched from *Centaur* to accommodate the survivors and the tow continued using two less heavily loaded lifeboats, surely this is sufficient evidence to cast serious doubt upon the claim that "Southerly gales were blowing with an average wind speed of 21 knots", anywhere else but in coastal areas.
We respectfully suggest that it is unlikely that the two heavily loaded lifeboats with minimum freeboard , **experienced anything except calm to mild seas during their seven day drift .**

Before it was recovered by *Centaur*, this lifeboat had drifted 90 nms from 25.57S / 111.09E in 149 hours which indicates a drift speed of 0.65 knots, roughly in line with ocean currents

The coastal steamer *Koolinda* effected the fourth recovery of survivors when they picked up 31 adult males at position 24.07S / 112.47E on Wednesday 26.11.1941. This boat does not appear to have been overloaded as it had only half the number as the *Centaur* recovery and this may explain why it drifted for 140 nms from 25.57S / 111.09E.
It drifted for a maximum of 149 hours (and quite possibly less) an indicated drift rate of 0.94 knots

The RAN Auxiliary HMAS Yandra made the fifth recovery on Thursday 27.11.1941, when she picked up 72 adult males from yet another grossly overloaded lifeboat at 24.59S / 112.22E.
The distance from 25.57S / 111.09E, appears to be 78 nms and it was adrift for a maximum of 159 hours, which indicates a drift rate of 0.49 knots, again close to current flow rates
So here we have yet another overloaded lifeboat that has quite possibly experienced calm to mild ocean conditions and that their rate of drift was determined by the speed of ocean currents, as we have shown should have been between 0.5 and 0.7 knots
Surely we have proven our submission that calm to mild seas were experienced and that the heavily loaded boats drifted at a relatively slow speed ? We have received professional opinions that the photograph of the German Lifeboat aboard *MV Koolinda* (Our thanks to West Australian Newspapers for authority to reproduce this information) was essentially a "50-man boat" and a load above that number would most certainly cause overcrowding.

Two lifeboats with sailing ability beached on the West Australian coast
46 adult males landed on the coast at Quobba Sheep Station, a huge property north of the town of Carnarvon on Monday 24.11.1941 in a steel lifeboat
Based upon the fact that two other lifeboats accommodated 62 and 72 adult males respectively, we can reasonably assume that this 50-man lifeboat was not overloaded and, because of that factor, could be expected to float higher in the water and consequently drift / sail at a faster rate.?
The landing point is 161nms from 25.57S / 111.09E and it was possibly drifting / sailing for approximately 133 hours but as this boat was equipped with sails and crossed the south-flowing Leeuwin Current and could possibly also have encountered coastal winds, we can have no idea how those items affected it's journey
Similar conditions would most likely have been experienced by the second lifeboat that carried 57 adult males to safety on the shore at Red Bluff, also north of Carnarvon. The fact that this second lifeboat was more heavily loaded but still travelled approximately the same distance but did not reach shore until the day following, was due to the fact that they arrived offshore at dusk but *Kapitanleutnant Meyer* decided that it was too dangerous to attempt to navigate the coastal reefs in darkness. They spent a very uncomfortable night in savage coastal winds and sea but it proved to be a sensible decision as all landed safely on shore the following morning.
Again, because of the Leeuwin Current, little purpose would be served in having a guess at the rate of drift.
At this stage we have documented the recovery of 319 survivors. There has been some minor confusion as to whether 2 or 3 Chinese laundrymen from the British freighter *Eurylocus* who chose to stay on *Kormoran* when prisoners were transferred, survived. Our research indicates that only two Chinese survived but it may have been three. A total of 319 men were saved.

We do have a problem so far as proof of the recovery of flotsam is concerned.

The Parliamentary Report of March 1999 discusses reports that items may have been washed up onto beaches and the only path that is open to us, is to refer to items 6.15, 6.16, 6.17 and 6.18 of that report as none of these supposed items have been included in the official history of the event.

It is possible that :

A four-gallon tin of cabbage
A brand new tyre on a very damaged rim
A 'hissing' four-gallon tin of Metholated Spirits
A 150 gallon tin of Kapok
Four or five lifebelts (that were not burned)
A packing case board with the words 'HMAS Sydney' painted on it
A fired flare, were indeed collected from local beaches.

It was claimed that information about these (possible) recoveries had been gathered from residents of the Port Gregory area and it was also claimed that a grey lifeboat had come ashore and "had been taken away". So far as we can determine, there was never a single claim that this was an RAN lifeboat or that it had come from *Sydney.*

Any or all of the flotsam listed above could have originated from *Sydney* and it would be unwise to attempt to deny this, but we have received evidence from a former RAN Rating that items are thrown overboard as a matter of practice rather than deliver it to rubbish disposal facilities on board Our informant who must remain anonymous for several reasons, has also indicated that the odd Officer's Cap, together with items of the Captain's crockery often vanished overboard and we are told that this rather childish practice was still in existence in the 1970's

It is possible therefore that these items left *Sydney* on any of her many trips to or from Fremantle.

The blunt fact is that none of these reported recoveries have ever been handed in to Authorities, so far as we can determine, the reported Lifeboat also vanished without trace and as we are doing our very best to ascertain the true facts, they may have existed but this cannot be proved.

This means of course that these subjects must be precluded from any factual examination of this sad event. We cannot accept some personal comment or belief as being factual.

The author also visited the Port Gregory area as part of a holiday trip with the intention of trying to ascertain facts and while long-term residents were happy to talk, we failed to receive one single confirmation about the recovery of any of these items. Maybe they occurred !

We were also informed that there is grave doubt in the area that a group who were socialising at Yallabatharra and who reported that they had seen flashes out to sea, were there on 19.11.1941. It was suggested to me that this gathering took place on Sunday 23.11.1941.

There is always a danger in accepting what is referred to as "Oral Evidence" unless it can be confirmed, one researcher even refers to this subject as "Oral History"

But we do have recovery facts on some flotsam, facts which have been proven beyond doubt:

On Friday 27.11.1941, *HMAS Wyrallah* recovered an RAN Type lifebelt 98 nms north of the *Kirsner / Hughes* position of 25.57S / 111.09E.

On the same day the British freighter *Evagoras* recovered a British Type lifebelt at position 23.06S / 110.47E 170 nms from 25.57S / 111.09E.

On Saturday 28.11.1941, eleven days after the encounter, *HMAS Wyrallah* recovered German rafts that had been lashed together that contained the body of a German sailor. The body was buried at sea after his clothing had been removed for identification purposes. This recovery was effected 111 nms from 25.57S / 111.09E.

HMAS Heros recovered a badly torn Carley Float at position 24.07S / 110.58E which is 113 nms from 25.57S / 111.09E. This Float appeared to be floating in a pool of (possibly) Linseed Oil which some crew members thought was "bubbling up from a container below water" What looked like a green coloured dog kennel was also seen but not recovered, it is

a fact that the Germans had a pet dog aboard ship and that it reached the coast north of Carnarvon (Quarantine Officers destroyed this dog together with a pet monkey that also landed). The damage to the Carley Float has since been established as being caused by shrapnel from naval shells, the Float had not been burned by fire.

It is known that another Carley Float containing a partly decomposed corpse was recovered from the Indian Ocean at Christmas Island around 6.2.1942. The Parliamentary Inquiry of March 1999 recorded that a single shoe that did not fit the corpse, was also found in the raft. There was no identification and the body reportedly was buried "with Military Honours"

Sadly, there has never been any proof established that this Carley Float originated from *Sydney*

A Catalina search aircraft reported the sighting of an oil slick near position 23.49S / 110.10E, 136 nms from 25.57S / 111.09E, but a subsequent search by surface vessels, failed to find any trace.

Tom Frame, in his wonderfully researched book ' *HMAS Sydney, Loss and Controversy*' *(Hodder and Stoughton)* reports that a (smokers) pipe and a slipper were also seen floating in this oil-slick (and a dog-kennel ?) We thank Hodder and Stoughton for permission to reprint and recommend this book as vital reading to all interested in *Sydney*

According to the evidence gathered by Tom Frame, some crew members aboard *Heros* thought that **"this oil was welling - up from a container resting on the ocean floor"**

When the positions of both Australian and German lifebelts and the damaged Carley float are examined, it does appear that these are well north of the area of battle, the Leeuwin Current appears to travel in a southerly direction near the coast, the tidal drift west of the Leeuwin Current appears to be basically in a northerly pattern, prevailing winds appear to blow mainly from the south - west / south – east but both westerly and north – westerly winds have been reported.

There are two vital questions that now must be asked, we do not know, and may never know, exactly what did occur all those years ago.

Question 1.

Why did *Sydney* quite suddenly veer from around 250 / 260 degrees to about 153 degrees?

No matter how hard we try to justify the action of our then Flagship, there can be little doubt that she absorbed massive punishment and, if surprise was achieved by the sudden change of a cargo ship to a fighting ship, the initial onslaught could have caused severe damage and loss of life to Officers and crew, both at deck level and below.

A possible cause is that this dramatic change of course was involuntary, a steering or rudder problem that could not be rectified while under constant attack at point - blank range by fully trained gunners (with the added advantage of the excellent radar - controlled targeting that we know was used by the Germans. Remember that *KMS Bismark* destroyed *HMS Hood* at a range of 16,500 yards with only her fifth salvo. Only three of *Hood's* crew of 1415 survived. A few days later, 2091 crew aboard *Bismark* would also perish)

But the most logical reason for such a change of direction could be that what was left of her steering teams decided that it would be prudent to discontinue the action and to set a course for their home-base at Fremantle. As communications with their Command Staff was almost certainly destroyed, these teams operated under a set of instructions that did not necessarily require confirmation.

The Western Australian Maritime Museum in their report 71 tell us that *HMAS Sydney* consistently sailed a course of 162 / 163 degrees between June and September 1941 when returning from Sunda Strait and the German report was that *Sydney* was sailing at a speed of "about 8 knots" on a course of "about 153 degrees" surely is close enough to indicate that she was on a heading towards south-south-east and roughly on-course for Fremantle

Question 2.

While survivors reported the direction and speed that *Sydney* appeared to be travelling, the actual progress in a southerly direction would depend entirely on how long the Engine-Room Staff could keep the engines operating, including fuel supply, lubrication, steam control and all the other requirements. What period of time could this vital function be maintained ?

We are aware that in January 1998, Mr. Lindsay Knight of Knight Industries PL of Albury, NSW, conducted an aerial search using the Knight Direct Location System from an aircraft and that he detected three possible wrecks :

Wreck No 1 (KDLS 1) 29.58.53S / 112.48.26S
Wreck No 2 (KDLS 2) 29.31.48S / 112.37.43E
Wreck No 3 (KDLS 3) 28.38.39S / 113.21.56E

And in May 2001 Mr Knight and his Navigator Mr T Warren Whittaker conducted another scientific examination with improved detection equipment and reported :

Wreck No.1 (KDLS 1) 29.58.4064S / 112.48.4164E
Wreck No.3 (KDLS 3) 28.38.259S / 113.22.2582E
Wreck No 2 (KDLS 2) Was a 'ghost' signal from KDLS 1
(The variation between the two examinations is only of minor significance)

Wreck No 1 (KDLS 1) appears to be 268 nms south-south-east from the Kirsner Site

Could it reasonably be within the grounds of possibility that propulsion was maintained to allow such a distance to be travelled ?
Could the Engine room personnel have managed to increase speed ?
WE DO NOT KNOW THE ANSWERES TO THOSE QUESTIONS !

One suggestion as to why little has been found of *Sydney* has been submitted to us.
Picture if you will, a severely damaged ship, with an unknown casualty rate, sailing away from the battle area at a speed of "about 8 knots " with her bows low in the water. There can be little doubt that she had suffered a torpedo hit below the waterline on the port side underneath the two front six - inch gun turrets.
If she was still "closed up for action", is there any possibility that her forward speed caused her to "sail – under" as more and more water pressure was forced through the hole blown in her hull by a torpedo?
And if she was indeed "closed up", would this tend to seal anything loose within that sealed hull thus preventing these items floating to the surface?
And is this material still sealed inside the dead ship?
But when did some items of flotsam leave her ?
We just do not know and it is reasonable to assume that we will never know as we are not aware of how far a diving operation would succeed.

At a July 2001 meeting of Master Mariners at Fremantle, three very pertinent questions were asked :

> **" What if *Sydney* sank around the same time as *Kormoran* and surviving crew members entered the water, possibly with or without flotation equipment. Would the fact that the first aerial search did not commence until the fifth day after the encounter ensure that any survivors could have perished either from exposure ? "**
> **and,**
> **" Did incompetence play any part in this disaster ? "**
> **and,**
> **" Did flotation vests of that era have kapok filling ?"**

So far as the first question is concerned, there must be an upper limit to how long survivors, possibly without lifeboats or rafts, could remain on the surface in any conditions. We do not know what weather/ocean conditions were encountered.
If KDLS wreck number one does ultimately prove to be that of *HMAS Sydney,* then it is clearly within the Sunda Strait to Leeuwin shipping channel. Once again, if ocean conditions were anything less than calm, survivors floating on the surface would surely have been difficult to see, even if search procedures had been arranged.
An answer to the second question will never be available. We have no idea why a search was delayed and we would need to have records of how *Sydney* had maintained schedules in the past. Was she often late ? Or did she usually keep to her ETA ?
And in answer to question three, we are told that the 'old type' flotation vests often contained Kapok filling that was subject to water-logging in some circumstances. Again we are informed that, as flotation vests were stored in special areas on board, it was possible that crew members had neither the time or opportunity to equip themselves with such vests.

In defence of Captain Burnett.

At any given time during World War Two, thousands of ships of all shapes and sizes, flying many different flags, cruised the oceans of the world, and the greater proportion of these were being used by the Allies.
As such they were entitled to protection from Allied warships, Naval Commanders were not lawfully permitted, under the Rules of Warfare, to fire at unidentified ships. Identification procedures must be rigidly complied with.

We have already shown that only nine *German Armed Raiders* went into service, mainly in the Atlantic and Indian oceans, an extremely minute percentage of total shipping, so it follows that the odds of a warship intercepting a *Raider,* were remote in the extreme.
Comparative photos are only a rough guide, as cargo ships were altered constantly to cater for changing cargo, for example the official photos of *Kormoran / Straat Malakka* possessed some similarities and at long-range, it would be quite impossible to identify her beyond all doubt
Just because flag and other identification signals are slow and muddled by non-professional and possibly non English-speaking crew, they are not necessarily a danger and any Naval Commander who actually destroyed an innocent target, would almost certainly face Court-Martial, disgrace, and the end of his Naval career.

The pressures of Command in these circumstances must be truly enormous, catapult float planes can only be recovered in relatively calm waters and one may or may not have assisted in the identification of this disguised Raider and we will now never ever know !
The 1995 *Mohr / Sellwood* story of the *Hilfskreuzer Atlantis* (T.Werner-Laurie Ltd.) tells of how *Kapitan zur See Rogge* had crewmen wearing dresses and wheeling perambulators around the decks to deflect suspicion as that *Raider* approached prospective victims.
Just how close would a warship have to approach another vessel before a boat crew could be sent to investigate ?
Almost certainly that distance would be point-blank range for naval guns operated by skilled, thoroughly - trained and experienced gunners.
If in fact, *Sydney* did close to within a few thousand yards of *Kormoran* in an effort to identify this cleverly-disguised merchant ship, her crew would almost certainly, be ready for instant action.
And even if *Sydney* was at 'Action Stations", a sudden surprise attack that caused interference to her Command Staff on the Bridge and that heavily damaged other vital defence / offence abilities so that she could no longer operate as a co-ordinated fighting ship, becomes more and more likely as we examine the few details that survivors provided.
For example, the specifications of the three inch anti tank cannon that was sited near the prow of *Kormoran* show that shells leaving it's muzzle travel at a speed of 1,780 feet per second which could be expected to strike *Sydney*,2.5 seconds after being fired at a range of 1,500 yards and one must doubt the ability of the human brain to react in time to respond. If her main armament had similar muzzle velocity, then the first ship to fire accurately could possibly have the battle effectively won in the first few seconds.
Kormoran did have one major advantage, her total armament was already pre-aimed and pre-ranged, even though her main range-finding equipment had been lowered to avoid detection, her specifications reveal that she had efficient range-finders concealed in her superstructure and her gunnery control officers were placed away from the Bridge specifically to avoid the possibility of loss of all Command Staff should the Bridge be destroyed. At such short-range it must be doubtful if the six-inch main guns of *Sydney* had much advantage over the five-point-nine inch guns of *Kormoran ?* The German specifications indicate that one of her guns was at least 20 years old but at such short range it would not be of any concern !

If we accept reports from German survivors as being a true and proper description of the encounter, (and we have no Australian report) that the first main salvo struck both forward turrets, demolished the Bridge of *Sydney* [and possibly her Captain, other Senior staff and the Director of Gunnery] and that she was being hit by all the heavy auxiliary firepower that *Kormoran* was able to summon, then it could be perfectly reasonable to suggest that *Sydney* was doomed and was only capable of returning fire by individual efforts.
When all of these possibilities are taken into account, it does appear that Captain Burnett quite likely acted in an approved manner, it was only the speed and accuracy of the attack that was the key factor and quite likely, this would have caught any other Naval Captain of any other warship in exactly the same manner !

Captain Burnett could quite easily have accepted the identification *Straat Malakka* once the "QQQQ" signal was broadcast and continued on to Fremantle in complete safety. No person would or could have blamed him had he taken that course-of-action.
But if this action had allowed *Kormoran* to sow 300 plus mines in shipping channels around Carnarvon and quite likely, given her time to add to her tally of merchant - ships destroyed, the costs to our war effort could have been substantial.

KMS Kormoran has been described as a converted cargo ship and while this is partially true, she was a new and modern ship, she was armed to cruiser standard with the most modern auxiliary guns and was a very powerful warship indeed. If she could achieve a sudden surprise attack, then a similarly armed warship would almost certainly face serious problems

Let us now discuss "those rumours" that are constantly presented

(We also refer readers to item 2.30 of the 1999 Parliamentary Inquiry dealing with this subject.)

(1). Sydney was torpedoed by a Japanese submarine

The location of each of the 46 Japanese submarines that were in service in mid-November 1941, has been established from both Allied and Japanese records, **beyond all doubt**

Every single submarine was in a home - port being prepared and equipped for war with the USA, the first six were despatched for Hawaiian waters from 16th.November, four were in the South China Sea, **none were in the Indian Ocean. A summary is attached.**

(2). *Kormoran* attacked while flying a Dutch flag.

In 1985, *Otto Jorgensen*, a survivor from *Kormoran*, was questioned about aspects of the action against *Sydney* and stated that he believed that his 149 .5mm [5.9 inch] gun fired approximately 140 shells and that most of them hit their close – range target.

Jorgensen maintained that his Commander, *Korvettenkapitan Detmers*, was of "the old school ", a thorough gentleman versed in the rules of naval warfare who was a proud German Naval Commander first and an Officer of the *Third Reich*, second. *Detmers* had been in the German Navy long-before the Nazi Party had taken - over, he was proud of his record, he was proud of his command and his crew, he had never failed in the past, to fly his battle ensign before opening fire on any target and *Jorgensen* dismisses this unfounded rumour outright. Maybe it is time that we all did likewise !

(3). *Kormoran* attacked while flying a white flag.

Same comments apply.

Jorgensen stated that it took only a few seconds to lower the disguise colours and hoist the *Reichskriegflagge*, also less than eight seconds were required to bring the concealed guns into operation, guns that were already ranged and aimed !

(4). *Sydney* survivors were machine gunned in the water.

Jorgensen totally rejects this rumour as the product of a sick mind and pointed out that survivors from all of the eleven ships accounted for, had praised the actions of *Detmers* and his crew, so far as the treatment of prisoners and the preservation of human life was concerned.

A foreword in the book *'Atlantis' [Ulrich Mohr, New English Library]* is relative and we thank them for permission to quote the following statement :

"When the City of Bagdad was attacked ,Rogge ceased fire the moment we had been rendered 'hors-de-combat' by the smashing of our only real weapon, our radio installation.
Our wounded were extremely well-treated, such scant fare as there was , was shared fairly.
The attitude of her crew was 'correct' the attitude of her Officers was actually courteous.
However much we hated our captivity, we at least conceded that our discomforts after all were but the result of Rogge overcrowding his prison holds, rather than to leave us to the 'freedom' of the sea.
Yet I, and Officers from other ships as well, both British and Norwegian, were to acquire feelings of friendship, despite our adverse circumstances and have since met Rogge and Mohr on the most cordial of terms

Captain J. Armstrong White,
City of Durban.(Also City of Bagdad, July 1940).

So, in an area of doubt and misinformation, at long last we have positive proof about the behaviour of the Commander of one of the nine German *HilfSKreuzers* so we should not automatically dismiss reports from the survivors of *Kormoran* just because they were the enemy.
We must carefully examine all the records that are available to us and, in the cold hard light of day, should those records indicate that the loss of *Sydney* was indeed, caused by human error, then let us accept this, no matter how unpleasant it may be.

Conclusions.

The loss of a single life, particularly in time of war and often in foreign lands far from home, has a devastating effect on those loved-ones left behind, as this author well knows.
Of the 926,000 Australians who served their country during World War Two, 29,437 died and 22,447 were wounded., a remarkably low figure when compared with forces of other nations.
So far as Australia is concerned, no foreign armies have swarmed across her lands, and only a few incidents have caused loss–of-life on home soil.
Air raids by *Hibuntai Air Fleets* on the northern city of Darwin and it's surrounds, caused immense losses. The City of Darwin was all but destroyed, nine ships were sunk by bombs on Thursday 19.2.1942 in Darwin Harbour and the coastal freighter Koolama was sunk at sea on Friday 20.2.1942.
The destruction of a fleet of Dutch flying-boats and an American B24 Bomber near the western city of Broome by long-range *Zeroshiki Kanjo Sentori* fighters on Tuesday 3.3.1942, an attack by *Midget* submarines in the harbour of the eastern city of Sydney and the sinking of *HMAS Kuttabul* on Sunday 31.5.1942 with the loss of 21 lives, the shelling of Sydney's eastern suburbs by submarine I.21 and the city of Newcastle by I.24, all occurred during the early days of World War Two.
Those killed around Australia and most who died overseas were, in the main, buried in a conventional manner in places where relatives and friends could pay their respects to those who paid the supreme sacrifice.
Even the bodies of *Chu-i's [Lieutenants] Matsuo and Chuma, Kokoheiss [Petty Officers] Ohmiri and Tzuzuka* who perished with their midget submarines in Sydney Harbour, were cremated at Rookwood, NSW, with full military honours and their ashes were returned to Japan.
The number of Japanese who lie in the Japanese War Cemetery near Cowra, NSW indicates yet again that the general public were possibly not informed of the events that caused all these casualties.

But relatives of the 42 Officers and 603 crew members of the Australian Cruiser *HMAS Sydney,* [including RAAF and Civilian personnel] have no graves to visit, indeed they have not even had the consolation of knowing the location where the ship lays in it's watery grave.
Those gallant men who gave their lives in their effort to keep their country free, the very freedom we all enjoy today in the year 2001, surely should expect their Government to, at the very least, locate the position where *HMAS Sydney* rests.
If, when the wreckage is located and inspected, the damage is comparable with the reports from German survivors, then so be it !
If Australian Naval Personnel committed errors-of- judgement under the pressures of warfare then surely, all this time after the event, when most of those who were involved are in extreme old - age if still alive, no person will blame them but it would be nice to know the truth !
It must be remembered that the *Third Reich* **surrendered unconditionally** and, apart from retaining their God-Emperor, *Dai Nippon Teikoku, The Empire of Japan*, did likewise.
Both countries were utterly and completely defeated and were humiliated by military occupation, so the true facts of an event that occurred in 1941 could surely have no effect upon those countries.
It is ridiculous in the extreme for any present - day public servant to claim that International Relations could be harmed if the true facts of the encounter between two ships of Nations at War, were to be released, more than half-a -century after the event..
German survivors know the facts but Australians have not been granted that courtesy

***'Raider'* activity in Australian waters.**
The *Armed German Surface-Raider* as we knew them, or *Hilfskreuzer,* to give them their German classification, were active around Australia in the early days of World War Two, and this information was surprising, as few can recall being given this news from our Authorities, either during hostilities or after they had ceased.
KMS Pinguin.
On Tuesday 28th. October 1941, this 2,766 ton vessel sowed mines between Newcastle and Sydney, NSW. She continued down our coast sowing mines in the shipping-channels in the approaches to Hobart, Tasmania, on Friday 31st. October 1941.
Her Commander, *Korvettenkapitan Krueger*, must have been fully aware of our lack of resources for he quite brazenly entered the protected waters of Spencer Gulf to sow mines in the Port Adelaide area, a Gulf with only one entry / exit..
Pinguin then headed west across the Great Australian Bight and on Tuesday 18th.November 1941, captured the British merchantman *Nowshera,* west of the Port of Fremantle.
On Friday 7.11.1941 the UK ship *Cambridge* sank off the south coast of Victoria after striking a mine. Next day the US ship *City of Rayville* stuck a mine off Cape Otway and sank, on Friday 5.12.1941 the Australian ship *Nimbin* was sunk by a mine off the east coast of NSW. *Millimual* also sank in the same area after striking a mine.
A full year earlier, on Monday7th.October 1940 ,*Pinguin* captured the Norwegian tanker *Sturstad,* in the Indian Ocean, converted her to a mine-layer, re-named her *Passat* and used her to sow mines in our shipping-channels in Bass Strait, south of Australia, from Tuesday 29th. to Thursday 31st. October 1940.

KMS Orion.
On Wednesday 19th. June 1940, *Orion* was engaged in mine-laying activities off the Western Australian south - coast Port of Albany, and was reportedly sighted by an aircraft of the Royal Australian Air Force , 130 miles south of that Port on that same day.

Unterseebootes.

We know that German U-Boats were active in the Indian Ocean and around the Australian mainland.

U.177, U.178 and U.179 sank a total of twenty ships with an estimated gross tonnage of 103,600 tons in the Indian Ocean in November 1942, U.862 attacked the Greek merchantman *Iliossos* south of Port Adelaide, South Australia, on Saturday 9th. December 1944, and went on to torpedo and sink the American Liberty ship *Robert J Walker* off Jervis Bay, NSW on Christmas Day 1944.

Can a final and positive opinion ever be agreed to ? [See pages 28 – 31]

Is it possible that a positive conclusion could ever be produced ?

There are so many matters that we really need to know, even a very small point, it has been reported that *Korvettenkapitan Detmers* told one of his interrogators that the encounter between *Kormoran* and *Sydney* had been filmed and told them that this was buried in a cave at Red Bluff, where a steel lifeboat under the command of *Kapitanleutnant Heinz Meyer* had landed with 57 survivors on 25th. November. We understand that several searches have been made including one in 1945, Dr. List with a party of others searched the Red Bluff area and so far as we know, failed to locate evidence. The latest search of which we are aware took place in May 2001.

A fellow researcher based in England has advised **that he has been led to believe** that the British Royal Navy has a file on *Sydney* and that this file as endorsed " not to be opened until the year 2020." **Again we do not know if this is true or false but refer readers to items 6.120 and 7.55 of the Parliamentary inquiry of March 1999.**

Should this ultimately prove to be true, one must be seriously concerned as to why such secrecy is necessary. Is it possible that it is known beyond all doubt that the German version of events is indeed true, and the Authorities both in the UK and Australia are loathe to confirm that *Sydney's* Commanders made a mistake ?

A chart, showing locations as near as possible, has been prepared for your inspection.

There is no doubt that *Kormoran* was re – supplied from her supply ship *Kumerland* in mid - October and surely it would be reasonable to assume that this included diesel oil for her engines ? We do know from the specifications that *Kormoran* carried 5,200 tons of diesel oil (sufficient diesel fuel oil to travel for between 84,500 nautical miles at 10 knots or 50,000 nautical miles at 17 knots)

Why then was no oil – slick reported after *Kormoran* sank ?

Could it have been that any probable Oil Slick had well and truly dispersed during the five to six days that any serious air search was implemented?

The Royal Australian Air Force had a few pre-war Avro Anson Aircraft plus up to ten Lockheed 'Hudson', aircraft that had been ordered by England for Coastal Reconnaissence duties. These planes first flew on Saturday 10.12.1938 and were a useful twin engined aircraft. Two Catalina flying boats were flown over from Townsville to assist in the search. 47 RAAF sorties from both Carnarvon and Pearce Base plus 2 Catalina long range Seaplanes, searched a very wide area, they sighted a couple of life boats and rafts. Many ships combed the area and recovered three lifeboats and two rafts containing 214 survivors, they recovered a Carley Float, two RAN lifebelts, a German lifebelt and four German rafts lashed together, over a large area of ocean.

Surely *Sydney* had a quantity of heavy furnace – oil remaining in her tanks ? But were these tanks sealed and undamaged ? There was no obvious Oil Slick when the search finally began AND NOT A SINGLE MENTION OF AN OIL – SLICK that is, apart from a pool of supposedly linseed oil found with the Carley Float.
Because the first Air Search of the generally accepted area of engagement did not take place until the morning of Tuesday 25.11.1941, would it be feasible to suggest that any oil that entered the water on 19.11.1941 or possibly 20.11.1941, would be mainly dispersed ?
And is it remotely possible that survivors could remain afloat for four to five days?
And is it also likely that any flotsam would be well and truly scattered by wind and tides?
Were search aircraft looking for HMAS Sydney, or was flotsam also involved?
Were planes carrying extra observers? At what height were these aircraft flying?
Could they have been reasonably expected to sight small items of flotsam?
Author's note.
A group of dedicated researchers, have collaborated over several years, in an effort to find the truth about several events that took place during World War Two.
We have had submissions and assistance from many fellow researchers who, in turn, have conducted countless interviews and, very importantly, have had access to one set of papers that most probably, no other researcher has ever seen or heard of. We have also struck many obstacles, even though this terrible war has been over since 1945, many participants still decline to provide information, although one elderly gentleman who was an Officer in the RAN, is reported to have stated in June 2000, that he remains positive that his RAN Ship located the wreck that was believed to have been *Sydney* in May 1947 but restrictions of the Official Secrets Act prohibited him from giving any further information about this exercise.
A schedule relating to Japanese Submarines is attached to this submission to support our statement on page 30 that no Japanese Submarines were in the Indian Ocean in November 1941.

Our combined research carries no political message, has no intention of denigrating the memories of any Nation, of any Peoples or of any person or persons. All we seek is the truth, true facts unrestricted by the requirements of censorship or National Security.
Do YOU want to know the truth about this terrible loss in November 1941 ?
The only way that this could ever be achieved is BY YOUR ACTIONS.

PLEASE HELP ALL THOSE PEOPLE WHO DESIRE THE TRUTH, PLEASE CONTACT YOUR PARLIAMENTARY REPRESENTITIVE AND TELL HIM OR HER THAT YOU WILL NO LONGER TAKE " NO " FOR AN ANSWER ! "
WE LIVE IN THE TWENTY – FIRST CENTURY, WE MUST KNOW THE TRUE FACTS OF WHY ALL OF OUR BRAVE AND GALLANT FIGHTING MEN AND WOMEN OF WORLD WAR TWO DIED AND THE TRUE FACTS SURROUNDING THEIR SACRIFICE.

This is an ' in – house ' publication to provide a basis for discussion
Peter Boichel, Geoff Chilman, John Francis George Gresham,
Dick Kagi , Peter Moir John Bradley
and other Associated Researchers Perth WA. July 2001.

Details of the Japanese Submarine Fleet are supplied by
Canberra - based Fellow Researcher Jonathon Bradley

Dai Nippon Teikoku.....The Empire of Japan.
Dai Nippon Teikoku Kaigun Sensui Butai.
The Japanese Navy. The Submarine Arm.

Unlike the German *Kriegsmarine* that used many differing types of *Unterseebootes* ranging from 729 to 1763 tons, the Japanese Navy had only one major class of Submarine, the 2,600 ton 'I' Class.
As history has revealed, the Japanese Submarine Force did not share the rate of success experienced by the other arms of their Armed Forces, and when the sheer size of their vessels is examined, we must be indeed fortunate that this was the position.
Where the U-Boats had one 75mm [or 3 inch] gun mounted forward of the Conning Tower, the huge 'I' Class carried two 125mm [or 5 inch] guns, one mounted forward and the other rear of their Conning Tower.
As far as can be ascertained, each carried one Aichi E13A Mitsubishi two – seat reconnaissance floatplane, carried in a waterproof deck hangar.
We understand that three other researchers since 1945 have provided proof beyond all reasonable doubt, of the location of each of the 46 operative submarines as at Sunday 16.11.1941. We have seen results published by Barbara Winters [Mrs. Poniewierski] and we congratulate her on her research.

Location of submarines .

Six were at their base at Yokosuka.
I-2 I-3 I-4 I-5 I-6 I-7 were in Group No. 2 and all departed for Hawaiian waters on Sunday 16.11.1941 under the command of *Kaigun Chujo [Vice-Admiral] Sato Shigeteku.*

Five were at their base at Kure.
I-1 I-9 I-15 I-17 I-25 sailed on Friday 21.11.1941, classified as group No.1 under the command of *Kaigun Chujo [Vice-Admiral] Sato Tsutomu* bound for the west coast of America.

Nine were based near Tokyo.
I-8 I-68 I-70 I-71 I-72 I-73 I-74 I-75 departed from Friday 14.11.1941 under the command of *Kaigun Chujo [Vice-Admiral] Shigeyoshi Miwa* also bound for American waters.

I-26 was despatched on Wednesday 19.11.1941 to patrol waters around the Aleutian Islands, she had to report any shipping that may be capable of intercepting vessels of operation *Shinjuwan Kogeki,* the code name allocated to the Pearl Harbour Task Force

A Group comprising eight submarines were at Kure Base
I-16 I-18 I-19 I-20 I-21 I-22 I-23 I-24 were nominated as a Special Attack Force and sailed from Kure on Wednesday 26.11.1941 under the command of *Kaigun Chuso [Commander] Hanko Sasaki* to patrol shipping routes between America and the Phillipines

A single submarine, I-10 was designated *Radio Headquarters Base* and departed from her base at Yokosuka on Sunday 16.11.1941 under the command of *Kaigun Chuso [Commander] Tahashi Yamada* to patrol in the South China Sea.

Four were also at Yokosuka .
I-121 I-122 I-123 I-124 under the command of *Kaigun Taisa [Captain] Kiyoi Hanafusa* departed Sunday 16.11.1941 to patrol in the South China Sea

Five were at their base on Hainan Island
I-53 I-54 I-55 I-56 I-58 under the command of *Kaigun Taisa [Captain] Kaoru Shigeteku* departed Thursday 27.11.1941 as a Special Patrol Group to cover the shipping channels between the USN base at San Diego and the Phillipines.

Seven submarines remained on stand-by at their bases at Kure and Yokosuka
I-52 I-59 I-60 I-62 I-64 I-65 I-66 were designated *Headquarters Command* for deployment as required

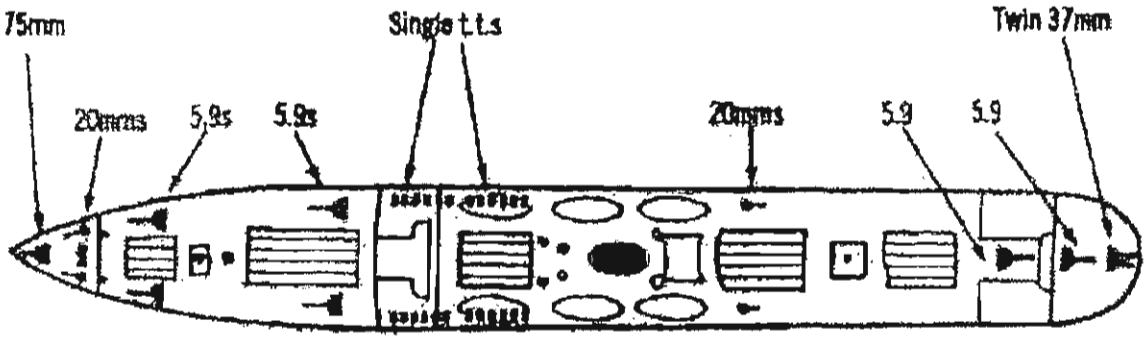
Quite obviously the Japanese Submarine building program was operational as we are aware that I-29 was operating in Australian waters in May 1942.

Johnathon's tireless research also provided details of the sinking of 30 of these 46 submarines.
1 was destroyed in December 1941.
5 were destroyed in 1942
10 were destroyed in 1943
13 were destroyed in1944
1 was destroyed in 1945
and also provided details of the operations of eleven Japanese submarines in Australian waters where 5 subs sank 11 ships along the east coast.

A sincere thank – you to all those wonderful people whose contributions assisted the printing of this report.
We do trust that you consider that our efforts were worthwhile.

George Gresham and Associates.

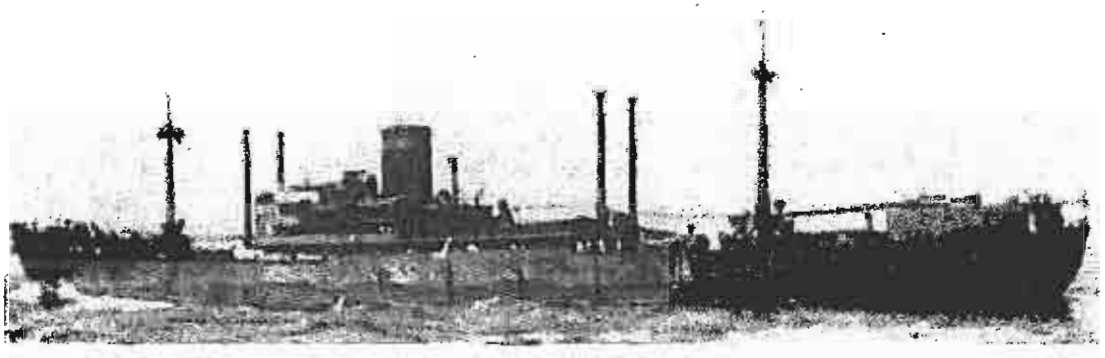
German *Hilfskreuzer*	*KMS Atlantis*	Technical Details



Original name	*Goldenfels, Freighter, Hansa Line*
Upon takeover by Kriegsmarine	*Schiff Zwei* *(Ship number 2)*
Conversion Identity	*Hilfskreuzer Sechzehn* *(HSK 16)*
Indienststellung	*KMS Atlantis 30.11.1939*
Bauwerft	*Bremer Vulkan at Bremen* *(Builder)*
Baujahr	*1936 - 1937*
Umbauwerft	*Deschimag*
Umbauzeit	*1939* *(Completed)*
Grose [in BRT]	7,862t *Gewicht 17,600t* *(displacement)*
Lange, Breite, Tiefgang	*155m / 18.7m / 8.7m* *(488ft/ 61.3ft /31.1ft)*
Fuel Type	*Diezel*
Geschwindigkeit	*16 knoten max 10 knoten cruising*
Fahrbereich	*60.000nms / 10knoten / 250days.*
Maschineleistung	*7,600Pse* *(7,600hp)*
Antrebsanlage	*Zwei Sechs Zylinder Diezels* *(2/6cyl Diesels)*
Ahzhl der Decks / Luken	*Zwei Decks/ Sechs Holds/Acht Compartments*
	(2 Decks 6 Holds 8 Bulkheads)
Besatzungsstarke	*Drei Hundertfuffzig* *(Complement 350)*
Bordflugzeuge	*Zwei Heinkel 'Arado' ar196V Float planes (2)*
Minen	*Neunzig Zwei* *(92 mines)*
Artillerie	*Sechs 149.5mm MkV Kanone* *(6/5.9 in.)*
Panzerabwehrkanone	*Eins 75mm* *(One Anti – Tank Cannon)*
Flugabwehrkanone	*Zwei 37mm* *(Two Anti – Aircraft Cannon)*
Maschinegewehr	*Vier 20mm* *(Four Heavy Machine guns)*
Sonstiges Uberwasser	*Vier 525mm* *(FourTorpedo tubes)*
Length of Cruise	*Sechs Hundertzwanzigzwei* *(622 days)*
Ships Gesunken/ Tonnage	*Zwanzigzwei 145,697t (22 ships,145,697 tons)*
Verbleib Gesunken	*22.11.1941 scuttled in South Atlantic*

Ref: NH.Lon/Hb

Schiff 41 - Hilfskreuzer KORMORAN



- Werft:Germania Werft, Kiel
- Baujahr: 1938
- Verbleib: gesunken, 19.11.1941
- Hauptbewaffnung: 6 x 15 cm - 2 x 3,7 cm - 6 Torpedorohre
- 2 Flugzeuge Arado Ar 196 A1
- Besatzungsstärke: ca. 400

8736 BRT - 164 m lang - 20,2 m breit - 19 Knoten

Das Schiff verließ am 03.12.1940 Gotenhafen in Richtung Suedatlantik um
Handelskrieg zu führen. "***Kormoran***" traf dort neben "U 124" und dem schweren Kreuzer "***Admiral Scherr***" auf "U 105" und "U 106", um diese
mit Brennstoff sowie Proviant zu versorgen. Im April 1941 traf das Schiff
den Hilfskreuzer "***Atlantis***" und fuhr dann ums Kap der guten Hoffnung, um
im Indischen Ozean sein Glück zu versuchen. Im Oktober 1941 wurde
"***Kormoran***" noch mal von der "***Kulmerland***" mit Heizoel und Proviant

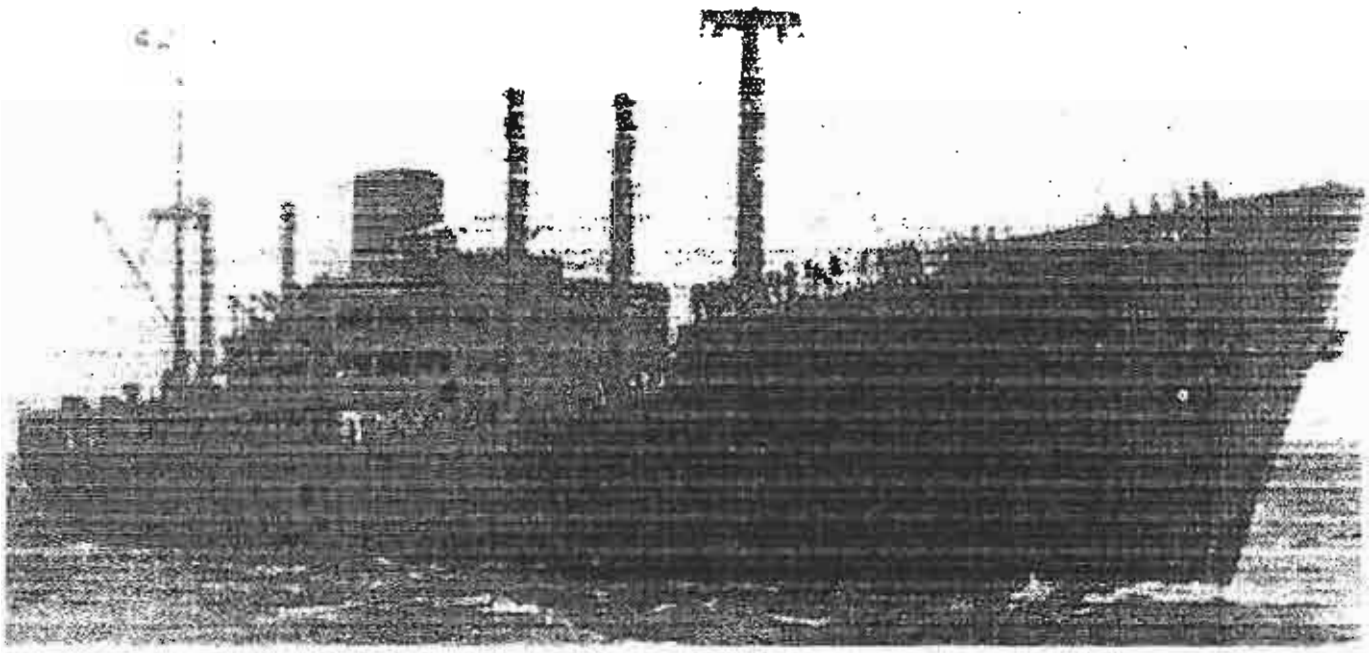
versorgt. Am 29.11.1941 traf das Schiff dann auf den australischen Kreuzer
"***Sydney***". Trotz der Überlegenheit in jeder Hinsicht versenkte "***Kormoran***"
nach einem kurzen Feuergefecht den Kreuzer. Doch auch die eigenen Schäden
waren so schwerwiegend, das die Mannschaft Ihr eigenes Schiff nach einer Fahrt
von 350 Seetagen selbst versenken mußte. Die Ueberlebenden der Besatzung
konnten sich auf das australische Festland retten.

66

nächsten Monat in die Gewässer um Java und Sumatra und anschließend bis nördlich von Madagaskar vor. Im Oktober wurde sie noch einmal von der "Kulmerland" versorgt. Am 19.11.1941 kam es westlich von Australien zu einem Zusammentreffen mit dem australischen Leichten Kreuzer "Sydney", der nach einer taktischen Meisterleistung und einer plötzlichen, aus allen Rohren erfolgenden, Feuereröffnung, versenkt werden konnte. Im Verlauf dieses Gefechts erhielt auch die "Kormoran" vier Treffer, von den einer den Maschinenraum lahmlegte. Aus diesem Grund sah sich der Kommandant Fregattenkapitän Detmers gezwungen, "Kormoran" selbst zu versenken. Während des Gefechts mit der "Sydney" waren 76 Mann gefallen. Der Rest erreichte die australische Küste, wo er in Gefangenschaft geriet.

Land	Name	Größe (BRT)	Datum	Land	Name	Größe (BRT)	Datum
GRI	Antonis	3729	06.01.1941	GB	Craftsman	8022	09.04.1941
GB	British Union	6987	18.01.1941	GRI	Nicolas D. L.	5486	12.04.1941
GB	Afric Star	11900	29.01.1941	JUG	Velebit	4153	26.06.1941
GRI	Eurylochus	5723	29.01.1941	GB	Mareeba	3472	26.06.1941
GB	Agnita	3552	22.03.1941	GRI	Stamatios G. Embiricos	3941	26.11.1941
GB	Canadolite [1]	11309	25.03.1941	AUS	Leichter Kreuzer Sydney	-	19.11.1941
11 Schiffe mit 68274 BRT							

PRISE
[1] am 13.04.1941 in Gironde ein

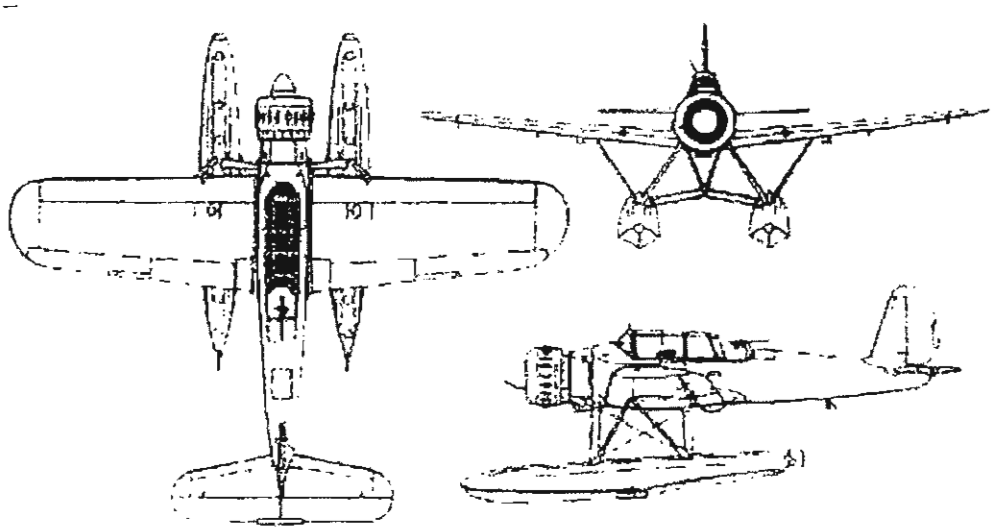


Hilfskreuzer "Kormoran" im Atlantik
[Foto entnommen aus: Lt37]

Seite erstellt am: Donnerstag, 23. April 1998
Aktualisiert am: Montag, 27. April 1998

Dokumentenkontext:
Power at Sea -> Deutsche Einheiten -> Hilfskreuzer -> Hilfskreuzer "Kormoran"

HEINKEL 'ARADO' Ar 196A-3
TWO SEATER MARITIME RECONNAISSANCE FLOAT PLANE

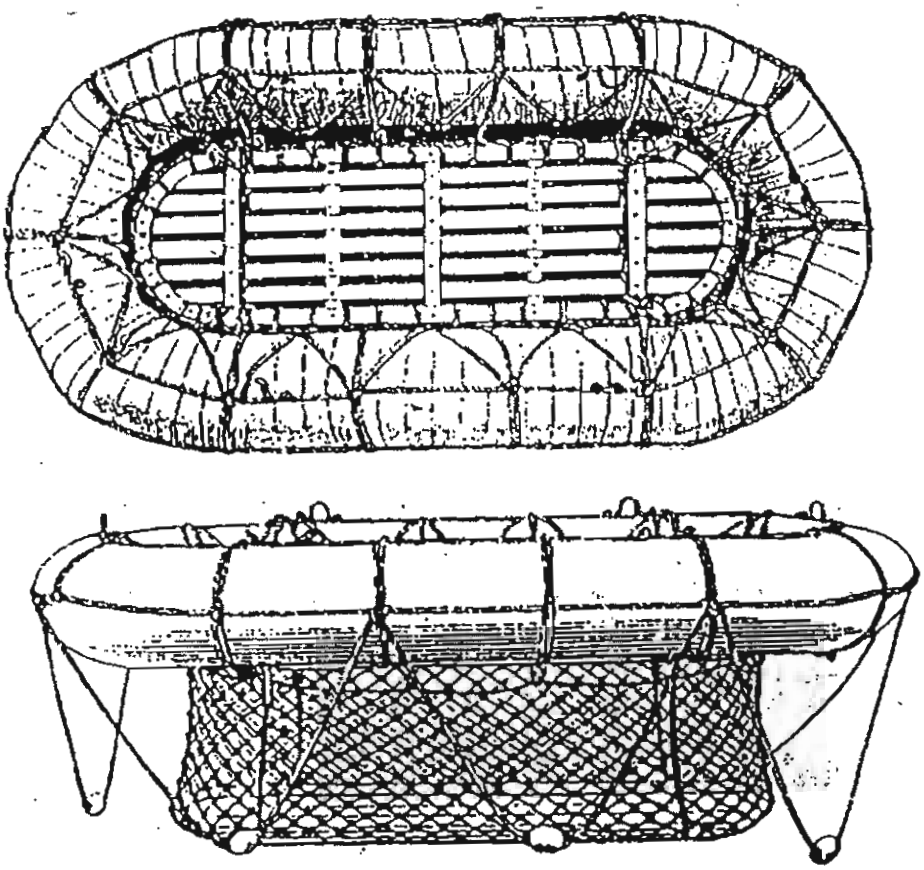


TECHNICAL DETAILS.

Power.	One BMW 132K nine zylinder radial air-cooled engine 960hp at Take-off. 820hp at 3,280 feet.
Armament.	Two 20mm FF Kanone / 60 rpg. One 7.9mm type 17 Machine Gun on forward fixed mount. One 7.9mm type 15 machine Gun on rear flexible mount. Two SC50 Bombs on ETC 50/v111 wing Racks
Performance.	Max Speed 194mph at 3,280 feet, Cruising Speed 166mph Climb rate 1358feet/minute. Ceiling 22,965feet Range 497 miles
Weight.	Empty 5,148lbs. Loaded 7,282lbs.
Dimensions.	Span 49.75 feet Length 36 feet Height 14.5 feet

Three Ar196A planes survived. *1 at Maritime Museum Varna, Bulgaria.*
1 at Smithsonian Institute Washington DC
1 at Willow Grove Naval Station Pennsylvania

Twenty-five-man Survival Raft
Shown is the standard British Carley Float



The standard German survival raft also has a 25-man capacity.

[1] 26 survivors on a Rubber Raft were recovered by His Majesty's Hired Transport *Aquitania* at 0600 hours on Sunday 23rd November at position 24.35S / 110.57E on the fourth day at sea.

[2] 25 survivors on a Rubber Raft were recovered by the Shell company Tanker *Trocus* at 1500 hours on Monday 24th November at position 24.06 / 111.40E on the fifth day at sea.

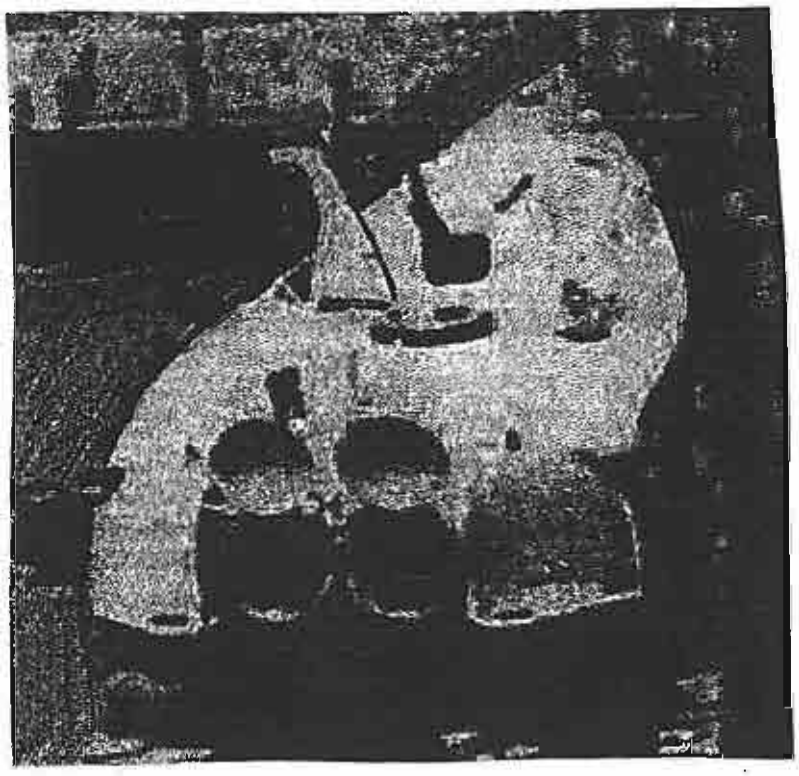
[3] An empty and damaged Carley Float was recovered by HMS Heros on Friday 28th November at position 24.07S /110.58E, possibly on the eighth day at sea and at present, rests in the National War Museum in Canberra, ACT.

KMS KORMORAM.....HSK V111.....SCHIFF 41.

LEICHTES SCHNELLBOOT CLASS 3

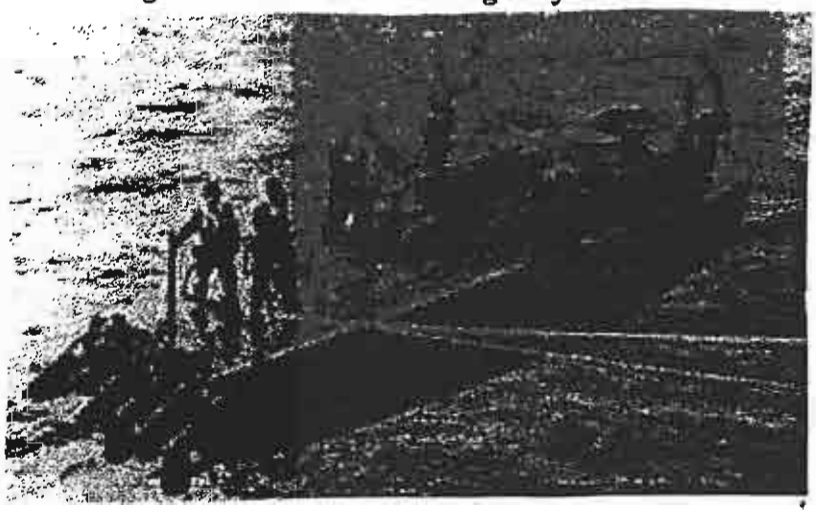
Mine – sowing speedboat carried by Hilfskreuzers .

Note rear pods to contain mines prior to sowing



(Poor quality photo)

Retrieving LS3 after mine – sowing duty



KMS KORMORAN
***HILFSKREUZER NUMBER 8* = HSK VIII**

Memorial Plaque in Hamburg, Germany

German survivors meet each year on 19th November to remember Fallen Comrades.
On 19.11.1991, they published this memorial to those lost on HMAS Sydney

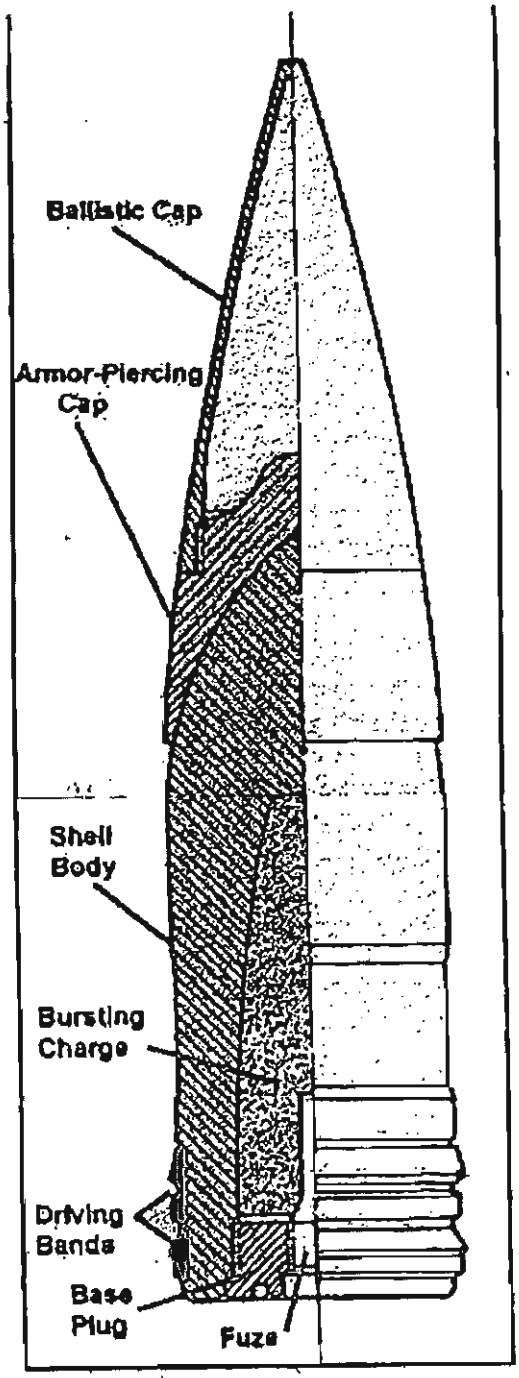
1941-1991

IN MEMORY

of H.M.A.S *Sydney* and her
brave crew, lost in action
off the West Australian Coast,
19th November 1941.

THE KORMORAN ASSOCIATION
Germany,
19th November 1991

The German Naval Armour-Piercing Shell.



Ballistic cap
The nose covering which provides greater aerodynamic shape.

Armour-piercing cap
This ensures that the shell enters the target before exploding.

Shell body
Contains all components to enable it to operate as it was designed

Bursting charge.
The size of the explosive charge is regulated at time of manufacture as per specifications.

Driving bands.
These ensure that the shell rotates in the barrel.

Fuse / Fuze
At the base of the explosive charge to detonate that charge

Base plug
To seal all components within the shell

KRIEGSMARINE GUNNERY TABLE

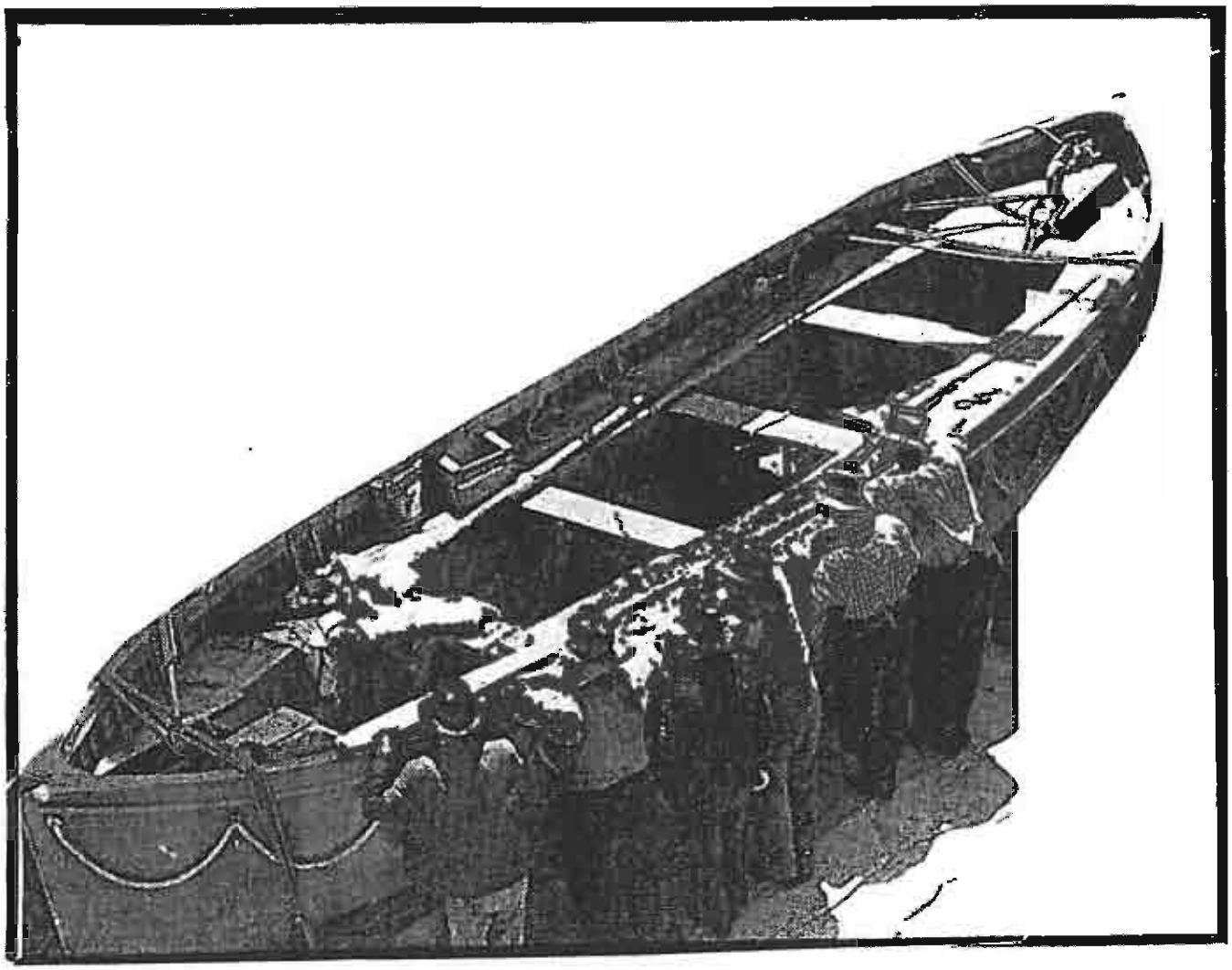
CALIBRE	WEIGHT OF SHELL	RANGE	RELOAD TIME.
15 inch	1,750 pounds	39,200 yards	26 seconds
11 inch	700 pounds	46,100 yards	20 seconds
8 inch	250 pounds	36,300 yards	9 seconds
5.9 inch	95 pounds	15.100 yards	9 seconds

ARMOR PENETRATION CAPABILITY

15 inch.	29 inches	at 5,000 yards.	18 inches	at 15,000	9 inches at 30,000
11 inch.	20 inches	"	12 inches	"	6 inches at 30,000
8 inch.	10 inches	"	4 inches	"	and 1.5 inches at 25,000
5.9 inch.	3 inches	"	1.7 inches	"	

Kormoran's four main guns took only 9 seconds to reload, in theory they could fire six times each minute or 140 shells in about 23 minutes as *Jorgensen* claimed (see page 18). Does this appear to reinforce that claim ?

KMS KORMORAN
PHOTOGRAPH OF THEIR STANDARD FIFTY-MAN LIFEBOAT
Five of these lifeboats were launched during "Abandon-Ship' procedures, 19.11.1941



Photograph by courtesy of West Australian Newspapers

[1] 46 survivors in a boat commanded *by Oberfahnrich zur See Paul Kohn* reached the Western Australian coast at Quobba Station north of the Port of Carnarvon on Monday 24th November on the fifth day at sea,

[2] 57 Survivors in a boat commanded by *Kapitanleutnant Heinz Meyer* reached the Western Australian coast at Red Bluff, north of the Port of Carnarvon on the morning of Tuesday 25th November on the sixth day at sea

[3] 70 survivors in a boat commanded by *Oberleutnant zur See Joachim von Gosseln* were recovered by the Royal Australian Navy Auxilliary *HMAS Yandra* at 1200 hours on Wednesday 26th November at position 24.59S / 112.22E on the seventh day at sea.

Submission
by

David Kennedy

David Kennedy

Locke, Debra
From: Stevens1, David
Sent: Wednesday, 31 October 2001 14:44
To: 'David Kennedy'
Cc: 'Wes Olson'; 'VE & GE McDonald'; 'jbye@unimelb.edu.au'; 'John A.T. Bye'; 'Jeremy Green'; Locke, Debra
Subject: Sec: unclassified RE: hmas sydney seminar fremantle

Thank you David, I have forwarded your information on to the relevant groups.

Best wishes,

David Stevens

Dr D.M. Stevens
Director of Naval Historical Studies
Naval History Directorate
Department of Defence (Navy)
CP4-1-41
Canberra, ACT 2601
Australia
Tel: +61 2 62662423
Fax: +61 2 62662782

-----Original Message-----
From: David Kennedy [mailto:uggles5@bigpond.com]
Sent: Wednesday, 31 October 2001 9:05
To: Stevens1, David
Subject: hmas sydney seminar fremantle

Please accept the following as a brief submission to the HMAS Sydney seminar at Fremantle on November 16. I will send, probably later today, an article I will submit to one of our group papers for possible publication before the seminar.

Looking into the possible positions of the ships, we need to take some particular matters into account.

One of the main new points in the parliamentary report on the loss of HMAS Sydney was that an underwater tube torpedo could have played a part in the sinking.

This, with the angle of the underwater tube provided by Kormoran torpedo officer Joachim Greter and documents, showed that there was a large crack in Captain Detmers' version of events.

This advance was accompanied by accounts of signals from Sydney and jamming, which were not out of place with practices of the day, remarkably Devonsire and Atlantis. These aspects indicated that there was another side to the action not addressed by official history.

The above points are sufficient, without going into detail, to establish that:

(I) Captain Detmers' version of events is open to great debate.

(II) There is sufficient evidence to establish where the Sydney and Kormoran are.

My research indicates that some of this evidence has not been accessed, or made accessible.

I would submit that, in order to help in pinpointing the location, archival material that has not been released be defined as:
(a) Having a direct bearing on the Sydney-Kormoran clash.
(b) Having a bearing on naval/merchant marine/airforce/army activities in the area of raiders or similar enemy contacts.
(c) That which refers to the Sydney-Kormoran period but which has not been revealed as being relevant to it or not.
These should be flagged on a data base.
In the case of (b) and (c), reasons should be given to as to why they are being withheld. A case in point is that of the two documents in the National Archive on signals from weeks surrounding the action withheld and given to the Defence Signals Directorate after a colleague was told officially that they were being sent to Whitehall.

For the archival and oceanographic groups: The original diary or notes of information officer Dr Fritz List in German of his lifeboat voyage be found and reviewed. I have seen scraps of a partial English translation that indicates it could be similar in content to that of wireless officer Reinhold von Malapert and navigator Henry Meyer. I found the von Malapert translation used officially had flaws in translation and gaps. The Meyer notes were on the backs of photographs in good condition. Von Malapert told me that Meyer was virtually out of action with shrapnel in his stern, indicating that the accounts, or copies, were written ashore. Von Malapert said that he wrote his in the boat. List, being involved in information, could have influenced the accounts, or required them, so the original of his work needs to be viewed if possible to form an opinion on the origin or origins of the account.

The notes of the Red Bluff voyage have a significant bearing on the research into the position of the ships because many people are using the latest interpretation of von Malapert, and Meyer, to track back from Red Bluff and 17-Mile Well, which my examination indicates was the target landing point for both boats before the second was forced by conditions to Red Bluff.

For the oral history group: The oral history recorded on tapes and documents by various researchers who have interviewed the same people should be given dates, and detail examined, to establish what is common in them and where they differ.

More could be said but I feel that the main point is that the only practical way to find the Sydney, short of metal, or oil detection, is to have all significant information. This entails serious examination of why information has not been released when its withholding may be creating unnecessary suspicion among some researchers.

If there is a huge, dark operational secret blocking discovery of the remains of HMAS Sydney and her men it might be significant, but in the light of present events and attitudes we should be able to cope with it. The greater the veil over this matter and the longer that articles and reports of fact are categorised with the cliches of "speculation", "claims of a cover-up" and the ubiquitous "conspiracy theory" the longer the growing number of descendants of Sydney and Kormoran crew will be left wondering where their forebears rest.

David Kennedy

Dave

I found this signal on a file we are examining for Joe Straczek as part of his request under the Archives Act. I spoke to him on the phone today and he asked me to pass you a copy.

Jim Ryan
Assistant Director
Classified Historical Records Review
The Defence Legal Service.

PH: 62291

Yes,

This has just been found. May be of interest.

26/9

H303/28 TJL/MS

TO A.C.N.B.

FROM C.C.A.S. P/L CODE CGM.

METHOD OF TRANSMISSION W/T DATE & TIME GROUP 28/14-34 Sept 45

RESTRICTED

Distribution :

FOLLOWING INFORMATION OBTAINED. MY 241412 LAST PARAGRAPH GERMAN NAVAL ATTACHE ADMIRAL PAUL HENNYKER ONLY KNOWS H.M.A.S "SYDNEY" WAS SUNK SOME HUNDRED MILES OFF PERTH. HE DOES NOT KNOW WHETHER SHIP WAS TORPEDOED BUT STATED THAT SUBSEQUENT JAPANESE BROADCAST THAT SHE WAS TOWED TO JAPAN WAS DEFINITELY INCORRECT. FURTHER NO (R) NO SURVIVORS PICKED UP BY ANY AXI VESSEL AND NONE REPEAT NONE BROUGHT TO JAPAN.

JAPANESE NAVY MILITARY MINISTRY HAVE STATED NOTHING KNOWN THERE BUT ENQUIRIES ON OUR PART ARE CONTINUING. I FEEL HOWEVER THAT NO INFORMATION IS KNOWN ANYWHERE IN JAPAN WHICH COULD SUPPORT HOPES THAT ANY PERSONNEL OF H.M.A.S."SYDNEY" ARE ALIVE.

1st.N.M.

ORIGINAL SIGNAL ON:
FLAGS INWARD 1-8-45—30-9-45
MA074/9 Box 12.

OUR CAR 2001-0385

Submission
by

D.R.E. (Ted) King

D.R.E. (Ted) King

P.O. Box 98,
KALBARRI, 6536

23rd September, 2001.

Phone: 99.371027

Mr. David Stevens,
Naval History Directorate,
Sea Power Centre,
Department of Defence,
CANBERRA ACT 2600

Dear Sir,

Please find enclosed copy of Chart and Statement I forwarded to the Joint Standing Committee. You most likely have same. I would like to add that the Anomoly at 27° 11.71 x 113° 12.88 has been checked by one other Boat and they report it looks as though there is something "square" there, but the sea was rough at the time. However, they will check again at a time when the sea is calmer.

The Anomoly circled on Porter!s compass bearing has not been located up till now and all I know is that it is there somewhere, as a Cray-fisherman working that area says it lays East-West. Some Fishermen are reluctant to give positions because they are good fishing areas.

As for the Sydney search area (Port Gregory). A party from South Australia will be checking one of my Anomolies which shows promise, on the 6th October, so we will have to wait on these results.

Yours faithfully,

D.R.E. King (Ted)

P.O. Box 98,
KALBARRI, W.A.
6536,
8th July, 1998.

Secretary,
Defence Sub-Committee,
Joint Standing Committee on Foreign Affairs,
Defence and Trade,
Parliament House,
Canberra, A.C.T. 2600

Dear Madam,

Supplement to Submission

As you will gather from my original submission, I believe the wreck of H.M.A.S. Sydney and the Kormoran lie approx. 80 miles apart. In the area in which I believe the Sydney went down, we have located, with the aid of a Submersible V.C.R., an unexploded projectile (Naval Shell) which has been identified as such. We have also located, what appears to be a human skull. This shows up on most V.C.R.!s as an object with two holes about the position of eye sockets, yet on one particular V.C.R. as a human skull, beyond doubt. Maybe because this particular V.C.R. gives an extra clear picture.

At time of writing I am waiting for experienced deep-sea Divers to arrive., then we hope to recover both objects and maybe then they will reveal something. I can!t say when these Divers will arrive, as it depends on their work-load.

The Kormoran area is very interesting and a lot of information points to this area. I have included with this supplement a Map and Statements dealing with this, and hopefully this will explain why I find it very interesting. I have a report from a Fisherman who claims to have located a small area about a mile across which is uncharacteristic with the surrounding ground. He claims he has never seen anything like it in all his years of fishing. There is something square and somethin_ protruding upwards. He states it looks like a lot of debris spread over the seabed. The G.P.S. on this location is $27^{o}.11.71$ South x $113^{o}.12.88$ East. I am having this location checked by two other boats when they are in the area. If they confirm the aforesaid Fisherman!s claim, then I will organise a dive on the site. As the location is approx. 80 miles from Kalbarri and in 78 metres of water I won!t check this site unless the information is confirmed.

I have a compass bearing on what resembled an explosion (see Statement by R. Porter (enclosed). This Bearing crosses this location. A statement by C.W. Munyard (enclosed) is also interesting. The compass bearing taken from this position crosses R. Porter!s bearing, but a little to the west of position $27^{o}.11.71$ South x $113^{o}.12.88$ East. This bearing could be a bit rough as I can!t pinpoint the exact position on the coast -line where the Farmer observed this so called tropical storm (as mentioned in Munyard!s statement).

On the 27th November, 1941, F/L Payne reported sighting an Oil

4

stain between Datum 27°00 x 113°32 and the Coast - this is approx. 25 miles from position 27°.11.71 South x 113°.12.88 East . approx. North East.

Then we have this drift theory compiled by The University of West. Australia and several opher people. They claim the drift of this Debris commenced approx. 60 miles from this area at 2400 hours. Three German survivors state the Cruiser was still in sight at dusk, by which time the Kormoram had blown up. In this case it would bring the explosion of the Kormoran very close to the time R. Porter and Jerry Rose sighted the smoke (Cordite Plume). This being so the drift would have commenced 4½ - 5 hours earlier and so bring it closer to the area I am interested in. I think tjat if a search for the Kormoran is conducted then this area should be given top priority.

Yours faithfully,

D.R.E. King

Interviewed Roy Porter - 19th April, 1992.

Mr. Roy Porter lives at Riverside which is situated 3 miles East of the Murchison River Bridge (Galena Bridge) and it was from this location that he observed the following -

Mr. Porter states he was walking down from his Shearing Shed towards the house a few minutes after sun-down, when he noticed a column of coloured smoke in the Western sky .... he stopped to observe this phenomon. He states the column of smoke was at its full when first seen because it stayed intact for a short period of time, then began to drift with the prevailing wind, forming a big letter "S" then just faded away, leaving no indication of a smoke column.

He cannot say for sure of the exact date, but did add that a few days later he was carting wheat into the Siding at Binnu along the Coastal track (Northwest Coastal Highway) when he was asked to pull off the road to allow a Convoy to pass ... there were many trucks in the Convoy - some Army, some Civilian. He didn!t see the trucks return, but was told they did return with German Prisoners from the Kormoran.

Compass Bearing taken from position on walking path a little left of a now dead tree, to a position on Horizon where smoke column was seen is 295^{o} .

D.R.King 23-4-92

D.R.E. King

Before I had interviewed Mr. Porter I had read a report in the Brisbane Courier Mail dated 31st October, 1987, of his sighting this column of smoke.

Re the column of smoke - my opinion is that it would have required a force at the base for it to have ascended unaffected by the prevailing wind until reaching it!s full height, at which time this was first sighted by Mr. Porter. I consider the force would have to be very powerful for the column to have ascended high enough for Mr. Porter to have seen it from his property, Riverside, which is approximately 35 miles from the Coast.

I believe this to be the same column of smoke Mr. Jerry Rose reported seeing from Drummonds Cove and maintained that it was a Cordite burn. I believe it was the Magazine of the Kormoran going up.

D.R.King 23-4-92

D.R.E. King

Jerry Rose was fishing from the beach at Drummond!s Cove in November, 1941, with some friends, when their attention was drawn to a plume of smoke rising out at sea. Jerry!s immediate response was, that it was Cordite burning. When questioned by his friends as to how he would know it was Cordite, Jerry explained that, as a lad, he lived near a Naval Depot in England. Periodically they burnt the old Cordite and once you see Cordite burn, you will always recognise it. He maintained that it was definitely Cordite beyond all doubt. A day or two later they heard rumours in Geraldton that the Sydney was lost.

D.R.E. King 23-4-92

D.R.E. King

I knew Jerry for many years. One day we were talking about the loss of the Sydney when he told me of sighting this plume of smoke and how he wondered if it was connected with the Sydney in any way. I have no doubt in my mind that he saw that plume of smoke. I have spoken to Naval personel and they claim that Cordite does burn differently and could be recognised as same. Also, if it was Cordite at sea, it could only mean one thing and that is the Magazine had blown. Although Jerry did not give any time of the sighting, to be fishing from the beach they would be fishing for Tailor and from my own experience I would say that time would be around 1600 hours to just before dark.

D.R.E. King 23-4-92

D.R.E. King

Statement by Mr. C.W. Munyard - 4th August, 1997.

During late 1949 early 1950 whilststationed in Geraldton on behalf of a Company, I had come into contact with some residents of the Northampton area who said that they had witnessed what they, at fi:st thought to be a severe tropical storm well out to sea North West of the adjacent coastline but which they later thought might have bee a naval battle as the "storm" centre did not travel as is usual. There were constant flashes against the distant skyline and there were the sounds of some obviously thunderous explosions.

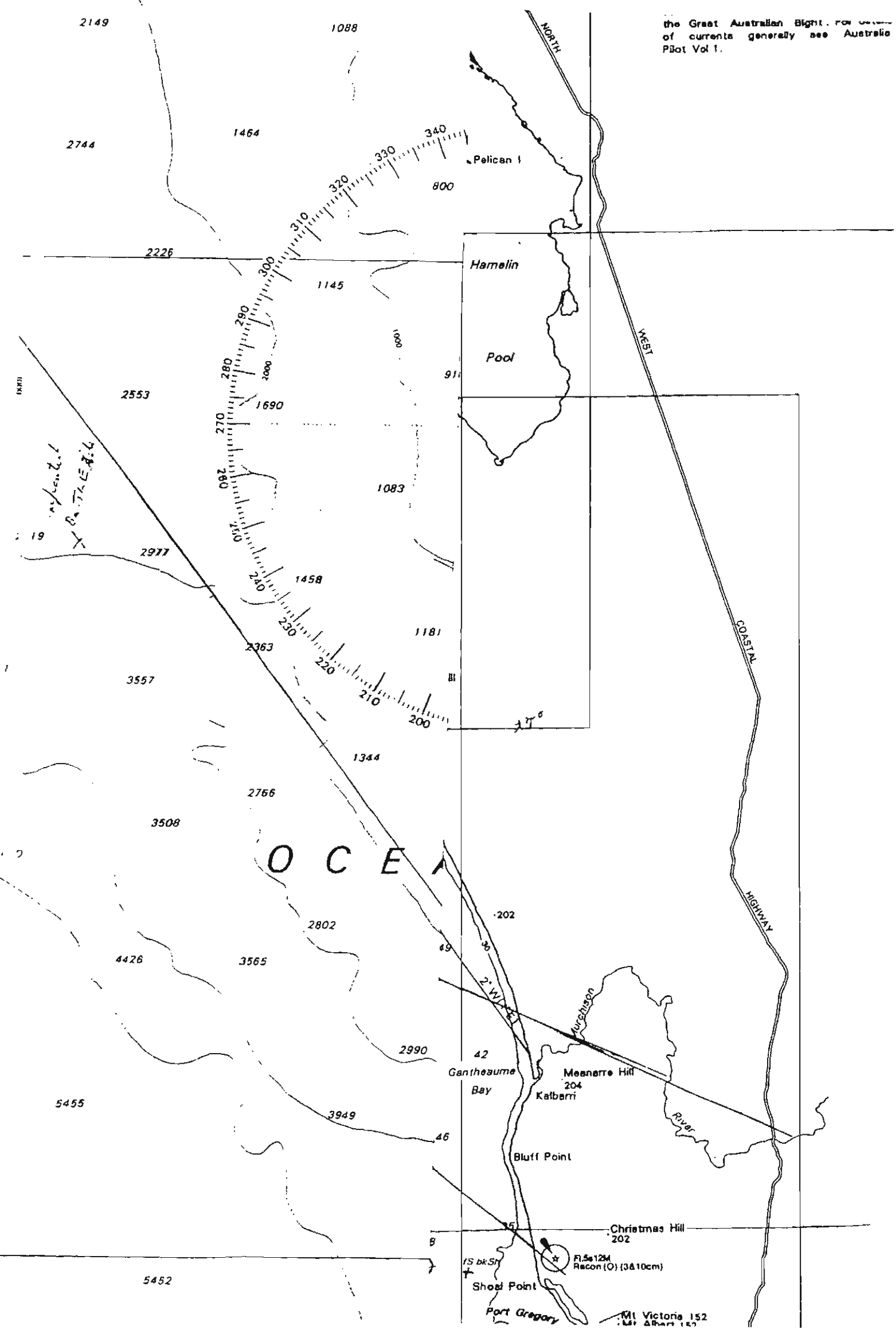
This "storm" occurred late on the 19th November, 1941.

Statement .... MR. Norm Thomas - Carnarvon

Mr. Thomas mentioned a very close friend of his, aged 85, who has lived in the Shark Bay area almost all his life. He was working on Dirk Hartog Island in November, 1941 - he was at the Outcamp on the North end of the island when he heard gunfire one evening and thought it was Naval Gun Practise. A week or so later, when he went to the Homestead for supplies, they told him about the Sydney. He believes that what he had heard could have been the Sydney engaging the Kormoran and that the gunfire was South of his camp.

I am unable to interview him because he has told Mr. Thomas he does not want to be hassled and I must respect this. There isn't very much to go on here, except that the gunfire was in the South, which points to the area I believe the Kormoran is and that this statement should be recorded.

D. King 20th Sept 1998


the Great Australian Bight. For details of currents generally see Australia Pilot Vol 1.
NORTH
WEST
COASTAL
HIGHWAY
Pelican I
Hamelin
Pool
OCEAN
Gantheaume Bay
Meaneare Hill
204
Kalbarri
Murchison
River
Bluff Point
Christmas Hill
202
Fl.5s12M
Racon (O) (3&10cm)
Shoal Point
Port Gregory
Mt Victoria 152
2149
1088
1464
2744
800
2226
1145
2553
1690
1083
2977
1458
1181
2363
3557
1344
2766
3508
2802
4426
3565
2990
3949
5455
5452
340
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320
310
300
290
280
270
260
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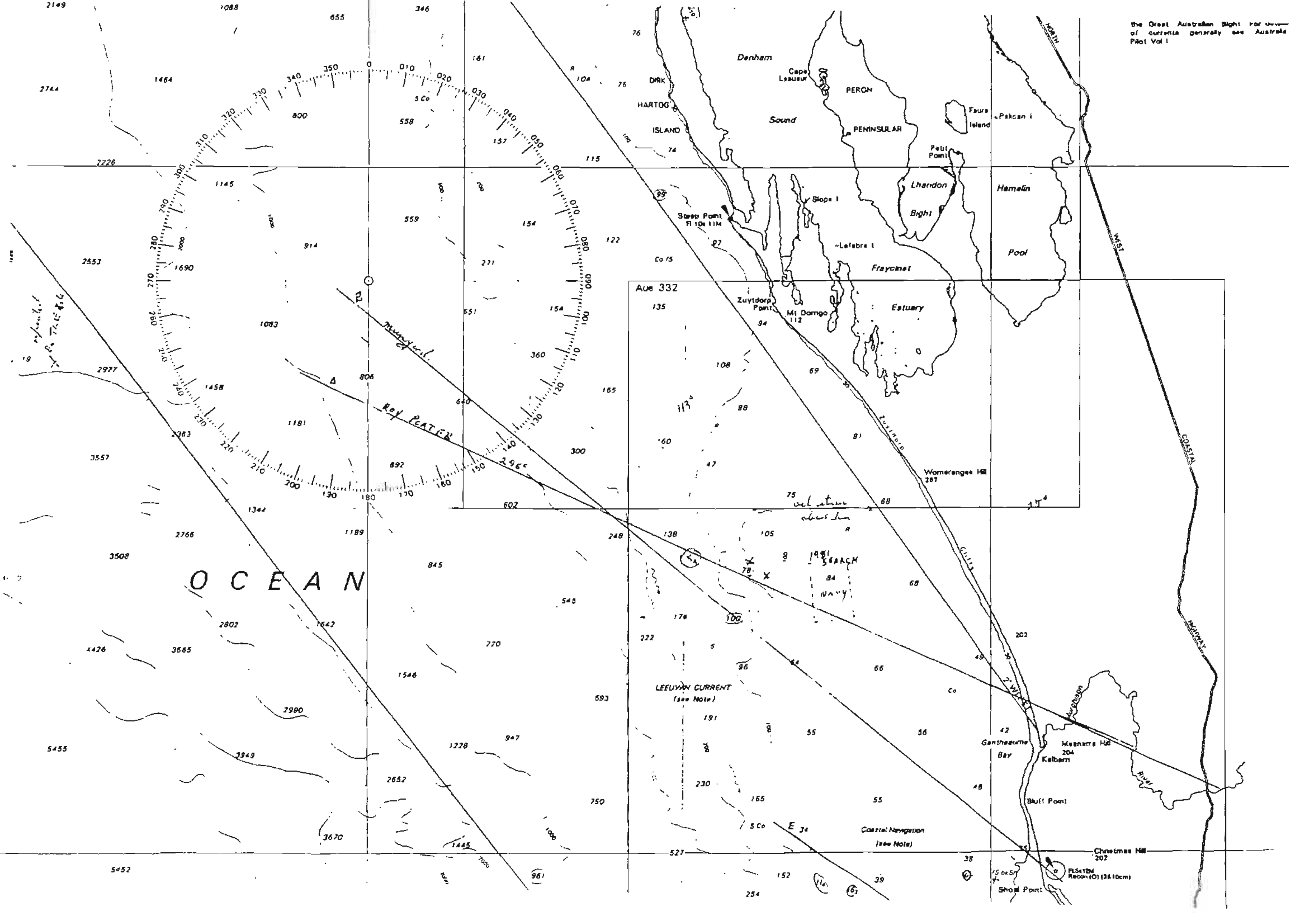
200
202
42
46
35



the Great Australian Bight For details of currents generally see Australia Pilot Vol I
NORTH WEST COASTAL HIGHWAY
Denham Sound
Cape Lesueur
PERON PENINSULAR
DIRK HARTOG ISLAND
Faure Island
Pelican I
Petit Point
Lharidon Bight
Hamelin Pool
Slope I
Steep Point Fl 10s 11M
Lefebre I
Freycinet Estuary
Aus 332
Zuytdorp Point
Mt Dorngo 112
Zuytdorp Cliffs
Womerangee Hill 287
1981 SEARCH
NAVY
LEEUWIN CURRENT (see Note)
Coastal Navigation (see Note)
Murchison River
Meanarra Hill 204
Kalbarri
Gantheaume Bay
Bluff Point
Christmas Hill 202
Racon (O) (3&10cm)
Shoal Point
OCEAN
Rey PEATER
246°

Submission
by

F.E.M. (Ted) Lilley

Research School of Earth Sciences
Australian National University

F.E.M. (Ted) Lilley

Research School of Earth Sciences
Australian National University

Message 218/220

with_best_wishes

To: j.bye@earthsci.unimelb.edu.au

From: Ted Lilley <Ted.Lilley@anu.edu.au>

Date: Thu, 18 Oct 2001 13:32:03 +1000 (EST)

SEARCHING FOR A SUNKEN SHIP BY MAGNETOMETRY
A contribution to the "HMAS Sydney (2) Symposium", November 2001
Notes of 18 Oct 2001
F.E.M.(Ted) Lilley
Research School of Earth Sciences
Australian National University, Canberra.
Ted.Lilley@anu.edu.au

General:
The magnetic field of an object like a ship will be approximately dipolar, and decrease as the inverse third power of distance away. Thus one can expect that a magnetometer would have to be within several hundred metres of a ship like the Sydney, and closer to a smaller ship like the Kormoran, to detect it by the magnetic effect of the steel in the ship.

Hence magnetometer surveys by a surface ship or aircraft would not be directly effective in locating a ship on the seafloor, except in water depths less than say 100 m. For two sites of depths 800 m and 5000 m, possibly a surface ship towing a submerged magnetometer on the end of a cable might be possible, so that the magnetometer traversed the ocean bottom just above the ocean floor. The process would no doubt be more practical for the 800 m site than the 5000 m site. Deep-tow submersible magnetometers have been used in different places around the world to investigate seafloor magnetisation patterns, but to my knowledge there is no existing technology or expertise in Australia. It is probably possible to buy a marine magnetometer "off the shelf" ($20k?) which could be put on the end of a cable and would withstand the pressures of the deep ocean, but extra technology would be needed, for example, to tell how far from the ocean floor the magnetometer was when in operation.

However, thus deep-towing a magnetometer, I imagine a ship could proceed slowly (at several knots?) to cover a target area with survey lines nominally 100 m(?) apart. A target area 1 km x 1 km (10 km of survey line) could thus be covered by a ship in a few hours, while a target area 10 km x 10 km (1000 km of survey line) would take some two weeks.

In addition, measuring profiles of the magnetic field vertically through the ocean column by a free-fall (and then free-rise) magnetometer, such as recently developed at the Australian National University, could help check a particular target. In water depth 800 m each profiler-measurement might take say 2 hr, and in water depth 5000 m say 3 hr. Thus some 10 profiles a day might be possible. If these are planned to be spaced 100 m apart on a grid covering a target area, then a 1 km x 1 km target area would require 100 profiles (i.e. perhaps 10 days of ship time), while a 10 km x 10 km target area would require some 10 000 profiles, and 1000 days of ship time (no doubt prohibitive, even if the profiling operation were refined to take less time).

Background effects:
The principle is that one is seeking perturbations, caused by a steel ship, against the background of the main magnetic field of Earth. Two particular characteristics of this background field are important, and

need monitoring. They are as follows:

1. The magnetic pattern in a target area, due to the magnetisation of crustal rocks.
As is well demonstrated by many magnetic maps used in geological mapping, the magnetisation of crustal rocks may be weak (as in many sediments on the seafloor) to strong (as in the rocks of an iron ore deposit). Seeking a sunken ship by magnetic means will be much easier if the crustal background magnetisation pattern happens to be weak and smooth, and possibly very difficult if the background crustal magnetisation pattern happens to be strong and variable.
Mapping the magnetic field of a target area by a surface ship (or, perhaps better, by an aircraft carrying out a regular aeromagnetic survey), should give valuable information regarding the magnetisation characteristics of the seafloor, especially for a 800 m depth target, but also for a 5000 m depth target. Obtaining surface magnetic maps of a target area is thus an essential first step to determine the background setting.

2. The magnetic field of the Earth is changing all the time, from minute to minute, and from hour to hour, due to electric currents flowing externally in the ionosphere, and internally in the oceans and surface rocks.
Such changes need to be monitored, especially for "magnetic storms", during all magnetic measurements. Such monitoring may be achieved by setting up a recording magnetometer as a base station on nearby land, or on the seafloor locally.
Another way to minimise the effects of changes with time of Earth's magnetic field is to make magnetic gradiometer measurements. The profiling magnetometers described should be able to be set up in gradiometer mode (though that development has not been addressed yet).

In summary:
First obtain maps of the surface magnetic field of a target area. Not too far from the coast, a standard aeromagnetic survey by a contracting company may be the best option. Farther offshore, an aeromagnetic survey may still be possible; otherwise a survey carried out by a ship towing a surface magnetometer may be effective.

Second, tow a deep magnetometer along a grid of lines nominally spaced 100 m apart covering the target area. The magnetometer should be kept to within 100 m of the seafloor.

Third, carry out vertical magnetic profiling systematically over a target area if the area is small enough. Otherwise keep vertical profiling in reserve, to check points of particular interest which may arise from deep-towing a magnetometer.

Cost estimates:
My estimates are that one is looking at perhaps two weeks ship-time, and perhaps $100 000 for instruments, for a first campaign.

Message 285/289

comments

To: j.bye@earthsci.unimelb.edu.au
From: Ted Lilley <Ted.Lilley@anu.edu.au>
Date: Tue, 30 Oct 2001 14:17:21 +1100 (EST)

Dear John

I have now read through, and enjoyed, the "Preliminary draft" which you sent me on 28 Oct 01. I learned a lot. (I have not yet read, though would be interested to do so one day, your prescribed reading [1].)

I have some further miscellaneous comments:

1. Firstly, DSTO has specialists in the topic of magnetic fields of ships and submarines, and one can only imagine that they should know much more about the whole topic than you and I, including search techniques and possibilities. It would seem a surprising omission if there is no similar DSTO contribution to the SYDNEY symposium. If there is, then it will be interesting and valuable to "compare notes" with them. If there is not, then perhaps your submission will "flush out" some comments from them.

2. Now that I have some more idea of the search locations, I have checked a map of Australian sedimentary basins, and fortunately the search areas seem to be generally on basin areas. I say fortunately, because the magnetic characteristics of such basins are typically smooth and weak, due to the uniform (and weak?) magnetisation of typical sedimentary rocks. Of course there can be exceptions, and local variations, but to have a general background of sedimentary basins is a very good start.

3. You mention a steaming speed of 5 knot when towing a deep magnetometer. As such an instrument and technique is not yet in hand(!) we can not be sure, but I think that slower, say 2 or 3 knot, may be a safer estimate. Again I estimate the development work possibly needed here. Also, at the end of thousands of metres of streamed cable, hoping to run survey lines in parallel just 100 m apart is probably just a dream. However enough survey lines back and forward over a target at an attempted spacing of 100 m would probably be unlucky to miss it altogether.

4. For the inshore search area, where the water is order 100 m deep, a modern aeromagnetic survey could be most effective in showing not only the background pattern of crustal magnetisation, but also the magnetic signals of any (large ship) targets on the seafloor. There are contractors in Perth who could run such a survey easily. In fact, it is quite possible that such surveys have alreay been run, and data exist, in connection with geological mapping.

5. By remarkable coincidence, I tested my magnetic vertical profiler from Franklin in May 1995 at sites which included
   27 31 S, 112 00 E
   28 15 S, 112 30 E

29 08 S, 113 09 E
as the ship proceeded to Fremantle from off NW Cape.
Generally, as far as I recall, the data did indicate minimal disturbance from seafloor crustal magnetisation.

(The paper reporting the vertical profiler is just published, and I shall with pleasure put a reprint in the post to you, with the compliments of authors Lilley, White and Heinson.)

6. I think you make a good case for say a 2 weeks cruise, to check out the target sites. If such an exercise contributes to the development and proving of a deep-tow magnetometer capability in Australia, then I think there is no doubt that that is a valuable contribution to make. Again the Navy, or DSTO, should be a prime client? Even environmental authorities?

7. A few years ago, there was much publicity when one of the new Collins Class (?) submarines, as a demonstration and test, sank an old navy ship off Perth. That known target would be a possible testing ground for a new deep-tow magnetometer (and other gear). Perhaps a few days operating out of Fremantle in advance of the cruise you outline?

Generally, I think your report is splendid.

Again, I hope all this helps.
Best wishes,

Ted.

Submission
by

Robert Lloyd

Robert Lloyd

1

Del, Please copy to J. Green + W. Olson. Jud

Forwarded 8/10/01.

Robert Lloyd
14 Goodacre Avenue
Winston Hills 2153
N.S.W. 02/10/01

Suggestion That The Navy Search For The " Kormoran"

It is known that the Navy has an air- born laser system for mapping the sea- bed. It seems to be used mainly in mapping areas of the coral-reef in Queensland. My suggestion is that this system be used to locate the "Kormoran" using the location postulated by Mr Lindsay Knight. As the Navy will map that area in due course,the expense of doing it now will be minimised. There will be no need to map the area twice.

I suggest that an area of 25 square-miles be mapped with the location postulated by Mr Lindsay Knight being the centre of that square. This search would take a minimum of time and of expense.

All this is assuming that the laser system can operate in the depth of water at the location postulated. As the depth is not great it would seem to be not a problem. The assumption is also that the resolution of the system is such that the bow of the "Kormoran" can be resolved and thus detected. If this assumption is wrong, then we are out of business. Perhaps the Navy can get a more powerful laser and a resolution that can detect wrecks?

The advantage of my suggestion is that the claims of Mr Knight can be refuted or otherwise once and for all by the Navy performing a task it is going to do anyway.

For your consideration

Yours sincerely

R.G. Lloyd
Robert Lloyd

I have taken the opportunity to send to you a copy of my paper " When Did They Know. " This paper has been accepted by the John Curtin University Library and will appear on the Electronic Research Archive of that library.

The West Australian Maritme Museum has filed the paper for study by scholars.

The paper has been published by the White Ensign magazine in the autumn ,2001, edition.

The paper has three historic firsts.

1 Documentary proof that the Prime Minister knew *Sydney* was sunk as of the 25th November 1941.
2 Documentary proof that the Prime Minister knew "all hands were lost " as of the 25 November 1941.
3 Revealed for the first time, and with documentary proof, that the Prime Minister saw the Governor General the day after *Sydney* was thought to have been sunk.

The book "John Curtin " by Lloyd Ross is held in some repute in academic circles. There is one story in the book about *Sydney* and the Prime Minister. I refute that story and provide an alternative.

I introduce a new actor into the *Sydney* drama :- Mr Roy Curthoys. The archives of Roy Curthoys may contain an insite into the *Sydney* question.

This paper is not a submission to you for the 16 November meeting in West Australia. It is sent to you purely for your interest.

Yours sincerely
Robert Lloyd

WHEN DID THEY KNOW?

When was it first known that HMAS *Sydney* had sunk? The short answer is that it was never known. No one saw *SYDNEY,* sink so perhaps she never sank. After all, it was said that *Sydney* was seen by the Jimmy Doolittle "Thirty Seconds Over Tokyo" air raid in 1942![1]

Putting aside the sensational, the long answer is revealing. On the 13th December 1941, the Acting Chief of the Naval Staff, John Dumford, complained to the Prime Minister that, as of the 26th November 1941, "when nothing was known of the fate of HMAS *Sydney*".[2] Dumford was upset that the War Cabinet had , on the 26th November1941, decided to inform relatives that their husbanes or sons were missing in action, when the Naval Staff knew nothing of the fate of HMAS *Sydney*. Yet Gavin Long , general editor of the offical Australian war history, writes in his book The Six Year War ,page 119, "Also on the 25th November the loss was confirmed of the Australian cruiser *Sydney*". Long gives no reference as to how he knew this.

Nevertheless, Long was right, for the Prime Minister knew on the 25th November that *Sydney* was sunk. Mr Curtin also knew on the 25th, that "all hands"[3] were lost. These facts come from the diary of Frank Dixon the first Federal News Editor of the ABC. On Tuesday the 25th November 1941 the entry in the diary says:- " Mr Hamilton said that the Prime Minister [Mr Curtin] told this confidentially to the Press at his early evening interview." The "this" was "that the ship was lost with all hands". Mr Hamilton was the ABC's representative in Canberra . So, some people knew on the 25th November 1941 that HMAS *Sydney* was "lost with all hands" when the Naval Staff appeard not to know.

In his biography[4] of John Curtin,the author, Lloyd Ross presents a story that of a Sunday the Prime Minister would visit the Governor General. There by revealing his concerns and worries to Lord Gowrie, the Prime Minister would be helped and reassured. In particular, Lloyd Ross has John Curtin saying :- "When the *Sydney* was sunk I couldn't bring myself to make the annoucement—. So I went to Government House and talked to the Governor General."
"Put it off for a couple of days , Mr Prime Minister, you might get better news." was the Governor General's advice. This the Prime Minister did

The only Sunday during which this event could have occured was Sunday 23rd November 1941. For, the Prime Minister told the nation on Sunday 30th November 1941[5], the Sunday after he had spoken to the Govenor General. It could not have been the previous Sunday, the 16th November 1941, because the battle between the *Sydney* and the *Kormaron* would not take place until the 19th November 1941. So the Prime Minister knew that the *Sydney* was sunk on the 23rd November 1941. How is it that the Prime Minister knew of the sinking on the 23rd November 1941 when the Navy seemed not to know as of the 26th November 1941? How could the Prime Minister know on the 23rd November 1941 when the Navy first got information[6]late on the 24th November 1941 that a cruiser – only suspected of being the *Sydney*–had been in an action and was on fire?

1 Inquiry Into The Sinking OfHMAS *Sydney*; Vol 10 page2286 Poniewiewski.

2Australian Archives (Can): The Sinking OfHMAS Sydney GUIDE NO 3; page 79 Summerell.

3Australian Arhves (Syd): ABC Federal News Editor Diary 1941, 25.11.1941; SSP286/18.

4John Curtin A Biography —Lloyd Ross. page 367

5Sydney Morning Herald December 1st 1941.Front page.

6Ibid 2 above page 51.

The reasoning in the above paragraph rests on the truth of the story told by Lloyd Ross. How true is it? There is no reference given by Lloyd Ross to this story. Such a defect throws into doubt the validity of the story and the inferences gained. So care must be taken. However, in the archives of Lloyd Ross, held in the National Library, there is a letter[7] from a Mr Roy Curthoys to Lloyd Ross. In the letter, Roy Curthoys reminds Lloyd Ross that he - Curthoys - told Lloyd Ross stories of the Prime Minister and the Governor General and that those stories were off the record. Roy Curthoys was a journalist, the former editor of the Argus, employed as the New York Times Australian representative and the Times of London representative. Roy Curthoys went back a long way with John Curtin. They knew each other in the twenties[8].There is no doubt that it was Roy Curthoys who told the story of the *Sydney*, the Governor General and the Prime Minister to Lloyd Ross. These facts add much validity to the story told by Lloyd Ross. Roy Curthoys left his archives to the National Library. Regretably, they are not open to the public until the year 2018. One wonders why?

Some authors have used the story of Lloyd Ross almost word for word. Norman Lee in "John Curtin, Saviour of Australia" page 90 writes "On the Sunday afternoon after he heard the news,Curtin went to Government House–". Lee references the story to Lloyd Ross. David Day in his biography of John Curtin uses the words of Lloyd Ross, page427 . David Black, Associated Professor of Curtin University, at the October 1998 Medals Ceremony says: -"[Curtin] Sunday afternoon—he would sit in the study of the then Governor General, Lord Gowrie,—— seeking Gowrie`s advice on how to announce the loss of *Sydney*". There is one problem with all these accounts, including that of Lloyd Ross. None of them is true. All are wrong.

The only Sunday during which this story could have occured, if it occured at all, was Sunday 23rd November 1941. This was shown above. That Sunday, 23. 11. 1941. ,the Governor General was in Sydney not Canberra. He attended Divine Service at St Andrews Cathedral in the morning.[9] John Curtin could not have gone to Government House because the Governor General's Sydney residence was Admiralty House. John Curtin was in Canberra that Sunday.[10] Unless it is proposed that the Prime Minister made a dash up the Hume Highway to Sydney and back again the same day—for he was in Canberra on Monday 24th November 1941.[11] ——to tell the Governor General that he could not bring himself to announce to the nation the loss of the *Sydney*. Clearly, it never happened. Lloyd Ross has made a blunder and the other authors have followed.

The Prime Minister, John Curtin, was received by the Governor General on Wednesday 26. 11. 1941. at Government House Canberra[12]. The Governor General having returned from Sydney on Tuesday 25 .11. 1941. The story can make sense, if the Sunday is eliminated, for the Governor General said "Put it off for a couple of days—". The Prime Minister announced "a couple of days " later, on Sunday 30th November 1941, the loss of the *Sydney*. This meeting of the 26th November 1941 seems to be the meeting that Lloyd Ross meant to refer. If so, there is no revelation about the Prime Minister knowing about *Sydney* three or four days before the Navy knew. There is , however , the question of the Prime Minister knowing on the 25th November 1941 when the Navy did not know on the 26th November 1941. That question remains unanswered.

As in all good mystery stories, once one conjecture is resolved another arises. On Wednesday, the 19 November 1941, , the day of the *Sydney–Kormoran* battle, the Prime Minister was in Canberra[13]. On Friday, the 21 November 1941, the Prime Minister was in Canberra[14]. On the day between those two dates, Thursday, the 20th November 1941, the Prime Minister was in Sydney seeing the Governor General at Admiralty House[15]and attending the funeral service of the first Labor Prime Minister, Mr Watson ,at St Andrews Cathedral[16]. So, the Prime Minister did make a dash up the Hume Highway, or did he go by train?, saw the Governor General,attend the funeral service, then dashed back to Canberra. What subject could it have been that made the Prime Minister see the Governor General? Could that subject have been the sinking of HMAS Sydney? How could the Prime Minister know at least six days before the Navy appeard to know? This speculation is too extreme. We are left, as we started, with the question—When did they know?

7 National Library (CAN) : MS3939, Box 41,Serial 1/ Folder 3, Letter 25-8-1958 Roy Curthoys to Lloyd Ross.

8 Ibid, 4 above, page 77.

9 Sydney Morning Herald Monday 24.11.1941, page 6.

11 The Canberra Times Tuesday 25.11.1941. page3.

12 Sydney Morning Herald Thursday 27.11.1941, page 8.

13 Sydney Morning Herald Thursday 20.11.1941, page 8.

14Ibid Saturday 22.11.1941. page 15.

15 Ibid Friday 21.11.1941. page 6.

16 Ibid.

Submission
by

Dr John McArthur

Dr John McArthur

Forwarded 18/10/01

Dr D Stevens
Director: Naval Historical Studies
Naval Historical Directorate
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Campbell ACT 2601.

Dear David,

Here is my submission. I've not given references as they will be included in full in the copy I will bring with me to the meeting.

I can back up the arguments made here and will do so. As I see it the target for this submission is the Archival Committee chaired by Mr Olson. By the way I have nothing against Olson – after all I have never met the man face to face. The issues are as I see them, personalities do not enter into the submission at all.

I trust we will meet at the Seminar.

Best wishes

John McArthur

John McArthur
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9 October 2001

Submission on the Use of Archives to locate *HMAS Sydney*

This submission is in two parts. The first part deals with a consideration of the problems that attend archival research and discusses the few possible leads that may give some guide to *HMAS Sydney's* final resting place. The point of view in approaching issues which arise from these problems is that of a reasonably experienced researcher who has used archives extensively. It is not a theoretical polemic. It should be noted that the position taken is not altogether value free because of the writer's involvement with the *Sydney* saga.
The second part of the submission also critiques the structure and process envisaged, as well as the terms of reference that have been set for the deliberations of the sub-committee charged with evaluating submissions dealing with archives.

Archives - how accessible are they?

An archive is at once an institution - a place, as well as a collection of papers, which someone - often a trained archivist - has judged to be worthy of preservation. An archive does not necessarily contain papers which relate only to by-gone times but may also contain recent items which are perceived to be of future value.

The archives which deal with the loss of *HMAS Sydney* are fragmentary and consideration must be given to the many reasons which may account for this. First, documents may be lost or misfiled. Neither condition may be permament, but for any researcher, time to research is a factor that cannot be ignored. If documents are lost or misfiled the chances of them being 'discovered" in the time given for a research project may be remote. Documents may also be deliberately or accidentally destroyed so that a seamless progression of information is impossible. If critical documents are destroyed then a full understanding of an issue, event or problem may never occur. Barbara Winter has made it clear in her biography of Rupert Long, the Director of Naval Intelligence during World War 2, that after the war he requested all documents be sent to his office and that many were subsequently destroyed. Whether any of these had to do with *HMAS Sydney* is merely conjecture. Long, ever secretive, took his knowledge to the grave.

Archival documents may be souvenired or, worse still, deliberately removed by researchers. In fact, documents may be souvenired long before they become archives. The case in point is that of Des O'Neil, a former RAAF intelligence officer and later a Member of the W.A. Parliament. On his retirement O'Neill found in his private files many documents which related to the survey and construction of a secret wartime airbase on the Anjou Peninsular. These were eventually returned to Australian Archives.

Archives may be subject to a purge of information which may be construed to be "in the national interest". Such a warning is given to all researchers who interrogate files in the United States of America archives at College Park Maryland. On the one hand, if a purge involves the extraction of a document, researchers will be none the wiser. On the other hand, another less-subtle form of a purge is the blacking out of information on a file so that its contents are impossible to read. The file is available

but it is useless as a document except to produce as evidence that information is available but access to it is denied.

Files may also be removed and sent to a third party for evaluation. The third party may be a national state whose interests are still important to the host country. Such a case exists with two files relating to messages relevant to *HMAS Sydney* in her last days. These files have been sent to the British High Commission for evaluation. Finding out about their fate is an exceedingly difficult task as any enquiry about their whereabouts or about any decision that may have been made is met with a wall of silence.

Restricted access may be given to files. The Archives Act provides for such an eventuality on several grounds. File contents may be masked and thus denied access to a researcher.

Often it is impossible to traverse a huge field of files that may reflect something on a topic. Once again, time is an important factor that must be maximised in terms of profitable research findings. It is simply impossible to examine every file in an area in the hope of discovering a tidbit of information.

The *Sydney* story with its locations of action and sinking may never have all its gaps filled as there may be files in other countries such as Holland, England, Germany, Africa and Russia which might shed some light on an aspect of *Sydney's* movements and last moments. To suggest that **all** relevant files have been inspected is naïve, as "all" (by definition) means wherever they may be in the world.

Archives - how trustworthy are their contents?

Most archival institutions warn the researcher that although a file may be available there can be no guarantee of its provenance i.e., the accuracy, the validity or the reliability of its contents. A great mistake is to take as absolutely truthful and accurate the contents of a file simply because it carries "official" status. It is important when reading a document to consider its writer, the context in which it was written and the outcome that was desired. Determining the latter is difficult when, in the case of a report or a signal, its response is missing.

The contents of reports may not necessarily represent the truth of the writer's view but the result of obedience to an order to rewrite them to achieve a certain purpose. An archivist who wants to clear up ambiguity may edit files. Precisely this action has been taken by R. Summerrell in his preparation of archival sources relevant to researchers seeking information on the loss of *HMAS Sydney.*

Files in archives may contain disinformation designed to trap later writers into making judgements which, in reality, have no valid base. Omitting vital information may also lead a researcher to arrive at misleading conclusions which are based mainly on assumptions.

Archives - and researchers

How researchers use files - even the same files - depends on what they want to argue. An individual's perspective may lend itself to interpretations which suit an evolving idea or representation behind which may lie an ideological disposition. Such a predilection then provides a framework for an ensuing argument. This tendency exists among the authors who have been prepared to express their representation of what happened. For example,Tom Frame is convinced that the underwater torpedo tube played a significant role in the sinking of *Sydney*. He places both ships parallel to one another with an assumption that both were stopped and that the raider then used her underwater tube to advantage, thus gaining total surprise. He seems to avoid the evidence that the underwater tube was not fixed at right angles because to do so would make his version untenable. Wes Olson, on the other hand is adamant that the underwater tube has no role at all. One can only wonder to what extent Olson is prepared to ignore the Committee of Inquiry's Report which found that it "believes a strong case may be made that *Kormoran's* under-water torpedo played a major role in the defeat of *Sydney*". Is it that Olson is entirely swayed by B. Winter who rejects any attempt to countenance the role of this torpedo tube? Winter ignores the sinking of *Craftsman* where Detmers successfully tried out his underwater torpedo. Given that Winter translated *Kormoran's* War Log she had to have read of that success and also of Detmer's earlier exercise (in his shakedown cruise) against a friendly destroyer which played the role of an enemy warship approaching from aft. Had the action been reality, rather than an exercise, the destroyer would have been placed in exactly the same predicament that it may be argued *HMAS Sydney* found herself in. The conclusion one draws is that Olson tends to ignore archival documents which do not support his primary thesis that surprise was gained entirely by *Kormoran's* initial gunfire. This viewpoint is also forcefully asserted by Winter and A. Templeton.

Archives - their leads on *Sydney*.

The frame of reference set by Olson for submissions to the Archives Committee seems for the most part to be irrelevant. *Sydney's* track, according to Detmers' story, is to the west of her usual return from an escort to the vicinity of Sunda Strait.
It is Detmers' avowed location of the battle site that has played such a significant role in the writing of what might be called the "official line". That position is one to which CNS clings to this day.
Whether or not it is true is the basis for considerable debate and there are many reasons for suggesting that it is not true - not the least being hindcasting done on the recently revealed information on the backs of six photographs hidden from all by Kpt. Lt H. Meyer, *Kormoran's* navigator. It is little short of amazing that these photographs (from a private collection, not archives) survived the soaking his lifeboat endured from heavy seas from 22 November and later searches by army personnel. That aside, Lt Cmdr E. McDonald has used Meyer's newly unearthed narrative and placed the origin of Meyer's embarkation in his boat well within an area off the Abrolhos Islands. If this is the case, and L. Knight's findings are accurate, then the use of archives using Olson's framework to determine *Sydney's* exact location is questionable. Is it not possible that the limits of this workshop are far too narrow

because they exclude information (as in the Meyer account) that resides in private collections?

Olson's framework aside, archives do yield some information:

1. *Sydney* was returning at speed from Sunda Strait.

No-one has been able to find in archives the reason for this proposition. It is known that Captain Burnett had notified ACNB and the Naval Member that he intended to return "direct" from his escort. The word "direct" is interesting and worthy of consideration. The composition of signals is such as to ensure no superfluous words are used. Every word means something and adds overall to the final message. The same word was to be used by CNS G. Royle in a later statement questioning why Sydney had not returned direct. He too had been sent the signal which contained the word "direct"

2. The tug *Uco* was allegedly seen off the northern tip of Dirk Hartog Island mid-morning of 20 November 1941. The ship was described as destroyer-like and making heavy smoke, as if on fire, and speeding southwards.
3. The time of sighting was later changed by Naval Intelligence to 19 November.
4. *Uco's* log indicates that she had cleared the island by 2.30pm on 19 November.
5. *Uco* picked up the "Q" signal in position 26.35 S, 111.32 E. at 01800 on 19 November.

This sighting has been accepted by many as being Uco. However, Uco was hardly destroyer shaped. Her stubby features and slow progress do not fit the description that was given. There is a very strong likelihood that the ship sighted was HMAS Sydney proceeding southwards - in keeping with her apparent return at speed.
If the sighted vessel was Sydney then Detmers' action position is untenable.
As for Uco's position at the time of hearing the "Q" signal (1800h) Naval Intelligence placed her some 80 nms to the west of the coastal lane which she would have been following if she was the vessel sighted off shore from Dirk Hartog Island. At her cruising speed of just above 8 knot, Uco could not have made that location in three and a half hours. Moreover, there is no reason why Uco would have changed course to steer so far from shore - not when she would have followed the coastal route.

Sydney approached from the north while Kormoran headed 27deg, 25 deg, eastwards or northeasterly. The direction taken by Kormoran varies according to who is telling the story. This hardly stands against Messerschmidt's statement to Dr C. Anderson at Swanbourne barracks that both ships at the moment of engagement were facing north. Nor does it stand against Acting CNS Durnford's statement to Cabinet on 4 December 1941 that Sydney approached from the southwest. If Durnford could be so sure of this - and after all this briefing was given in early December - why is it that no supporting evidence exists on record?

6. ***Sydney*** departed the field of action, on fire and making way to the south.

Some of the Germans said that Sydney drifted away to the south - an impossibility. Treber's sketch placed Sydney to the rear of Kormoran with both ships stationary and on fire. His account was not considered worthy of further deliberation by naval intelligence. Regardless of the bearing allegedly taken from the raider to the departing warship, the German consensus, such as it was, favoured a southwards course.

If *Sydney* was the ship seen proceeding southwards on the morning of 19 November, then her speed could place her at the Abrolhos somewhere towards dusk - the alleged time of the conflict.

This location places the "official" story and its adherents in some difficulty.

The Structure and Process.

It seems not unreasonable to question several aspects about this whole workshop/ seminar.

The deadline for submissions has not appeared in any of the correspondence that I have received. The assumption was that I did not want to make a personal submission - although, to be fair, Mr W. Olson did write that I should send any written submission which I wished to make to Dr D. Stevens. Mr Olson also gave me the terms of reference for his Sub-Committee, but these terms seem to be unknown to others with whom I have spoken.

It appears that the sub-committees are to meet in-camera and no oral submission nor supporting argument for a submission will be granted. Each of the sub-committees will deliberate on what they receive and provide a report to a public meeting. At that time questions may be asked from the floor - but there is a time limit of half an hour to deal with those questions (and their answers) directed at each subcommittee.

In the case of the Archival Sub-Committee several important points may be raised. First, Olson cannot be regarded as a trained historian practised in analysis and able to evaluate such evidence as may be presented to him. Although he has claimed that he is more knowledgeable than anyone else on the subject, the fact that he has written a book on the loss of *Sydney* does not make him an expert. Journalists' reviews of his book have been mostly favourable, but nowhere is there a critique of it. There is a world of difference between a review by a journalist who has minimal knowledge of the *Sydney-Kormoran* saga and a critique delivered by someone capable of analysing its thesis and argument.

It is difficult to see how Olson, as Chairman, can be regarded as being value-free in his ability to judge. His book has been lauded by Dr M. McCarthy of the WA Maritime Museum as "a great book on the loss of *HMAS Sydney*, the one you've been waiting for all these years ... brilliantly researched and a compelling read." This eloquent testimony does not stand up to close scrutiny.

For example, on the issue of the sighting of the vessel off the northern tip of Dirk Hartog Island, Olson correctly states that the day was indeed the 19th but omits that the time of sighting was mid-morning and he is quite prepared to follow Naval

Intelligence's claim that "the tug *Uco* was probably the vessel in question". It is reasonable to ask why Olson does not raise questions about the word "probably". There is also a world of difference between something that is claimed with certainty, as opposed to something that is claimed with mere probability. The moment doubt is entertained then more analysis must take place. The distance from shore of the vessel was claimed to be seven miles. At that distance visual recognition is good, especially if the viewers are standing on high ground. There is also a significant difference between the shape of a tug and that of a sleek warship. *Uco* could never make speed in the same sense that a destroyer or cruiser could. Moreover, *Uco*'s logbook records that she cleared the island by 1430 of 19 November. It is also a concern that Olson does not compare the differences in entries between the tug's Master's Logbook and her Deck Logbook

A second example of Olson not accessing archives effectively may be seen in his statement that Wing Commander Lightfoot, temporarily based in Carnarvon,was instructed to "advise the local authorities that the occupants of the two lifeboats to the north of the town may be of enemy nationality". In reality, Sergeant Anderson, who was the officer-in-charge of Carnarvon police, returned to his station to draw a pistol because he was informed by the Customs Officer that word had been received that **some** of the sailors north of the town could be German. It is hardly likely that Anderson would have set out to rescue the survivors with such little support if he had known that all of them were German. The local VDC had been called and were available to help out but it was felt that their services were not required - and this was later the basis of a complaint from the head of the VDC that his men were denied their rightful role in helping to round up the Germans. To believe that Sergeant Anderson was confident that he, together with unarmed truck drivers, could secure the whole of the enemy is little short of ludicrous.

For these and many other instances from Olson's book, which could be listed and discussed, concern has to be raised about Olson's presence in such a capacity.

There are also grounds for concern about the response of the Federal Government to Recommendation 10. That the *Sydney* Foundation Trust should be given such a prominent role in making any decision at all about the location of the warship's wreck is not acceptable in view of its own partisan approach. That the Trust is to be represented by E. Punchard, who has been heavily involved in a highly debatable documentary on the loss of *HMAS Sydney* which appeared on Australian national television, does not make for a value-free position. Nor does the appearance on the Committee of Dr M. McCarthy, who has been so fulsome in his support of Olson's work and in so doing has publicly endorsed all that Olson has written.

That the Committee of Inquiry should be dismissive that Knight and Whitttaker's discoveries and prefer as a starting point the so-called "official" position suggests closed minds. Given that a limited budget will be allocated to any search it would seem "logical", to use the words of the Inquiry, to start at least with Knight's findings of May 2001 and then extend northwards.

It is argued that by accepting influential position on these committees, Olson, Punchard and McCarthy are faced with a clear conflict of interest which compromises the impartiality needed to carry out the deliberations required of them. Finally, in both structure and process this seminar leaves much to be desired.

J. McArthur
3 October 2001

Dr D Stevens
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Dear David,

Thank you for your prompt reply. I have a few problems with what Wes Olson has told me. I understand from him that I am to send any submission I wish to make directly to you and in turn you will forward it to Wes and Company for their consideration. There will be neither a public presence nor a public presentation and the committees will decide for themselves if the written information placed before them is of any use. In Wes Olson's case, his committee will decide whether archives throw any light on the final resting place of *Sydney*. I take it that, in view of the above, there will be no questioning of those who make submissions - as the procedure to be followed denies it completely.

As well, the terms of reference seem odd to me.

(a) Reg. Hardstaff has already worked out *Sydney's* previous tracks so little is to be gained from a re-examination of them.

(b) The results of the 1941 search for *Sydney* may be clearly expressed - nothing was found - but raise the question about Durnford's submission to Cabinet in December 1941 on *Sydney's* approach to the raider and a different story emerges. Yet there is nothing in naval archives that directly or even indirectly provides evidence upon which Durnford could base his account.

(c) The survivors' statements are so varied that an historian can marshall any several of them to support an argument. If Knight is right in his location, then the whole business about initial sighting needs rethinking and generates a Pandora's box which would make much of what this committee has to work on rather irrelevant.

(d) Detmer's "after action report" is suspect for many reasons and it is hard to see what it says about *Sydney's* final location.

(e) As for the German Admiralty report that will be interesting if for no other reason than it is important to consider who translated it.

In short, David, I do have misgivings about the process that is envisaged and the terms of reference as being capable of yielding anything new.

Let's focus on the two messages regarding *Sydney* that were discovered in archives and sent to the British High Commissioner for transmission to MOD for a decision. I have inquired many times and met little more than the standard "I know nothing" response from senior archivists. Why has there been no answer?

What of PMG archives - and all the others that Winter has identified as worthy of exploration? David Kennedy raised another source in one of his submissions and that would imply an archive somewhere "out of Africa".

We know of the alleged "official" action site only from the interrogations of the German officer survivors who possibly knew where they were. If *Sydney* sailed off southwards then there is little more than guesswork where she lies given the existing records in the public domain.

I know Michael McCarthy has long argued that all archives need to be explored in order to find answers but I believe it to be ingenuous to accept that after all this time a document exists in national archives that gives the location of *Sydney*. If it does then it is remarkably well hidden - and the RAN would have to have known of its existence. Tom Frame's unsuccessful attempt to prevent the Westhoven Report appearing in public archives hardly gives one confidence that all documents are available. What if there are others where a successful denial has taken place? The document I found where Long declared that for much of the war Royle was unstable caused a stir when I mentioned its existence to a naval intelligence officer. He could not believe that it could ever be cleared for public viewing. The implications of CNS being a "psyche case" are enormous – and Long does not spare Royle at all. The point is that there is no way of knowing whether all documents are available - despite the rhetoric that has been made about there being nothing to hide.

Finally, I am convinced that the archives, such as they are, on the conflict and its aftermath reveal, not so much where *Sydney* is, but failure in planning and control on a massive scale. (Given the circumstances, that failure is quite understandable) What they also say on the political consequences are interesting but their location of the battle site is no more than a regurgitation of the German accounts.

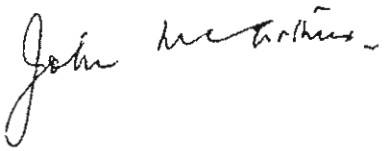
So, I take it that my presence at the seminar/workshop is neither sought nor provided for; that the committees will meet simply to review the written submissions made to them. Their decisions will then be forwarded to another committee who will make a final recommendation.

In any historical research, as you know, much depends on the quality of the archival documents as well as their quantity. So much is missing that might cast light on many aspects of the *Sydney-Kormoran* battle and its aftermath. We deal with archival bits and pieces and need to take into account other sources including that which exists in personal collections. Narrow the field and the likelihood is that distorted conclusions may be drawn.

In conclusion, I make the point that all Voluntary Defence records in WA were ordered to be destroyed at the end of the war. The man (Reg Nicholas) who was the senior army intelligence officer at the time gave me to believe when I interviewed him that he had something to tell about *Sydney* but refused to say anything because he was determined to the end to abide by his oath of secrecy. Winter tells us that Long had many documents destroyed at the end of the war and that their secrets literally died with him.

I guess I am disappointed at the procedure and the terms of reference as I consider that together they make for a waste of time, money and effort.

Yours sincerely



John McArthur

102B Holland Street
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17 September 2001

Submission
by

M. McCarthy

Department of Maritime Archaeology
WA Maritime Museum

M. McCarthy

Department of Maritime Archaeology
WA Maritime Museum

WESTERN AUSTRALIAN
museum
MARITIME

Ref: MA-630/81
Date: 22 October 2001

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Dear Dr Stevens (David),

re: **The Royal Australian Navy's HMAS Sydney II Seminar.**

It is satisfying to note that that with the completion of the Parliamentary Inquiry into the loss of HMAS *Sydney* II, with the recent Services expedition to Christmas Island and now the coming RAN seminar into the feasibility of locating the vessel, that the October 1945 decision of CMDR Long, Director of Naval Intelligence not to publish anything further on the action or its aftermath unless forced by ministerial pressure, is effectively reversed.

As one who, through the Director and Delegate responsible for the operations of the Commonwealth *Historic Shipwrecks Act 1976*, has represented this institution in the matter since 1981, it is of some personal and professional satisfaction that both Government and the RAN have reaffirmed their ultimate responsibility for both the ship and the need to effect satisfactory closure to the matter.

You are aware that we are in receipt of formal advice from our Commonwealth office that responsibility for the wrecks of HMAS *Sydney* and HSK *Kormoran* remains with the parent navies and governments until located and it is only at that point that they will come under the operation of the 1976 Shipwrecks Act i.e. we have no on-going responsibility to provide advice or any explanation for the mystery.

A new chapter has been opened by these two separate events, allowing me to concentrate elsewhere within my diverse portfolio of responsibilities after the November Seminar.

.....

In respect of your request that recent information relevant to the viability of a search or the location of HMAS *Sydney* be tabled, I make the following observations and

ABN 95249517733

Dr D.M. Stevens
Director of Naval Historical Studies
Naval Historical Directorate
CP4-1-003
CAMPBELL ACT 2601

Dear Dr Stevens (David),

re: **The Royal Australian Navy's HMAS Sydney II Seminar.**

It is satisfying to note that that with the completion of the Parliamentary Inquiry into the loss of HMAS *Sydney* II, with the recent Services expedition to Christmas Island and now the coming RAN seminar into the feasibility of locating the vessel, that the October 1945 decision of CMDR Long, Director of Naval Intelligence not to publish anything further on the action or its aftermath unless forced by ministerial pressure, is

1) The extensive body of scientific oceanographic evidence (contained in The 1991 Forum papers, the Sydney Foundation Trust analyses, the HMAS Sydney Search Pty Ltd analyses, the Department of Geomatics, University of Melbourne analysis) and the latest historical analyses by author Mr Wes Olson, all combine to indicate that a search of 'Detmer's battle region' near 26°32-34'S, 111°E (at its close derivative which is plus or minus less than a degree as advanced by those groups) is required. There HSK *Kormoran* is expected to lie and this should be the logical starting point for any search for HMAS *Sydney* II. I am not aware of Prof Bye's latest conclusions and cannot refer to them in this context.

2) It is evident from the contemporary accounts, that in effecting a search of that region, both HSK *Kormoran* and HMAS *Sydney* may be found.

3) I strongly urge that the Government facilitate the joining of the groups mentioned above and other interested and capable parties such as the American groups who have expressed interest, including Woods Hole and NUMA, such that they join forces with the RAN in this phase. The conclusions of the majority are so similar and their locations all so close.

4) It needs also to be accepted that HMAS *Sydney* may have attempted to make the nearest allied ship repair facility at Surabaya as a first priority, subject to its physical and command status. Failing that, the ship would have made for a number of ports on the Australian coast, with Geraldton but one of a number of possibilities.

5) Should HMAS *Sydney* not be found in the area indicated by an amalgam of the findings of the scientifically-based groups mentioned above, then consideration will need to be given to examining any of the sites still outstanding at the conclusion of the November seminar. The examination of these before or after a search of the 'Detmer's battle region' would be cost effective given that they are all GPS locations and can be accessed *en -route*.

6) You will be aware that I have written to all who have outstanding written reports of locating possible wreck sites to this institution, advising them to table their reports through your office at the November seminar. These include Ms G. McDonald, Messr's Whittakker/Knight, Mr J. Mildwater and Mr W. Olson. A number of the 'Geraldton' sites have recently been eliminated as a result of surveys conducted by the Services (RAAF/RAN) last year and by Sub Ocean Surveys of Adelaide on October 7 this year, leaving few outstanding. You are already in receipt of my unfavourable analysis of the historical antecedents and the factual basis of the Whittakker/Knight claims to have 'found' HMAS *Sydney* and HSK *Kormoran*, though I accept that I am not a scientist and have deferred to the Scientific Committee for finality.

7) Appended to the 'hard copy' of this note will be new oral material relevant in the context of locating the wreck, to the SS *Cape Otway* and reports of bodies in the water. This was received in July this year and it is sent to you for the consideration of the oral history chair, the oceanographic chair and the archival chair also.

A) For the Archival Chair: As I understand it, and notwithstanding the quality of Richard Summerell's excellent source guide, the receipt of this material reinforces my belief that there still exists a need to formally ask, and receive, of all Commonwealth institutions such as the RAN, Naval and other intelligence bodies, and the Australian War Memorial, formal assurance that they do not hold any materials relevant to HMAS *Sydney* II, HSK *Kormoran* or to the search vessels and aircraft, anywhere in their records or other repositories controlled by those institutions.

B) For the Oral History Chair: The account received is a new account adding further to those since recorded and referred to at the Parliamentary Inquiry. Again it is of direct relevance to the terms of the seminar.

C) For the Oceanographic Chair: There is enough doubt in this matter to lead the Chair to seek to conduct an hypothetical forensic oceanographic exercise that factors in the possibility that SS *Cape Otway* did sight bodies on its voyage and to see whether this affects the conclusions. A need to effect this 'hypothetical' exercise also exists in the location of an object known to have emanated from HMAS *Sydney* near Jurien Bay in mid-1942. This is not a new report, but it does not appear to have been factored in by any oceanographic analyst to date. The records of the Parliamentary Inquiry refer.

D) Finally and still in the context of it being information relevant to the location of the ship, I refer the Archival Chair to pages 40-43; 115-6 of the Summerell guide to the Commonwealth Records on the issue of what I perceive to be hitherto unsatisfactory explanations for both the loss of the aircrew on board HMAS *Sydney*, and for the signals recorded by Squadron Leader Cooper. In recognition that their satisfactory analysis will provide further clues to the location of HMAS *Sydney* II, I ask the Chair to cause these to be re-examined. Point 7A above also refers in this instance.

Yours sincerely

Dr M. McCarthy
Curator, Maritime Archaeology

1/4

x 2 Please ...

JIM BLYTHE
32 SYDENHAM RD,
DOUBLEVIEW. 6018.
6th July 01.

Called 17/07
& discussed
Will write
Tabled at Tower
Smin

Dr Mike McCarthy.
W.A Maritime Museum
Cliffe St,
Fremantle 6160.

Dear Sir,

Further to our telephone conversation of 4th July regarding my father being a lighthouse keeper at North West Cape lighthouse (now known as Vlaming Head).

My father worked on all the Commonwealth lighthouses in W.A. and including Cape Don lighthouse in the Northern Territory. I was born in 1935 when my father was lighthouse keeper at Rottnest Island (approx, 1935-1936) From there he was transfered to Eclipse Island (approx 1936 to 1938) Then after a further 3 months as a relieving keeper at Cape Leeuwin was posted to N.W. Cape (approx 1938 to 1941).

My father passed away in 1968. I clearly remember him relating many times a incident that took place while he was keeper at N.W. Cape. I relate the information which is still very clear in my mind, as follows:-

My father had recorded the weather readings as was the case every afternoon at about 4.30 PM, ready for transmission per

peddle radio at 1700 hours. It was normal practice for lighthouse keepers to tune in the radio set before making the weather transmission in order to pick up the precise frequency and in doing so picked up a very clear and loud transmission in what my father decribed as Japanese dialogue. The reply was also heard loud and clear in the same dialogue.

My father was not alarmed and at 1700 hours proceded to establish contact with the Carnarvon receiving station and send his weather readings as usual. No mention was made of the foreign transmission he had heard in fear of breaching radio security. Instead dad waited a few weeks until he was in Perth on leave and he reported the incident to a Army Intelligence Officer at Western Command. He was assured his report would be fully investigated.

My father was informed some time later (by what means I don't know) that a Japanese cook who was working at Yardie Creek Station (a few miles from N.W. Cape) had been "picked up" by the military and that he had a radio transmitter hidden in a hollow log close to the Yardie Creek Station and each day he would go and do his transmissions to a receiver in close proximity according to my fathers assesment of the strong volume of the reply transmission.

My father was of the opinion that a Japanese submarine was in the area at the time and played a vital role in the final sinking of HMAS Sydney.

It was strange that there were no survivors from the Sydney.

My father was transfered to Cape Don lighthouse in about 1942 and at that stage women and children had been evacuated from all North West towns so my mother and myself were not allowed to accompany dad.

In about 1945 dad was transfered to Point Moore lighthouse at Geraldton and so mum and myself were reunited with him again.

Dads next posting was to Cape Leveque lighthouse (1950 – 1953.) and we travelled there on the lighthouse tender ship Cape Otway. It was during that voyage that we were told the horrific stories by several crew members of the Cape Otway crew spotting bodies floating in the sea on its south bound journey, in the vicinity of N.W. Cape. The conversation came from older member of the crew who had sailed with the ship for a few years. I remember one of the crew was the ships cook named Syd. Another was Tom Arcus, the ships cobbie. Not much went on on board ship with out either of these men knowing about it. It was logical for mum and dad to assume that the event had been reported at the time. How many bodies were sighted is not known by my self, but "bodies" would indicate more than one, and there was no mention of what the bodies were clad in.

I have recently been told that this information was VERY SENSITIVE at the time and that "higher authority" ordered the Captain

of the Cape Otway to ignore the bodies sightings.

I am unable to confirm these last few lines, However, I stand by my fathers information as being correct.

I have recently read in a extract of Ministeral correspondance that there could have been another ship in the area at the time of the sinking of Sydney. Apparently British Intelligance have dismissed this claim in the same correspondance. Could this "other ship" have been a Japanese submarine? Is it possible that there could have been a cover up on a giantic scale, remembering that this took place before the bombing of Pearl Harbour.

I hope this information will be of some interest, if only from a archivab point of view.

Yours faithfully

Jim Blyth

THE CAPE OTWAY STORY

In November, 1941, Mr. Davidson, the Cape Leveque Light-house Keeper and his family were aboard the Light-house Service Boat, the Cape Otway, on their way to Geraldton.

Alma and Kempston had four children .. Joy aged 18, who celebrated her 18th Birthday aboard the Cape Otway. Shirley aged 15, Sue aged 8 and Michael. Both Joy and Michael have since passed away, leaving only Sue and Shirley to tell this story. The following are their Statements regarding the Cape Otway from two days out of Carnarvon to their destination being Geraldton. These Statements are very interesting as there is nothing official on the Cape Otway!s involvement in the days following the H.M.A.S. Sydney and the Kormoran engagement.

Statement from Mrs. S. Simonetti nee
Shirley Davidson.

Two days out of Carnarvon at about 9.30 p.m. Captain Bateman came to our quarters and asked if Dad would come up and have a look at a Morse-code message they had received, as he couldn!t make head nor tail of it.

When Dad returned he said that the Cape Otway had been requested to pick up a Life-boat at a given position with approx. 40 people on board. When they arrived at this position they could not locate the Life-boat. After searching for some considerable time without success they continued on their way t Carnarvon. When they docked at Carnarvon they were told of the loss of H.M.A.S. Sydney and that the Life-boat they had been requested to pick up had German survivors aboard from the Kormoran and that they had been picked up off the Coast.

Shirley stated that regarding the Sydney incident, this was the only event worth a mention, furthermore there were no bodies sighted at all, and if there had been they would certainly have known about it.

D. King

It is interesting to note that the Cape Otway did not know of the loss of the Sydney until they arrived in Carnarvon, or that it was Germans in the Life-boat they were requested to pick up. One would question the message they were supposed to have received asking them to search within 5 N.M. of the Coast for survivors. Was that message sent after they had left Carnarvon?

Statement from Mrs. S. Richardson nee
Sue Davidson

In November, 1941 she was aboard the Cape Otway with her family sailing from Cape Leveque to Geraldton. Two days out of Carnarvon they received a Morse-code message requesting them to pick up a Life-boat at a given position with approx. 40 people aboard. On arrival at this given position they could not locate the Life-boat and after an unsuccessful search they continued on to Carnarvon.

Captain Bateman wasn!t very pleased with this requestas he said his job was maintaining the lights, not rescuing people.

When they docked at Carnarvon they were told that the Life-boat they had been requested to pick up had German survivors aboard from the Kormoran and that they had been picked up off the coast.

The Cape Otway normally travelled close to the Coast as most of the lights they serviced were on the coast, so it was pointless to sail out wide the have to come in to service a light.

There was no sighting of bodies and there was never any mention of this, then or years later. The First Officer from the Cape Otway kept in touch from time to time over the years and not at any time when the conversation turned to this episode was there any mention of floating bodies.

D. King

A point worth noting here is that the Cape Otway was requested to pick up this Life-boat which they endeavoured to do, and yet nobody contacted them to advise them of its recovery.

Around about 1988, John McArthur and I were swapping notes regarding the Sydney. I didn!t have much to offer at that time as I had only been researching the area around Port Gregory for about a year or so. Vic. Jefferies was also present - he is Public Relations Officer at Stirling Naval Base. John told me of his visit to Captain Hardiman, seeking information regarding what part, if any, the Cape Otway played, in the days after the Sydney-Kormoran engagement. Unforunately the Captain was very ill and bedridden and told John he could not remember anything of 1941.

A month or two later John met Captain Hardiman!s wife at a Social and she told him her husband had passed away and that prior to his death he was hallucinating about floating bodies.

Is this the foundation of the story about the Cape Otway sailing through hundreds of floating bodies ? ? ?

Michael Montgomery, in his book "Who Sank the Sydney" mentions J.H. Hazlewood on Page 191. He states that while talking to two Officers off the Cape Otway, they mentioned finding several bodies at sea .... when they signalled this information to Naval H.Q. they were instructed to leave them where they were.

Then we have the Radio Operator who states he received or heard a message from the Cape Otway stating they were sailing through floating bodies along the Zuytdorp Cliffs. Nothing more is heard from him. Why come forward to make a statement like that and not be prepared to back it up. ? ? ?

Several years ago I met up with Ivan Boyd, who, at that time was residing here in Kalbarri. Ivan told me that he took over the position as First Officer on the Cape Otway in February, 1942 and that he knew about the page being removed from the Log, but could not explain why. He also stated that during the time he was on the Cape Otway nobody ever discussed its involvement in the Sydney-Kormoran incident.

Now ... if they had discovered hundreds of floating bodies one

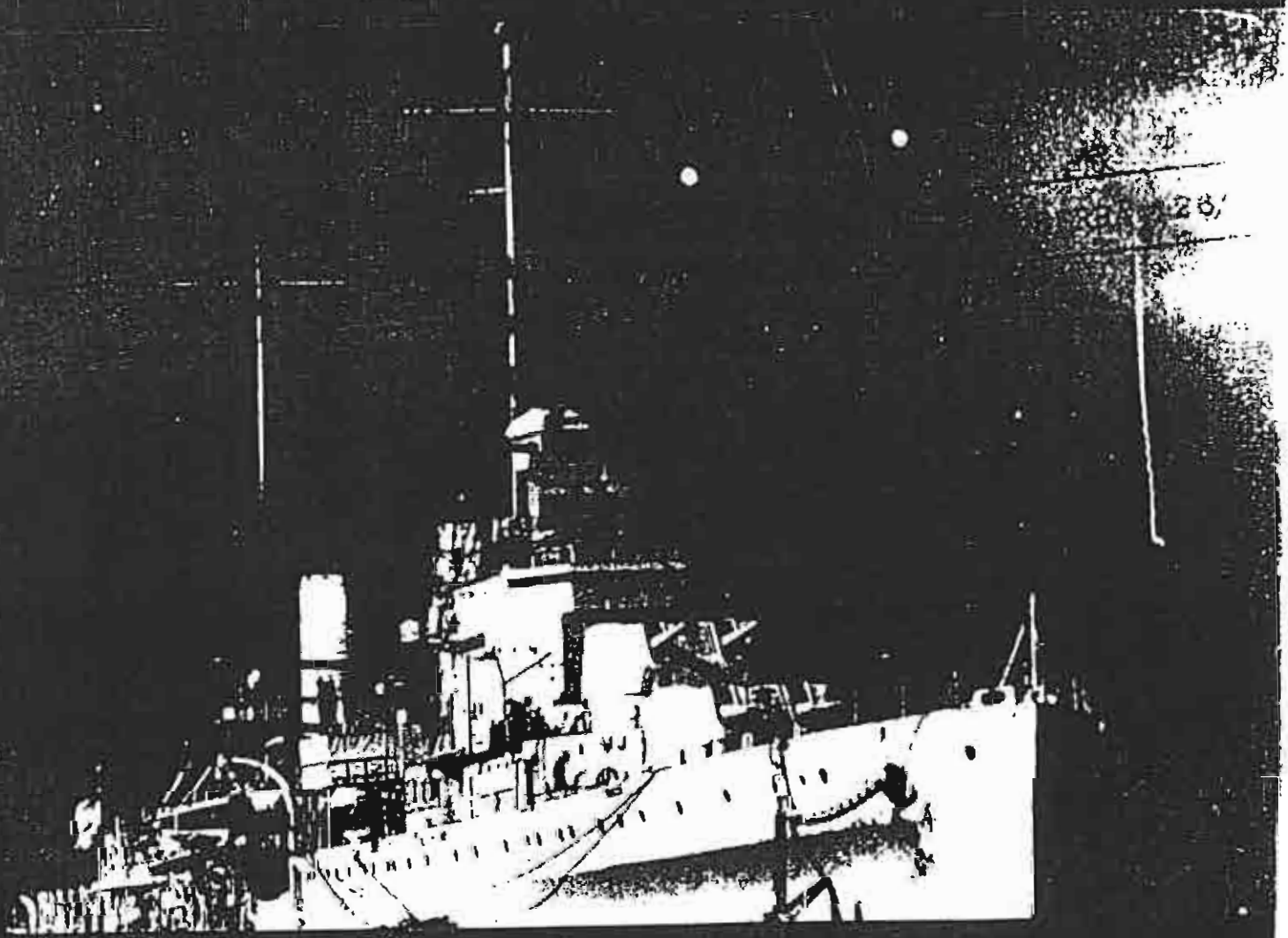
would expect this would have been discussed among the crew. The Cape Otway passed the Zuytdorp Cliffs on the night of 2nd December. According to my calculations she sailed from Carnarvon at noon on the 2nd December and would have reached the Zuytdorp Point just after the moon set. With the ship under black-out conditions, visibility would have been restricted to the extent it would not be able to see floating bodies, and to count hundreds would have been impossible. We also have to take into consideration the length of time these bodies would have been in the water. If they came from the Sydney-Kormoran they would have been in the water for 13 days on the 2nd December. Bodies do not float for that length of time unless each body is supported in some way. Why were they not picked up by the R.A.A.F. when they searched the coast from Geraldton to Carnarvon? Hundreds of floating bodies would have been easily visible from the air.

After considering this latest information, I believe the Cape Otway did not encounter any bodies at all. The only part she played in the Sydney-Kormoran saga was the unsuccessful search for the Life-boat.

D. King

THE SINKING OF HMAS SYDNEY

A Guide to Commonwealth Government Records



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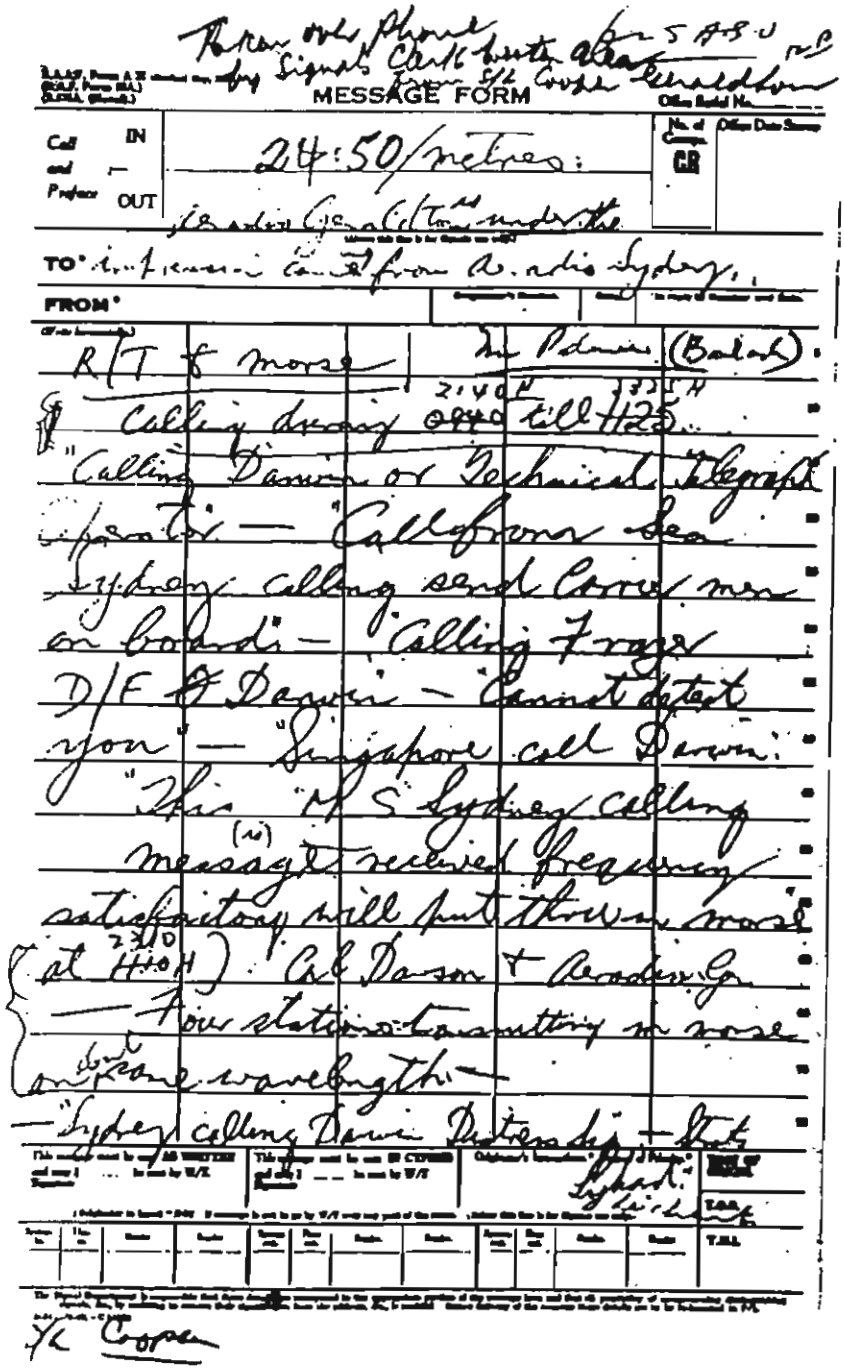
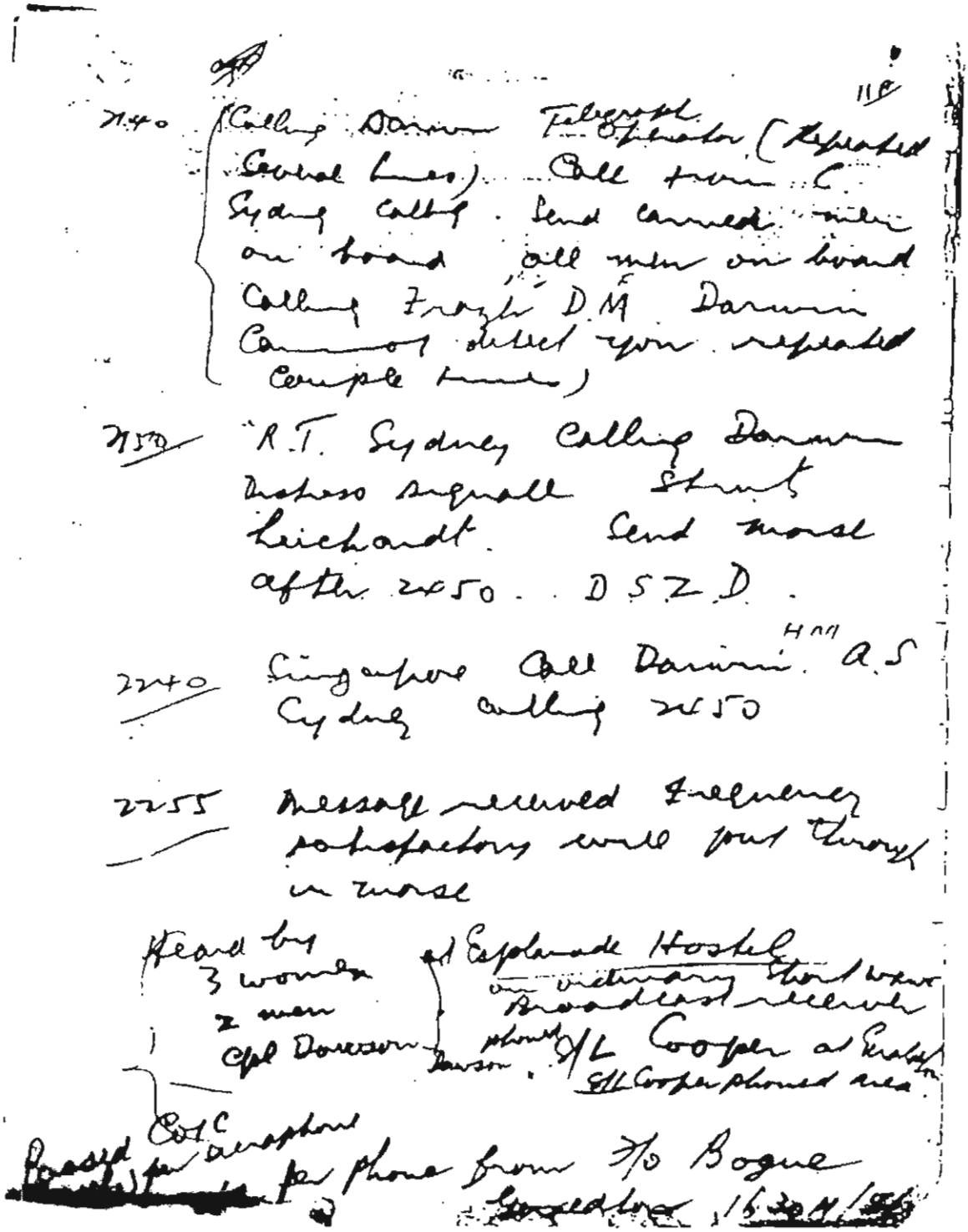

MESSAGE FORM

A message taken over the phone from a Squadron Leader Cooper by an Air Force signals clerk, Western Area. The message is undated, but appears to form the basis of the SWACH log entry for 4 December 1941 (see series K809 also described in this chapter). Annotations in red pencil and in a different hand subsequently appear to have been made to the time groups and to the name 'Lykard' against which has been written 'Leichart'. RAAF Historical and Archives Section: AA1969/100, 2/18/INT – *Squadrons involved in Search for HMAS Sydney.*



This appears to be a transcription by a second person of part of the message opposite, to which some annotations have subsequently been added ('B2' and 'F' in the 5th line, and 'HM' in the entry for 2240). Although the paper has become brittle and some of the information at the bottom has been lost, it is possible to make out the words 'Passed COIC [part of word or name missing] per secraphone' and a date/time group that appears to end '5/12'. The date time group 1630H/5/[remainder missing] appears on the bottom right-hand corner. RAAF Historical and Archives Section: AA1969/100, 2/18/INT – *Squadrons involved in Search for HMAS Sydney.*

However, on page 1 of an appendix to the summary, after outlining the searches
undertaken the summary states:
Subsequent intelligence suggests that HMAS *Sydney* sent out a weak and corrupt "Q" distress message under extreme difficulties on 19/11. This is being investigated.
No further mention of this message has been located in later summaries or in related documents. It is possible that the message referred to is the Q message received by the *Uco* or by Geraldton radio, and later believed to have come from the *Kormoran* (see AWM64, O/2 described above).

SOUTH WESTERN AREA COMBINED HEADQUARTERS LOG BOOK, 1941–1942 **K809**

Recorded by: 1941–1942 South Western Area Combined Headquarters, WA, Australian Army (CA 6978)

Quantity: 0.18m (Perth – microfiche in all offices)

South Western Area Combined Headquarters log book (2 Jul 1941 – 5 May 1942) **K809, Whole Series**
This series consists of a log book used for recording inwards and outwards signals of the RAAF South West Area Combined Headquarters (SWACH) in Fremantle. Entries are made chronologically and show the details of messages sent and received. A microfiche copy of this register are also available at the Australian War Memorial.

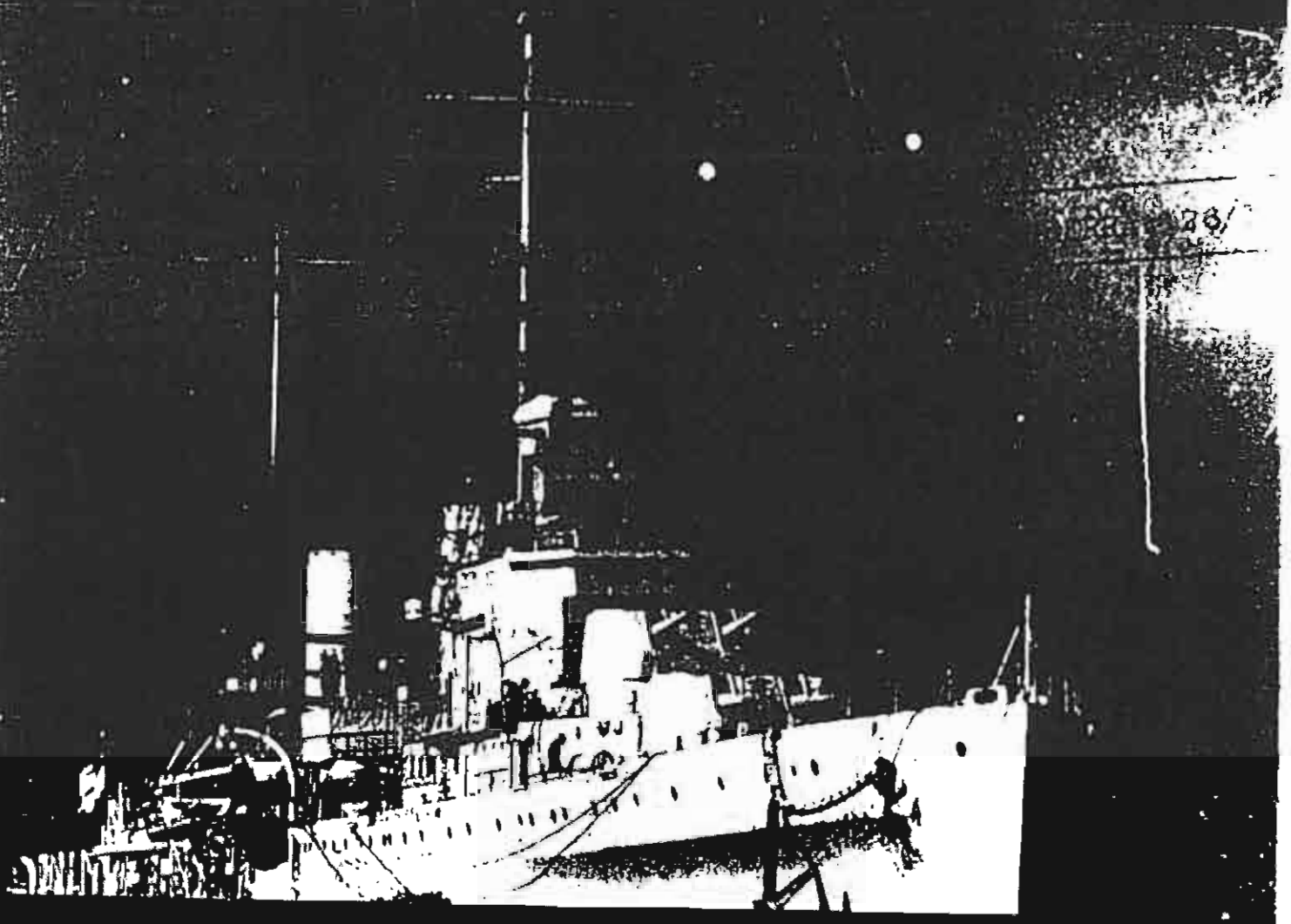
The log book records a number of messages sent and received relating to the search and rescue operation, but of particular interest are the details of messages alleged by some to have been received from HMAS *Sydney* prior to its sinking. The description of these messages contained in the log suggests that they could have been transmitted by the *Sydney*, but this would seem to be impossible judging by the dates on which the log entries are recorded. Two handwritten notes which may have formed the basis of these log entries appear in this chapter, and are discussed in more detail on pp. 29–30, under *Some unanswered questions*. The microfiche copy of the log book is difficult to read. Relevant extracts are therefore given below. The times given in the log appear to be Z time (ie Greenwich Mean Time, or 8 hours behind local Fremantle time).

Thu Dec 4 (page 148)
1520 – W/A [?Western Area – 1 word appears to be crossed out] phoned message received from Geraldton – Geraldton heard a call on 24.50 metres possibly from HMAS *Sydney* and requested Pearce to call Darwin for bearing.

1543 – Rd [received] following by telephone from W/A – S/L Cooper at Geraldton reports one of his operators listening on 24.5 metres heard R/T telephone signal calling Darwin or technical telegraph operator. Signals weak and operator thought it may be from HMAS *Sydney*. Later Geraldton report strength of signal increasing.

THE SINKING OF HMAS SYDNEY

A Guide to Commonwealth Government Records



Richard Summerrell

research guide
NATIONAL ARCHIVES

published 'whatever the criticism'. The same day the Secretary of the Department of the Navy sent a message to his Minister, advising him that the number of survivors from the *Kormoran* should not be published 'in view of the effect on next of kin, relatives and friends of personnel of HMAS *Sydney*'.[85]

Three days earlier, at a meeting of the Advisory War Council the Rt Hon. WM Hughes had expressed the view that there must be survivors. At that stage it was still thought a possibility that there were two raiders. The confusion was caused by the first German survivors stating that they were from the *Kormoran* while information from the British government indicated that they were from the *Steiermark*. Not realising that they were the same vessel, it was thought that survivors from the *Sydney* may have been on the second raider.

By 4 December the government was satisfied that all hope of finding survivors from the *Sydney* had passed. The next of kin were sent a letter from the Secretary of the Department of the Navy referring to the earlier telegram, and informing them that:

> The Naval Board direct me to inform you that an intensive search by sea and air has failed to find HMAS *Sydney* or any survivors from her gallant Ship's Company. The Naval Board, therefore, announce that all are considered to have lost their lives in action, and, with the Minister for the Navy, they tender to you again their heartfelt sympathy.[86]

The Royal Australian Air Force was more cautious. In a letter to the next of kin dated 6 December the Secretary of the Department of Air confirmed the advice contained in the Air Board telegram of 26 November. Intensive searches by sea and air had failed to find any survivors among either the Naval or Air Force personnel of HMAS *Sydney*. The letter continued:

> If, after full consideration of all the circumstances, the Air Board is compelled to conclude that there is no hope of [relationship and name] being found alive, a presumption of death will be made.

In December 1941 and January 1942 requests were made by the naval and air force authorities to the International Red Cross asking that special enquiries be made concerning the possibility of personnel missing from the *Sydney* being held prisoner of war. Official uncertainty about the fate of the *Sydney's* crew was mirrored in the correspondence from the public and the next of kin, who months after the *Sydney's* loss still had hope that one day their sons, husbands and brothers would be found alive. As related in Chapter 6, as late as October 1945 it was still felt necessary to make inquiries in Japan and elsewhere to make sure that rumours of the ship's personnel having been taken prisoner of war were untrue.

It was not until June 1942 that the Air Board officially notified next of kin that it presumed the members of the Air Force serving on the *Sydney* to have died. The submission to the Air Board from the Air Force Director of Personal Services indicated that the Naval Board had presumed the death of naval personnel on the basis of information obtained from the interrogation of the survivors of the *Kormoran*, and from the results of the sea and air searches. The submission went on to state:

> Action to presume deaths of the Royal Australian Air Force members on board HMAS *Sydney* was not commenced previously as it was considered that different considerations would apply in determining the fate of Royal Australian Air Force members, some of

[85] National Archives of Australia: A5954, 518/36 - *HMAS Sydney - Sinking. Replacement Fund.*

[86] National Archives of Australia: MP151/1, 443/201/946 - *Sydney re loss. Copies of circular correspondence sent to next of kin and dependents by Navy Office.*

> whom might have been in an aircraft which was possibly in the air at the time when HMAS *Sydney* sank. The evidence negativing this possibility was not at all conclusive (see Minute 11). In view of the lapse of time and the negative results obtained by enquiries from the International Red Cross Society...it is requested that these members be presumed to have died...on 19 November 1941.[87]

The Air Board accepted the recommendation. The basis upon which the submission stated that some of the Air Force personnel were 'possibly in the air at the time when HMAS *Sydney* sank' and that 'the evidence negativing this possibility was not at all conclusive' is unable to be determined. The file containing this 'evidence' (A705, 32/1/87 – *HMAS Sydney – Members of RAAF missing from*) is neither in the custody of the Archives nor in the Department of Defence, and is presumed to have been destroyed.

At the meeting of the War Cabinet in Melbourne on 4 December 1941 the Prime Minister asked why there were no survivors of the *Sydney*.[88] No explanation was given, but the official view was summed up by Mr Frank Eldridge in his report to the Director of Naval Intelligence on 28 February 1942:

> Commander Detmers expressed the opinion that *Sydney* sank as the result of the punishment she had received, and that there could have been no survivors as the whole superstructure had been so smashed, boats on deck must have been destroyed, while any boats stowed below must have been burned by the fires which were raging.[89]

The records

The human and very personal dimension of the loss is reflected in the official records of service of the men who died.

The service history records of each of these men are preserved by the Archives in Canberra. In some cases the records are still held by the Navy and Air Force personnel sections in the Department of Defence. Most of the records end in 1942 or 1943 with the finalisation of details of pay and personal effects. The most complete and comprehensive records are those of naval officers and RAAF personnel.

Naval personnel

For naval personnel (including Royal Navy personnel attached to the RAN) the most substantial records are officers' confidential reports which were assessment reports prepared periodically by commanding officers. These reports are consolidated on a personal record file for each officer which usually extends over the officer's career. The confidential report prepared on Captain Burnett two days before he took command of the *Sydney* appears later in this chapter.

In addition, for each officer there are Record of Service cards which contain personal particulars about the officer and summary details of his service history and postings.

For non-commissioned naval officers and sailors the most complete set of records are the Record of Service cards which, as for those of officers, record each individual's personal particulars and service history.

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[87] National Archives of Australia: A703, 660/7/35338 - *LAC Keith Homard, RAAF, 35338 [Lost aboard HMAS Sydney, 19 November 1941] – Casualty – Repatriation, 1941–1943.*

[88] National Archives of Australia: A9240, Set 2 Vol 4 - *War Cabinet notebooks, meeting of 4 December 1941.*

[89] National Archives of Australia: MP1185/8, 2026/19/6 - *Loss of HMAS Sydney – report by Mr FB Eldridge on interrogation of survivors of Kormoran.*

635/41

112 Perry Drive
CHAPMAN ACT 2611
28 September 1994

...Relations
...Stirling
...ngham WA 6

HMAS Sydney Relic at Green Islets

...s Vic,

...nk you for your inquiries and the order for my book which I have enclosed.

...ve followed up the reference to the HMAS Sydney relic and went back to the War Memorial to get original quotes in the hope that I could get additional information for your group.

...wever the references are all to the initial report and are mostly second or third hand. The articles ...re found on 13 June but no indication is given of their exact location or even if they were found ...gether .

...e initial report from the Wedge Is CWP to HQ 44 Inf Bn was relayed to 3 Aust Corps on 17 June ...d the delay blamed on the conditions of the tracks in the area. This is supported by other accounts ... the War Diary of 13 Inf Bde that the road to Jurien Bay and Wedge Island Point were badly in need ...f work and also reports of heavy rain at this time.

...his initial report is written up in the Message Log at HQ 3 Aust Corps and found its way into ...ubsequent Situation Reports and Intelligence Summaries.

Unfortunately there does not appear to be any further reference to the relics later in the month and if they arrived at HQ 3 Corps they appear to have disappeared.

The specific references are as follows :-

Special Mobile Force Operational Order No 22
in War Diary 44 Inf Bn - June 1942 - AWM 52 8 / 3 / 83

C Coy, 44 Inf Bn took over the Wedge Island Coastwatch Posts from 1 Tp, 10 Light Horse Regt on 4 June 1942

Message from HQ 44 Inf Bn to HQ 3 Aust Corps dated 17 June 1942
in War Diary 44 Inf Bn - June 1942 - AWM 52 8 / 3 / 83

Just received message from Wedge Island : Delayed by condition of tracks . Found 13 June near Green Islets portion of Japanese lifebelt . Also box marked HMAS Sydney . Am awaiting both articles to be forwarded as soon as possible this HQ.

Entry in War Diary HQ 3 Aust Corps "G" Branch - AWM 52 1 / ? / ?

17 June 42

1600 SMF reported that on 13 June 42 the detachment at Wedge Is found, near Green Islets, portion of a Japanese lifebelt also a box marked HMAS Sydney.

Submission
by

LCDR David McDonald, RAN

LCDR David McDonald, RAN

DISCUSSION OF T.W. WHITTAKERS SUBMISSION TO THE HMAS SYDNEY SEMINAR 16 NOV 01

By

Lieutenant Commander David McDonald, RAN

Introduction:

1. I have written this short submission after a request to examine Mr Whittaker's analysis of Von Malapert's diary and Meyer's sailing notes from the perspective as a professional mariner and more specifically a professional navigator.

My professional background is as follows:

LCDR D.V. McDonald PWO SW N+ C

Mar 1990	Joined the Royal Australian Navy as a Seaman Officer
Jan 1992 – Dec 1993	Officer of the Watch in HMA Ship's TORRENS and SWAN
Feb 1994 – Sep 1996	Navigating Officer HMA Ship's PROTECTOR and GERALDTON (Minor War Vessels)
Jan 1997 – Nov 1998	Navigating Officer HMAS MELBOURNE (Major Fleet Unit)
Nov 1998 – Dec 1999	Specialist Warfare and Sub Specialist Navigation Courses
Dec 1999 – Apr 2001	Navigating Officer HMAS ARUNTA (Major Fleet Unit)

2. Currently I am serving as the Senior Navigation Instructor for the RAN at the Navigation Faculty, HMAS WATSON where I am responsible for the instruction of the Specialist (Surface Combatant Navigation Course) and Sub-Specialist / Deep Draught or Advanced Navigation Course.

3. Having examined the content of Whittaker's paper I have decided to structure my analysis by first examining the validity of the data / assumptions utilised then examining the actual methods used to apply this data and finally to make an independent assessment of the final conclusions by Mr. Whittaker.

Environmental Data:

4. Wind Speed and Direction. The Routing Chart for the Indian Ocean in November and the Australian Pilot Vol V (Wind Distribution for Oct is the closest in the Pilot) both indicate South to South Easterly Wind directions with strengths of between 4 – 6 (13 – 24kts) between 25 and 35% of the time. The Diary and Sailing Notes generally record winds from the SW to SE at strengths between Force 4 – 6 with an extended period of wind strength above Force 5 (17 – 21 kts) which would accord with the data in the references I consulted. Whilst this would indicate a resultant wind from the S to SSE at a Force at the upper end of 4 (15-16kts) it is not unreasonable to utilise some form of statistical average given the potential for error in the determination of both wind strength and direction by those in the lifeboat. It is important to note that I have only utilised two sources of data and have not consulted the BOM for any observations taken during this period in either Geraldton or Carnarvon. With that in mind the

determination of likely wind strength and direction by Whittaker in this instance is considered appropriate and not unreasonable.

5. Current. The Pilot and the Routing Chart indicate a NNW'ly current for the period setting at strengths between 0.5 and 0.75kts for approximately 50% of the time with rates below this for the remainder. An assessment of a rate of 0.2kts, whilst a little on the low side is considered appropriate given the set is less than 0.5kts for 50% of the time in November. The value of wind generated current has been determined in accordance with the methods employed by AMSA for SAR operations and as described in DRB 36 the National SAR Manual.

6. Leeway. Within DRB 36 there are tables provided to determine leeway based on the type of craft in question. For the description of craft in the table that best suit a lifeboat of the type in question a value of between 0.05u and 0.12u where u is the wind speed is considered suitable. If you take the lowest value (0.05u) and apply the wind speed you get a leeway component of 1.05kts. This figure covers a Lifeboat sized craft when drifting. For a vessel under sail with little or no keel this figure should be increased to account for the additional leeway effect of the sail area. I discussed this point with a number of experienced dinghy sailors all of whom gave figures around 8-10% of wind speed. In these terms Whittaker's figure of 7% of wind speed is not unreasonable.

Methodology:

7. The methodology used by Whittaker to determine the effect of environmentals on the lifeboat is in accordance with simple vector addition protocols. The only factor I can see that is not considered is the tendency for a drifting object under the effect of the wind to 'fly off the wind' up to 45 degrees either side of the actual wind direction. This should not have much of an effect whilst the lifeboat is under sail or oars however it may have some influence over the direction of drift when 'hoved to'. In this case the omission is not considered to have had a marked effect on the results and subsequent conclusion by Whittaker as when drifting the crew deployed a drouge which reduces that effect considerably.

8. When discussing the assumption that the diary and notes have taken into account the environmental conditions Whittaker concludes that a course of 130 at a speed of 2.8kts would be required to counter the set and achieve the Course Made Good (CMG) and Speed Made Good (SMG) in the notes. The methodology utilised to obtain this result is once again correct. Having discussed the merits and performance of sailing craft of little or no keel with experienced sailors, I would agree with the assumption that a craft of this description would not be able to sail any closer to than 8 points given the assessed wind strength and sea state. This would therefore cast doubt on the determination that the diary and notes are based on an Estimated Position (taking into account environmentals) vice a DR which is simply heading and speed.

Conclusions:

9. The conclusions of Whittaker based on the assumptions made in his paper are considered to be sound in a navigational sense. If the notes are considered to be a DR (and the weight of evidence against this being an EP would suggest it) and the prevailing weather conditions are accepted as described then there is no way that the voyage of those in the lifeboat commenced from the currently recognised position. It is my assessment, based on the information in the paper and on that of my own (limited) research of the information provided by Whittaker that the lifeboat journey must have commenced from a position much further south than currently recognised.

10. It is my intention to continue with further research into the Sailing Notes and Diary and produce a paper in an attempt comply with the recommendation of the Archival Committee and provide the expert analysis as requested below:

> **The Archival Committee recommends that the von Malapert and Meyer sailing notes be examined in order to assess their viability. Specifically, to see if the von Malapert/Meyer lifeboat could have departed from position 26° South 111° East at 0900H on 20 November and make a landfall at Red Bluff at 0930H on 25 November.**

Submission
by

LCDR Ean MacDonald (RANR Ret'd)

LCDR Ean MacDonald (RANR Ret'd)

32 Watsonia Road, Gooseberry Hill,Western Australia 6076
Telfax 08 9454 5319
4th October 2001
Dr D.M Stevens Director of Naval History Studies
Dear Sir,

Re H.M.A.S. SYDNEY (11) WRECK SEMINAR

Thank you for your reply dated 24th September, and information therein.
I enclose herewith my Submission, with Diagrams.

I am however left a little puzzled as to the conduct of the Seminar.

The programme outlined plans sessions which seem to include only Reports of Workshops presumably held at some previous date or dates, but does not tell anything about those Workshops.
I am curious therefore as to what part the Workshops play in the Seminar, and how they are to be conducted.

It seems that a Submission such as mine, which I believe includes material that could relate to each of the Workshop areas, must be treated by each.

The fact that the Workshops appear to be charged with themselves analysing submitted material and that cut and dried Reports will be submitted without open and public discussion seems to fly against the intentions of the Government consequent to the Parliamentary Inquiry of 1998.

I am reminded that consequent to the Inquiry the Committee recommended involvement of as many of the individual researchers and groups as possible, and that Navy agreed to... " Proposals for presentations ....."

I see no room for "presentations" in the Seminar as now proposed, and this raises another puzzle.

The further indication that only "questions" are to be taken after Workshop decisions have been made seems to be a strange way to conduct a "Seminar".

The fact that Workshops include those who have already expressed strong opinions may cast doubt on results.

However, I trust that the Seminar results in some positive direction towards resolution of the mystery still persisting concerning so many of Australia's lost Sailors ,my old shipmates and friends.

I trust that copies of Workshop Reports will be available.

Yours faithfully

Ean McDonald

SUBMISSION TO...

H.M.A.S. SYDNEY (11) WRECK LOCATION SEMINAR

to be held at Fremantle on 16th Niovember 2001

by EAN MC DONALD
LCDR R.A.N.R.(Ret) V.R.D., C.D., A.A.P.T.C., P.L.F.R.A.I.A.,
Master Mariner.

dated 4th October 2001

Pages 1 to 7 plus 6 diagrams

.....

Because so much has already been said and written on the demise of H.M.A.S SYDNEY (11) , this, my Submission to the Seminar of 16th November 2001, attempts to be brief, basic, and simple.

I submit that :-

Location of SYDNEY's wreck has been rendered difficult because of many factors.

The KORMORAN story has ever been suspect.

Merely one of its inconsistencies is that of the underwater torpedoes.

Considering that KORMORAN crew in 1941 and over 57 years since, totally denied the use of underwater torpedoes, but that in 1998 one German, Linke (at least) finally admitted to their use, then without having to delve deeply, this simply proves (again) that the whole German story contained fabrications from the very beginning.
As such, any assumptions whatever based on any of the German stories are therefore fundamentally suspect and useless towards resolution of the still remaining mystery.

Any acceptance of location of the action dependant on German evidence is thus itself totally suspect. * 1

Yet another significant point is that by now is well demonstrated the sheer impossibility for survivors picked up or landed to have come from the "Detmers" or "Official" position, that is, any where at all near 26 30 S 111 E. *2

Again we have a breakdown of a fundamental basis for the "Official" story.

Whilst according to Naval Intelligence,Tug UCO received her QQQQ signal whilst at a position 26 45 S 111 32 E. *3
She is also supposed to have been seen only a few miles off the coast of Dirk Hartog Island, that is, at a position about 25 50 S 113 E, a mistake that no Tugmaster could make. *4

That position would put her just 100 miles off that coast at a distance impossible to be seen.

It would also put her just about 30 miles from the Detmers " sinking " position.

Even a Tugmaster would be able to hear or sense heavy guns firing at that distance at dusk

Here yet again the whole "official" story completely breaks down.

Lindsay Knight's repeated sweeps over the whole of the northern area (i.e. around 26 S 111E) have shown no evidence whatsoever of any wrecks. *5
Again we see a complete break down of the official story.

.....

In considering possible locations of both Action and Sinkings of both SYDNEY and KORMORAN one must examine background to their passaage courses at least.

Because SYDNEY has been shown to have been proceeding south from Sunda Strait at a speed that would normally require special permission or instruction, she must have been either expecting to meet something unusual, or she was hastening back to Australia carrying something not normal, such as persons or cargo requiring urgent carriage. *6
We know Captain Burnett suspected a Raider in the area somewhere. *7
Did he also have special cargo ?,
Did Navy in 1941 and since wish to keep that secret?

Evidence exists that SYDNEY went "missing" for about 24 hours at the time she was supposed to be handing over ZEALANDIA to her next escort on to Singapore. *8

SYDNEY must have been ordered to, or permitted to, take those abnormal actions by a superior of the Royal Navy, not necessarily known to the R.A.N.

Royal Navy Archives therefore become of importance in the SYDNEY story, particularly in regard to locations of action and sinking.
The Parliamentary Inquiry and our Government recommended *9 search of British records. Navy agreed a year ago to do this. It is germane to this Seminar that some report on that search is reported. If it is claimed that documents are not available then the mystery and doubt simply deepens further.

There is sufficient evidence to show that the vessel sighted off Dirk Hartog Island during the forenoon of the 19th November 1941 was not UCO, but SYDNEY.
Apart from my comments earlier, no one , however naive, could mistake a fast moving Cruiser for a small sluggish Tugboat at close distance.

I have calculated by Traverse that SYDNEY could have comfortably covered the distance from Sunda Strait to Dirk Hartog at the speed of 25 knots that she seems to have travelled. She could also have comfortably reached the Port Gregory / Abrolhus area by afternoon.

The oral evidence of an action off Port Gregory and even off Geraldton, is too strong to interpret as anything but an action between two well gunned ships of war. *10

The only battle in the whole wide adjacent ocean area at that time was that between SYDNEY and KORMORAN.

.....

Multi expert evidence of current and wind effects, confirmed by German reports and records is too strong for the KORMORAN survivors to have come from anywhere near the so called Detmers or Official position, that is, anywhere near the location 26S 111E. (South West of Carnarvon) *11

The recently aquired "Photo Diary´ said to be written by KORMORAN Navigator Meyer, however vague in spots, surely confirms :- *12

A. the impossibility of origin at anywhere near 26S 111E,

B. the highly likely origin near the Abrolhus Islands.

Lindsay Knight´s repeated and confirmed discoveries of *13 likely wrecks are far too strong to be brushed aside as has been attempted by officials of the W.A.Maritime Museum and others involved.

I see challenge to this Seminar and Officialdom generally to disprove Knight´s location, of at least the possible KORMORAN wreck, only about nineteen miles off Wallabi Island in only about 800 metres of water.

I refer to Testimoniale, as attached list, by no less than fourteen organisations, scientists and reputable people, as to the efficiency and accuracy of Knight´s Detection System. *14

Appreciating that members of Workshop Committees to this Seminar will no doubt have studied Submissions to the 1998 Parliamentary Inquiry, I nevertheless draw attention to my own Submissions and accompanying Diagrams that demonstrate as follows :- *15

Diag No 5 - that it was impossible for Detmers / VonGosseln lifeboats to have moved almost due east as they apparently did, without motor propulsion or towing.

Diag No 6 - A. that it was impossible for German lifeboats to have come from the 26S 111E area unless by motor propulsion or towing.
B. that it was much more likely they came from the Abrolhus area

Diag No 7 - (taken from Meyer "photo diary notes) that Meyer's boat at least must have come from the Abrolhus area.

I am aware that LtCol Warren Whittaker has analysed the Meyer Track from Meyer's "photo diary" and came to a similar conclusion to my own.
I stress that my analysis was done completely remotely and independantly from Colonel Whittaker's.

Diag No 8 - A general backplotting of survivors' drift along current/wind drift line of 332 degrees from KDLS 3 position,

Diag No 9 - the Northern areas covered by KDLS flights that revealed no wreck locations,

Diag No 10 - the flights over the Southern (Abrolhus) area that revealed the KDLS 1 and 3 sites suspected to be the wrecks of SYDNEY and KORMORAN. * 18 Diag 8

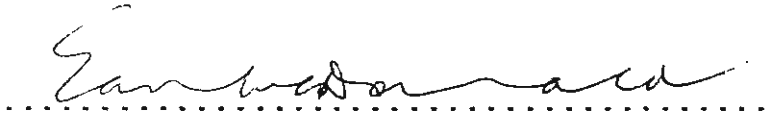
Whilst the brief of this Seminar is said to concern the possible location of the wreck of SYDNEY, it must surely be understood that if the wreck of KORMORAN is found then the whole story begins to have a proper basis for the first time since the action in 1941, and can better lead us to SYDNEY.

I therefore see a first challenge to this Seminar and Navy to check the KDLS Number 3 site off Wallabi Island in 800 metres to prove or disprove existence of wreckage in the first place and its identity subsequently.

The first stage is well within locally available technology.

Navy Hydrographers could at the same time clarify a number of indeterminent soundings in the area as shown on Chart Aus 416, thus surely making a justifiable contribution to Nautical Knowledge, as well as this matter in hand.

Signed



Ean McDonald

References

*1. David Kennedy Submission Parl't Inquiry
Vol 19 Pages 4647 -50

*2 Diagrams 6 and 7

*3 Montgomery and Naval Intelligence

*4 Ditto

*5 Diagram 8, 9 , 10 and KDLS Reports

*6 Capt Burnett signals to DNOWA 10/11/41.
Cdr Hardstaff Submission re speeds
Aust Achives -Parl't Inquiry P 4682

*7 Tom Fisher and Templeton Submissions Parl't Inquiry,

*8 Parl't Inquiry Submission J.J. Collins and others

*9 Parl;t Inquiry Report and Gov't Response Rec No 2

*10 Parl't Inquiry Submission G McDonald (despite criticism
from Act Prof Kirsner)
Dr Bye on light and sound transmissions.

*11 Dr John Bye, J Courtney and others

*12 Diagram 7

*13 Knight Whittaker Submissions Parl't Inquiry
and Seminar

*14 List of Testimonials attached

*15 Diagram 5 - Courses made good by Detmers & Von Gosseln

Diagram 6 - Impossibilty of origin at Detmers site

Diagram 7 - Backplot from Meyer "Photo Diary "

Diagrams 8 - 9- 10 - KDLS Searches and discoveries.

Attachment References * 14

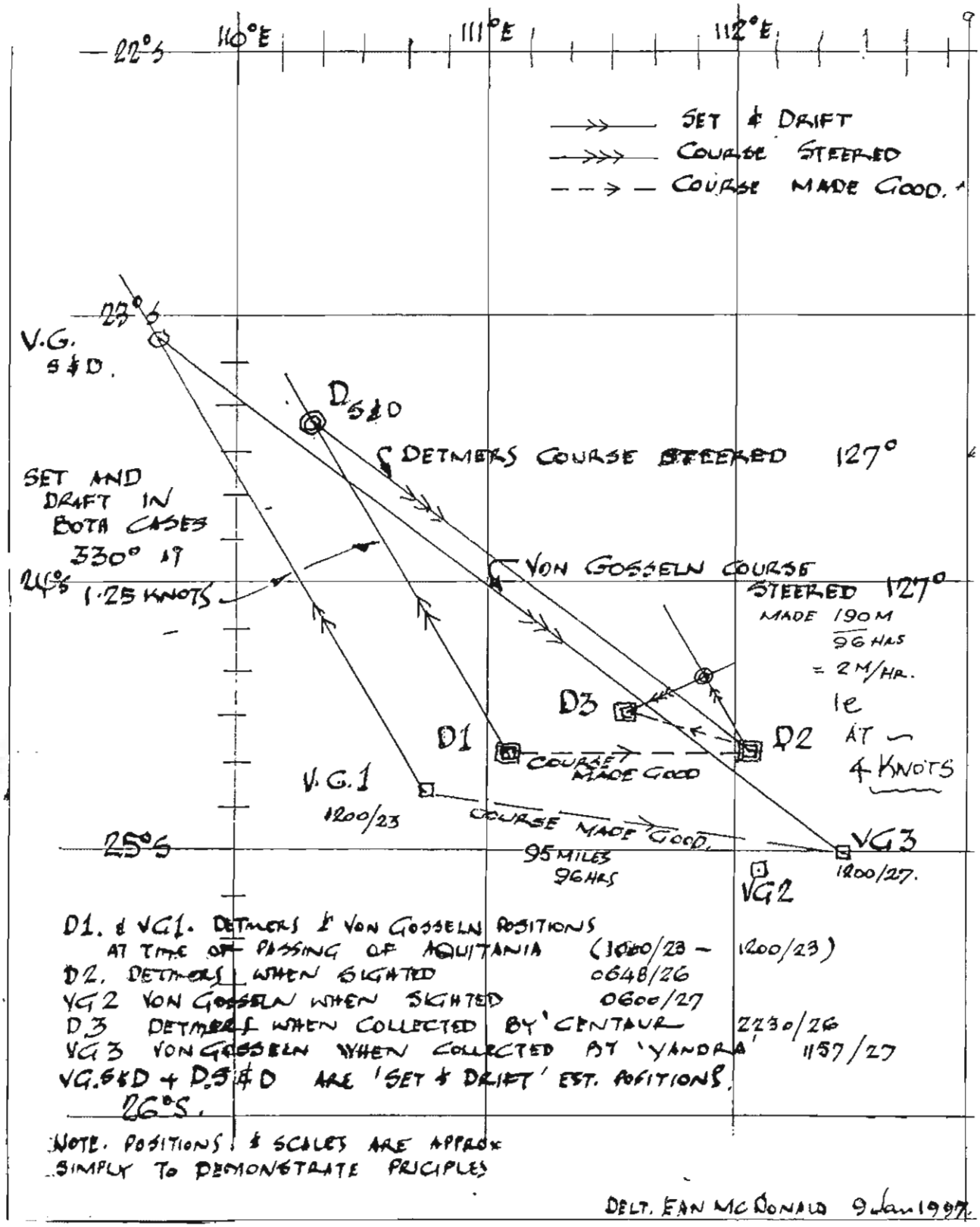
List of Testimonials to performances of
Knight Direct Location System

It should be noted that Colonel Whittaker will be submitting the originals of these Testimonials.

1. Kalbarri Air Charter - West Aust - location of wreck in unknown position
2. Helen M Morris - Phillipines - confirmation of Location of Japanese Battleship with Gold cargo.
3. Air Facilities - Queensland - confirmation of Oil and Gas Pipelines
4. RUST PPK - Sth Aust - locations of Tar and Oil contamination areas
5. Gale C Millar - USA - Precise location of Gas pay zones
6. Imperial Oil Properties - USA - location of hundreds of Oil and Gas deposits.
7. Celtic Boomerang - USA - location and identification of many Gas and Oil sites.
8. Coomooroo Expl´n Co.- Report of many successful surveys in Australia and UAS for Gold, Oil, Gas etc Made as Submission to Parl´t Inquiry Vol 11 P 2651
9. CSAS - Aust - Recommend by Chief Exec Officer
10. W´m J Kyte - Victoria - location of Gold in deep leads
11. Senator D McGibbon - Aust - support for KDLS.
12. Dr Michael Garrett - Melb - Scientific confirmation of tests under controlled conditions
13. B.M.Dunlop Assoc.- Victoria - Location of Graves in unknown positions
14. Geraldton Air Charter - West Aust - Calibration tests confirming location of coal fired wreck unknown location at 40 miles distance.

HMAS 'SYDNEY' / 'KORMORAN' ACTION 19 NOV 1941. 5.

PLOT OF COURSES ACTUALLY STEERED BY DETMERS & VON GOSSELN AFTER THEIR 1ST 82-84 HOURS DRIFTING TO NORTHWEST & PASSING OF 'AQUITANIA'.



D1. & VG1. DETMERS & VON GOSSELN POSITIONS AT TIME OF PASSING OF AQUITANIA (1000/23 – 1200/23)
D2. DETMERS WHEN SIGHTED 0648/26
VG2 VON GOSSELN WHEN SIGHTED 0600/27
D3 DETMERS WHEN COLLECTED BY 'CENTAUR' 2230/26
VG3 VON GOSSELN WHEN COLLECTED BY 'YANDRA' 1157/27
VG.S&D + D.S&D ARE 'SET & DRIFT' EST. POSITIONS.

NOTE. POSITIONS & SCALES ARE APPROX SIMPLY TO DEMONSTRATE PRICIPLES

DELT. EAN MC DONALD 9 Jan 1997.

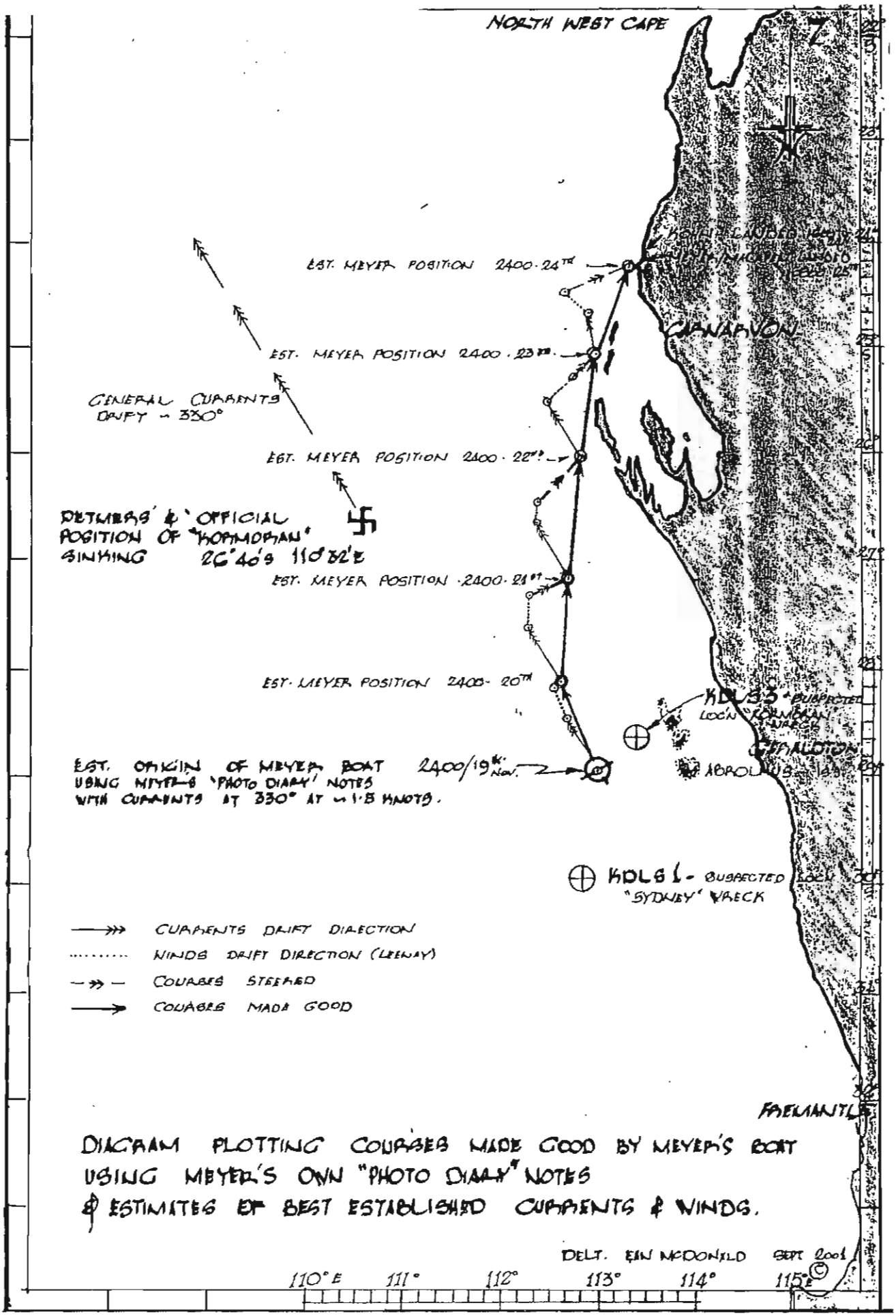
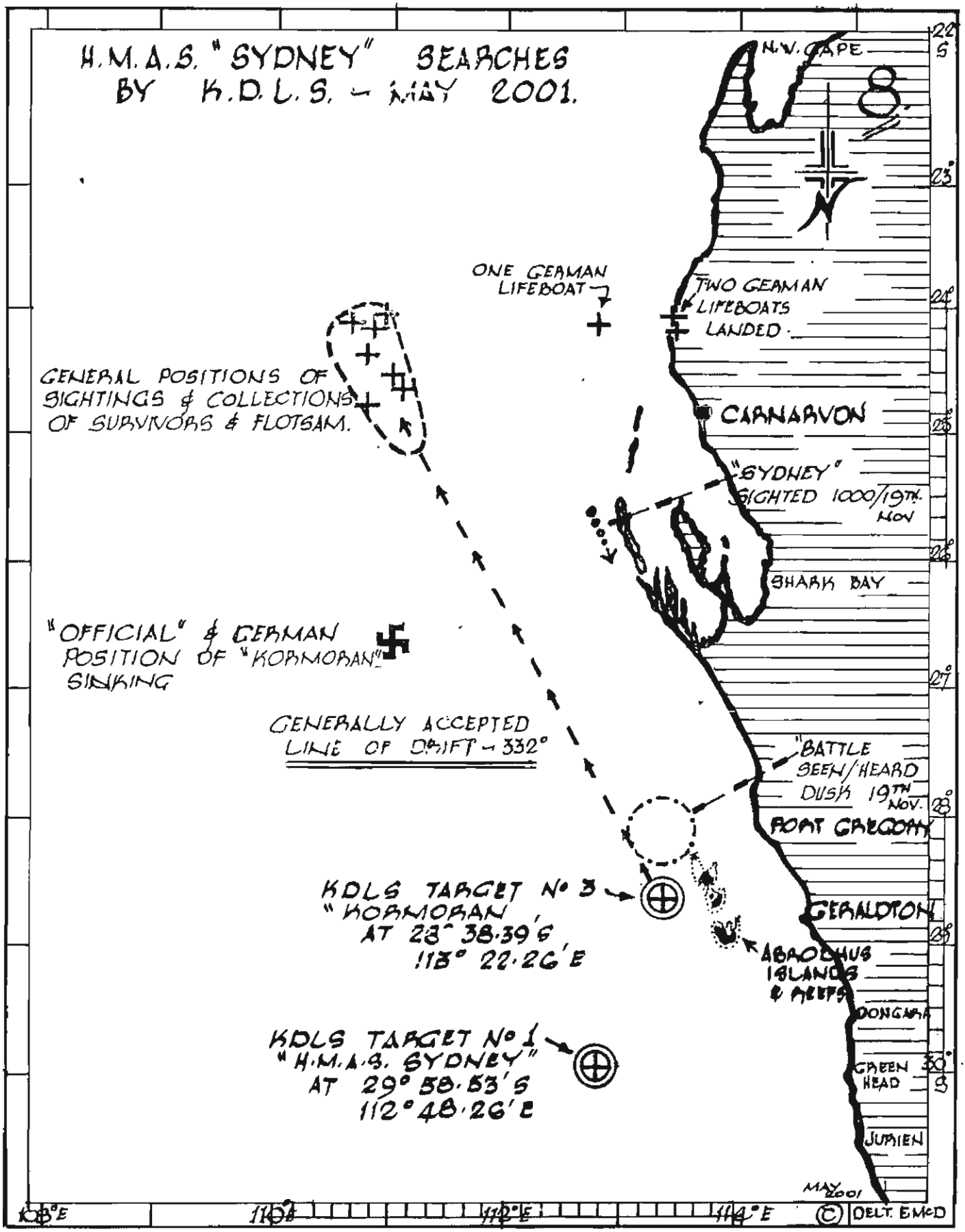
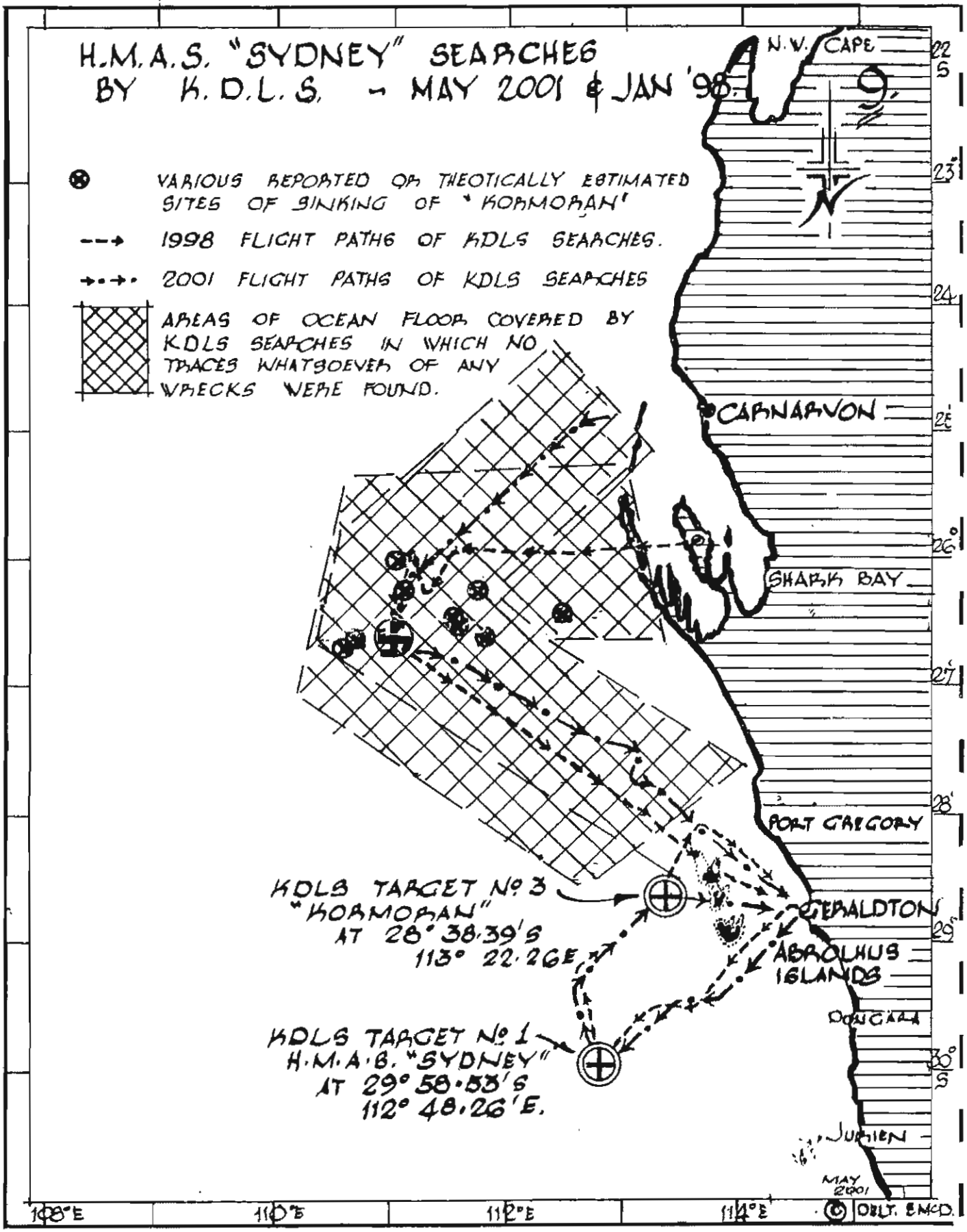
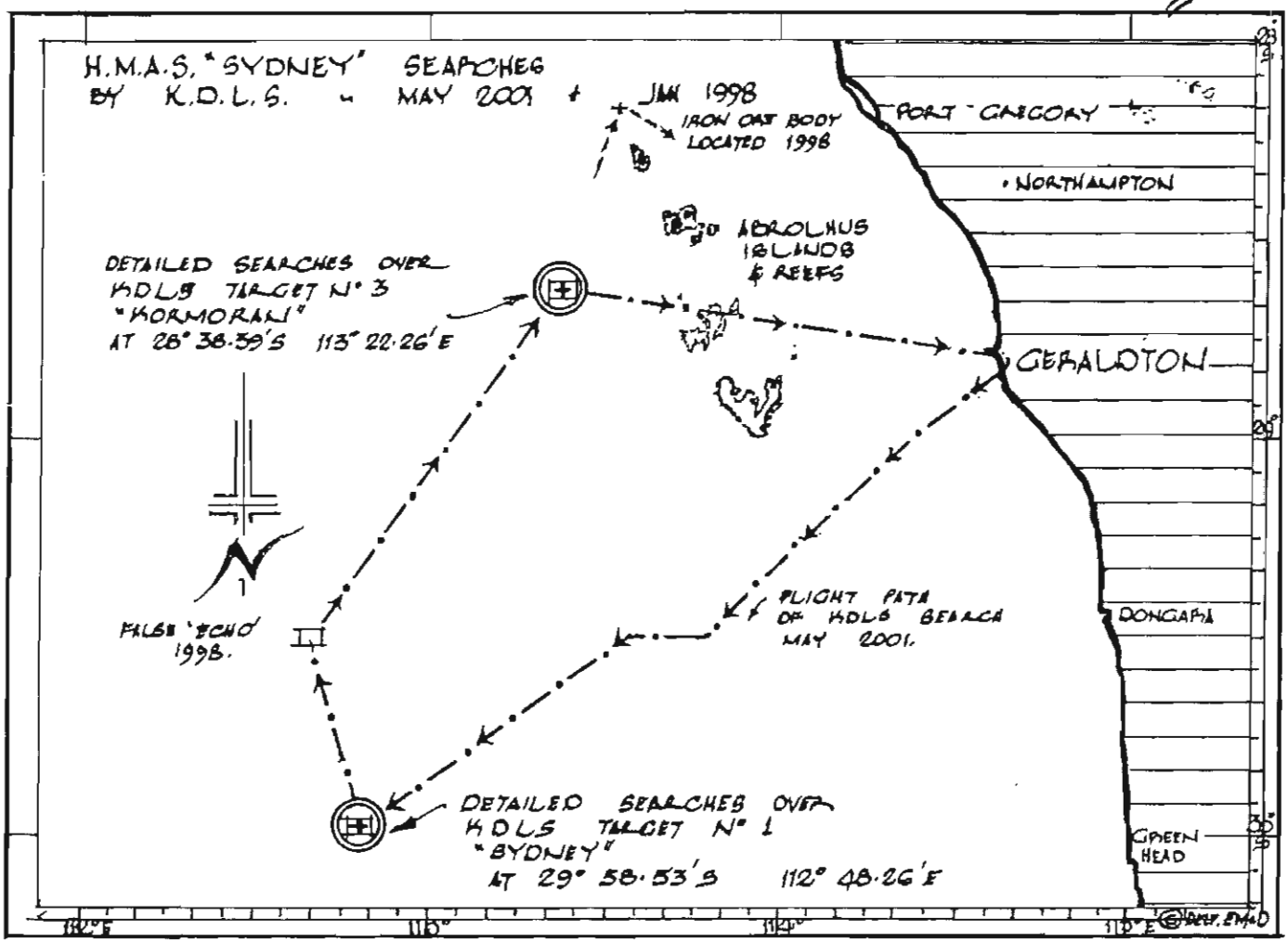


DIAGRAM PLOTTING COURSES MADE GOOD BY MEYER'S BOAT USING MEYER'S OWN "PHOTO DIARY" NOTES & ESTIMATES OF BEST ESTABLISHED CURRENTS & WINDS.

DELT. EIN MCDONALD SEPT 2001


H.M.A.S. "SYDNEY" SEARCHES
BY K.D.L.S. – MAY 2001.
N.W. CAPE
ONE GERMAN LIFEBOAT
TWO GERMAN LIFEBOATS LANDED
GENERAL POSITIONS OF SIGHTINGS & COLLECTIONS OF SURVIVORS & FLOTSAM.
CARNARVON
"SYDNEY" SIGHTED 1000/19TH NOV
SHARK BAY
"OFFICIAL" & GERMAN POSITION OF "KORMORAN" SINKING
GENERALLY ACCEPTED LINE OF DRIFT – 332°
"BATTLE SEEN/HEARD DUSK 19TH NOV.
PORT GREGORY
KDLS TARGET No 2 "KORMORAN" AT 28° 38.39'S 114° 22.26'E
GERALDTON
ABROLHOS ISLANDS & REEFS
DONGARA
KDLS TARGET No 1 "H.M.A.S. SYDNEY" AT 29° 58.53'S 112° 48.26'E
GREEN HEAD
JURIEN
MAY 2001
22° S
23°
24°
25°
26°
27°
28°
29°
30° S
110° E
112° E
114° E
© DELT. EMcD


H.M.A.S. "SYDNEY" SEARCHES
BY K.D.L.S. - MAY 2001 & JAN '98.
VARIOUS REPORTED OR THEOTICALLY ESTIMATED SITES OF SINKING OF "KORMORAN"
1998 FLIGHT PATHS OF KDLS SEARCHES.
2001 FLIGHT PATHS OF KDLS SEARCHES
AREAS OF OCEAN FLOOR COVERED BY KDLS SEARCHES IN WHICH NO TRACES WHATSOEVER OF ANY WRECKS WERE FOUND.
N.W. CAPE
CARNARVON
SHARK BAY
PORT GREGORY
KDLS TARGET No 3
"KORMORAN"
AT 28° 38.39'S
113° 22.26E
GERALDTON
ABROLHUS ISLANDS
DONGARA
KDLS TARGET No 1
H.M.A.S. "SYDNEY"
AT 29° 58.55'S
112° 48.26'E.
JURIEN
MAY 2001
22° S
23°
24°
25°
26°
27°
28°
29°
30° S
108° E
110° E
112° E
114° E
© DELT. EMCD.


H.M.A.S. "SYDNEY" SEARCHES BY K.D.L.S. — MAY 2001
JAN 1998
IRON ORE BODY LOCATED 1998
PORT GREGORY
NORTHAMPTON
ABROLHOS ISLANDS & REEFS
DETAILED SEARCHES OVER KDLS TARGET N° 3 "KORMORAN" AT 28° 38·39'S 113° 22·26'E
GERALDTON
FALSE 'ECHO' 1998.
FLIGHT PATH OF KDLS BEARCH MAY 2001.
DONGARA
DETAILED SEARCHES OVER KDLS TARGET N° 1 "SYDNEY" AT 29° 58·53'S 112° 48·26'E
GREEN HEAD
112°E
113°
114°
115°E

TO Jo John Bye - for Information

32watsonia Telfax 0894545319 Tuesday 11th Se pt 01
To Warren.... Copies to Bruce, Glen, John Bye

I can agree generally with your basic concept from the Meyer "Track" as expressed in your Notes dated 6th September - backplotting his progress from or near to the KDLS3 position. You have seen that I came to a similar conclusion as set out in my previous backplot about 24th August, using the Meyer "Photo Diary" notes and estimated Set and Drift figures as I saw them, even allowing for the vagaries of Meyer´s notes.
I see you agree with my first 5 points now set out on the bottom of your page two.
I do not separate SeaSurface and Wind Driven Currents, but prefer to use the total of approx 2 knots in direction round figure 340 rather than your 360.
(You have to be aware of an accusation by Kirsner that you may be "double counting " - his term)
I did not apply any current effect on Meyer for the 24th - I think that on that day he was backing and filling looking for a landing, and in any case the current effect where he was close inshore then was probably negligible.
I note that your diagram of Wind drift while not sailing is shown as an effect on a lifeboat bows or stern on - whereas I believe it would settle beam on to wind, and thence actually attract a stronger drift.
Be all this as it may I do not believe we should get tangled up in details that can only cause further argument and become target for more argument.
I feel it sufficient to demonstrate - as we can do simply - that Meyer...

a. Could NOT possibly have come from the Norhern area
(the "Official" or "German" position.)
b. Could more likely have come from the Southern area
(and thus the KDLS3 position or damm near it.)

Why don´t we leave it to Navy or other "Experts " to PROVE we may be wrong - to simply challenge them to PROVE KDLS3 wrong.

.....
As to your Fax of 6th -
No you did not get the wrong end of the stick - I still feel the "Seminar" will be a sheer waste of public money, time and effort, but feel it will still go on regardless, if only as a justification of the WAMM and Navy and " Trust" vested interest in either shoving the result under the same old carpet, or justifying more money being allocated to "Experts" to press on with their games.
I´m glad you have agreed with my feeling that people like Reith are not going to be interested in reading much.
I feel that we should hold any approach to press until the seminar as they will get bored with the matter.
Finally - I´ve not heard a thing officially on "a" Seminar
No room for a story !!!

Yrs
Ean McDonald

32 Watsonia Road Gooseberry Hill W.A. 6076
Telfax 9454 5319
23rd November 2001

To Dr John Bye

This comes a little belatedly perhaps, only because a day or so before the " Seminar " I was stricken by a virulent chest wog, and although I battled on for the sessions,I was finally hospitalised for a few days to knock it off - prognosis now effective.

After the Seminar you commented on possible sightings of land by the KORMORAN boat survivors moving northwards. Having also had similar thoughts I felt I should check that out and have given it some time. It didn't need much.

That coast of ours is singularly bereft of great features, apart from some quite spectacular cliffs like at Red Bluff and Zuitdorp, but even they would dip right out at about 40 n.miles in best conditions.

Presuming a height of eye say six feet for a survivor standing on a thwart of his life boat, his horizon would be perhaps 2.8 miles max.

The Abrolhus might give him a tenuous misty glimpse at only about another 2 miles.

Even the high coastal feature about Lat 27 S just below Freycinet Estuary would dip out at about 40 miles, and Dirk Hartog's max would be perhaps 30. Cape Ronsard maybe 17.

Dawns could be hazy,nights impossible, so we are left with few hours daily in clear weather. All in all not favourable for sightings

Looking at my own plots, Meyer was perhaps within land sighting distances only as he rounded Cape Inscription. As I show him there in early dawn it lessens probabilities again.

So I feel we can discard the idea.

I did ask the German Engleman about this without result, but as he was very vague at best, I got no lead.

I feel that your conclusions were fair.
I believe that a cheap run over KDLS3 could be a good beginning , and wish Hierarchy would accept that.

Yrs

Ean McDonald

Submission
by

Glenys McDonald AM, JP

Glenys McDonald AM, JP

Deb, Please copy for Jeremy Green.

REPORT FOR HMAS SYDNEY (11) WRECK LOCATION SEMINAR

PREVIOUS SEARCHES AND INFORMATION ON ANOMOLIES

GLENYS McDONALD AM JP
69 GLENDINNING ROAD
TARCOOLA BEACH
GERALDTON WA 6530
Phone: (08) 9964 9256
M: 0408 949 794
Email: gmac@wn.com.au

28 September 2001

I would like to detail for you some details of areas of interest I have had in the shallow waters this side of the continental shelf in the Port Gregory area.

FIRST SEARCH

My first search for HMAS Sydney was on 9 September 1995. I charted a boat out from Kalbarri to investigate an area the local crayfishermen referred to as the North Lump I had to attempt to work out this position from previous references because the local Port Gregory crayfishermen refused to give me the GPS.

Their reasons were "I don't think it is the HMAS Sydney, but if it is it will be blown out of all proportion" and obviously interfere with their fishing rights. The second reason was they did not want any other boats coming to investigate 'their' area in case of competition

I was interested in this area, near the edge of the cray line out from Lucky Bay because I had heard some fishermen thought there was a wreck there, and one Port Gregory local told of a fishing trip in this area some years ago when they dropped four cray pots off on a very long rope When they pulled them up they were covered in rust and rust ran all over the deck of their boat. The area was about 290 degrees from Port Gregory which fitted in with the line of sighting.

The position I gave the charter boat operator was 28 degrees 04.47S and 113 degrees 52.42E.

Once on board it was not long before my sea sickness overcame my fascination of viewing the eco sounder and I really had no control or knowledge of where or how well he searched the area We found nothing other than a small raised reef which did not appear suitable. No divers went down. The depth was about 120 ft.

The exercise cost me about $400.

DRIFT CARD EXPERIMENT

In mid 1998 I suggested to Dr John Bye that an experiment should be conducted to assess where the debris located at Port Gregory might have originated from. Given that it may have also come an overturned lifeboat.

In partnership with Dr Bye, Ros Page and Dr Barry Severne we planned the positions of the drops for the drift card experiment and shared the expense of the cards equally four ways.

700 of 1000 drift cards were packed into nine different drop packs and their numbers recorded Initial inquiries of the crayfishing and fishing fleet to drop the cards in the required area in November showed that this method would not work for us.

I then arranged for a single engine 4 seater plane, piloted by a friend, who donated his plane, fuel and time to our cause.

As the cards would be released from about 1000 ft at the required GPS positions, I decided to wrap them in toilet paper. This worked with the bundle holding together until it hit the water at which time the toilet paper disintegrated

Ros Page and her husband came with the pilot and I on the drop. I recorded the GPS position and timing of each drop.

In addition to the information we required on the drift of debris, we also wished to put a bundle of cards at the GPS of the estimated source of the sound and light propagation heard and seen from Port Gregory, and also at the Knight position for the Kormoran.

This latter position was outside of our air drop grid so Ros Page arranged for this to be dropped off by the Customs boat which was in Geraldton port at the time

The cards contained my telephone number and the address of Flinders University. Over the coming months I recorded several hundred responses as the cards were found and the community assisted the project.

I found that the lettering on a number of cards came off in certain reef areas, and we had our money refunded as the manufacturer promised this would not happen.

Dr John Bye produced his findings in Flinders University Report 58 "Drift Evidence for the Location of HMAS Sydney and HSK Kormoran

SECOND SEARCH - NAVY COOPERATION

In April 1998 I was contacted by Lieutenant Commander Alex Hawes, the Executive Officer on the new HMAS *Huon*. Alex had an interest in HMAS *Sydney* having used his skills as a navigator to plot where he thought the battle would have occurred. He presented a paper to the Federal Inquiry.

Alex contacted me because his position of interest and the Bye source of the Port Gregory sound and light were very close. We communicated over the months and Alex indicated that it would be ideal if we could utilise *Huon's* work up requirements in that area of interest. His applications to do this were not successful.

In July 2000 Alex, who now was ashore in Sydney and had some responsibility for the programs of the minesweepers, made contact again. He informed me that his Admiral had endorsed the project for the *Huon* and the *Norman* to do their required testing in our area of interest. He, and Lieutenant Gunther arrived in Geraldton, direct from Sydney on 31st July. We had dinner that night, and spent several hours on August 1st going over my information, oral histories, GPS positions of sightings, compass bearings and foul ground reported to me by fishermen. They drove to Perth next day and flew back to Sydney.

Of particular interest was a foul ground report I had which was on the direct line of sightings from Port Gregory. We worked up a couple of search areas of interest, and I also mentioned checking the 2 World Geoscience magnetic anomaly positions, which I had. The plan was for a RAAF plane (equipped to detect submarines) to check the positions, and provide this information to the ships, which would then check the area with ROV etc. The RAAF plan would be cost neutral using spare hours on other duties The *Huon* and *Norman* would be in Geraldton on Melbourne Cup Day.

On 31 August, a perhaps over enthusiastic Alex phoned me to say that the RAAF flight had occurred and the Flt Lt Dearie had reported some weak, good and strong MAD contacts. The two strong MAD contacts were either side of my foul ground with what appeared a debris field in between. Alex was convinced it was a large steel ship in two pieces. I kept this to myself for two and a half months until the ships arrived. I played no part in the naming of the three sites. I believed one site could be HMAS Sydney and the other two sites were magnetic anomalies. I do not know who named them Kormorant, Turrets and Sydney.

Alex arrived in Geraldton on Sunday 5th November and indicated that there were several contacts of interest. The ships would actually be searching the area of the foul ground the next day on their way into Geraldton for a 3-day stop. It was a long wait.

Apparently HMAS *Norman* did not search at all because she was running late due to weather and fuel problems. HMAS *Huon* also was delayed by weather and did not arrive in position until around 4pm Monday. She did two quick runs along one line and moved to the second position, which they did not yet have co-ordinates for. At the former position nothing was located except a hard flat sand with scattered low flat beautiful coral, all the one type and height.

Whilst the ships were in Geraldton I attended with Lt Commander Hawes, a briefing of the senior officers of both ships. This was held from 2pm to about 5pm at the Port Authority boardroom. Captain Griffiths of the *Huon* stated that the strong MAD's in my position of interest could not be ruled out on what he had done. It was decided that Capt Todd of the *Norman* would do a run along the cray line (looking for the North lump) and search the first area of strong contact with a 2mile x 2 mile sweep. *Huon* would go to the other area now it had the co-ordinates. A third area was not searched. (None of these areas are the Lindsay Knight positions).

Unfortunately both ships struck very rough seas when they left Geraldton on Friday 10th November. The run along the cray line was badly affected by the swell and the *Norman* did not find anything to report, including the previously located coral.

I am not sure if *Huon* located anything of interest because they damaged their ROV when they attempted to launch it in the bad weather.

Both ships performed well in Fremantle waters on their final exercise of this portion of their program. It is unlikely, under normal circumstances to have this opportunity for another three years.

Whilst I have always agreed that Detmers position should be checked first, these ships are not suitable for that work. So whilst their attempts to search my other area of interest and can be cost neutral, I saw no reason not to take up this opportunity. I am only sorry that time and the weather was against us.

THIRD SEARCH

A gentleman who lives at Port Gregory became obsessed with locating HMAS Sydney and hired a magnotometer at something like $180 per day to search the area He used cray boats when he could or his yacht. He rang to say he had found some scattered magnetic anomalies and felt it could be a debris field. On the information provided I knew the water was too shallow and it was too close inshore, but I could not ignore such enthusiasm.

I contacted Trevor Beaver of Batavia Dive Academy and he and Ian Stiles took their dive boat to Port Gregory My husband and I joined them at 5am next morning and we set out.

The magnotometer did give off several readings, but when the divers went down all they found was clear sandy bottom and some coral. Obviously just the nateral magnetic signature of this area.

Another day of wind, cold and sea sickness, and one shattered resident, who then returned his magnotometer. I contributed $100 to the expenses of this trip.

FOURTH SEARCH

I do not really class this excursion as a search. However we were told that a local cray fishing deckhand had donned diving gear to release a wedged cray pot. Whilst underwater he discovered a large steel shipwreck with a very large 'fish hole' in the bow, which he swam through. Strangely he did not mention this fact to his skipper until he was back on deck and they had been underway for a while.

Again the position was not likely to be HMAS Sydney because it was only about a mile off shore in line with the Glass family home at Greenough.

Again with Trevor Beaver, my husband and I went to the area, but we could not pick up anything likely on the sounder. We did plan to go back with some GPS positions for the cray pots in the area but have not done so to date.

FIFTH SEARCH

I was approached by Tom Watson of Lane Cove NSW, regarding getting a search for HMAS Sydney underway He first went to the HMAS Sydney Foundation Trust with his information about an air charter company which his friend was a stakeholder in, who had the technology to find wrecks in reasonably deep water.

He shared this information with the Trust and they utilised this company for some work off Rottnest. Tom decided to 'go it alone' and continue organising his search. As I had originally committed to sharing my areas of interest with him, I continued along this line.

We met on various occasions with Tom travelling to Perth and Geraldton several times.

The plan initially was for a single engine plane complete with technical equipment to fly the grid areas and to have shipping coverage in the water. I travelled to Perth and gave my information to this company.

The plan did not get off the ground because of complications and the need for a twin engined plane. Tom and his partners at one point agreed to purchase a twin engine plane capable of doing the task and to pay for the fit out of the plane with the required equipment

This too has been put on hold until after the findings of the HMAS Sydney Seminar.

CONCLUSION

What I am trying to impart here is that there are a lot of people attempting to follow leads to locate this important shipwreck. I feel this search should be initiated by the Government, as a responsibility to those 645 men. This would prevent people putting their lives at risk in their enthusiasm to solve this great puzzle.

I have no idea where HMAS Sydney may lie.

I would like the area on a compass bearing of 295 degrees from the homes identified as part of the sightings investigated. I suppose I would like a grid flown out from here to the German Battle position which is on the same bearing, but I realise this is too large a grid.

The other position or area I would like investigated is that which is on this line of sighting, and in the area where a wet line fisherman felt he sat on a wreck site for three days some years ago. He placed the position on my chart. He worked out his

positions in those days using radar and he felt the position he gave me was fairly accurate within a five mile radius.

This is the position I gave to Lt Com Hawes for investigation by the RAAF and the HMAS HUON and HMAS Norman. It was at this position the RAAF identified Strong MAD contact.

The fisherman's position is near 27 degrees 55S and 113 degrees 35 E

The following is a drawing of what his sounder appeared like and the direction of the anomaly.

Fisherman:
27 55S 113 35E

The RAAF plane identified two strong MAD contacts in this area:
27 56.359S7 113.35.432E2 and
27 55.705S1 113 36.149E8

I am aware that this area is full of natural magnetic anomalies. But that does not mean a shipwreck cannot also lie in this area.

Two know magnetic anomalies are those first raised by me after information received from individuals associated with the Sunday Times. World Geoscience checked these positions and declared them magnetic and some 200 ft below the ocean floor.

The positions originally detailed by World Geoscience before their confirmation flight was:

28 2S 113 29E and
28 11S 113.34E

The RAAF flight mentioned previously located GOOD MAD contacts at:
28 03.267S8 113 29.009E5 and
28 11.426S4 113 34.436E5

I trust this information is of interest to you. I am aware that Ed Punchard is interested in receiving it. I was unable to get any additional information from the RAAF because of classification.

I have a copy of an unclassified email from Alex Hawes, and the positions of weak, good and strong MAD contacts at the three positions the crew were sent to – ie 2 known magnetic anomalies and one area believed might be a shipwreck. The RAAf flight was carried out by P3C Shepherd 369 Flight 29 August 2000 PC-Lt Dearier, TC – Flt Lt Brownie, OTR Flt Lt Hibbard.

It is obvious I would like this shipwreck position further investigated.

Yours faithfully,

G. McDonald

Glenys McDonald AM JP

ATT.

P3C SHEPHERD 369 FLIGHT 29AUG 2000

PC-LT DEARIE, TC- FLTLT BROWNIE, OTR FLTLT HIBBARD

ON TASK 0730Z

TASK 1 POSS SYDNEY

0804Z	GOOD MAD CONTACT	28 03.267S8-113 29.009E5
0808Z	MAD	28 03.248S7-113 28.513E4
0811Z	MAD	28 02.812S3-113 29.349E2
0825Z	MAD	28 02.476S9-113 30.104E3

CREW SATISFIED

TASK 2 POSS TURRETS

0914Z	WEAK MAD	28 11S2-113 34E2 (NON GPS)
0921Z	WEAK MAD	28 11S2-113 34E2 (NON GPS)
0924Z	WEAK MAD	2811S2-113 34E2
0934Z	GOOD MAD CONTACT	28 11.426S4-113 34.436E5
0922Z	WEAK MAD	28 12S3-113 38E6 (NON GPS)

CREW SATISFIED

TASK 3 POSS KORMORANT

0942Z	WEAK MAD	27 56S0-113 35E3 (NON GPS)
0948Z	STRONG MAD	27 56.359S7-113 35.432E2
0952Z	STRONG MAD	27 55.705S1-113 36.149E8
0844Z	WEAK MAD	28 08S8-113 32E0
0832Z	WEAK MAD	28 09S9-113 33E1
0851Z	WEAK MAD	28 09S9-113 30E8

UNABLE TO COMPLETE NORTERN END OF KORMORANT SEARCH AREA

OFF TASK 0955Z

VE & GE McDonald

From: <Alex.Hawes@defence.gov.au>
To: VE & GE McDonald <gmac@wn.com.au>
Sent: Friday, 16 February 2001 3:03 PM
Attach: att1.htm
Subject: SEC: UNCLASSIFIED:-Unclassified RAAF [Clean-Virus Free]

Sorry that you have had that trouble. The signal reporting SHEPHERD 369's flight on 29Aug00 was largely concerned with some experimental equipment, and subsequently carries a higher classification than one would normally see. The following paragraph is unclassified (but sensitive) and is releasable:

"...transitted to south to begin mad search for sydney, on task after mad checks at 0730z. initially searched a line between sydney 2802s2-11329e6 and turrets 2811s2-11334e2 and gained mad contact at good gps posn of 2803 267s8-11329.009e5 at 0804z. crew continued search in this poss sydney location, gaining mads at the following times and good gps positions:
0808z(2803.248s7-11328.513e4), 0811z(2802.812s3-11329.349e2) and 0825z(2802.476s9-11330.104e3). crew satisfied at this time with posn of poss sydney and went to second datum for turret search. gained weak mads (non gps positions) at 0914z(2811s2-11334e2), 0921z(2811s2-11334e2) and 0924z(2811s2-11334e2). a good mad was called in turret area at 0934z(2811.426s4-11334.436e5) based on accurate gps posn. a weak mad was found outside aop at 0922z(2812s3-11338e6). crew satisfied with posn of poss turrets with datum to a radius of 0.5nm cleared, same as sydney datum, also cleared. decision made to continue to ple to locate kormorant. a weak mad located in kormorant aop at 0942z(2756s0-11335e3). on further investigation gained a strong mad at 0948z(2756.359s7-11335.432e2) and 0952z(2755.705s1-11336.149e8). other weak mads located were at 0844z(2808s8-11332e0), 0832(2809s9-11333e1) and 0851z(2809s9-11330e8. due to ple at 0952z, crew was unable to complete mad search in north of poss kormorant adp, but southern part of kormorant aop cleared. crew was off task at 0955z and landed ypea at 1052z."

You would appreciate that this created quite a stir at the time.

Clearance Divers - generally a good source of bs in my experience.

I have read the report of survey raised by the HUON (which is surprisingly detailed) and will see if I can have the MW Route Survey Officer declassify the component that deals with the Port G survey for release. Could you give me a call regards same?

Alex Hawes
0418 270 580

"VE & GE McDonald" <gmac@wn.com.au> on 16/02/2001 11:21:09

KNIGHT & WHITTAKER CLAIMS TO HAVE FOUND HMAS SYDNEY 11

1989 - 2001

DATE METHOD	KORMORAN	JAPANESE SUB/ MYSTERY SHIP	SYDNEY 11
1989 MAP DOWSING	28°39S 112°50E Depth 1200m	29°03S 112°23E Depth 4700m	30°18S 112°24E -
1989 FLIGHT 4 SEPT KSEDS	28°07S 113°12E Depth 154m Found Iron, gun metal, bronze, coal	28°35S 113°20E Depth 700m Found Jap bronze propellers, gun metal, Jap swords, human bones No coal	– Not able to fly this area
1998 28 & 31 JAN KDLS MK 217	28°38.39S 113° 21.86E Depth 700m	29°31.48S 112° 37.43E Depth - Claimed had been trying to get shavings from Jap propeller from War Memorial to determine signature of Jap propellers	29° 58.53S 112° 48.26E Depth 4500m
2001 27 MAY KDLS MK 29B	28° 38.259S 113° 22.2582E Depth 700m	- Disappeared	29° 58.4064S 112°48.416E Depth 4500m Claimed bones found for first time

For the Committees interest

Knight + Whittaker claims 1989 to 2001

Evidence for 1989 claims available if requested.

G. McDonald.

Note 89 Japanese Submarine becomes 98 + 2001 Kormoran.

Submission
by

John Noel Mildwaters

John Noel Mildwaters

JOHN NOEL MILDWATERS
3 TONBRIDGE WAY
THORNLIE W.A. 6108

DR DAVID STEPHENS
*/NAVAL HISTORY DIRECTORTE;
SEA POWER CENTRE;
DEPRTMENT OF DEFENCE;
CANBERRA.

DEAR SIR;

I WISH TO ADVISE YOU OF TWO G.P.S. POSITIONS OF WRECK INDICATIONS WHICH HAVE BEEN HELD IN CONFIDENCE AT THE W.A. MARITIME MUSEUM BY DR. MIKE McCARTHY SINCE THEIR LODGEMENT IN ~~1998~~ 23-7-97 JMW.

I WOULD NOW LIKE TO SUBMIT THE TWO CO-ORDINATES WHICH ARE LAT 28-06-193 S
LONG 114-00-264 E POSSIBLY FOR HMAS SYDNEY

& LAT 27-11-71 S
LONG 113-12-88 E POSSIBLY FOR KORMORAN
FOR THE 16-11-2001 SEMINAR REGISTRATION, THESE ARE GPS POSITIONS.

ADDITIONALLY I HAVE GRAFTS TAKEN FROM VIDIO CAMERA TAPES OF THE SITES WHICH I CAN PRODUCE AT THE SEMINAR OF OUR SEARCHES.

FOR PORT GREGORY SEARCH GROUP
SKIPPER & WIFE (ANON'YMOUS]
RALPH & TRASE TAYLOR
PHILLIP & FIONA TAYLOR
D ;R;E & M. KING
JOHN & LIL MILDWATERS.
SIGNED JMildwaters 31-10-01

Submission
by

J.A. Montagu CD

McElhinny Nominees Pty Ltd

J.A. Montagu CD

McElhinny Nominees Pty Ltd

Rec'd From

Apparently
Otto Jorgensen to
Montague
Mr Montague will Action
this - I
John Montague
leave my
details
there.
16/11/07.

9457 3630 Ht

OJ — To JM in 1995
Otto to JM w/o killer
in 1998.

Otto died 1999.

42 Falkland Sq
Riverton
6148

[illegible]
[illegible]

[illegible], 16th September 199[illegible]

[illegible]
[illegible]
[illegible]
[illegible] 6146

Dear Sir,

I am very sorry for you that you still today have no confidence nor trust in my words.
It is a real fact that an auxiliary cruiser is able to destroy an active navy cruiser, but it is the truth!
The captain of our auxiliary cruiser, Captain [illegible], was a man with great experience and praxis, much greater than the captain of the "[illegible]" had.
[illegible] had been trained in Germany during his youth, [illegible] [illegible] to train young men and they wanted to [illegible] [illegible] of the German navy.
The Captain [illegible] knew how to behave!
He behaved exactly according to the agreement of Geneva with respect to the conditions of the war at sea! If he had not behaved according to the Geneva agreement he would have been taken to a law-court because he would have committed a war crime.
Why was Captain [illegible] not quoted before the court?
There is only this answer : Captain Detmers was free of crime because he acted exactly to the Geneva contract!
And why are there a lot of Australians who will not or cannot believe the fact that an auxiliary cruiser can destroy a larger cruiser in a more powerful equipment?? Cruiser
H.M.A.S. "SYDNEY" was the most glorious in Australia. In the Mediterranean she had heavily fought against the Italian navy and now this improvised ship shall have destroyed this new cruiser ?? 645 men killed?? No that cannot be. There must have happened a crime.
All those parents, the children, the family, they all have suffered under the death of their fathers or sons or good friends, and the inquirers, investigators, researchers write books about that tragedy, but the only grown-up person is Mrs. Barbara Winter! No other person— lady or gentleman— [illegible] able to solve the mystery!
Captain Detmers never acted against the Geneva contract. [illegible]
[illegible] [illegible]
Captain Detmers always [illegible] a flag which he was allowed to show.

Captain Detmers was honoured by the Australian Navy.
One Australian Commander visited Kiel, in the next year another Commander visited [illegible].
Both laid wreaths at the German monument for the fallen comrades of the navy of the wars 1914/18 and ~~[illegible]~~ 1939/45.
Captain Detmers was never or [illegible] before a war-crime-court, neither in Australia, nor in England or in Germany (at the time when England [illegible] [illegible]).
In order to correct some mistakes of you! The duel between the two ships began exactly on the 19th November 1941!
Kormoran was not hit by our own mine nor by a mine of our Opponent. Kormoran was hit by shells just as we sent shells over to our Opponent.
After this introduction I come to all those inquirers, investigators, researchers and other types of men who know much more, from a local [illegible] over to ~~[illegible]~~ [illegible] and all those who [illegible] know more than those who had lived our HSK "[illegible]".

F. T.

!!!

Some corrections for you:

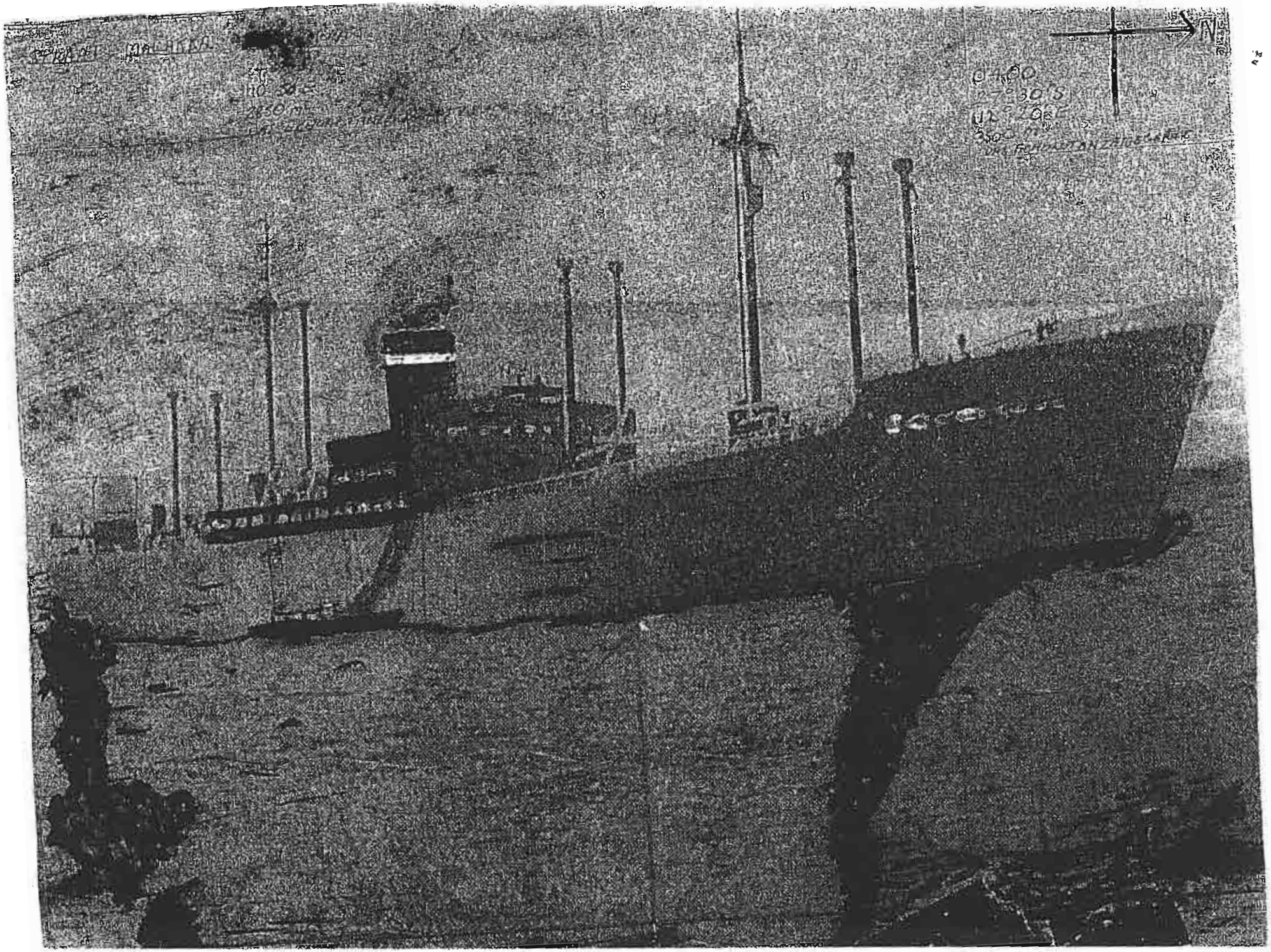
1. The action began in the evening of 19/20 November!

page 2, number 1: The reported date and ~~time~~ time in 1941 is not doubtful!

5. Hermann was not hit ~~by~~ by her own mine! nor by a mine of our opponents!

page 3, "the Japanese „Submerinem" shall have helped to sink „Sydney" is an absolut nonsense, but it was believed!)

Yours faithfully,
Otto Jürgensen



McElhinney Nominees Pty Ltd

ACN 008 844 666

DEVELOPERS-ASSESSORS-CONTRACTORS-INVESTIGATION-ENGINEERS

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HMAS SYDNEY FORUM FREMANTLE WA:
NOVEMBER 16th 2001:

ATTENTION: CHAIRMAN:

CHRONOLOGY OF THE HMAS SYDNEY
-HSK KORMORAN DEMISE AND
ISSUES OF RELEVANCE ATTRIBUTED
TO WRECK LOCATION AND LOSS OF
THE 645 AUSTRALIAN CREW:

NOVEMEBER 20th 1941: 0300-0400 hrs WST: LAT 27deg 30mins S. Lng 112deg 20mins E. HOURS OF DARKNESS:

SYDNEY WAS HIT BY THREE TORPEDO STRIKES DELIVERED BY THE KORMORANS TORPEDOBOOT: ONE IN THE PORT BOW: TWO INTO THE PORT QUARTER, BLEW AWAY THE STERN SECTION:INSENT ROLL OVER AND SANK STERN FIRST:

HSK KORMORAN DRIFTING WHILST PRACTICING MINE LAYING STARTING SINCE 2400 ON THE NIGHT OF THE NOVEMBER THE 19th 1941WAS WITHIN THE SUNDA SEATRACK IN READINESS FOR THE TROOP SHIP AQUITANIA THAT WAS DUE DOWN THE SAME TRACK ON NOVEMBER 23rd 1941 WHICH WAS THE KORMORANS MAIN TARGET:

THIRTY SURVIVORS FROM SYDNEY WAS PICKED UP BY KORMORAN AFTER THE AUSTRALIAN LIGHT CRUISER WENT DOWN AND WERE LOCKED IN THE CELLS OF KORMORAN AS POW:

KORMORAN THEN PROCEEDED WEST OUT OFF THE REACH OF LAND BASED AIRCRAFT OR SEA SEARCH VESSELS: HEARING NO WIRELESS TRANSMISSIONS RELATING TO SYDNEYS NONE ARRIVAL AT FREMANTLE: THE KORMORAN THEN PROCEEDED TO TRAVEL EAST ON THE 22nd OF NOVEMEBER 1941 AGAIN IN THE HOURS OF DARKNESS TO LAY A MINE PATH ACROSS THE AQUITANIA,S PATH ON THE TROOPSHIPS VOYAGE SOUTH:

AT APPROXIMATLY 2300-2400 WST ON THE 22nd NOV 1941: THE KORMORAN AGAIN PRACTICING HER MINE LAYING: HAD AN ACCIDENT WITHIN THE MINE STORAGE GALLEY: WHICH RESULTED IN HER SINKING WITH THE LOSS OF 79 OFFICERS AND CREW FROM THE SHIPS ENGINE ROOM AND SLEEPING QUARTERS, ALONG WITH THE THIRTY AUSTRALIAN PRISONERS SHE WAS HOLDING IN HER CELLS: THE ACCIDENT CHART FIX IS LAT 24deg 07mins S. lng 110deg 50mins E. WHERE THE WRECK OF KORMORAN IS RESTING:

THESE FACTS CAN ALL BE SUBSTANTIATED BY ORIGINAL DOCUMENTS OBTAINED FROM A GERMAN CREW MEMBER PETTY OFFICER NAMED OTTO JURGENSEN WHO CORRESPONDED WITH MY COMPANY IN 1995-1998: THE RECENT VISIT TO WESTERN AUSTRALIA OF MR FITZ ENGELMANN WHOM I INTERVIEWED ON WEDNESDAY 13th NOV 2001 HE WAS A 19 YEAR OLD GUN LAYER OFF KORMORAN WAS MET BY THE SAME REPLY THAT HAS BEEN A STANDARD PROCEDURE FOR THE PAST 60 YEARS: QUOTE: I WAS ONLY A 19 yr OLD GUN LAYER AT THE TIME AND I SAW VERY LITTLE:

MY POINTS TO FRITZ ENGELMANN WAS BASED ON THREE MAIN FACTS: SIGN A DECLARATION THAT CONFIRMS OTTO JURGENSENS STATEMENT THAT THE ACTION WAS IN THE NIGHT TIME IN TO THE FOLLOWING MORNING: THEREFORE IN DARKNESS:

SIGN A DECLARATION THAT THERE WAS THIRTY OR A NUMBER OF SYDNEY SURVIVORS PICKED UP BY KORMORAN AFTER THE ACTION AGAINST SYDNEY ON THE MORNING OF THE 20th NOVEMBER 1941:

I ALSO ASKED WERE THEY RELEASED AFTER THE KORMORAN HAD THE MINE ACCIDENT? HE THEN AGAIN STATED THAT IT DID NOT HAPPEN THAT WAY:

THE MAIN ISSUE HERE IS: IF THE THIRTY HMAS SYDNEY SURVIVORS WERE LOCKED IN THEIR CELLS AND DIED THROUGH THE MINE EXPLOSION: THEN IT DID NOT CONSITUTE A WAR CRIME: if NO EFFORT WAS MADE TO RELEASE THEM, THEN THEY DID COMMITT AN ATROCITY:

THERE IS DOCUMENTATION AVAILABLE TO SUPPORT THE WRECK LOCATIONS AND CIRCUMSTANCES, HOWEVER IT IS CRITICAL FOR THE FORUM TO APPROACH THE AUSTRALIAN GOVERNMENT TO CONTACT THE INTERNATIONAL COURT AND REQUEST THAT SURVIVING MEMBERS OF THE HSK KORMORAN ASSOCIATION ARE BROUGHT BEFORE SUCH COURT TO BREAK THE SILENCE RELATING TO THE LOSS OF 645 OFFICERS AND MEN FROM THE HMAS SYDNEY LOST THEIR LIVES 120 MILES OFF THE WESTERN AUSTRALIAN COAST IN SEMI TROPICAL WATERS IF THE SYDNEY WAS AT ACTION STATIONS

IN THIRTY YEARS OF INVESTIGATIONS INTO INCIDENTS WERE THERE IS ONLY IN MANY CASES ONE SIDE OF EVIDENCE WAS ONLY AVAILABLE: HOWEVER SIXTY YEARS OF COLLUSION AND SILENCE HAS TO BE PENETRATED, IF ITS BY THE INTERNATIONAL COURT? THEN SO BE IT:

YOURS SENCERLY:

JOHN A MONTAGU: CD

16th NOV 2001:

Submission
by

C.E. Munyard

T.A.C.E-M.I.M

C.E. Munyard

T.A.C.E-M.I.M

INDUSTRIAL MINING AGRICULTURAL

T.A.C.E - M.I.M

A.P.E.A., M.I.M.C.

CONSULTANT TO INDUSTRY

Unit 3 Hale House
37 Waverley Road
Coolbellup WA 6163
Phone (08) 9331 6615

Date: 22nd March 2001 *Your Ref:* *Our Ref:* CEM.17/3/2001

SUBMISSION

Lt.Commander Richard Chartier
Staff Officer,Reviews
Navy Headquarters
R1-4-71
Russell Offices
Canberra ACT 2600

Dear Sir

HMAS Sydney 11

I thank you for your 'phone call to me on the 20th inst and for information given. Plese find enclosed my Submission with regard to the loss of Sydney and her entire crew. (details of Submission enc).

Separately to my decodings of Dr ListS cryptographs I would like to comment upon the article that appeared in the West Australian newspaper on the 1/5/2000 in which the Son of Lt.Capt Henry Meyer, Navigation Officer of the Kormoran , featured when he whilst on a trip to Australia,handed in photographs written upon by his Father to the Western Australian Maritime Museum. A coincidence that these items should only appear now after all the publicity.
My comments are these;

Kormoran survivors were searched initially followed by further thorough snap-searches,it would have been very hard to secrete the 'photos.

Henry Meyers allegedly wrote the messages on the 'photos whilst in a boat enroute to Red Bluff but on the writing shown he was ashore and was waiting for the Police to come for them and so was under some surveillance. An odd time to be writing notes. I find it odd that a seasoned navigator would write 111W instead of 111E. Even under duress he would have noticed an error and corrected it I feel sure. During the years after the War he would surely have looked at the photographs,reread what he had written, noted the error and corrected it. A navigators mind would have led him to do that. To dot the i and cross the t.

Bearing in mind the matters above an investigators mind must ask the question,was the writing placed upon the photographs during the War or after it and by another person?. Compiled from hearsay and notes perhaps. I find it a little strange that a seaman should refer to a raft as a rubber boat.

I have no desire to cast aspersion upon anyones good name/impugn their character but there have been so many twists and turns in the HMAS Sydney affair that one can not be blamed for possessing doubts.

I am still researching the actual number of crew on board the Kormoran,why were not the alleged crew members who died when a raft overturned near the Kormoran (or some of them) picked up and were there any prisoners captive on board the Kormoran. If so,what happen-to them.

../2

Page 2 of HMAS Sydney 11
Submission to Lt.Commander
Richard Chartier.

With regard to Dr.Lists Leica camera etc in the cave at Red Bluff (see my decoding enc) I advise that I was making trips into the Carnarvon area on behalf of my employers during late 1947 and at that time it was commented upon,to me,that local residents were very surprised at how quickly after the Wars end in 1946 European ' tourists ' as they called themselves were in the area and visiting the coastline. Dr.Lists camera would have been recovered.

When the Kormoran survivors took to the boats,abandoning their sinking ship,they would have been fully armed because they would not know what the future held for them. I would suggest that when they knew that they had been spotted and would be taken into custody they would have taken their arms and ammunition a little way off-shore and dumped them together with any such things as wireless sets etc.

I refer of course to the parties on the beach near Red Bluff and the Seventeen Mile Well/Quobba.
As a matter of interest,Henry Meyers writings say that HMAS Sydney and the Kormoran were finally 30km apart whilst my decodings say 35km.

Yours faithfully

C.E.Munyard

Enc. Red Bluff caves sketches and my letter pertaining to these.
Copy of front page of my booklet HMAS Sydney 11 & Dr.Lists cryptographs.
Page from the Community News 1995 reference my booklet.
Six page set of my decodings dated 14th April 1999.
Copy of a page from the West Australian titled ' Secrets Surface '.
Copy of captured Japanese Invasion map,1942.

Sketch made by Dr List (Australian Archives)

consequences IF ALIVE they had been allowed ~~to remain~~

The circumstances ~~were indeed~~ extreme, because if ar

~~had survived~~ from the *Sydney* to give evidence, Detmer

~~[illegible] incarcerated, to be charged~~

Sketch made by Dr List (Australian Archives)

G.E.M.

4/2/95

THE LOSS OF HMAS SYDNEY.11.

The hiding place of Dr. list's LEICA camera.

Inferences drawn from decyphering of the Red Bluff cryptographs.

I began to wonder what the little man wearing a typical Officers peaked cap and having a satchel slung upon his back and carrying as well a stick across his shoulders supported at one end by his right hand was pointing at, so I followed the line of the stick across to the left of the inside of the right-hand cave opening whereupon I discovered the shape of a spear pointing left to right and upwards at an angle. While studying the surrounds of this spear I noticed under it the distorted but clear letters E C A and that when I drew the L shaped stick in front of the E, I had L E C A. Further study showed that the crossbar or guard mounted behind the head of the spear had part of this bar partly inserted downward into the space between the E and the C which finally spelled out the word LEICA.

This message is well woven/hidden in the myriad of deformed lines and shapes contained in the sketch.

According to this message the camera was secreted in the back wall or roof inside the cave.

At no time did I believe that Dr. List would have hidden the LEICA in the sandy floor or thereabouts.

When taken back to search for the camera Dr. List must have been amused whilst digging was in progress.

C. E. Munyard

Acknowledgements to: Michael Montgomery. ' Who Sank The SYDNEY '.
Tom Frame. ' HMAS SYDNEY, Loss & Controversy '.

HMAS SYDNEY.11.

&

Dr. List's Cryptographs.

Authors note.

I had intended originally to write a book about the loss of HMAS SYDNEY subsequent to work that I had carried out in decyphering the cryptographs compiled by Dr. List after he and other Kormoran surviving crew members had come ashore near Red Bluff beyond Carnarvon on our northwest coastline late in 1941 but after much thought I decided that since so much has already been published as regards factual information concerning HMAS SYDNEY prior to her loss and unprovable supposition regarding this latter tragic event by various authors that I should confine myself to a simple disclosure of the messages that I believe that I have been able to extract from these cryptographs.

When all is said and done the matter of most importance is ' what happened to the SYDNEY ' and all aboard her on that fateful day,.. the 19th. of November 1941.

I believe that my decodings of Dr. List's sketches could prove to be accurate but in no way do I presume to guarantee that my findings are correct.
I would also mention that though the derived messages be accurate it may well be that interested parties wishing to preserve secrets might ridicule my efforts.

The following material is deliberately not put forward for readers consumption in a polished format but is rather just a record of what has taken place during these recent studies. As will be seen much of the material is comprised of letters and notes. Through the need for strict confidentially in much of my work I do much of my own typing and I am not expert so I ask perfectionists to bear with me.

C. E. Munyard
5th. March 1995

ISBN 0 646 23424 2.

First published in 1995
by C.E.Munyard.
41 Strickland Road, ARDROSS WA 6153.

S P E C I A L N O T E

8th. July 1995

The key to locating the alleged hiding place of Dr. List's camera etc at Red Bluff has now been included in this publication for reasons shown,- see pages 25/26/27.

Melville-Fremantle Community News 8/8/1995

I have now decoded the cryptographs and notified Dept.of Defence as to results.1999.

WARTIME REFLECTIONS

I have lodged details with Norseman Historical Bureau etc.

Some new ideas on an old mystery

The Japanese invasion map details landings at Esperance then inland thru Norseman to Sandstone then Eastward.

The decodings indicate to me that there was Japanese involvement in the sinking of HMAS Sydney.

THE mystery of HMAS Sydney has fascinated war historians for 50 years.

One aspect has gripped the attention of Cliff Munyard, of Ardross, who has spent years on the interpretation of cryptographs inscribed into caves at Red Bluff, north of Carnarvon.

The marks are believed to be the work of survivors from the Kormoran, the German ship responsible for sinking the Sydney, which itself went down in the action between the two vessels.

Whether or not the Japanese were involved in the incident remains controversial, but Mr Munyard has assembled an interesting scenario for those who are students of maritime history.

He has put together a 27-page booklet of his findings which includes clues to the hiding place of a Leica camera which many believe was hidden by Dr List, a cryptographer known to be on board the Kormoran.

It has never been discovered, although Dr List was taken back to Red Bluff as a prisoner of war to locate it.

Mr Munyard may be contacted on ~~364 7510~~ by those interested in his theories, which read like a detective story.

His own war experiences were in Australia, but lacked no excitement for that.

In early 1942 he was an engineer at the Butterfly Goldmine, near Norseman.

While carrying out urgent powerhouse repairs one night, the miners spotted a small single-engined aircraft, which passed overhead, heading towards the salt lakes.

They thought it was a plane from RAAF Kalgoorlie, checking on the blackout, so after hastily dousing lights and fires, they rang the base, only to find no aircraft had been in the area.

Weeks later they were told a small float-plane was believed to have been launched from a submarine off the coast near Esperance and had been intercepted.

Mr Munyard said that acts of sabotage and espionage were carried out in Australia.

At the Butterfly a foreign agent, a professional saboteur who had been employed to work underground, was discovered.

He had an arsenal of explosives and had prepared bombs from grenade casings which were cast in the mine foundry as part of the war effort.

Armed security agents arrived one night and the plant was shut down.

The nightwatchman, with Churchill, his bulldog, grabbed his shotgun and Mr Munyard took a service revolver from the desk, as the party moved in to arrest the wanted man.

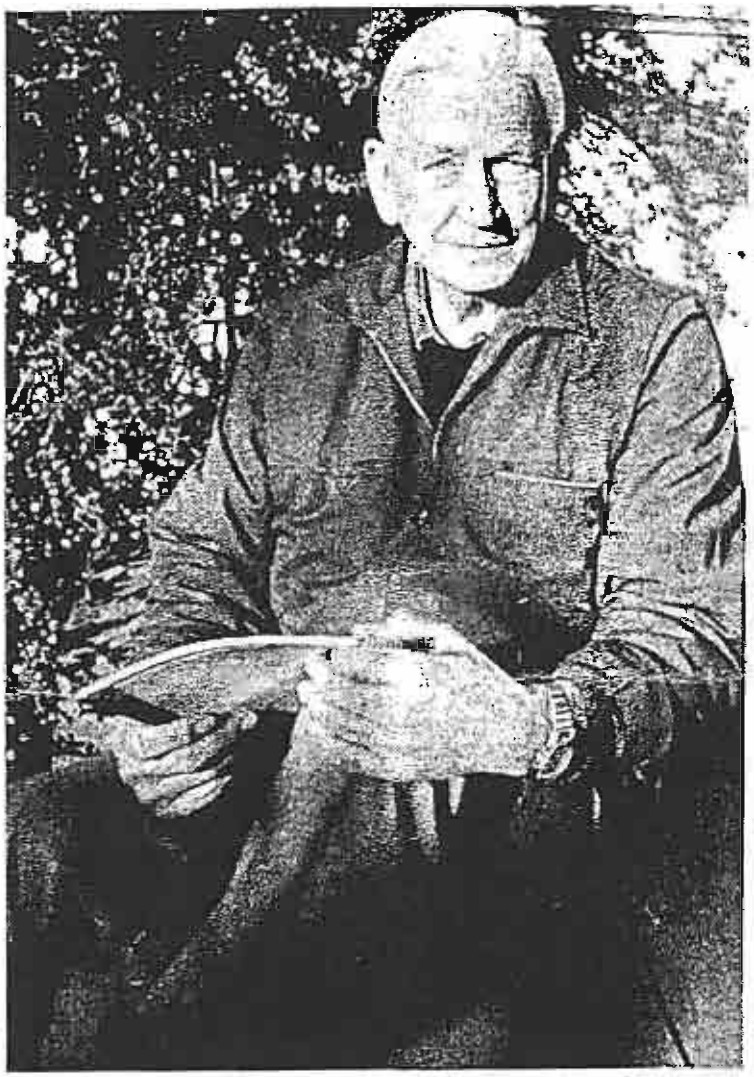
Later that year he was inducted as a reservist in the United States Army Air Force. Special duties involved him taking mine electricity generating plants to strategic airstrips planned for the coastline near Esperance.

At that time it was thought that a Japanese invasion of Australia would be mounted from Esperance and then would sweep eastward.

He was later transferred to Whyalla, and worked around Australia on essential and secret war work.

His association with cloak and dagger dated from the early days of the war when he was directly involved in apprehending two spies, allegedly from India, who purported to be producing a holiday brochure for tourists.

They had collected precise information about towns and ports, leading citizens and the defence capabilities of the towns.



● Ardross resident Cliff Munyard with the booklet he has written on the HMAS Sydney mystery.

Not so.

The 'caves' sketch riddle I had solved and published details of.

I was told, not 'they'

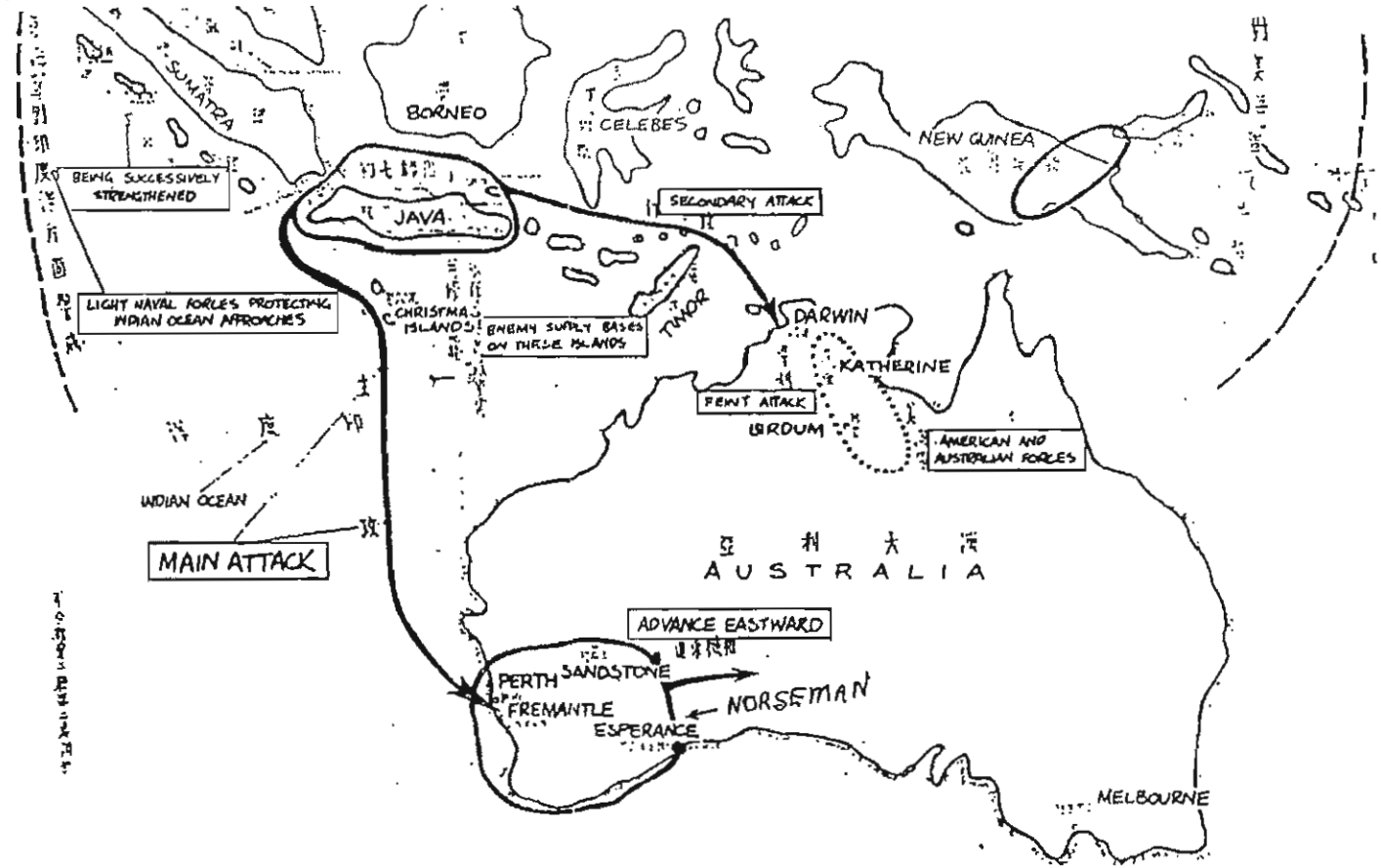
* I had been alerted to try to identify this man. WA 1940

(as I have written, I was able to, as well as the Agent at Spargos)

weekend magazine

RIGHT: A copy of a Japanese invasion document, supplied by the Australian War Museum in Canberra. It is believed that the invasion plan was that taken from enemy soldiers in New Guinea in 1942.

A translation of Japanese notes attached to the map says, in part: "Part of the forces, based on Java, to stage a diversional attack landing at Darwin, and engaging the American and Australian forces around Katherine and Birdum. The main force, proceeding the Sunda Straits, to land at Fremantle and Perth, occupy the country west of Esperance-Sandstone, then advance eastward.



Target Australia!

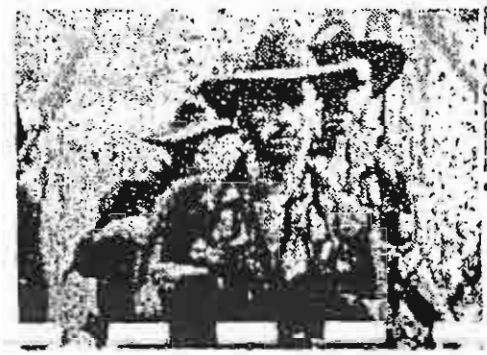
THE Japanese did intend to invade Australia — despite what is said in the Dibb Report.

BY HUGH SCHMITT

The three ex-servicemen are asking: Could the documents at the War Museum ... the ... they ... catalogued in ...?

ers for the occupation of the Australian mainland.'

"The maps showed the airfields, the railway lines and major works to be ...lope... at l... tart... soo



somewhat North/South in Australia with Western Australia being expendable if need be. We were still the Cinderella State. We in Australia owe our freedom from Japanese rule to American intervention on our behalf.

INDUSTRIAL MINING AGRICULTURAL

T.A.C.E - M.I.M

A.P.E.A., M.I.M.C.

CONSULTANT TO INDUSTRY

Unit 3 Hale House
37 Waverley Road
Coolbellup WA 6163
Phone (08) 9331 6615

Date: 14th. April 1999 *Your Ref:* Your previous purchase of this booklet. *Our Ref:* Appendix A (a set of 6 pages)

HMAS Sydney 11 & Dr.Lists Cryptographs

Further to the issue of my self-published booklet bearing the title as above I had extracted some other details from the cryptographs but did not publicise this material immediately largely owing to the fact that I became aware of the Official Inquiry into the loss of HMAS Sydney and decided to wait and see what transpired.

I have now enclosed for your perusal copies of pages 1 & 2 containing suggested decodings.

I was advised during the Inquiry that my booklet could not be included as a Submission as it was published prior to the Inquiry and was as such not written especially as a Submission.A reference to the existence of the booklet was allowed as a Submission and a copy of the booklet was included in Exhibits.
I refrained from submitting this further material as I did not wish it to be perhaps summarily dismissed as 'just another theory'.

The findings contained within the accompanying pages confirm,to me that is,that a Japanese submarine was present during the sinking of HMAS Sydney and the subsequent 'mopping-up' operation.

I understand more and more why Captain Detmers/Dr.List tried to have copies of the cryptographs carried back to Germany,- they wanted it known that they (the crew of Kormoran) were not involved in the mopping-up operation. All members of Sydneys' crew had to be silenced. Japan at the time was not at War with Australia so if,as it seems, one of their submarines was involved in the Sydney/Kormoran battle and it became known,accusations of involvement in War Crimes could have been levelled at Captain Detmers and his crew. There is of course the fact that should it be quickly known that Japan had engaged in a War-like act without declaring War then perhaps Pearl Harbour would have been placed on full-alert.
Captain Detmers was reportedly somewhat concerned about War Crimes.

Dist.list:Dept of Defence,Navy
Defence Academy
National Library
Booklet-holders

Yours faithfully
C.E.Munyard.
C.E.Munyard.

HMAS Sydney 11
&
Dr.Lists Cryptographs.

ISBN 0 646 23424 2

As a preface to the following observations could I say that one lesson that I have learned well during a long and varied career is that 'coincidence' has an extremely long arm. 'Coincidence' qualifies as the perfect Devils Advocate to seemingly logical decision-making whether the scene is technical,physical or emotional. 'Coincidence' is also a tool-of-trade to the astute cryptographer who uses it to cloud an issue or to create diversional blind-alleys,however,should an important identification have to be made included within his message he is then faced with having to close-group pointers to the item/matter to be identified. This happened to Dr.List I believe with reference to the obviously-needed mopping-up operation subsequent to the sinking of HMAS Sydney and the result is as under;(using numbers)

Of the four individual sketches on Page 16 of my booklet the one on the extreme left refers I believe to mopping-up finally,and so I have listed the letters above it together with their alphabetical numerical value in order to extract whatever information that I can.

	K	T	M	S	W	E	R	O		Total
	11	20	13	19	23	5	18	15	=	124
	S	Z	B	N	L					
	19	26	2	14	12				=	73
	B	W	P	A						
	2	23	16	1					=	42
*	B	K	G	F	M	S	T			
	2	11	7	6	13	19	20		=	78
								Total		317

On the top line we have the letters RO,these being the closest prefixes to the total of the appropriate numbers when added up,so we have

RO 124. Naval (not Army) submarines in the Japanese Battle Group in 1941 were I class and RO class apparently.
Just a coincidence do you think ?.

317 (approx) survivors from the Kormoran were taken into custody, Captain Detmers would not have included the Chinese men.
Just a coincidence do you think that this figure tallies with the numbers total displayed above ?.

Whilst on the subject of numbers may I refer to the matter of Kormoran transmitting the QQQQ signal,accompanied by GMT which is taken to refer to Greenwich Mean Time,but Captain Detmers had to make known to Germany the identity of the ship sending this message,so by reversing the alphabet and so the numerals we have;

	G	M	T	(total not relevant)
becoming	T	N	G	
with values	20	14	7	giving a total of 41.

The Kormoran was designated Schiff 41.

So many codes have been based upon letters or numbers. There was one which employed one single number followed by whatever number of O's were required to complete a known signal. When the single digit number was converted to its alphabetic opposite letter then the sequence of O's converted to the letter obtained from the digit,so;

../2

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(just as an example) the 1000 which Captain Detmers placed before G M T would have signalled thus; Note: The K before G M T on page 1 * denotes 1000.(1000 gr = 1 kilo)

1000
becomes A000
which becomes AAAA = Aircraft Attack Report.

This would have indicated that HMAS Sydney's 'plane had been launched. Captain Detmers would not have sent out AAAA because listeners could have been alerted,which could have consequences.

Points to think about,

If Captain Detmers made a show of abandoning Kormoran early-on then he could only have put a few men into boats because if too many showed then Captain Burnett would have realised that a general cargo ship was not before him as they were fairly economical with regard to crew numbers.
Give Captain Burnett the benefit of the doubt too. He would have been suspicious of any ship and being naturally aware of Kormorans teeth even though she was posing as the Straat Malakka he would not have allowed Sydney to be broadside with a doubtful vessel. He would have stood off from,probably,Kormorans rear quarter.The more that you look at the situation so do you realise that the odds don't add up,unless a third party was present.

The letters above each sketch usually match with pre-arranged words that describe the salient points/features contained within the sketches and a de-coder has to attempt to align the words with the extracted numbers/totals which can give with the detail embodied in the drawings,a clue to the trend of the words, It is a reasonable assumption that the letters/words above the left-hand cryptograph pertains to some action taken by RO 124 submarine with the objects in the room suggesting to me a mopping-up operation of boats and men in the water. I have no wish to malign anyone,I am just telling it as I see it. I cannot guarantee that my findings are correct but taking into account my previous decodings of Dr.Lists cryptographs I believe that I am not far from the truth.

Ends

Ps. I am aware that Submarine 124 was not RO class but Dr.List had to make a positive identification. He had to make the numerical values of letters attain the total of 124 and just to place 'I' in front of 124 would not positively relate the Sub to Japan.

CM

(This paragraph was inadvertently not included) .

Appendix D
(refer Page 1 of 2
of Appendix B)

HMAS Sydney 11
&
Dr.Lists Cryptographs
ISBN 0 646 23424 2

In decyphering the letters appearing above the four sketches reproduced on Page 16 of my booklet the indications as under must be borne in mind.(seen below is the bottom line of the 4)

The letter B together with its numerical equivalent of 2 giving,
$\frac{B}{2}$ stands for the following;

B is the first character in a word to be defined.
2 denotes that alphabetical numbers should be reversed.
B is also a divisor.

Now,as a demonstration I will show the complete bottom line with results;

	B	K	G	F	M	S	T	
	2	11	7	6	13	19	20	(read from right to left)
	25	16	20	21	14	8	7	= normal numerical sequence in alphabet.
so	25+	16+	20+	21+	14+	8+	7	= reversed alphabetical numbering.

= 111 or 111°E Kormorans position? Was crossing 111°E.

Now the second line up from the bottom

	B	W	P	A	
	2	23	16	1	Note: The letters A & Z are leading/1st place.
	25	4	11	26	normal values
so	26	11	4	25	reversed values
=	26	11+	4+	25	becomes 26.40 or 26°40S on 111°E (from above) Kormorans position?

Now the third line up from the bottom

	S	Z	B	N	L	
	19	26	2	14	12	figures to left of divisor B retain normal values.
			25	13	15	figure B and to right of it. Not known as yet.
	=26	19	= 26°19S			figures to left of B are normal. Sydneys position?

As said above both A & Z can equate with the number 1,they lead.

Now the top line

	K	T	M	S	W	E	R	O	
	11	20	13	19	23	5	18	15	(B2 absent,no reverse numbers)
so	11+	20+	13+	19+	23+	5+	18+	15	=124 Submarine number I believe & RO.

In line with the pattern of the indicators the letters/words on this top line would read as normal,left to right.
Note. The topline equates with the left-hand of Dr Lists four sketches.

In the previous appendices I gave an explanation of most of the bottom line. The story is emerging. This would be the story of the action down-stream from the first sighting. The results,as said before, of using the numbering system in this type of de-coding can defy co-incidence. Two southerly bearings have appeared based on 111°E.

As shown in my booklet I arrived at the conclusion that Kormoran was at 26°34 whilst crossing 111°E and proceeding North East and Captain Detmars was alleged to have stated this. That was the very first sighting of some vessel,which turned out to be HMAS Sidney. Dr. List would not have repeated this so as said above the Bearings on this page would be subsequent reportings.

Dr.List would have followed usual practice by referring to his ship Kormoran as'A'and HMAS Sydney as 'Z'.

The Positions given will now stand as bench-marks for hind-casters.

Ends

Appendix D1.

HMAS Sydney 11
&
Dr.Lists Cryptographs

Further to appendices C & D.I have set out below the actual sequence of events laid out in Appendix D in their true order of happening.

Line No.1 on D is in its correct place and describes the meeting between HMAS Sydney and Kormoran. It corresponds with the right-hand (end) drawing of the four as re-produced on page 16 of my booklet.

Line No.2 Third line up from the bottom on D assumes its rightful position. Becoming 2nd to line No.1 above. Formerly 2nd from the left of the 4 drawings.

Line No.3 The lower line on Appendix D assumes its rightful place as line No.3 as shown.

Line No.4 The 2nd line up from the bottom on Appendix D assumes its rightful place as line No.4 as shown.This alludes to the drawing 2nd from the right-hand-end.

Explanation;

Dr. List laid a red-herring trail to follow when he delegated the four drawings as (left to right) E S B T. It was obvious that the letters should read B E S T but even then he set a trap by placing T at the reverse to normal left-to-right reading. In fact in the proper sequence of events,

drawing nominated T was actually B, the meeting of HMAS Sydney and Kormoran.

drawing nominated S was actually E.

drawing nominated E was actually S

drawing nominated B was actually T

So;

Actual B (formerly T) was the meeting between the two ships.111°E.
Actual E (" S) was the sinking of HMAS Sydney at 26°19S.
Actual S (" E) was the mopping-up of HMAS Sydneys crew.
Actual T (" B) was the sinking/abandonment of Kormoran at 26°40S

Actual drawing S from above does in its caption-lettering indicate that RO 124 was present. A Japanese submarine nominated RO instead of the true I for reasons of positive identification.

Conclusions;

The text of Dr. Lists cryptographs establishes the fact that the information offered up to Australian interrogators by the Kormoran survivors consisted of a tissue of lies. Dr. List wanted to present the true story to German Command.

As I have reported before,should Kormoran have sunk Sydney in fair fight then there was no need for lies and misleading statements.

* It is obvious to me now that what I took to be the machine-gunning of a ships-boat (Sydneys) on page 10 of my booklet was actually the detail of the torpedoing of HMAS Sydney. The Sydney was torpedoed three times as seen. Captain Detmer surely didn't achieve this result on his own. Note the placement of the torpedoes.

Captain Detmers/his ship, was present when the Sydney was sunk (Dr. List gave the position 26°19S on 111E) and though the Kormoran had been severely/fatally damaged by HMAS Sydney (it was abandoned and scuttled at 26°40S111E)

../2

ISBN 0 646 23424 2

it would have participated in the destruction of the Sydney. A two-pronged attack.

I still adhere to the premise that the Kormoran together with a Japanese submarine,was lying in wait for the Aquitania. (Appendix C)

Dr. List was a clever cryptographer.
He chose the most mundane to represent the most significant. The supposed hanging gaggle of fish...the torpedoeing.

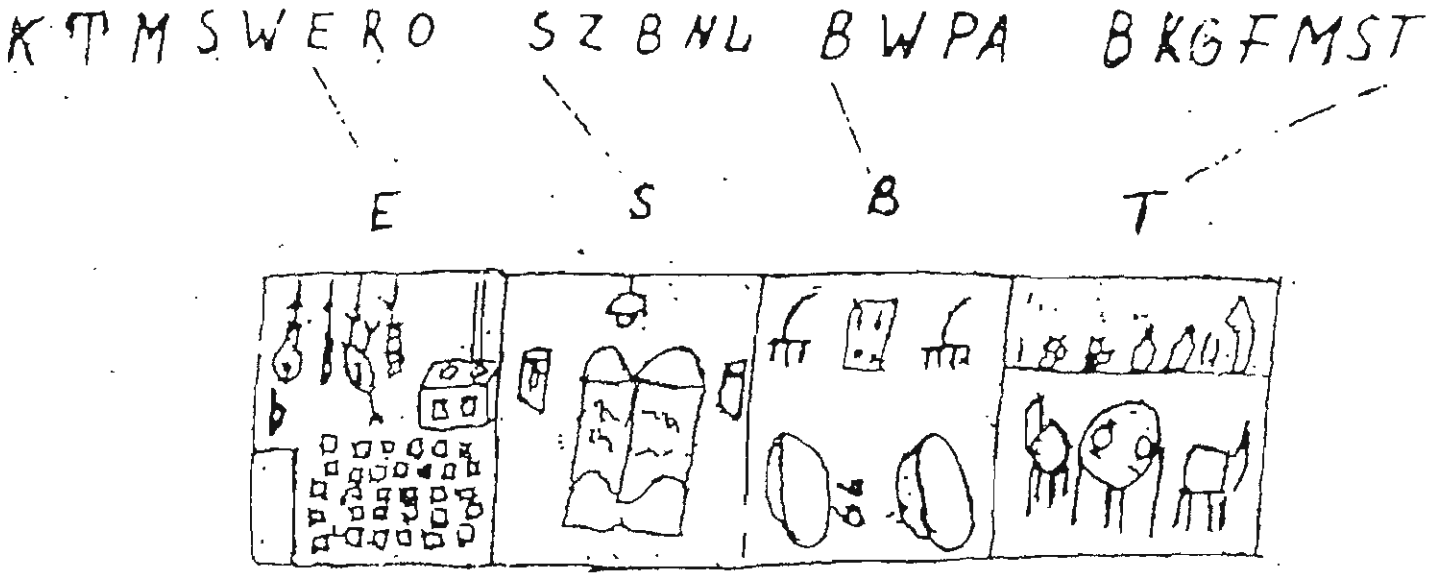
* Truth-to-tell I had been wondering why such importance was being placed upon the direction from what I thought then was machine-gun fire,was coming,toward a ship's boat. Captain Detmers said that one of his torpedoes hit Sydney. Remember.

That the year was 1941 and Captain Detmers,Dr. List and the other survivors from the Kormoran probably would have been fairly confident that the Axis Powers,Japan included would win the War and that their stay in Australia could be short-lived. Captain Detmers would still have felt the need for strict accountability regarding sea-actions and sinkings especially of German ships. The meeting point of HMAS Sydney and the Kormoran would be required and would be of passing interest but the details of positive action would have been demanded especially as said with regard to the sites of sinkings.

That information was what Dr. List was recording in the cryptographs, just the stark facts.

Ends

Note: All of my decodings have been based upon this cryptograph as under.



Cryptographs found at the time of the Germans' imprisonment at Carnarvon

Cryptographs, another of the finds that Mr Rowbotham made during his private inspection of the prisoners at Carnarvon? The four key letters would obviously seem to represent the German words 'essen' (to eat), 'schlafen' (to sleep), 'baden' (to bathe) and 'trinken' (to drink), while the groups above them were taken by Mr Rowbotham to indicate different objects in each drawing. During his researches he enlisted the help of Frederick Vogel, a Swiss agricultural adviser, who confirmed to him that 'no German would do this for nothing' and showed them in turn to an ex-Kriegsmarine friend. The latter identified them as a Kriegsmarine code and deciphered two compass bearings, which gave a position on the edge of

1/5/2K.

The West Australian

SECRETS SURFACE

German scribblings shed light on Sydney wreck

INDUSTRIAL MINING AGRICULTURAL

T.A.C.E - M.I.M

A.P.E.A., M.I.M.C.

CONSULTANT TO INDUSTRY

Unit 3 Hale House
37 Waverley Road
Coolbellup WA 6163
Phone (08) 9331 6615

Date: 16/11/2K1 Your Ref: Our Ref:

Department of Defence
Naval History Directorate (CP4-1-014)
Canberra ACT 2600
Australia

Dear Sirs, HMAS SYDNEY (11) Wreck Seminar
Fremantle WA

Following upon my decodings of Dr.Lists (of the Kormoran) cryptographs I would suggest that a search pattern for locating the Sydney could be 26°19S on 111°E with the position of the Kormoran being 26°40S on 111°E. Each search area centered upon those bearings to be 10 N miles by 10N miles.

I originally published my decodings of Dr.Lists cryptographs under Copyright on the 14th April 1999. Prior to that I had solved the riddle of the Caves sketch as to the hiding place of the LEICA camera, in my booklet HMAS SYDNEY 11 & Dr.Lists Cryptographs ISBN 0 646 23424 2.

Only an examination of the hull of the Sydney will tell the story of the fate of the ship in-as-much as that the number of times that the vessel was torpedoed can be ascertained. Captain Detmers stated that one of the Kormorans torpedoes struck the Sydney. This matter needs to be thoroughly explored because there are indications that a Japanese submarine was present during the sinking of HMAS Sydney.

I trust that this Submission receives consideration.

Yours faithfully
C.E. Maynard.
C.E.Maynard

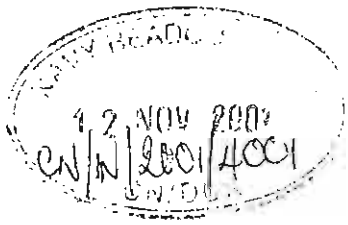
Submission
by

Bernard O'Sullivan

Bernard O'Sullivan

72 Bellevue Street
Shelly Beach
NSW 2261

9th November 2001



Vice Admiral Oxenbould, RAN
Department of Defence,
Canberra 2600

Dear Sir,

HMAS SYDNEY, HSK KORMORAN
WHY!
A DEDUCED RECKONING

In the "REPORT ON THE LOSS OF HMAS SYDNEY" two of the possibilities of how SYDNEY sank were credited to me, since then I have given considerable thought to the matter, which I have now put in writing and is enclosed in the above named Paper.

I hope this will be accepted, for I feel it will lay the Ship's Company and HMAS SYDNEY to the rest, they so justly deserve.

Yours sincerely
Bernie O'Sullivan

Bernard O'Sullivan

HMAS SYDNEY HSK KORMORAN

WHY!

A DEDUCED RECKONING.

by

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WHY!

The reason for writing the following is really a dedication to three men I worked with between 1963 and 1968, all were Master Mariners, all died Australian Citizens.

The first one was, Captain David Freeman, who was Master of ANL's Mount Kembla. Unfortunately, I did not know or realise he had been Chief Officer of the Australian ship MAREEBA, captured, then sunk by KORMORAN. Captain Freeman was a Survivor yet again, when the German Supply ship carrying him, was sunk by a U-Boat in the North Atlantic, only to be rescued yet again by the Germans, and spend the remainder of the War, as a Prisoner in Germany.

The second one was Captain Alfonse Schmitt, who was the Chief Officer of ANL's Windarra, and the reason I took up writing submissions to the "INQUIRY", after Newspapers had published articles suggesting atrocities. He told me he had been a Prize Officer in KORMORAN, which was denied by Barbara Winter, who I believe, has done the greatest amount of research into the disastrous incident. Because I have not researched at all, I must let the accusation go unchallenged.

The third and last person was, Captain Cyril Calcott, who was the Stevedoring Superintendent of the Macquarie Stevedoring Company, where I was employed as a Cargo Supervisor. Cyril had been Chief Officer of AQUITAINIA.

I am saddened that I did not realise their connection to the disaster of the 19th November 1941, otherwise I would have questioned them all more closely, and been able to write a more factual account.

The saga of the loss HMAS SYDNEY has been covered by Inquiries, Books Television Documentaries, and of course Newspaper Articles, all based on the result of the Interrogation of the Rescued Crew of HSK KORMORAN, some embellished with rumour and conjecture.

In one of my submissions to the Inquiry into the Loss of HMAS SYDNEY, by the Joint Standing Committee for Foreign Affairs, Defence and Trade, I mentioned, "When a ship's position is unable to be found, by either Terrestrial or Celestial Observation, then the Navigator will calculate a position by deduced reckoning, commonly known as "Dead Reckoning" or just simply "DR". This allows for all known forces which would affect the ship's progress, (wind, tide, currents, etc).

The following argument then is based on the known elements which affected the daily routines, schedules and common practices of both Merchant Ships and Warships during the late 1930's and 1940's, and therefore produce a logical explanation as to where and how HMAS SYDNEY sank with all hands.

I have not researched, for there is no written word apart from the basic theories I learnt at the Rotherhithe Nautical School, and the years of practical experience at Sea which has given me the confidence to answer questions asked and some, which should have been asked during the Inquiry.

Not surprisingly, the following is an expansion of what I have written in my submissions.

THE SHIPS

HMAS SYDNEY was a modified Leander Class Cruiser, the most 'popular' Class of Cruiser built.
One of the most important features was, they were 2 unit ships, ie two entirely separate and independent Enginerooms, both propelling twin screws, the forward or No.1 Unit, the forward and outboard propellers, No.2 Unit, the after and inboard propellers.

Almost everything was known about Sydney, down to recent research, that 20 of the Ship's Company had perfect teeth.

HSK KORMORAN was a cargo liner, a very common class of Merchant ship, in fact there were hundreds of them, all basically of similar construction usually six hatch ships, with the maximum of cargo derricks with their supporting masts or 'Samson posts', the main difference being the 'Company Livery'.
A uniform pattern was adapted by a shipping company, where various parts of the ships were a particular colour, eg P and O ships, Funnel, Black; Superstructure, Cream; Masts and Samson Posts, Brown; Hull - Topsides Black, Boot-topping, Red.

It must be remembered, this was before 'Ready for Use' paint, all paints were mixed from the basic white lead, with raw linseed oil, for flat paints; boiled linseed oil for Gloss. The colour being added were ochres, yellow and brown, Prussian Blue, Lamp Black etc.

It can been seen why colours were kept simple, otherwise each ship in the Company could have variations in shades of the "Company Livery".

The other means of identification was the placement of the prominent features of, Masts, Samson Posts, Accommodation, and Funnel.

To differentiate from a Mast and a Samson Post in a profile description, a Mast was defined as a structure fitted with a Topmast, so a ship with twin Samson Posts with a span between them and a Topmast rising from the centre of the span, was a Mast, and a mast without a Topmast was defined a Kingpost, as were the Samson Posts.

Confused? So were Naval Personnel

To add to the confusion, ships on a 'Voyage Charter' usually retained their own Company's colours, but painted their Funnel, the colours of the Chartering Company.

Time Charters, the ship was painted in the Chartering Companies Liveries, they may even change their name to one recognised as the Charterer's, yet retaining their own. An example could be the "PORT TAMPA", which indicates, the W Wilhelmsen's TAMPA was chartered by the PORT LINE. She would be painted the PORT LINE colours, change her name, but of course, still wear her Norwegian Ensign.

During the WWII, the largest Charterer of ships, was the British Ministry of War Transport, whose livery was Grey.

This then shows, that any ship wearing her peacetime livery had to be considered Neutral.

The Royal Navy had previously been brought to task for breaking International Maritime Law, when HMS COSSACK entered neutral Norwegian Waters, to board the German ALTMARK.
The Allies could not make acts of aggression against Neutrals, without causing strong protest from the League of Nations, on behalf of the Neutrals Nations, which at that time, included the USA,

Remember, 'The Aggressor' was the AXIS Nations.

To recapitulate, a merchant ships identity was verified by,

a) The Company Livery

b) Its Nationality (Ensign)

c) The profile description, which means, when seen from abeam. viz.

M K KB K F K M

Translation Mast, Kingpost, Kingpost against Bridgefront, Kingpost, Funnel, Kingpost, Mast.

d) Ship's name, (although this may not be relevant, it may have been changed by the conditions of contract written into the Charter Party).

Of course, a ship chartered by the British Ministry of War Transport, would be more readily identified, not only would she be painted grey, but also armed, (Stern gun visible), she would also be issued with a secret ship's number, (a four flag hoist), which was different to her International Call Sign). and allow her true identity to be verified by Allied Warships.

NEUTRAL SHIPS WERE NOT ISSUED WITH SECRET CALL SIGNS.

SHOULD THEY BE CHARTERED BY THE BRITISH MINISTRY OF WAR TRANSPORT, THEY LOST THEIR NEUTRAL STATUS.

WHY STRAAT MALAKKA

Having failed to lay her mines off Madras, KORMORAN sailed to her 'Secret Position' in the South Indian Ocean.

I feel, the laying of the mines was uppermost in Kapitan Detmers mind, the obvious place being Australia's East Coast, where PENGUIN had met with some considerable success.

To achieve this, a suitable disguise had to be adopted, a ship with basic constructional similarities with KORMORAN, and known to be a frequent visitor to Australian Ports, but, located for the next month or two, away from the area, so that there was no chance of a possibility of meeting with her, nor another ship having been in visual contact with the 'selected' ship identity.

Kapitan Detmers was assisted in choosing an Identity, by having a Radio Watch maintained listening to the Arrival and Departure signals of all Ports on the East Coast of Africa.

The standard of Radio Equipment of Merchant Ships was not very good in those days, electricity supply was not certain either, and the power supply was via 'wet cell batteries'. The Safety Band, was the Medium Frequency, 500 m/c.

Normal procedure was to notify the Port Authority 24 hours prior to arrival, (via Radio to a Coastal Radio Station), and on departure, to contact the Radio Station again, informing them they were at sea, and able to receive 'Traffic', (messages).

While Allied Radio Traffic was in code, Neutral ships operated in plain language, or International Brevity Code.

One such ship was the STRAAT MALAKKA.

The list of 'daily traffic' showed STRAAT MALAKKA's progress arriving and departing South African Ports, Port Elizabeth, Durban, then to Lourenco Marques, in Portuguese Mozambique, indicating she would call at East Coast of Africa, Persian Gulf, and Indian ports, before returning to her Home Port of Batavia, in the Dutch East Indies.

WHY A NEUTRAL SHIP

I think I need to qualify STRAAT MALAKKA's Neutrality.

Although Germany had invaded Holland, they were not officially at war. Holland was an Occupied Territory, with its own Elected Governments, maybe they were "Advised by a Gauleiters", but still, in the letter of the Law they were Dutch Nationals.
The Dutch East Indies were in a truly Neutral Zone, which allowed the Dutch Ships to Trade freely, taking full advantage of their major Trading Competitor, Great Britain, who were otherwise occupied fighting a war for survival in Europe.

(The Dutch Cruiser, TROMP was stationed in Batavia to safeguard the Dutch East Indies, not under the jurisdiction of Flag Officer Far Eastern Fleet, stationed in Singapore, although later, was requested by Flag Officer Commanding Australian Naval Forces, to "keep a lookout" for SYDNEY.)

Admittedly, Queen Juliana and her Royal Family, with loyal Members of the Dutch Government, had escaped to Great Britain, and were the Free Dutch Government in exile.

Kapitan Detmers considered STRAAT MALAKKA to be very suitable, with a similar outline, a speed of 14 knots, which would be easy for KORMORAN to maintain, even with her 'sick' third engine.

The published profiles were near enough, and would require little to add to be the same. Compare:
STRAAT MALAKKA: M K KB F K K M with

KORMORAN: M K B F K K M

The Engineroom Ventilators could be mistaken or easily changed to look like Kingposts, so I have added them to the profile.

The Kingposts on the Bridgefront would not be seen from abaft the beam, but they too could be easily 'rigged' if thought necessary.
The counter stern would be hard to recognise, even had it been 'picked-out' as part of the 'Identikit', particularly in 1941, when counter sterns were still

very common, and usually marked ships as being built prior to 1932.

THE MEETING

The Sea Mines had deteriorated, but with the problem of the soluble release mechanism temporary solved, I feel, the laying of the mines was now 'Top Priority'.

{ To meet with International Convention in those days, sea mines were the moored type, ie The mine was attached by wire cable to an anchor, which also acted as a carriage, this facilitated the launching from the Mine Layer. They had four flanged wheels, supporting the cable drum and the Mine, and stowed on rails. The required depth was set, (which was usually about 4 metres below the surface at Mean Low Water Spring Tide, obviously, they didn't want them showing above the water surface, making them easily visible, therefore, readily "Swept"), and the procedure for launching was simple. Each Mine was pushed along the rail to the door, where they were launched over the side. The mine was not armed until it had reached its designated depth. These mines were simple contact/magnetic types, but all the same very efficient, they claimed an awful number of ships during both WWI and WWII, as well as delayed the timely arrival of ships, which had to wait until a Channel had been swept clear.)

The Germans were experienced in the Australian Trade, and although stated they were on there way to mine the approaches to Carnarvon, they knew it would have been a waste of time, and they may as well have 'dropped' them over the side in deep water for all the affect they would have on sinking ships or delaying the delivery of Cargo to far away England.

This then is why, the target area was the East Coast of Australia, with its busy Sea Lanes, of both Coastal and Overseas Trades.

When KORMORAN had completed her transformation to STRAAT MALAKKA, she directed her course to pick up the 'Batavia to Sydney Sea Route' well to the North of Cape Leeuwin, for had she been sighted approaching the more 'populous' Leeuwin from the West, then she would have caused suspicion of her presence, for it was not a recognised Trade Route for KPM.

Because of the warnings in the Sailing Directions, the Course would be set well to the West of the Sunda Strait Fremantle Track.

WHY THE DIFFERENCE OF SPEED

During the Inquiry, Rear Admiral Oxenbould was asked if HMAS SYDNEY could have been in the position designated by KORMORAN.
In a later submission, he stated, "Yes. SYDNEY required to maintain a speed of 21.9 knots, well within the designated speed of 25 knots.

We must now find the reason for the discrepancy in speed.

SYDNEY had been out of Dry Dock for some months, so I suggest a "slip" of 7%, which would give a speed of 25 - 1.75 = 23.25 knots, an expected head drift current of 0.3 knots since leaving Sunda Strait would reduce the speed to 22.95 knots, giving a difference of 1.0 knot.

The time elapse shows SYDNEY lost approximately 2 hours steaming.

WHY!

I stated in my submission, the South Equatorial Current would have carried SYDNEY to the west, but I feel there was a more "physical explanation".

The slow tedious escort duty of ZEALANDIA had a soporific affect on the expected efficiency of the Ship's Company, and Captain Burnett I feel, decided they needed to be roused from the lethargic attitude into which they had fallen.

The 'Walrus' had not been flown-off for some time, and this was exercised during the afternoon, the "quiet period" so revered by all Seamen.

When 'catapulting' the aircraft, (like the Angled-Deck Aircraft Carrier of 'today'), the ship increased her speed, and turned to place the true wind thirty five degrees on the port bow, so enabling the aircraft, after losing the affect of the ships speed, to have the wind directly ahead, thereby receiving maximum benefit for gaining altitude.

The wind would be from a South Eastly direction, causing the SYDNEY to steer to the West of the Track, which would have increased the affect of the South Equatorial Current, and explain the reason why she was so far to the West of the Sunda Strait to Fremantle Rhumb Line Track.

While aloft, the 'Walrus' would have noted if other ships were in the vicinity.

I feel this would have influenced further activity during the 'First Dog Watch'.

The ship was probably at a relaxed "State of Readiness", with the ship in two watches, Port and Starboard.

Ideally suited for a little competition! A "Whaleboat Race"! around the ship.

The Port Watch to man the Port "Whaler" and Starboard Watch to man the Starboard "Whaler". ("Whalers" are propelled by oars)

The race to commence at a 'blast of a whistle' given by the Commander.
The "Whaler" manned, lowered to the water, released, and to race in the direction they were pointed, ie The Port "Whaler" to go Clockwise, while the Starboard boat to go Counter Clockwise.
The Race to finish when the Boat was hoisted back inboard and secured in the davits.
The latter would have entailed all the Watch to hoist the boat with the rope falls.

This would have created great excitement. (whilst against Regulations, 'bets were in all probability, made and taken').

There may have been a two or more races.

This interlude would have taken about two hours, and the 'boatraces' remembered the following day.

FIRST SIGHTINGS.

HSK KOMORAN, now disguised as the Neutral STRAAT MALAKKA, planned to 'merge' on to the Sunda Strait to Cape Leeuwin track under cover

of darkness, during the night of 18th/19th November, 1941.

This was completed successfully, and Kapitan Detmers proceeded in all confidence, which must have been shaken, when at 1600 the Officer Lookouts, in the specially constructed "Crows Nest" reported sighting another ship on the Starboard Quarter, soon to be confirmed, a Warship.

(The reports stated, the lookouts at first thought the approaching ship was the 'Topsail of a Square Rigged Ship', which suggests, what they actually saw was the Gun Control Director Turret, some 50 feet (15 Metres) above the waterline, this meant, they too were visible by the warship, more so, for the "STRAAT MALAKKA" was ahead, in the direction in which SYDNEY was travelling , the normal direction of search for fast ships.)

The theoretical distance apart when first sighted would have been:
KORMORANS, 'Crow's Nest Lookout' at the Foretopmast approx. 105 feet.

Distance to the horizon	11 . 78 miles
Ht of Bridge SYDNEY- lower edge Gun Control Turret	8 . 29 miles
Distance apart	20 . 07 miles

Whereas, SYDNEY's masthead lookout was 144 ft:

Distance to the Horizon	13 . 80 miles
KORMORANS's Funnel showing above her Bridge	8 . 29 miles
Distance apart	22 . 09 miles
Difference	2 . 02 miles

This shows SYDNEY would have sighted KORMORAN first.

Had the ships been approaching one and other, their combined speeds would have been (25 + 14), 39 knots, which means, that within 1.5 minutes of first sighting, both would have been fully visible to each other, and any action taken by KORMORAN would have been noted and as such caused suspicion, which would have led to an entirely different outcome.

While the foregoing is theory, in my experience as Officer of the Watch of the Orient Line post WWII built ships, ie ORSOVA and ORCADES, with a Bridge Height of Eye of 95 feet, the first sighting of ships on a clear day, (which had already been observed on the Radar Screen), was between 14 and 15 miles.

I am of the opinion, that the distance apart at first sighting, was less than 20 miles, but we must consider some truth was told that day, and the German's did have powerful Zeiss Binoculars.

The approximate time of First Sighting was 1600, the ships 20 miles apart and with an approach speed of (25 - 14) 11 knots, the time of nearest approach would have been shortly before 1800, this did not allow for the slowing down and alteration of course, but it was the time of the commencement of Action, which gives credence to my argument they were nearer to each other, when first sighted.

WHY "STRAAT MALAKKA" MAINTAINED COURSE AND SPEED

Kapitan Detmers said, to avoid SYDNEY, he altered course to 260 degrees, heading towards the setting sun.

Firstly, a ship trying to avoid a "pursuing enemy", would have directed their course towards the nearest safe port, Geraldton, (which would have been to a course of approximately 135 degrees), and at the same time "calling" frantically for help on their Radio.

Secondly, had she altered course to 260 degrees, then Action would have commenced earlier than stated, for SYDNEY would have then steered an intercepting course, thereby reducing distance to be steamed, by nearly 50%.

Thirdly, the Gunsights were fitted with 'Colour Shades of various densities', which could be 'flicked over', and give full eye protection to the 'Layer' and 'Trainer' of the gun, from the glare of the sun's shining path to the horizon, and so rendering such a ploy to be useless.
This was well understood by the Germans.

"STRAAT MALAKKA", was a Neutral ship, going about her business and was not contravening any Laws , so had no reason to take evasive action.

WHY THE 'WALRUS' WAS TURNED INBOARD.

HMAS SYDNEY sighted a Ship ahead on the port bow.
The distance was such, that even with binoculars it was difficult to identify, other than that she was a Merchant ship.

(Since the 60's, specialist ships have been constructed, gradually increasing in size to make them more 'productive' (economical), Container Carriers the Cargo Liners replacement, are at least 3 times the size, with containers stacked five or six high on deck, ie 13M to 15 .6 M plus the Freeboard of 10.5 M, would display a silhouette as large as AQUITANIA, for both the Bridge and the Funnel had to be higher for the Navigator's vision and the clearing of the Fumes from the Engine's exhaust.)
Tramp ships have been replaced by Bulk Carriers, the smaller ones being 50.000 tonnes or over 6 times the size of the original Tramp Steamer. Nowadays, we have no conception of the relative size of ships then at sea, even many experienced Seamen, have no knowledge of Navigating ships without the aid of Radar and other Electronic instruments, this includes Yachtsmen.)

To give some idea of the apparent size of the ship at 15 miles; extend your arm to its full length with the thumb and forefinger at right-angles to the line of sight, a space of 1 or 2 millimetres would show the comparison, ie, hardly discernible: The ship ahead was on a similar course or the reciprocal, (end-on) and showing its narrowest silhouette, any alteration of course would have been noted by the broadening of the her outline, and immediately cause suspicion to the SYDNEY, who would have then taken the approved action of approaching a possible enemy. ie flown off the 'Walrus' for a closer observation.

This then is WHY, because the ship ahead maintained her course and speed, and behaved in the normal manner of ships going about their lawful business, allayed any doubts to her true identity.

While warships have a number of large signalling lamps which can be seen for 10 or more miles, a Merchant Ship does not.
The daylight signalling lamp was the 4 inch aldis lamp, which had a fixed light, and relied on a moving reflective mirror, which was controlled by a 'trigger' to make the short and long 'Dashes' of morse code.
One must remember, the operator was a 'Merchant Seaman', who was not specialised in Signalling, there was a beam swell, causing the ship to roll, and making accuracy of the 'aimed' Aldis Light very difficult.

The apparent wind was right ahead, which would have made identification of a Flag Hoist equally difficult.

The Sydney had an RANR officer on board, a Lieutenant, which indicates he possessed the Certificate of Competency for a Master of a Foreign Going Ship, and a Merchant Seaman of at least 10 years experience.

I feel he would have been Special Duties Officer the Watch, as is usual for Lieutenant RANR (Seagoing), and as such would have been consulted as to the possible identity of the ship being overtaken.

The 'Livery' (painting scheme and Funnel markings) would have Identified the ship when about 5 miles ahead, as being a KPM vessel, which would have been soon verified by a less 'wavering' Aldis Lamp , and the ship's name painted on her stern when about 3 miles apart.

I feel that the 'Boat Race' the previous day, suggested or influenced the decision by Captain Barnett to send a Boarding Party to inspect the "STRAAT MALAKKA". It would be a good exercise, and help bring his Ship's Company to a higher standard of proficiency.

The decision made, SYDNEY was readied.

With no 'Air Threat', the 4 inch and other AA weapons' crews stood down, those designated for Boarding Party, with the exception of the Stoker Mechanic, to change into 'No.10s', (Long Whites).

(No.8's, known as 'Action Working Dress', was not current until 1946/7).

The PINNACE was the boat chosen to transfer the Boarding Party to the Merchant Ship. This boat was stowed in chocks, inboard of the Davit Hung Whalers and Cutters, and was launched with the aid of the " Walrus Recovery Crane".

The 'WALRUS' and catapult were swung into their 'Housed Position'

WHY, SYDNEY DID NOT TAKE MORE POSITIVE ACTION.

During the whole time HMAS SYDNEY had been observing the ship ahead, it had not wavered from its course and speed, the signalling was not as good as required. This standard of proficiency had to be expected, being a Neutral

Ship, the Officers had not 'Honed' their signalling skills to the extent of Allied ships, which had gained experience through the constant signalling between ships in Convoy.

When eventually HMAS SYDNEY conveyed, through the use of Flag Hoists and the International Code of Signals,"That she required her to stop, with the intention of Boarding and Inspecting her Papers and Cargo", she was out on "STRAAT MALAKKA's" quarter approximately distance 1 Mile.

"STRAAT MALAKKA", did what was expected, sent a Radio Message for help on the Emergency Band of 500m/c. (but at reduced power, for only Geraldton Coastal Radio Station received a very poor signal, but it would still have 'blasted' the ears of SYDNEY's Telegraphists)

I feel the "Dutchman" would have struck her colours in submission, but although their Signalling was not up to standard, their Seamanship is every bit as good as any warship, possibly better.

She turned into the moderate swell (approximately 3 metres high), bringing it about 10 degrees on her port bow, the course she steered was 260 degrees, (Detmers told the truth, when he said he altered course to 260), slowed the engines and stopped.
The wind and sea was SSE 3/4, or approximately 160 degrees, a gentle to moderate breeze of about 10 knots (17 kph), which was at right angles to the swell, and would have kept the stopped ship, headed in the right direction.

Captain Barnett was well aware of the International Rules of the Sea, and although his main armament was manned, the Gun Control Tower would have been trained on the "STRAAT MALAKKA", and the guns still in the Fore and Aft position.
He was not allowed to threaten the "Neutral Ship", (only one German Survivor spoke of "staring down the barrels of the Big Guns").

The Boarding Party assembled in the 'Waist' of the ship, arms were issued,

(In their white uniforms, they had been mistaken for Cooks and Stewards, who normally at 1730 or thereabouts, would have been in the Galley etc, preparing the Evening Meal, having answered the 1600 hours Routine Pipe

"Hands to Tea", but they were at Actions Stations, so no matter what the argument is, the people in white could not be Cooks or Stewards).

While the Pinnace was being prepared, Captain Barnett, had SYDNEY brought round to the course of 260, to 'fetch-up' abeam distance 5 cables from the "STRAAT MALAKKA". (0.5 of a nautical mile, which is a 1000 yards or 926 metres {nearly a Km} corresponds to the distances given by the Germans during their interrogation).

As the Crane took the weight of the pinnace, Kapitan Detmers knew that most of the attention on board the Warship would be focused on the launching and gave the order to "DE-CAMOUFLAGE".

TARGETS OF THE GERMAN GUNS

The guns which could bear and shoot at SYDNEY were, 4 x 150 mm , 1 x 35mm, and the 35mm Anti Tank Gun. (The Germans claimed several smaller calibre guns were used, but I feel they would be quite ineffective at 1 kilometre).

The targets for the KORMORAN's guns had been allocated before the order to 'De-camouflage' and I suggest they were as follows:

The 4 x 150mm guns were aimed at;

1) The Bridge
2) The Foremast
3) The After or Auxiliary Gun Control Position
4) 'Y' Gun

The 35mm, the Foremast should the larger gun miss, otherwise, the 'Waist' area, where the Boarding Party was mustered.
The Anti Tank Gun had the most important target, the Armour Plated Gun Control Tower.
The German Navy has always been known for its accuracy in gunnery, every gun hit their target,

WHY, THE APPARENT SLOW RESPONSE FROM SYDNEY.

The Order "DE-CAMOUFLAGE", included, breaking-out' the Kreigsmarine Ensign at the Foretopmast, and would have alerted SYDNEY's Gun Control

Officer, who trained the Guns from the Control Tower "On to Target", but while he waited for the "Gun Ready Lights to come on", the Germans had fired and at the precise moment he activated the "Shoot Pedal", the enemies shells landed, causing SYDNEY to heel, 'lifting her guns off target' and the shells to overshoot.

WHY 'A' AND 'B' FIRED ONLY ONCE

The double reaction of exploding shells and the recoil from firing the Broadside, caused the SYDNEY to heel more than usual, and delayed her recovering to the upright, so that as she continued 'rolling' to port, the torpedo fired from the forward 'Gunport Door' of KORMORAN, hit the immersed side above the 'upright waterline' and directly below 'A' and 'B' Gun Turrets, the explosion lifting them from their 'Training Ring Mountings' rendering them useless and in all probability, killing or wounding both guns' crews.

The 35mm gun had hit the Walrus causing its Tank of Aviation fuel to explode, the 'Fireball' igniting everything in the area, the wooden boats, and killing or maiming the 'Boarding Party' and all other personnel in the vicinity, including the Torpedo Men, who had been unable to 'arm' the torpedoes. (They may have been fired to clear the tubes, but not 'set to run', so fell harmlessly into the water, saving an explosion caused by the fire).

WHY, THE SOLE REACTION.

The 'Captain' of 'X' gun realised the Gun Control Positions had been hit, took local control, ordering the Layer and Trainer to aim for the Enemy's Engineroom, but again SYDNEY was hit, causing her to heel at the precise moment 'X' guns fired, but this time, the shells struck the Funnel and boat deck area, they did not see their 'fall of shot', for 'X' Turret received a direct hit, killing or wounding the Gun's Crew.

HMAS SYDNEY was no longer a fighting unit, her main armament out of action, the smaller calibre guns had lost their crews, while assembling as the 'Boarding Party'.

There may have been a further two shots fired from each of the KORMORAN's 150mm guns, probably aimed at the enginerooms below

funnels, and few more shots received from the 35mm guns, but suddenly all action ceased.

Fire and smoke could be seen about the Enemy ship's funnel, both of the Starboard boats were on fire.

WHY! HMAS SYDNEY, DISENGAGED.

SYDNEY was heavily damaged, she had been hit at least twice on the Bridge (Compass Platform/Upper Bridge ?), and the other upper deck positions. Casualties were extremely heavy.
Killed or Wounded were, Captain Barnett, the Commander, Navigator, Special Duties OOW, (Chief) Yeoman of Signals and his V/S Staff, Lookouts etc.
Gunnery Control Tower, Gunnery Officer, Chief Gl and two others,
All Guns' Crews, including the smaller calibre guns, who were members of the Boarding Party, First Lieutenant, Boats Officer, (Boarding Officer, and the other Boarding Crew members not in Gunner's Party), the Aircraft Handlers who manned the Crane.
Gunnery Officer (T) and his Torpedo Crew.
The Auxiliary Gun Control Tower Crew.

The foregoing would have been obvious to KORMORAN (Detmers), but he was unaware of other hidden damage.

WHY! A 2 UNIT CRUISER PROCEEDED AT 5 KNOTS.

Damage had been sustained in the Enginerooms, yet, there was no outward sign to show the extent of internal damage.

(This Class of Cruiser was fitted with wing tanks. They were formed by the Inner side of the shell plating, the bottom being the Margin Plate of the Double Bottom tank, the inboard sideplates, fitted to the deep web frames, for the additional strength required in the Boiler and Engine Room spaces, the top of the tank, the underside of the Mess Decks' Steel deck plates. They were approximately 10M x 5M x 1M with a mass volume of 50 t. FW) These tanks were normally used for Fresh Water, but, because during War, the ships spent more time at sea than in port, used for Fuel Oil, thereby extending the range of the ships.

Reserve Fresh Water is not essential, because, when the ship is on 'Passage', the Steam after passing through the Steam Turbines, is cooled in the Condensers by sea water. The heat expended, heats the Sea Water to evaporation point, and this steam in turn is condensed, and pumped into tanks, continually replenishing the ship with Fresh Water).

At least one shell had penetrated the forward 'Wing Tank', exploding within the tank itself, either holing the inner side or fracturing along a Butt end, and allowing the Oil Fuel to enter the adjoining Engine space, the heat in the Engineroom, would have caused evaporation of the liquid fuel, and any piece of 'sparking' machinery would have ignited the 'gas'.

This fire would have been fed continuously, until the last drop of Oil Fuel had escaped from the Wing Tank into the Engineroom Space.

WHY!

Oil is lighter than water, and the encroaching sea water as it entered the holed tank, would have sunk to the bottom, causing the floating oil to continually flow into the Engineroom.

NUMBER ONE UNIT WAS CLOSED DOWN.

Number Two Unit sustained damage too, I feel this time, the shell had entered the Boiler Space, and damaged steam pipes.

Steam was sufficient to turn the Starboard engine only.

The Bridge had been destroyed, killing or maiming all personnel, someone in the 'Lower Steering Position' possibly, the Ship's Chief Coxswain, took the initiative to Ring Half Ahead on the Engineroom Telegraph, but because of the damage to the Engine/Boiler Rooms, only the Inner Starboard Propeller turned, causing SYDNEY to turn to port, and towards the burning RAIDER. The Steering gear was undamaged, this allowed SYDNEY to steer clear, and astern of the KORMORAN.

WHY THE TORPEDOES MISSED.

As SYDNEY approached the 'wake' of the 'Raider', a member of the Ship' Company, (but not a Torpedo Rating, for they had all been killed when the

WALRUS's fuel tank had exploded), realised the still loaded starboard Torpedo Tubes would come 'on sight' of the enemy, and as they did, he fired the 'Fan' of Torpedoes, but, unfortunately, the sights were still set for 25 knots and he fired too soon, causing the torpedoes to pass harmlessly down the KORMORAN's starboard side.

(Had any of the torpedoes struck KORMORAN, they would have exploded the 300 mines carried in the after hold, and the world would have never known what had happened to either ship)

On passing astern of KORMORAN, HMAS SYDNEY continued to the SSE or steered the original course of 155 degrees?.

WHY THE GUN FIGHT WAS OF A SHORT DURATION.

The 5.9 inch guns of KORMORAN were WWI 'vintage', and too large a calibre to use fixed ammunition, (projectile and propellant a single unit, ie, the brass cartridge attached to the shell, which after the gun fired, the used cartridge was ejected, much in the same way as a rifle) and would have been a projectile, with a separate cartridge for the propellant, because of the age of the gun, most likely made of calico, which would have required separate magazines situated below the Waterline, and carried to the guns by 'hoists'.

(The largest fixed ammunition used by the Royal Navy was 4.7 inch shells).

The shell shot from HMAS SYDNEY's 'X' Gun which penetrated the KORMORAM's funnel, struck and exploded the Diesel Header Tank, causing burning oil to 'cascade' into the Engineroom.

This tank would have been at least 9 tonnes capacity (3 cubic metres), (ie 9 cubic metres of Fresh Water, but diesel Oil has a Specific Gravity of 0.85, therefore, 10.6 tonnes of diesel oil), its purpose was to pre-heat the fuel before being gravity fed into the engines.
It was the most vulnerable target on KORMORAN, for not only did this tank feed the Main Engines, but also, all of the generators, including the Emergency Generator.

That one direct hit, deprived KORMORAN of all electric power.

The burning oil falling into the engineroom spread fire throughout the space, rendering KORMORAN derelict.

It must be remembered, KORMORAN was laying head to swell, with the 'gentle to moderate breeze' on the port beam.

This caused the flames from the burning funnel, to spread to the lee or the Starboard Lifeboats, which were destroyed.

Kapitan Detmers was a very good seaman, and as he watched the smoke shrouded burning HMAS SYDNEY, slowly steaming to the south, realised the safety of his crew was now paramount.

WHY 317 SURVIVED FROM KOMORAN

The fire from the funnel was spreading, for there was no power to provide water to fight the fire.

The remaining two lifeboats on the windward side (port) were threatened by the fire, and was the reason to 'cram' as many fit men into the boats as possible, (wounded men were excluded, for they would require more space).

As the boats were manned, they were lowered to the water and sent away, to clear the vessel as soon as possible, for there was danger of explosion, should flames reach the mines and other explosives.

The 3 inflatable Rubber Bridge Pontoons, which they had fortuitously 'obtained' from the Army, were stowed in the 'tween deck, and to get them to upperdeck, required the steel hatch lids to be opened. This would have entailed some considerable time, Hydraulics to be disconnected, blocks and tackles rigged etc, a derrick may have had to be utilised, which would have prolonged the task.

When the first raft was hoisted, gas bottles would have been brought up on deck as well, in all probability, CO2, from the domestic refrigeration plant.

The first to be inflated was for the use of the seriously injured, who could stretch out on the larger surface. After inflating the raft, it was thrown from

the deck into the sea, then secured alongside, while the wounded where gently handed down to raft.

By this time it was quite dark, with no lighting except hand held torches, and possibly the 'Aldis' Lamp(s).

As the raft cast-off, it would not have been noticed if the raft was damaged, it having been 'top' stowed, may have been damaged by spilt turpentine spirit, or some such liquid, and had weakened the heavy canvas treated rubber material, for this raft was never seen again.
After the other two rafts had been inflated, manned and sent away, the boats stowed in the 'Tween decks would have to be hoisted on deck.
The boats were at least 2 tonnes in weight, and would have required the use of a derrick. Rope tackles were used to top the derrick. A slow operation, the Top Block of the tackle to be attached to the 'Topping Lift' wire, and when the Tackle was hauled 'Two Blocks', the Topping lift 'stoppered-off', Blocks overhauled, re-secured etc; this process repeated several times.

Not only would flickering flames of the burning centre Superstructure and engineroom have given some light, but also added impetuous, for the danger of explosion of the stored ammunition was increasing.

When those two boats had disappeared into the darkness of the night, there was only one boat remaining, but this was fitted with "Fleming Propulsion". *(This equipment consists of a metal framework fitted above the bottom boards, to support rotating shafts fitted between the thwarts, these in turn were connected by Universal gear cogs to a central shaft above the boats keelson, extended through a tapered gland in the sternpost, and to which was fitted a propeller. Sockets were attached to the shafts running athwartships, into which levers could be fitted. The boat's crew sitting on the thwarts, could then, by pushing and pulling on the levers, turn the propeller).*

This type of lifeboat was common among Passenger Ships, where the passengers did not have the rowing skills of sailors.

Such equipment was cumbersome, and took up much needed space and removed. To expedite the preparation, after the propeller and it shaft was removed, a wooden plug was hammered into the tapered shaft hole from

outside the boat, which meant, rather than plugging the tapering hole, only 'pared down' wood from the plug and fitted the shafts, thinner outer edge This was their only mistake, which was discovered, after the boat had been in the water for some time and the plug had worked loose, and floated free to be lost in the darkness of the night.

When the last boat was floating alongside with all the remaining survivors, Kapitan Detmers standing at the shipside rail, ordered Lieutenant Heinz Messerschmidt to set the fuse of the pre-placed demolition charges to explode in 30 minutes. When this was done, the Mines Officer preceded the Captain over the side and into the boat.
Kapitan Detmers was the last man to leave the ship.

WHY THE KORMORANS LIFEBOATS AND RAFTS 'DRIFTED' TO THE EAST

(The theory of sailing is, the wind exerts a force on the 'Sail' area of a boat, and the draught of the boat reacts to the pressure of the water. These two forces are likened to the sides of a parallelogram, while the resultant direction force is the diagonal between the two opposite corners.
A large sail area with a light but deep draught will give the greatest desired result.
This theory works in practice for any small craft, while a large ship, will lay across the wind and drift down wind.)

As the lifeboats and rafts cleared the ship, they came under the influence of wind, current and swell.

The lifeboats were able rig a mast, sail and direct the boat with the aid of the rudder, but Lifeboats, with their shallow bar keel are notoriously bad to sail, and unable to steer closer to the wind than 7 Points, (79 degrees) They needed to steer to the East, the nearest land.
Fortunately, the elements were in their favour,
The wind was 160 degrees, allowing them to steer a course of 080 degrees, although this was too close hauled, so I feel the helm was eased, and the wind brought onto the beam (070 degrees).
This course would then bring the swell 'dead' astern, causing the greatest affect from the swell, the lifeboats were 'carried or planed along' by the

swell, in the direction of the course steered.

The Pontoon/rafts had length and breadth, draught and 'sail' area, so that they too would be 'sailing', like the lifeboats, laying at right-angles to the wind, they would be greatly assisted to the East, by the swell.

Only one boat made little way to the East, the last boat, which was in a semi 'waterlogged' state, and where the 'sail affect was over-ridden by the draft..

As each of these 'lifecraft' cleared the ship and the smoke of the down wind burning SYDNEY, they were able to see she was still afloat, some reported until 2200 while others midnight.
The difference in time could be, as they travelled to the East, SYDNEY 'Dipped' below the horizon.

WHY HMAS SYDNEY STAYED AFLOAT.

All guns had ceased firing.

After SYDNEY had cleared the stern of the enemy, she steered the original course of 160 degrees, and although only steaming at 5 knots, the head moderate breeze was 'fanning, the flames of the raging fires', the survivors realised, they would need to stop the ship, to give them a chance of successfully fighting the fire.

The SYDNEY was no longer a 'Fighting Unit', the Magazines were flooded to reduce danger of exploding . This action would also improve stability.

WHY WAS SYDNEY NO LONGER A FIGHTING UNIT

The damage sustained was the destruction of her Main Armament, and the lighter 4 inch and 'Pom Pom' guns rendered useless through the death or injury of their Guns' Crews, who were designated as Boarding Party.
The Torpedo damage to the Hull was obvious, a large hole, causing the ship to be 'down by the head', the holes in the hull caused by the shells less evident, for either the Anti-Tank Gun shells ot the Armour Piercing Shells used by the 150mm guns (reported by Heinz Messerschmidt in a more recent interview).
Both masts had 'collapsed', the 'Walrus' and boats destroyed, the Bridge,

and both Gun Control Towers, wrecked.

The Wireless Telegraphists have been ignored, but I feel, the enemy was well aware of the location of the Main or Bridge Wireless Office, and this too had been damaged/destroyed, for no W/T message was transmitted.

The Captain, Executive Officer and all Seamen Officers (including Gunnery and Gunnery (T) officers), and with the damage to the Engine and Boiler Rooms, would mean the Engineer Officers must be included in those seriously wounded or dead.

AT LEAST 50% OF THE SHIP'S COMPANY WAS DEAD OR WOUNDED

WHY HMAS SYDNEY DID NOT SINK.

During interrogation, the KORMORAN's Ship's Company spoke of the number of shells fired, and the duration of their "Barrage", (for it could not be called anything else), would have ended sooner with SYDNEY blowing-up rather than sinking. Also stated, one of their Magazines was hit and exploded, which would have caused KORMORAN to suffer huge damage including 'Breaking in Two'.
They lied.

HMAS SYDNEY gunfire was, the initial broadside, which overshot, only one Gun fired after that, 'X' Gun, which struck the funnel, but because of this hit caused the complete loss of power by the enemy, who until then, had fired their 4 x 5. 9 inch guns twice, and allowing some delay in the loss of power, I feel at the very most, 3 more salvos were fired, giving a total of 5 x 4 or 20 strikes by the heavier guns, even so considerable damage had been incurred

I think this argument is confirmed by the Anti-Tank Gunner being awarded the Iron Cross for his accuracy in shooting, and one must consider the 20 shots fired by the heavy guns may be an exaggeration.

Although SYDNEY was badly damaged and on fire, she was not sinking, in fact stayed afloat for another 4 or 6 hours.

WHY! WE MUST CONTEMPLATE THE STABILITY.

HMAS SYDNEY had been at sea for at least 14 days since she last refuelled, and probably had 3 more days fuel in reserve, say 300 tons.

(I feel this may have been the reason why aircraft were sent out in search for her, {see Group Captain C A V Bourne's Submission to the Inquiry}, the SNO in Fremantle knew she was short of fuel).

100 tons fuel oil carried in the wing tanks, with the balance of 200 tons in the Double Bottom Tanks. The Fresh Water Tanks would be as usual full, say another 200 tons.

Given normal circumstances, the ship was stable.
The Stability would have been improved by the damage to the Masts, the loss of the 'Walrus' and boats.

The torpedo damage, caused the flooding of forward Messdecks, which although it put the ship 'Down by the Head' improved her stability, as did the flooding of the Magazines.

The damage to the No.1 Unit would not have affected the Stability until the oil fuel had stopped flowing, and the seawater started to flow through the holed tank.

Several Messdecks and Storage Spaces would have been closed (sealed) as part of the Damage Control System, these would have added to the 'Reserve Buoyancy', but some would have been below the Centre of Gravity, therefore, a negative affect.

The Fire-fighting would have caused flooding in the upper compartments, the 'sills' of all the Water-Tight and Weather Doors would have contained the water, which would be swilling around, and causing Free Surface Effect within the Ship.

THE CONSEQUENCE

SYDNEY would have steamed for over an hour to ensure they were out of effective range of the enemies guns, when they would have turned into the swell before stopping the engines.

The rolling with the continuous 'swilling' of water in the various compartments ceased and reassured the survivors. The ship herself would have taken up a list to starboard, which would have lifted the damaged side clear of the water. The ship 'lifting' gently to the Head swell.

The stability of the ship would not have been considered.
Basically, because so few Naval Officers were familiar with the calculations required, most situations affecting the Water Tight Integrity of the ship had been anticipated, and 'Tables' drawn up by Naval Architects, which would assist the Ship's Officers to understand any dangerous threat to the ship's Stability.

(The "Affect of Firefighting on a Ship's Stability" had yet to be realised, this did not happen until 1951, when the Canadian Pacific Railways EMPRESS OF CANADA caught fire in the Liverpool Docks, and capsized during the Fire Fighting.
There had been other fires where ships had heeled in Dock, in particular, the French Liner NORMANDIE, which listed and 'leaned' against the Dock sill, and was *later claimed by The Port Authority, caused by the 'off shore' Fire Floats).*

The Fire fighting may have been carried out by seamen other than the Damage Control Groups, so more water was used than essential, ('Jets' used instead of 'Spray' nozzles). Not directing the water at the seat of the fire, etc.

At first, especially while still steaming, and the ship rolled in the swell, the slack water would have been swilling around. Because the Stability was becoming 'Tender', the rolling would not have been too unpleasant, but as the stability deteriorated, then the ship would have heeled to one side, causing the Centre of Gravity to move off the Centre Line of the ship, this in turn changes the Centre of Buoyancy so that it will act Vertically through the Centre of Gravity, thereby attaining Neutral Stability.
The ship was not in danger, but had taken-up an 'Angle of Loll'.

The affect of course is, should the Angle of Loll be 5 degrees to Starboard, and the ship roll 5 degrees , then the roll to Starboard will be to 10 degrees and to Port, the ship will be upright.

This type of slight roll will not upset the ship, but the additional water being used to fight the fire added weight above the Centre of Gravity , causing the ship to increase its 'Angle of Loll' to Starboard.

(The State of Neutral Stability/Angle of Loll is not a desperate situation, Merchant Ships had knowledge of it, particularly 'Tramp Ships' loaded with Lumber {sawn timber} and Coke. In both cases, the ship is 'full and light' and extra cargo is carried as deck cargo to a height of 8 feet (6.2m). During passage to the discharge Port, the Deck Cargo will absorb moisture either from rain, sea spray, or both. This adds weight above the Centre of Gravity, (in those days, Triple Expansion Steam Engines were the popular choice of propulsion for tramps ships, the Engineers preferred a port list to lessen the strain on the Piston Rod Guides), the Angle of Loll was invariably to the portside.
It was a common sight seeing 'Lumber ships' entering Port with a 5 to 10 degree list.
When the cargo discharge was commenced, the lumber on the high starboard side was lifted off first. Surprisingly, the ship's ' list' eased, because the cause was the Ship's Neutral Stability, and the removal of the highest stowed cargo lessened the weight above the Centre of Gravity.)

WHY HMAS SYDNEY CAPSIZED.

Sydney had been stopped, and fighting the fires for 2 hours or more.

All seemed in control, although the free water was slopping from side to side in all compartments, the'Angle of Loll' was not increasing

A change to the distribution of weights was occurring, as the oil from the damaged "Wing Tank slowly 'trickled' into Number One Unit, it was replaced by Seawater.

(In laboratory experiments involving balancing weights, very little mass is required to tip the scale, even when much heavier weights are in balance).

The Specific Gravity of the Fuel Oil was 0.93 (the Navy mixed lighter oil to the normal Fuel Oil to reduce smoke Affect).

So the original weight	50 x 0. 930 = 46 . 50 tonnes
was replaced by the Seawater	50 x 1. 025 = 51 . 25 tonnes
A difference of	4 . 75 tonnes

This small difference in mass (weight) was happening in the Port Wing Tank, while it was below the Ship's Centre of Gravity, it would improve the Stability, but as soon as this change of weight distribution rose above the Ship's 'C G', then it would decrease the stability and increase the "Angle of Loll', although this increase in weight was on the high side, it would not change the list to Starboard, until additional weight had increased to such an extent, as to balance the weight of the water on the Starboard side).
This would have occurred when, the 'swilling water' passed the Centre Line.
This total mass off water would be approximately 100 tonnes, which would gather momentum as the water rushed across the various spaces, not stopping but washing against the bulkheads and across to the port side causing the 'Angle of Loll' to shift to the port side, the ship to continue rolling violently, knocking all surviving Personnel against obstructions and bulkheads.
All would have either been killed or rendered unconscious.

The ship would be on its Port Beam's End, when water would have poured into the ship through every opening, be it open doors or Shell damage, and continued until completely capsized.

This violent movement would have been so great, that when the ship was up-side down, the force of the water acting downward against the damaged forward section would most likely have broken the ship in two.

The sinking ship still had enclosed undamaged compartment, and still sealed against the ingress of water, these "obeyed Boyle's Law".

("If the temperature and quantity of a gas remain constant, the volume varies inversely with the pressure".)

THE POSITION OF HMAS SYDNEY'S SINKING

Kapitan Detmers informed the Interrogators a position that differed from the Navigators, who had designated the major Co-ordinates, ie the whole degrees only of the Latitude and Longitude, whereas, Detmers included minutes of Longitude, (criticism, is'nitpicking', worthy of the humblest of Public Servants)

The last position noted would have been the Midday Position, and when Detmers decided to "Abandon Ship", the Navigator would have calculated KORMORAN's position, as is the normal procedure of all ships when in danger etc. Normally this position would have been sent out as an SOS, but, there was no power to Transmit the call for help.

The calculation involved was not complicated, a consultation of the 'Traverse Tables', (a Plane Trigonometry 'Ready Reckoner').

The position would not allow for 'Set and Drift' of a Current, which in this case (already argued), was to NNW, 0.3 knots. As the time was 1800. then the actual position was, 6 hours x 0.3, or 1.8 knots astern.

The time, after HMAS SYDNEY had cleared the stern of KOMORAN would have been about 1830, and steamed southward until she thought, at a distance out of range of the enemies guns, (remember, SYDNEY was steaming into the wind and the smoke from her fires obscured the burning Enemy astern).

At 2000 it was dark, and the distance from the enemy approximately 7.5 miles, when SYDNEY turned into the swell and stopped her engine.

The wind on her beam would have blown (Sailed) her back down the track at one knot, plus the current set of 0.3 knots giving a set and drift to the NNW at 1.3 knots.

One of KORMORAN's Survivors reported still seeing the fire at Midnight

The following argument will indicate SYDNEY's position at the time of sinking.

The distance steamed from 1830	7.5
This then shows:	
Distance steamed from 1830	7.5 mile
Less set and drift 4 hours at 1.3 knots	5.2 miles
	2.3 miles
Set encountered 1800 - 2000 2 x 0.3	0.6 miles
	1.7 miles
The original error of not allowing for set	1.8 miles
	0.1 mile

By a strange coincidence, the position given by Kapitan Detmers is the position in which HMAS SYDNEY sank.

As she sank, the pressure increased, but confined in half the space, at 10 metres; one third the space at 20 metres; one quarter the space 30 metres, etc. this progression would continue until the wreck reached 400 metres. It can now be seen, the air in the sealed compartments contracted, leaving a vacuum in the lower part of the compartment.

But the air, (oxygen) contaminated by the oil fuel gases in the empty double bottom tanks would be compressed, and such a compression would cause this volatile mixture to heat until it reached its 'Flash Point', when it would explode, (*the principle of the internal combustion engine).*

We can see, that before the wreck of HMAS SYDNEY reached the seabed she was subjected to a huge explosion of the gases in the double bottom tanks, and at the same time, an implosion of the sealed compartments.

These natural forces are more powerful than the man made explosions of that period, not only were there no survivors, HMAS SYDNEY disintegrated in the position stated by Kapitan Detmers:

LATITUDE 26 34 S LONGITUDE 111 00 E

ADDENDUM

THE CHRISTMAS ISLAND CARLEY FLOAT

I included in my submissions, argument against the Carley Float 'rescued' off Christmas Island being from HMAS SYDNEY, the following will emphasise that argument.

The foregoing **"DEDUCED RECKONING"** excludes any survivors, had some Sailor or Group of Sailors managed to launch a Carley Float and escaped, they could only have done so by "Breaking Ship" (Desertion).

The 'lone survivor' to have remained in such a state of preservation after nearly three months adrift in the tropics, and with little food, would have had to resort to Cannibalisation, (Lucky he had perfect teeth).

(A Chinese Seaman survived 43 days adrift in a Lifeboat, the longest period recorded during WWII., but the boat had ample provisions of both food and water at the commencement of the ordeal. Other crew members died. During other lengthy survivals, some admitted to cannibalisation)

The Forensic Surgeon called to give advice to the Committee practiced in Victoria, where preservation of cadavers is assisted by the dry air in the arid regions, a far cry from the Hot Humid conditions of the Tropical Ocean. (One Newspaper Article actually 'talked' of a Mummified Body)

The Current Television Programme, BLUE PLANET, confirms my argument of small creatures of the Ocean finding shelter under these floating masses, and 'setting-up a Food Chain'.
Two months, very little flesh would be remaining, if larger predators had left anything at all

THE CURRENT "DRIFT CARDS".

They possessed neither Freeboard nor Draught, so would not come under the same influence as a Raft (Carley Float), but would have drifted in the surface current of the water. Yet another 'Red Herring'

Submission
by

B. Severne
B. Walker
G.Riley
M. Cooper

Sub Ocean Surveys

B. Severne
B. Walker
G.Riley
M. Cooper

Sub Ocean Surveys

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Sonar and magnetometer survey of seabed feature in Geelvink Channel, Geraldton

B Severne, B Walker , G Riley and M Cooper (Sub Ocean Surveys)

Escalating interest in locating HMAS Sydney resulted in the survey of a seabed feature located in 24 fathoms at the northern end of the Geelvink channel and 15 miles off Lucky Bay, south of the Balline fence-line. Terry Ash (professional fisherman) located the "Lucky Bay Lump" some 30 years ago, which has yielded excellent catches of pink snapper and crayfish. This seabed feature or 'lump' is several hundred metres long and rises some 10 metres above the seabed with sharp sides, smooth top and the suggestion of a hull shape. It has been considered in recent years to possibly indicate the final resting place of HMAS Sydney.
Our interest in this area is based on recent oceanographic and historical research which indicates the Sydney lies in shelf waters approaching the northern entrance of the Geelvink Channel.

This survey was carried out on 7th October 2001 using modern search techniques and a modest budget of $5,000. Sea state was calm with an 8 knot breeze, 10+ metre water visibility and south-bound migrating humpback whales.

Sidescan sonar with a 800m wide swathe and 10cm resolution was towed at 6 knots to survey the 'lump' and surrounding square kilometre of seafloor.
Navigation used a 12-channel GPS with resolution better than 10 metres, despite US military activity in Afghanistan.
The sonar image indicates an elongate hard carbonate reef zone, but none of the discordant features that characterise an intact or shattered steel shipwreck.

A magnetometer was then towed on six traverses across the 'lump' to record the total magnetic field with 1 nanotesla (1 nT) resolution at 6 metre intervals. Magnetometer response was less than 20 nT whereas a 7000 tonne warship would provide a magnetic signature greater than 500nT under these survey conditions. The integrated magnetometer and side-scan sonar survey indicates that HMAS Sydney is not at this location.

It is a pleasure to acknowledge the crew(Steve and Max) and skipper/owner (Terry & Cheryl Ash) of "Miss Horrocks II" for sharing their knowledge and west-coast hospitality. David Burchill and Max Cramer provided focus and encouragement. John Bye, Ros Page and Michael McGeorge are thanked for introducing us to the mystery of HMAS Sydney.

NATA

Submission
by

Max Venables

Max Venables

MR ARTHUR Leggett
MRS Ruth James

Max Venables
10 Gore Street
GLENELG NORTH SA 5045
8295734

The Editor, *Vetaffairs*
PO Box 21
WODEN ACT 2606

Dear Sir

I read the article re the HMAS Sydney Memorial at Geraldton W.A. in the September 2001 Vetaffairs paper.

Please be informed I believe it is extremely important the facts concerning the sinking of the Sydney should be a true and correct account of her position and whereabouts at this time. I would be pleased if you would consider the following information and you may confirm this with any survivor who was on board HMAT Zealandia on its voyage to Singpore.

The story of the last troops who farewelled the HMAS Sydney, THE 8 DIVISION AMMUNITION SUB PARK, left Melbourne Ports on 2/11/1941 on the HMAT Zealandia, escorted by HMAS Adelaide. We went via the South Pole to Albany, Western Australia, to be met by HMAS Sydney on 12/11/1941 and escorted into Fremantle. After a few days in Fremantle, HMAS Sydney resumed escort of HMAS Zealandia to our now known destination, Singapore. On about the 17th November, 1941, the HMAS Sydney left the escort to intercept an unknown ship on the horizon. She proceeded about halfway to the ship when she must have received the correct answer to her signals and returned to resume escort duties. Before HMAS Sydney departed on 18/11/1941, she completed a ceremonial parade around HMAT Zealandia with all hands on deck and headed in a south-west direction instead of south-east for Fremantle. On this day we were met by H.M.S. Durban and escorted into Singapore to arrive on 20/11/1941. The HMAS Sydney was sunk on 19/11/1941 with all lives lost.

The HMAS Sydney was *not* returning from Java but from the west coast of Australia. There were 600 troops on board the HMAT Zealandia. Our Unit, 8 Division Ammunition Sub Park, consisted of 200 on board on 2/11/1941. This year marks 60 years on and only 22 of our Unit remain.

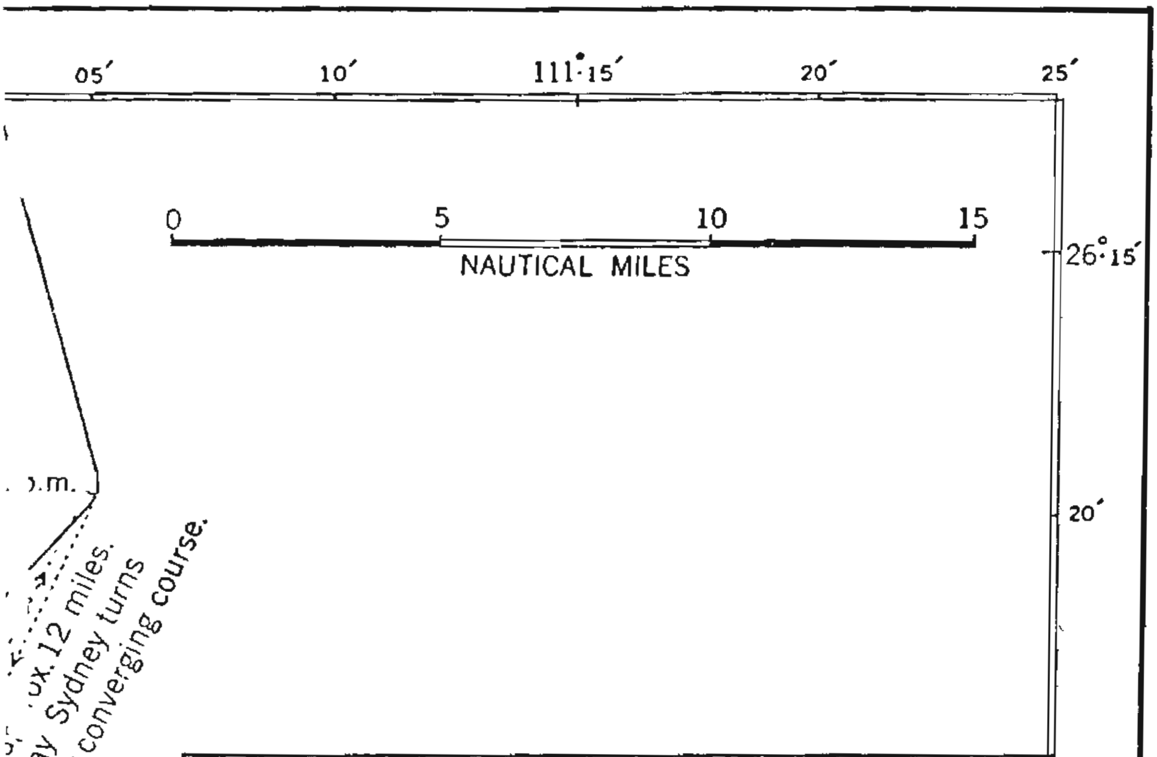
.../2

During HMAS Sydney's few days in Fremantle, Syd Markham, who also served on HMAS Perth and who spent 17 years in the navy, was transferred with others from HMAS Sydney the day before her escort of HMAT Zealandia, to attend a training course in Melbourne, Victoria. Both ships were lost. We were the last troops to say goodbye to HMAS Sydney.

Yours faithfully

Max Venables

MAX VENABLES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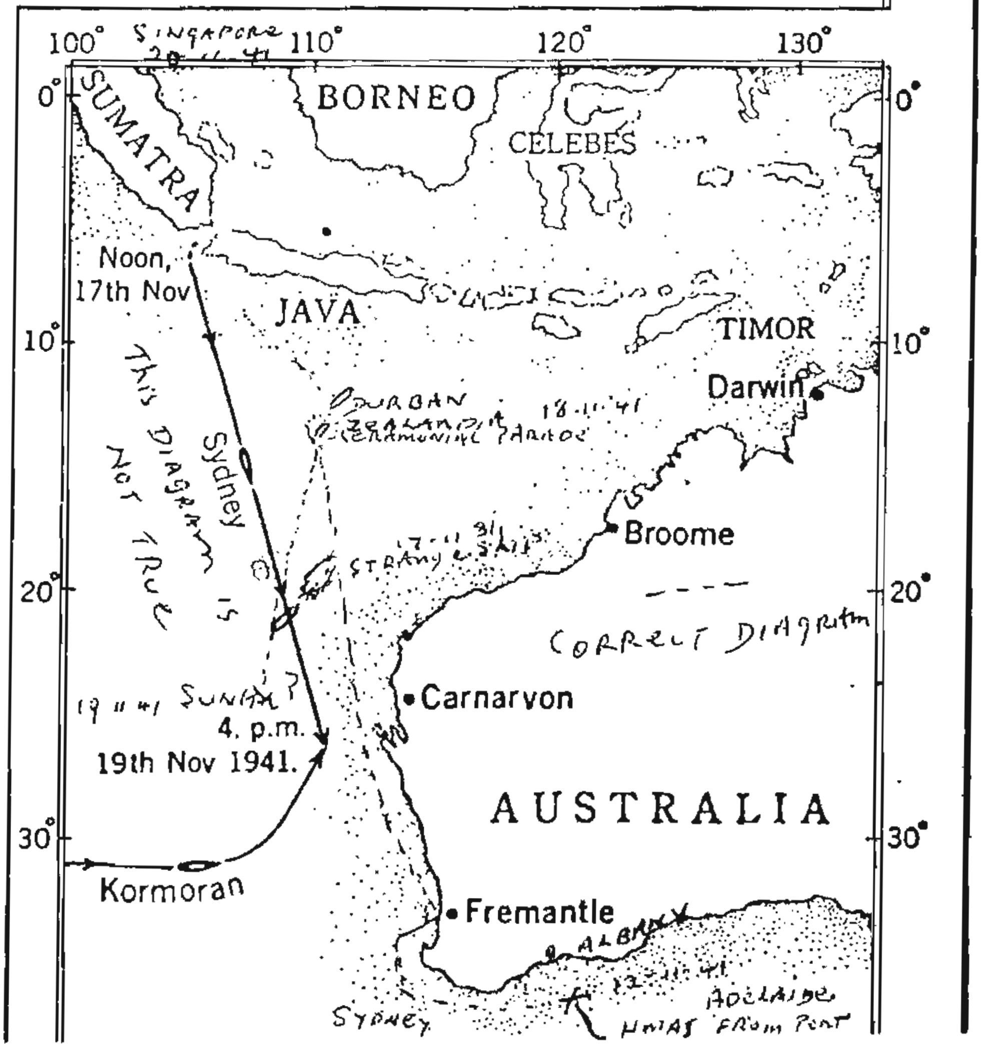
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17th Nov
Darwin
Broome
Carnarvon
Fremantle
AUSTRALIA
Sydney
THIS DIAGRAM IS NOT TRUE
CORRECT DIAGRAM
DURBAN
18.11.41
4. p.m.
19th Nov 1941.
Kormoran
ALBANY
ADELAIDE
SYDNEY

EX-PRISONERS OF WAR ASSOCIATION OF W.A.

AFFILIATED WITH THE EX-POW ASSOCIATION OF AUSTRALIA

31/12/2000

47b Wenden Place
Willetton 6155

12-11-01

Dr. David Stevens
Director of Naval History.

Dear Sir,

I have recently received these enclosed papers which may help you in deciding the position of H.M.A.S. Sydney when she was sunk.

I hope that you will be able to spend time to read this man's very credible story and study his map.

I wish you well with your seminar

Yours Faithfully

Ruth James.
HON. SECRETARY

Submission
by

T.J. Watson

T.J. Watson

T.J. Watson
17 Kallaroo Road
LANE COVE NSW 2066

29 October 2001

Dr David Stevens
Director of Naval Historical Studies
naval Historical Directorate
CP4-1-003 CAMPBELL A.C.T. 2601

Dear Dr Stevens,

Regarding the Seminar to be held at Fremantle on Friday 16/11/01 concerning the H.M.A.S. Sydney I enclose herewith my Submission to the Seminar and I also enclose a brochure covering the 15 year period when I was C.E.O. of this company It is for your information only as the company is no longer in operation.

I attended most of the Government Enquiry meetings and I am very interested in helping in any way I can and would appreciate receiving any data that is available. I also would like to be placed on the list of interested people. I will be attending the Seminar on 16/11/01.

Yours sincerely,

THOMAS J. WATSON

TELEPHONE 0294274931
FAX 0294283784

Enclosure:

forwarded to Jeremy Green
5/11/01.

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TEL 0294274931 FAX 0294283784

SUBMISSION TO THE PROTECTOR OF NAVAL HISTORICAL STUDIES

29 October 2001

Dr David Stevens
Director of Naval Historical Studies
Naval Historical & Directorate
CP4-1-003 CAMPBELL A.C.T. 2601

Dear Dr Stevens,

As a member of the Fremantle Branch of the R.A.N.R. I was called up for service on 3.9.1939 and receive training at both Fremantle and H.M.A.S. Cerebeus in Victoria. I later transferred to the R.A.A.F. where I spent the remainder of World War II, a total of 6 years and 3 months. As H.M.A.S. Sydney was based in Fremantle on the 3.9.1939 I met quite a number of Sydney's crews and became firm friends of quite a few some of who perished in the dreadful disaster of November 1941. Ever since I have been intensely interested in the circumstances surrounding the loss of Sydney, and to help if possible, in bring about a solution to the tragedy.

Since the lifting of the 30 year security ban, I like hundreds of others have followed the volume of information that has come forward including the books that have been written and the Government Enquiry that was held. It appears that the only way it will ever be resolved will be to locate the wrecks of the Sydney and Kormoran as recommended by the Government Enquiry. I held the position of C.E.O. of an Australian Aviation Company for 48 years, and was involved in airborne geophysics for a period of 15 years. I therefore realise the difficulties in finding a ship not knowing where it sank.

As this was one of the greatest disasters in the history of Australian Defence Forces. I believe that everything possible should be done to bring about a solution. During the period I was involved with airborne geophysics, I had the privilege of meeting experts and attending conventions in various parts of the world over many years After the lifting of Australian security I became actively interested in helping in any way I could the various organisations that sprung up with the same wishes. I do believe a lot more could be done than has been done in the past few years. however, a lot of people have spent time and money doing the best they can without much of a definite plan. I therefore submit for your perusal my thoughts and suggestions.

1. There are so many opinions about exactly where the action happened. I believe that all reports should be investigated and areas of interest searched with the latest equipment available. The use of aircraft at present is restricted to water depths of approximately 600 feet however the Germans reported the action took place at water depth of approximately 12 – 14,000 feet. As the actual position is unknown I was responsible for forming a small group to carry out a small search of some interesting anomalies in the shallow water area.

   I've been working on this for the past two years and have made three visits to United States and the UK contacting experts in equipment and methods I've received some of the best advice in the world and prepared a computerised model of H.M.A.S. Sydney showing the technical possibility of what you could expect to find in various water depths. We hope to fly this area soon.

   This proposed operation is underwritten by our group in the hope that it will create further interest by others.

2. My opinion that all interesting prospects such as the "find" claimed by Mr Lindsay Knight, of K.D.L.S Knight, Direct Location System should be tested if aircraft equipment becomes available to use in deep water. Should Mr

Knight's "find" be confirmed using G.P.S. navigation tests would confirm or reject the site and prevent further expensive on-service ship investigation.

3. During my many visits overseas I have had the pleasure of meeting a Lieut Colonel in the United States Air Force who explained that he was Second-in-Charge of US Air Force Intelligence. I explained to him my interest in the H.M.A.S. Sydney and much to my surprise to hear that he knew all about the Sydney – Kormoran action. Although the USA was not at war then. He invited me to visit him in Washington DC to meet his Commander who was Head of the US Air Force Intelligence who would be able to help as they had lots of information. This meeting was about mid-1999 and I didn't take up his offer, however it still stands. I'm also of the opinion that any information we can get from anybody is worthwhile.

4. I have friends in England who served in World War II in the Royal Navy and I was introduced to the President of the Royal Navy Association who was very interested in Sydney and knew all about it. I explained to him about obtaining information from the archives in the United Kingdom who still have a 70 years secrecy ban on information. He offered to help in any way he could by using his influence with the Royal Navy. It is said they would have records of all signals and instructions sent to Sydney from Singapore at this time. This would be invaluable information and they suggested that pressure should be applied by the Australian Government to the authorities in the United Kingdom for release of this information.

5. It is obvious that if there is a serious attempt to find the ships a plan should be prepared listing in detail what facilities can be made available and a management panel be appointed. The use of aircraft is the cheapest method of eliminating the shallow water areas and if equipment can be obtained to search the deep water, aircraft would be the quickest the cheapest way to position any anomaly found. However, aircraft is not the final answer as with present day equipment aircraft could only accurately position any find using GPS navigation equipment in 600 feet depth of water then a surface vessel would be needed to finally identify and photograph the find. A small search we are planning will establish the practicability of further searching perhaps in deep water.

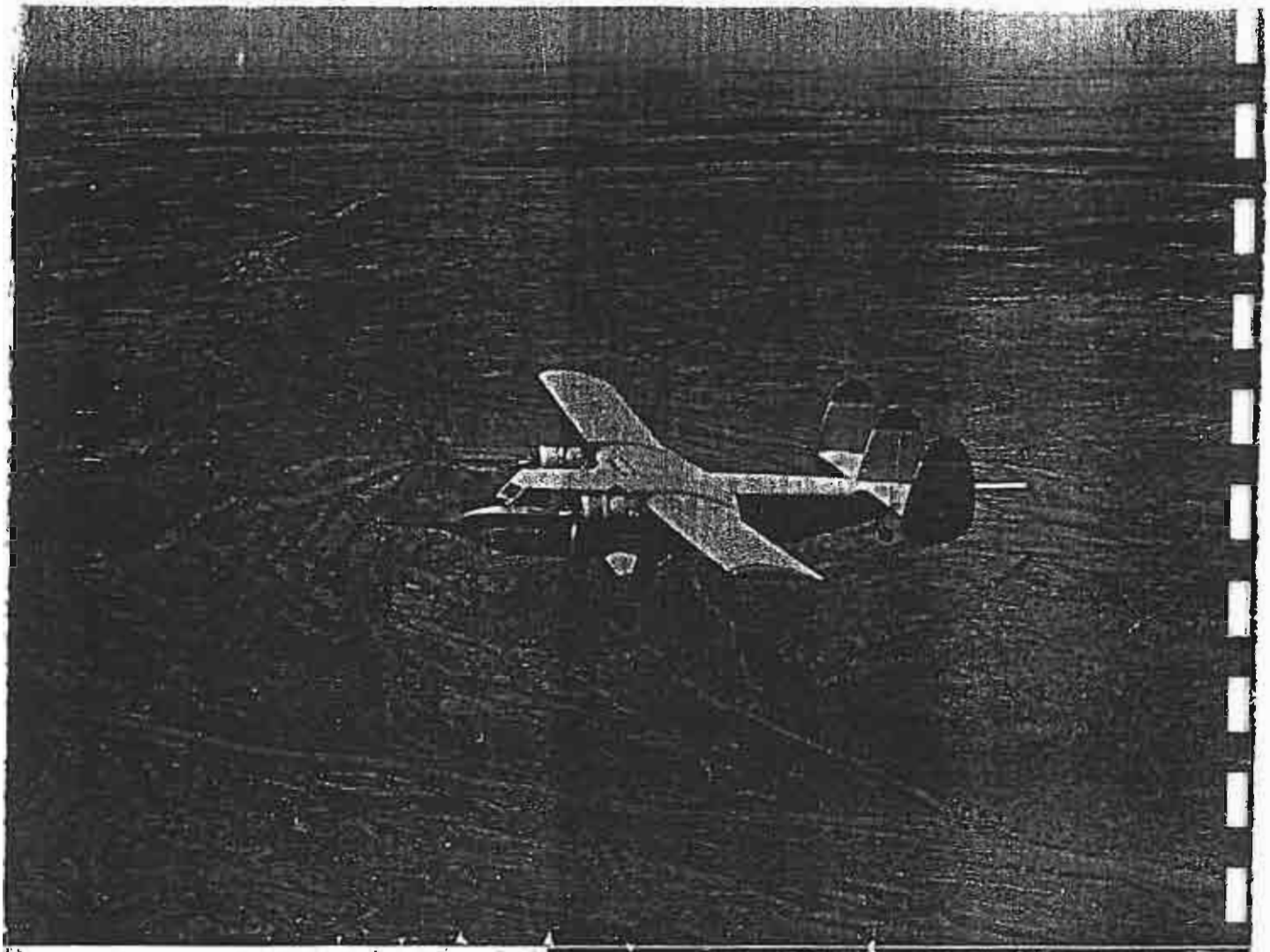
As a third generation patriotic Australian, I believe it would not be asking too much of the Navy and Air Force to carry some of these surveys. If the Australian Government can supply several warships and four R.A.A.F. Orion aircraft to save racing yachtsmen in the Southern Ocean some Orion aircraft and ships should be made available. Surely we are not that poor, and if we are, the private sector would no doubt help with fuel costs.

I am prepared to offer my services to the Seminar in any way and to followup the many overseas contacts I have already made. I would do this at my own expense, my only wish is to find the ships and show some respect to our 645 gallant sailors who lost their lives.

Yours sincerely,

T Watson

THOMAS WATSON



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AIRBORNE GEOPHYSICS

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Crew checks flight plan prior to take-off on a geophysical survey mi
(Note VLF EM hose probe antenna)

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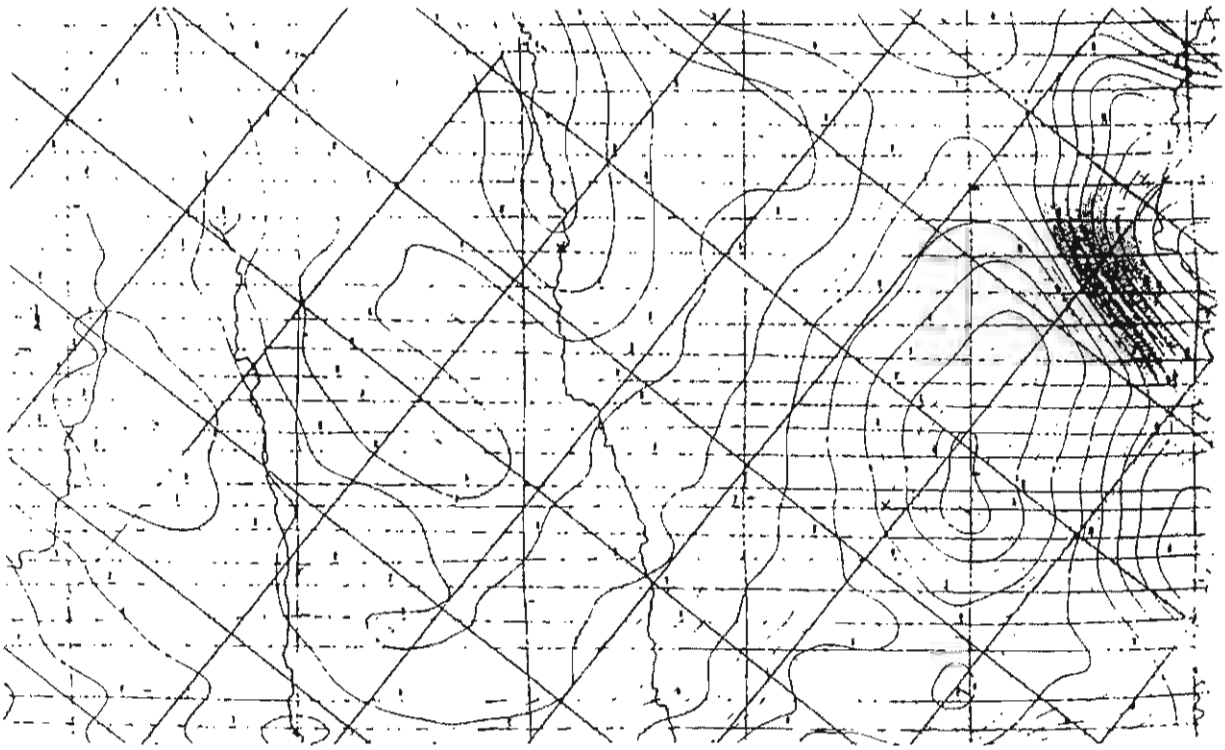
- Geophysical interpretation of all collected data. High sensitivity and gradiometer interpretation using the Werner deconvolution method of digital processing.

Total intensity isomagnetic contours.



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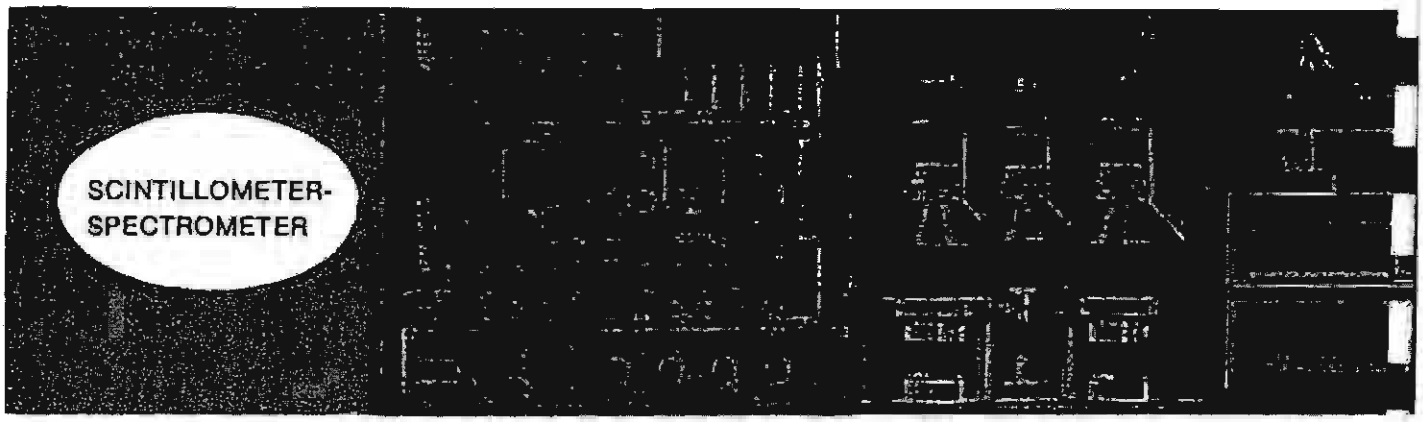

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Submission
by

T. Warren Whittaker OBE
&
Lindsay Knight

Department of Geomatics
University of Melbourne

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&
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Dr David Stevens
Director of Naval Historical Studies
Naval History Directorate
Sea Power Centre
Department of Defence
Campbell Park Offices, CP4-1-14
CANBERRA ACT 2600

2nd October 2001.

Dear Sir,

SUBMISSION TO THE WRECK LOCATION SEMINAR TO BE HELD ON 16 NOVEMBER 2001.

I have worked on the search for the wrecks of HMAS SYDNEY and HSK KORMORAN with my colleague Linsday Knight since 1989.

I enclose our submission to the Seminar.

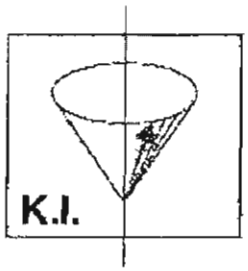
The submission contains our report on three aerial searches using the Knight Direct Location System (KDLS). These searches enabled us to locate two targets west and south-west of the Abrolhos Islands:

- KDLS Target No 1. At 29° 58.4', 112° 48.4'. (Suspected wreck of HMAS SYDNEY).
- KDLS Target No 3. At 28° 38.3', 113° 22.3'. (Suspected wreck of HSK KORMORAN).

Oceanographic evidence, oral history and my analysis of the records of the voyage of Kapt.Lt. Meyer's lifeboat are all consistent with the location of the battle being west of the Abrolhos Islands. My analysis of German survivors' written records refutes the view that the wrecks of HMAS SYDNEY and HSK KORMORAN lie in the vicinity of 26°S, 111°E. (the so-called northern site). A corollary of this conclusion is that the statements by the KORMORAN survivors regarding the location of the battle are false. (Document 4, Page 21.)

Mr. Knight has asked me to say that due to business commitments, he is unable to attend the seminar on 16 November. He has provided details of the KDLS in Document 8, also14 Testimonials in Document 9.

Yours faithfully
T. Whittaker.



THE SEARCH FOR THE WRECKS

OF

HMAS SYDNEY AND HSK KORMORAN

IN

1989 1998 2001

USING THE

KNIGHT DIRECT LOCATION SYSTEM

SUBMISSION TO THE
ROYAL AUSTRALIAN NAVY

WRECK LOCATION SEMINAR

FREMANTLE 16 NOVEMBER 2001.

BY

KNIGHT INDUSTRIES PTY LTD.

AND

T. WARREN WHITTAKER, OBE.

SEMINAR TO DEFINE THE SEARCH AREAS FOR THE WRECKS OF HMAS SYDNEY AND HSK KORMORAN.

SUBMISSION BY WARREN WHITTAKER.

CONTENTS.

1. **The Search for the Wrecks of HMAS SYDNEY and HSK KORMORAN by Lindsay C. Knight.** An overview of the research carried out by Knight and Whittaker. (Pages 1 - 6.)

2. **Report on the Search for the Wrecks of HMAS SYDNEY and HSK KORMORAN in 1989, 1998 and 2001 Using the KNIGHT DIRECT LOCATION SYSTEM by Lindsay C. Knight and T. Warren Whittaker."** This is the record of three KDLS searches that located two targets west and south west of Geraldton WA. The targets are: KDLS Target No 1 (Suspected wreck of HMAS SYDNEY) and KDLS Target No 3 (Suspected wreck of HSK KORMORAN). No wrecks were detected in the vicinity of 26S 111E. (The area claimed by Kormoran survivors to be the site of the battle. (Pages 7 - 15).

3. **A Summary of the Evidence Supporting the Conclusion that the Battle Occurred West of the Abrolhos Islands by Warren Whittaker.** This document itemises the evidence supporting the KDLS observations relating to the probable locations of the wrecks of HMAS SYDNEY and HSK KORMORAN. (Pages 16 - 20.)

4. **The Voyage of Meyer's Lifeboat. An Analysis of Kapt. Lt. von Malapert's Diary and sailing Notes made by Kapt. Lt. Meyer by Warren Whittaker.** The Diary and Notes contain clear evidence that the battle took place west of the Abrolhos Islands. The evidence is consistent with the KDLS Search results. (Pages 21 - 37).

5. **The Loss of HMAS SYDNEY - 1941: The Search for the Wreck of HSK KORMORAN by Warren Whittaker.** This booklet describes research into the location of the wreck of HSK KORMORAN. (50 Pages).

6. **Drift Evidence for the Locations of HMAS SYDNEY and HSK KORMORAN by John A.T.Bye. Research Report No 58.** The report covers drift card experiments and the use of a drift model based on experimentally determined velocity profiles in air and water. The Author concludes that the result of the study clearly indicates the probability that the battle between HMAS SYDNEY and HSK KORMORAN occurred west of the Abrolhos Islands. (This document has been included by kind permission from Professor Bye). (55. Pages).

7. **Report on the Meteorological Conditions near 26S 111E for 17-28 November 1941 by Joe Courtney, Bureau of meteorology.** Mr. Courtney has stated that the weather conditions west of the Abrolhos Islands would have been generally similar to the reconstruction for 26S 111E. (This document has been included by kind permission from Mr. Joe Courtney). (16 Pages).

8. **Knight Industries Pty Ltd DIRECT LOCATION TECHNOLOGY by Lindsay C. Knight.** The document describes the KDLS instrument, operation and uses. (5 Pages).

9. **Testimonials for KDLS.** This documents contains 14 testimonials covering wreck location, oil and mineral exploration and old graves in Australia, USA, Philippines. (25 Pages).

Total 188 Pages.

CONTACT DETAILS.

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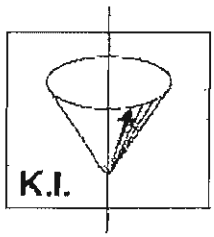
e-mail kipl@bigpond.com

LCDR Ean McDonald RANR (Retired).
32 Watsonia Road
Gooseberry Hill
Western Australia 6076
Phone and Fax 08 9454 5319

Document No 1.



THE SEARCH FOR THE WRECKS OF HMAS SYDNEY AND HSK KORMORAN.

by

Lindsay C. Knight.

1. THE RESEARCHERS:

Lindsay C. Knight.

I have 57 years practical experience in electrical and electronic manufacturing and Research and Development. I obtained many patents. I am the inventor and co-inventor and was manufacturer of the Dart Military Training Target System and the Super Dart Projectile Location System for Military and Police marksmanship Training. The equipment was installed in more than 20 countries worldwide.

I am the inventor and operator of the Knight Direct Location System (KDLS). The primary role of the equipment is oil and mineral exploration. I have used KDLS to locate ship wrecks offshore Australia, PNG, Guernsey (UK), Indonesia, Philippines and Florida (USA).

T. Warren Whittaker. OBE. Lieutenant Colonel (Retired)

He is an Aerial Survey Consultant. He has devised programs and procedures for mapping and inspection of Electricity Power Lines, Gas Pipelines and Railways from light aircraft. The procedures involve the use of Differential GPSs and Pen Computers.

He held a Mate's Certificate issued by the Royal Yachting Association (UK). He has 10 years experience navigating and racing keel boats and dinghies on inland waters and off shore. He has rowed a 17 foot rubber raft 600 miles on white water rivers in North America including two trips though the Grand Canyon. This experience enabled him to analyse data relating to the drift objects, rafts and lifeboats recovered in the Search and Rescue (SAR) Phase of the action.

2. THE AIM OF OUR SEARCHES.

Our aim was to locate the wrecks of HMAS SYDNEY and HSK KORMORAN using the Knight Direct Location System (KDLS) in order to provide data designed to facilitate "in-water searches" funded and organized by others. **We carried out this work of national interest at our own expense.**

The initial search was carried out at the suggestion of an officer of the Receiver of Wrecks.

The KDLS findings have been assembled from scientific field research over a period of 12 years. **The KDLS results are supported by researchers from a variety of other recognised disciplines.**

It is not possible to obtain a positive identification of the wrecks by means of KDLS. In view of this, we have designated the wrecks as "Targets" for the in-water search. KDLS Target No 1 is the suspected wreck of HMAS SYDNEY and KDLS Target No 3 is the Suspected Wreck of HSK KORMORAN

3. THE KNIGHT DIRECT LOCATION SYSTEM (KDLS).

KDLS is a well-tried system that has been under continuous development and in commercial use for 12 years for oil and mineral exploration on and off shore. **KDLS technology is a very useful tool for of searching large areas of ocean quickly and economically.**

- Information relating to Direct Location Technology is set out in **Document 8.**

- 14 testimonials are to be found in **Document No 9.** These testimonials cover ship wrecks, oil and mineral exploration and location of 100 year old graves.

I have used KDLS to locate ship wrecks offshore Australia, PNG, Guernsey (UK), Indonesia, Philippines and Florida (USA).

The location of these KDLS Targets has been published on a **"Take it or leave it"** basis. **I recommend that KDLS Targets No 1 and No 3 be included in future under water searches.**

Details of the equipment and procedural methods is proprietary information and will only be disclosed at the discretion of Knight Industries Pty Ltd on a need to know basis

In view of the proven performances of the KDLS in a wide range of environments Knight Industries Pty Ltd does not see the need to spend any further time or money on demonstrating the KDLS system.

I have made this information available free of charge on condition that in the event of a discovery of wrecks at these sites, due acknowledgment is given to Knight Industries Pty Ltd.

4. RESULTS OF KDLS SEARCHES.

Between 1989 and May 2001, we have carried out three KDLS searches for the wrecks of HMAS SYDNEY and HSK KORMORAN. The results of these searches are documented in our report **"The Search for the Wrecks of HMAS SYDNEY and KSK KORMORAN IN 1989, 1998 AND 2001 USING THE Knight Direct Location System. (Document No 2.)**

Before the third search in May 2001, we confirmed the calibration of KDLS on the known site of the wreck of the SS Cambewarra.

Target No 3 (Suspected wreck of HSK KORMORAN.) as detected by KDLS appears to be spread over a considerable area.

The targets were located in the same place during each search. On each occasion, a number of aerial passes were made over the target area using the KDLS direction finding capability.

Table shows the number of times each target was detected in the same location.

Target	1998	2001	Total
SS Cambewarra	0	2	2
No 3, Suspected KORMORAN	3	6	9
No 1, Suspected SYDNEY.	5	8	13

This table demonstrates that KDLS data is repeatable and quantifiable.

Analysis of the data indicates that there are two targets to the west and south west of Geraldton, Western Australia. (The so-called "Southern Area" of research).

- KDLS Target No 1. (Suspected wreck of HMAS SYDNEY,).
  centred on 29°58.4064'S, 112° 48.4164'E (Detected in 1998 and 2001).

- KDLS Target No 3 (Suspected wreck of HSK KORMORAN),
  centred on 28° 38.259'S, 113° 22.2582'E (Detected in 1989, 1998 and 2001.)

The location of KDLS Targets No 1 and No 3 are shown in Annex A.

5. THE SEARCH OF THE NORTHERN AREA.

Searches in the vicinity of 26°S 111°E (the area claimed by Dr McCarthy of the WA Maritime Museum to be the site of the battle) or the vicinity of 26° 34'S 111°E (the location claimed by Captain Detmers) were carried out in 1998 and 2001. **No wrecks were detected by KDLS in the area bounded by 26°S, 112°E, 27°S and 110°E.**

The scientific evidence does not support the KORMORAN sank in or near 26°S 111°E as recorded in Meyer's sailing notes.

The Australian Hydrographic Office carried out a library search of the area and found no wrecks recorded in the area bounded by 26°S, 112°E, 27°S and 110°E.

An analysis by Warren Whittaker of von Malapert's diary and Meyer's sailing notes found clear evidence that the battle did not take place in the vicinity of 26°S 111°E. The evidence is that the battle took place in the vicinity of the Abrolhos Islands. See **Document No 4.**

6. INDEPENDENT CORROBORATION OF KDLS FINDINGS FROM OTHER SCIENTIFIC DISICPLINES

The KDLS evidence that the battle took place in the vicinity of the Abrolhos Group is supported by:

- Independent marine experiments and research by Dr John Bye of Melbourne University. I attach an extract from **"Drift Evidence for the Locations of HMAS SYDNEY and HSK KORMORAN". Research Report** 58 by John A.T. Bye, Flinders Institute for Atmospheric and Marine Sciences. See **Document No 6.**

- Analysis by Warren Whittaker of von Malapert's diary and Meyer's sailing notes refutes the view that the wrecks lie in the northern site. There is clear evidence that the battle took place west of the Abrolhos Islands. A corollary of this conclusion is that the statements by the KORMORAN survivors are false. See **Document No 4.**

- Analysis of drift objects and voyages of lifeboats by LCDR Ean McDonald RAN (Ret'd). Submission to the Parliamentary Inquiry, Volume 3, Page 519.

- Historical research by John McArthur. Thesis. To be published.

- Independent analysis by Warren Whittaker of drift objects, rafts and the voyages of lifeboats by. **"The Loss of HMAS SYDNEY – 1941: The Search for the Wreck of HSK KORMORAN".** Dated 10th September 2000. Published privately. **Document No 5.**

For easy reference, the evidence contained in these documents has been summarised in **"A Summary of the Evidence Indicating that the Battle between HMAS SYDNEY and HSK KORMORAN Took Place in the Vicinity of the Abrolhos Group"** by T. Warren Whittaker **(Document No 3).**

7. CONCLUSION.

The result of three KDLS Searches between 1989 and 2001 is that two wrecks have been detected.

- KDLS Target No 1 at 29° 58.4064'S, 112° 48.4164'E.
- KDLS Target No 3 at 28° 38.259'S, 113° 22.2582'E
- No wrecks were detected in the Northern Area.

The location of KDLS Target No 3 is generally supported by:

- Oral History,
- Reconstruction of the path of Drift Objects, Rafts and Lifeboats,
- Practical experiments and research by Dr John Bye.

8. RECOMMENDATION.

I recommend that an in-water search be carried out to verify and identify these sites:

KDLS Target No 1 (Suspected HMAS SYDNEY) at 29° 58.4064'S, 112° 48.4164'E.

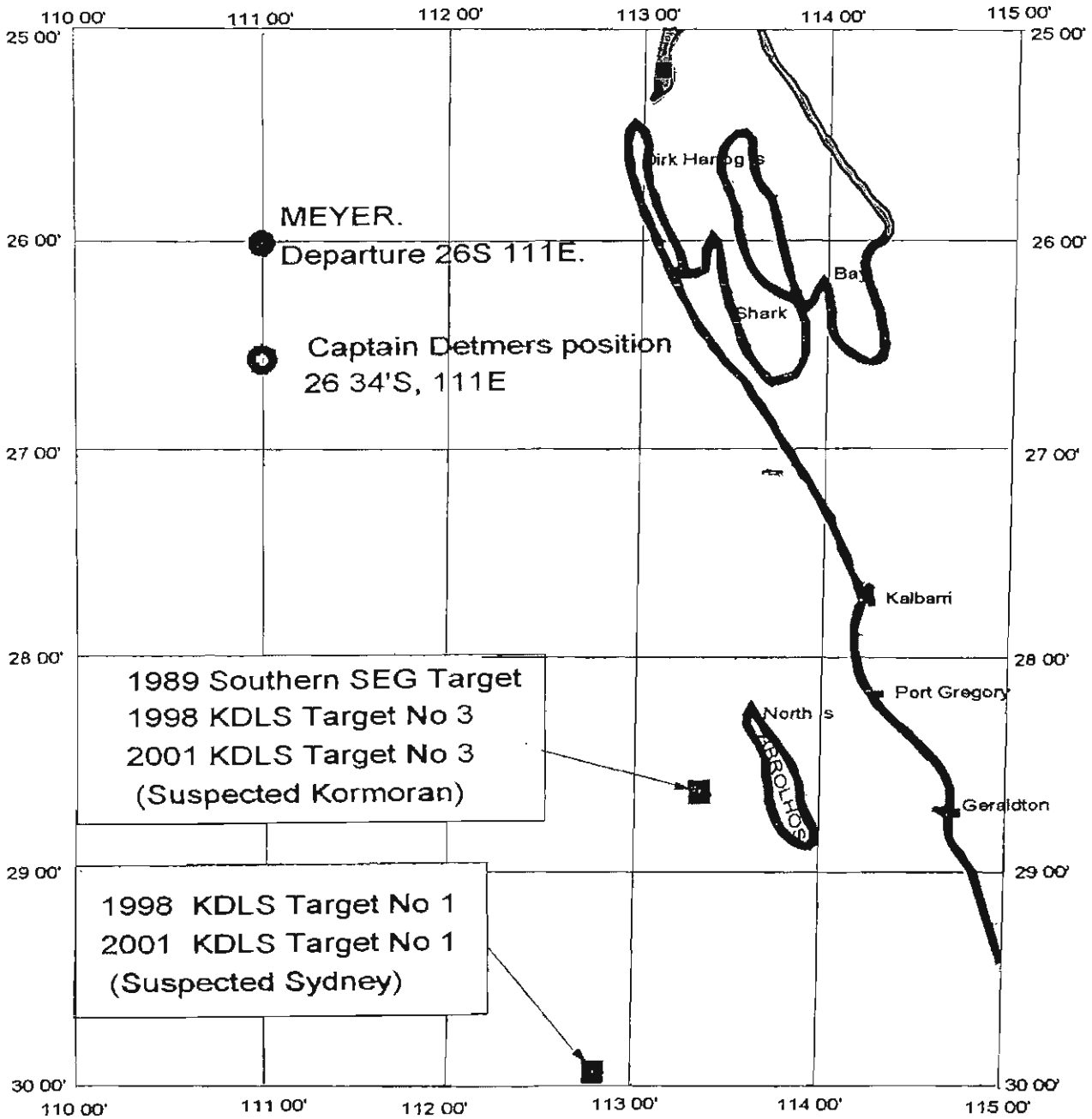
KDLS Target No 3 (Suspected HSK KORMORAN) at 28° 38.259'S, 113° 22.2582'E

L Knight

Lindsay C. Knight.
Knight Industries Pty Ltd.
27 September 2001.

Annex A.

KDLS TARGETS No 1 AND 3



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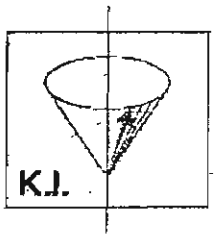

THE SEARCH FOR THE WRECKS

OF

HMAS SYDNEY AND HSK KORMORAN

IN

1989 1998 2001

USING THE

KNIGHT DIRECT LOCATION SYSTEM.

REPORT

BY

Lindsay C. Knight. and T. Warren Whittaker. OBE.

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THE SEARCH FOR THE WRECKS OF HMAS SYDNEY AND HSK KORMORAN.

REPORT

By

Lindsay Knight and Warren Whittaker.

1. INTRODUCTION.

This report records three searches for the wrecks of HMAS Sydney and HSK Kormoran by Lindsay Knight and Warren Whittaker using the Knight Direct Location System (KDLS). The KDLS is a remote sensing system invented, built and operated by Lindsay Knight. The portable equipment was installed in Light Aircraft. For information about KDLS, see Document No 8. **Direct Location Technology.**

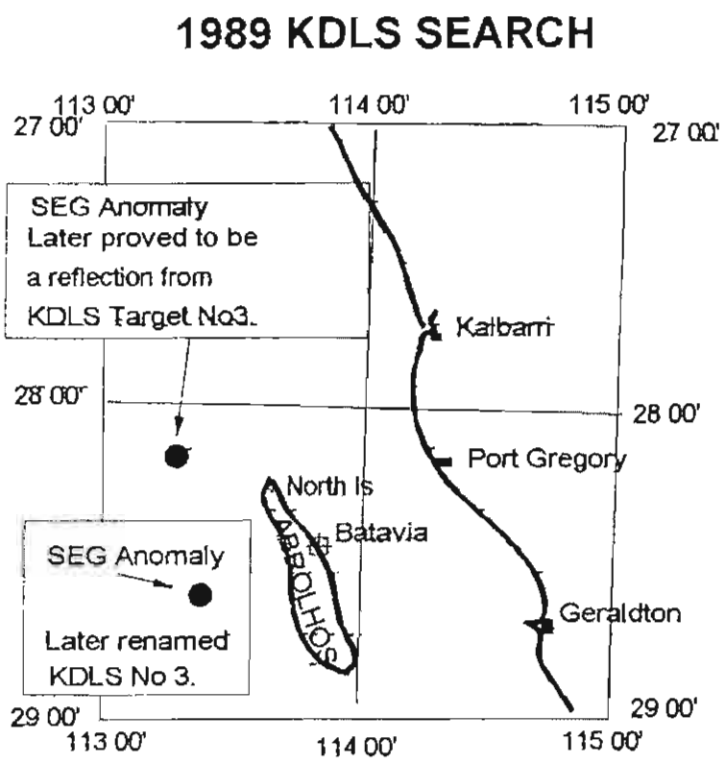
Warren Whittaker was the navigator and recorded spatial data using a GPS.

The detection range of the KDLS is proportional to the altitude of the aircraft. During these searches, the altitude was between 5,000 and 8,000 feet. Operating at this altitude, the wrecks can be detected up to 70+ nautical miles ahead and at least 30 nautical miles on either side of tbe aircraft.

We funded all three expeditions.

2. 1989 - THE FIRST SEARCH USING KDLS Mk 4. (SEG 1.)

In 1989 Lindsay Knight accompanied by Warren Whittaker carried out an aerial search to seaward from Kalbarri in a single engined light aircraft using KDLS Mk 1. The aim of the search was to locate the remains of the Batavia in the Houtman Abrolhos Islands. The position of the wreck was known to our pilot, Mr Ernshaw but not to us. The remains of the wreck of the Batavia were detected by KDLS from a distance of 25 miles. Mr. Ernshaw confirmed that the remains of the wreck had been located accurately. (See Document 6 Testimonials, Serial T1).



A search was made to seaward of the Abrolhos Islands to see if a signal could be detected from any wrecks that could possibly be the wrecks of HMAS Sydney and HSK Kormoran. Two anomalies were detected. The southern anomaly was also detected in the 2nd and 3rd Searches and was named KDLS Target No 3. The northern anomaly was later identified as a ghost or reflection from Target No 3. Due to the restrictions placed on single engined aircraft flying off shore, no further search could be carried out to seaward.

3. 1998 - THE SECOND SEARCH USING KDLS Mk 27 (SEG 5.).

On 28 and 31 January 1998, KDLS searches were carried out in a twin engined Cessna 337 aircraft chartered from Geraldton Air Charter piloted by Wendy Mann, JP. Lindsay Knight operated the latest Mark of KDLS (Mk 27).

3.1 28 January 1998,

- **KDLS Target No 1** was located at **29° 58.53'S, 112° 48.26E**. This was believed to be the wreck of HMAS Sydney due to the type of material detected.

- **KDLS Target No 2** was located about 30 nautical miles northwards from KDLS Target No1. At the time, this was labeled the "Mystery Ship" (During the search on 26 May 2001, this anomaly was investigated and found to be a reflected point or ghost, on a northerly line, from Target No 1).

- **KDLS Target No 3** was located at **28° 38.39'S, 113° 21.86'E**. This was thought to be the wreck of HSK Kormoran. This site is consistent with the anomaly detected in 1989.

3.2 31 January 1998,

A KDLS Search was carried out starting from Denham (Shark Bay) and covering the sites identified by Captain Detmers and others. No wrecks were detected in the area. Two bulk carriers under way were detected at the entrance to the Geelvink Channel. This was proof that KDLS was working correctly.

3.3 The results of these searches were reported in full to the Defence Sub-Committee of the Joint Standing Committee on Foreign affairs, Defence and Trade. The Sub-Committee was formed to inquire into the Circumstances of the Sinking of HMAS SYDNEY. The report was published in Submissions Volume 9 Number 101. (Page 2203).

Details can be viewed on our web page: www.albury.net.au/~kipl/index.html

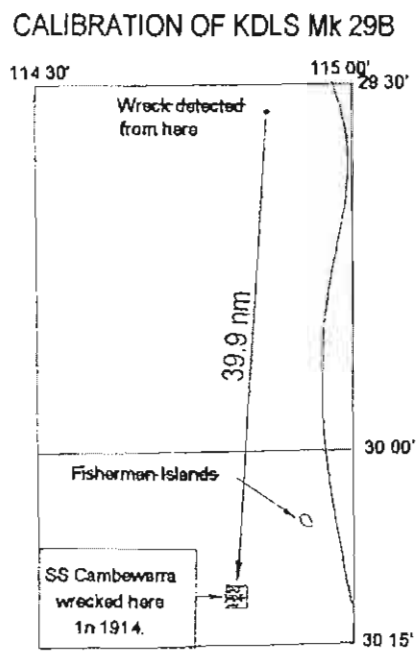
4. 2001 - THIRD SEARCH USING KDLS Mk 29B (SEG 6).

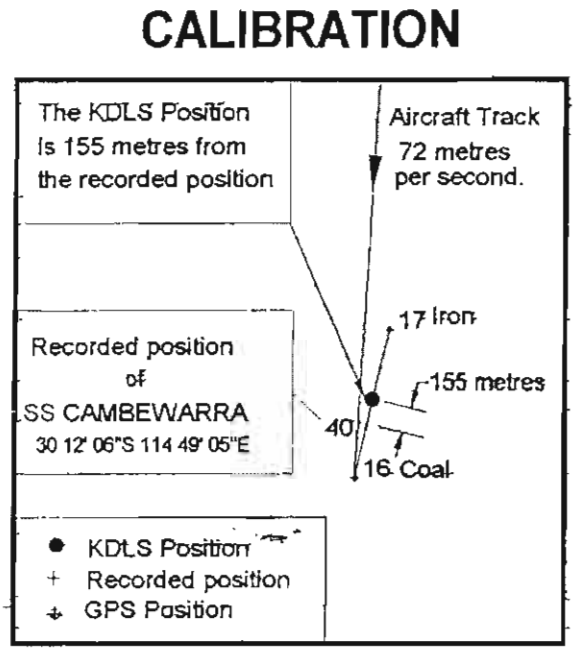
4.1 CALIBRATION.

As part of the plan for the third search, KDLS Mk 29B was calibrated over a known wreck. The SS Cambewarra (coal fired, 450 tons) was wrecked off the coast of WA at **30° 12.1'S, 114° 49.0833'E** in 1914. The wreck is 10 nautical miles from the coast and 89 nautical

miles south of Geraldton. On 24 May 2001, Bonanza VH-AVT piloted by Wendy Mann. JP. was chartered from Geraldton Air Charter.

Lindsay Knight operated the KDLS and Warren Whittaker was navigator. A Garmin 12 XL GPS linked to a Fujitsu Stylistic 1000 Pen Computer was used for navigation and recording the aircraft's track. Spatial data was captured by the Garmin 12 XL.





The KDLS was set up on the signature frequency of steaming coal. We flew South about 10 nautical miles off shore at an average speed of 140 knots. A wreck was detected ahead from just south of the 29 30' parallel. The coal anomaly was detected at waypoint 16. Another pass was made over the target with the KDLS tuned to the signature frequency of iron. An iron anomaly was detected at waypoint 17. The mean of these waypoints is the KDLS position. It is 155 metres from the recorded GPS position of the wreck. The wreck was detected from an altitude of 4,000 feet at a range of 39.9 nautical miles at a speed of 72 metres per second.

A testimonial by our pilot, Wendy Mann, is included in Document 9, Serial T 14.

4.2 THE AIM OF THE THIRD SEARCH.

- To check the validity of the three targets detected in1998 (Second Search) using KDLS Mk27.

- To check the area south of the Abrolhos Islands. This area has bee identified by Professor John Bye as a possible location for the wreck of HMAS SYDNEY.

- To attempt to differentiate between the wrecks of HMAS Sydney and HSK Kormoran using additional materials.

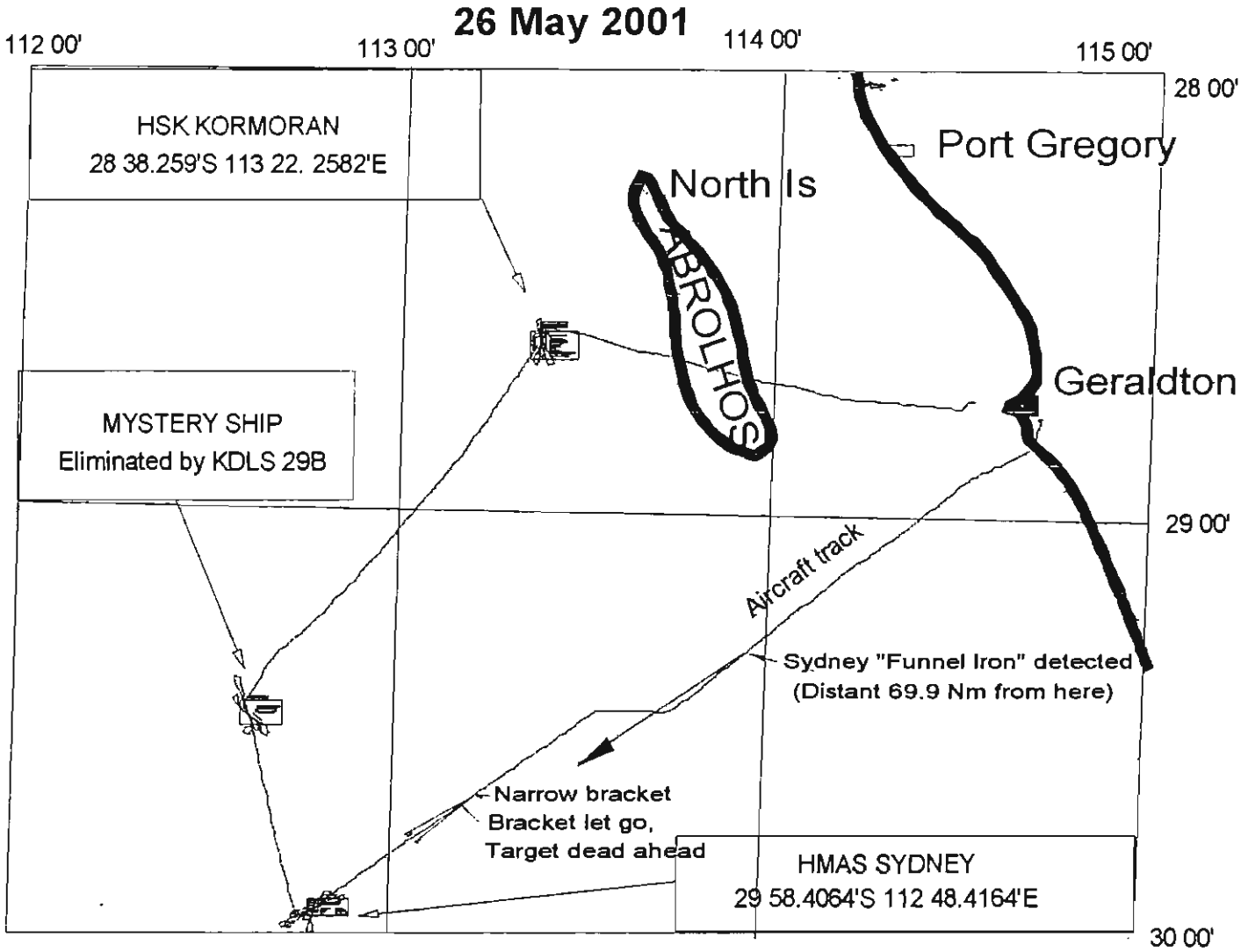
- To examine the area to the West and South West of Shark Bay. This area contains the location of the battle reported by Captain Detmers. Our flight plan was designed to cover the possible locations the Battle Site and Wreck Sites recorded by the Joint Standing Committee on Foreign Affairs, Defence and Trade: "Report on the Loss of HMAS Sydney" together with sites identified by other researchers..

- A further objective was to check the sites for any sign of the presence of a Japanese Submarine.

4.2 FIRST SORTIE. (Southern Area)

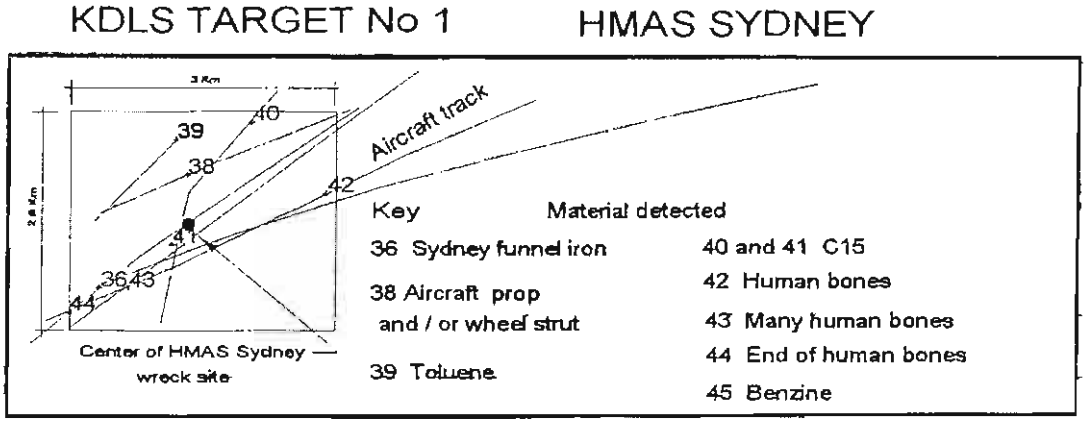
A Cessna 337 was chartered from Geraldton Air Charter, piloted by Wendy Mann JP. As before, Lindsay Knight operated the KDLS and Warren Whittaker was navigator. On 26 May 2001, we carried out a KDLS search West and South West of Geraldton.

KDLS SEARCH FOR THE WRECKS OF HMAS SYDNEY AND HSK KORMORAN



4.4 KDLS TARGET No 1

HMAS Sydney's funnel was damaged during a battle with an Italian Warship in the Mediterranean. Mr. John Harrison provided a specimen from the damaged funnel obtained during repairs. **KDLS Target No 1** was detected from a distance of 69.9 Nm using this specimen.



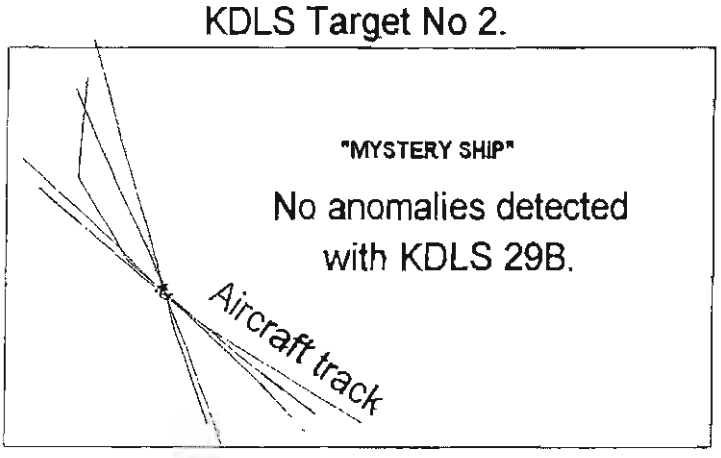
In addition to the materials detected during the 1998 search, the following were detected:

- C15, indicating bunker oil, was detected in two positions.
- Many signals from human bones were detected at this site. In one spot, a strong signal was detected indicating many bones.
- The spread of the objects appears to indicate HMAS Sydney could have broken up.

This target is believed to be the wreck of HMAS Sydney. Objects were detected over an area of 3 x 3.5 km. The centre of the area is at 29° 58.4064'S, 112° 48.4164'E.

The position recorded in 1998 was **29° 58.53'S, 112° 48.26'E**. The GPS subject to selective availability error at that time. This is within 400m of the May 2001 position.

4.5 KDLS TARGET No 2.



KDLS Target No 2 detected in 1998 ~~no longer exists.~~

Using KDLS Mk 29B it was possible to identify the signals detected ~~in 1998 as a reflected~~ point (or Ghost target) from Target No 1.

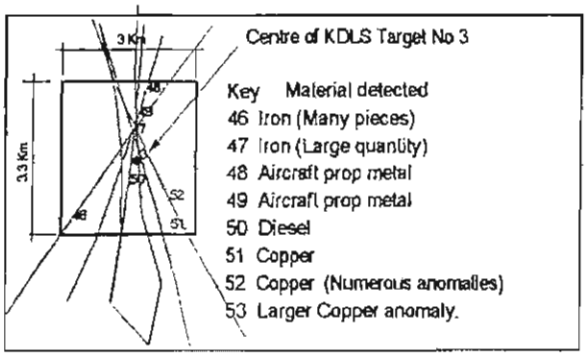
4.6 KDLS TARGET No 3.

KDLS Target No 3 appears to be the wreck of HSK Kormoran located at 28° 38.259'S, 113° 22.2582'E. The 1998 position was 28° 38.39'S, 113° 21. 86'E

The following observations are made:

- The wreck appears to be distributed over an area of about 10 sq km.
- No C15 was detected at this site. C15 is a bottom end hydrocarbon fraction of Bunker Oil, used by HMAS Sydney but not HSK Kormoran which used diesel fuel.

KDLS TARGET No 3
HSK KORMORAN



- Pieces of copper were detected spread out over a wide area. This copper could possibly be attributed to the copper degaussing cables around the ship, being blown apart when the mines exploded.
- Two sites containing aircraft propellers were detected. It is known that HSK Kormoran carried two float planes.
- The **KDLS Target No 3** position is consistent with the Oral History collected by Glenys McDonald and in particular with the statement by Adelina Cox, who as a young woman at Bluff Point near Geraldton in 1941,on the date of the action, saw an orange / red glow over the horizon .

4.7 JAPANESE SUBMARINES.

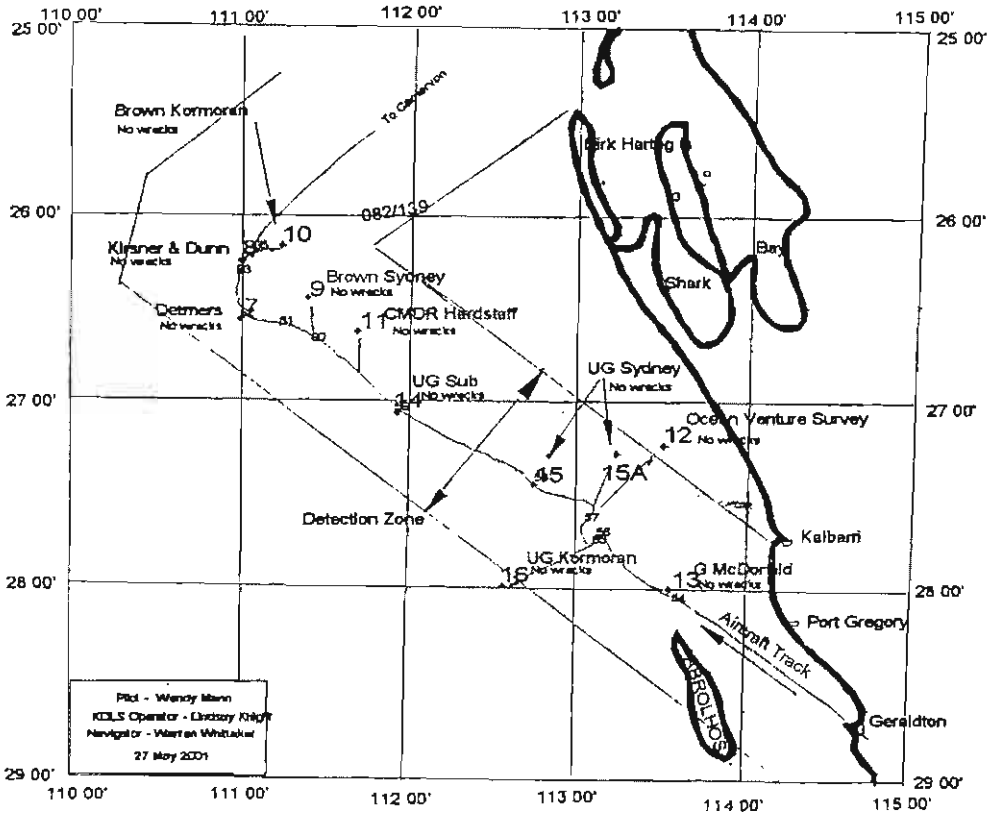
The Navy allowed Lindsay Knight to obtain drill cuttings from a Japanese submarine propeller at the Canberra War Museum. The cuttings were taken from an unobtrusive location. This is different material from that used in Imperial and European ship propellers. These cuttings with their resonant frequency, were used in the search.

No signals were detected on Japanese submarine propellers in the area or over any of the sites.

5. **SECOND SORTIE.** 27 May 2001, West and South West of Shark Bay.

SEARCH FOR THE WRECKS OF HMAS SYDNEY AND HSK KORMORAN
SORTIE No 2 - NORTHERN SEGMENT. - 27 MAY 2001.

NO WRECKS DETECTED



- No signals were detected in the area bounded by 26°S, 112°E, 27°S and 110°E. This area includes the sites identified by Captain Detmers (26° 34'S 111°E) and Meyer (26°S 111°E.) or at any of the other possible locations listed in the parliamentary report on the loss of HMAS Sydney or the sites identified by other researchers.

- During the third search, a number of fishing boats were detected before they came into view. These sightings are proof that the KDLS was working correctly.

6. ANALYSIS OF EVIDENCE RELATING TO THE SITE OF THE BATTLE.

Warren Whittaker carried out an analysis of the available evidence relating to the location of the battle. The result of his investigation was published in Submissions to the Inquiry Volume 15, Submission No 161, Page 3635 etc.

A revised version of the submission was published privately: **The loss of HMAS Sydney - 1941: The Search for the Wreck of HSK Kormoran. See Document No 5.**

Warren Whittaker concluded that, apart from the statements of Kormoran survivors, the available evidence points to the location of the battle to be close to the KDLS Target No 3 west of the Abrolhos Islands.

Recently, Warren has studied the records of the voyage of Meyer's lifeboat. These records contain clear evidence that the battle took place west of the Abrolhos Islands and NOT in the vicinity of 26°S 111°E. **See Document No 4. "The Voyage of Meyer's lifeboat"**

7. CONCLUSION.

We conclude that KDLS Target No 1 is probably the wreck of HMAS Sydney and KDLS Target No 3 is probably the wreck of HSK Kormoran.

13. INTELLECTUAL PROPERTY.

This information obtained by the use of the Knight Location System is the intellectual property of Knight Industries Pty Ltd. The information may be used for in-water searches providing due acknowledgement is given to Knight and Whittaker.

L.C.Knight
Date 27 Sept 2001

T.W. Whittaker.
Date 27 Sep. 2001.

Document No 3.

SUMMARY OF EVIDENCE SUPPORTING THE TARGETS LOCATED BY THE KNIGHT DIRECT LOCATION SYSTEM.

By

T. Warren Whittaker.

1. AIM

The aim of this paper is to draw attention to some of the evidence indicating that the battle between HMAS SYDNEY and HSK KORMORAN took place west of the Abrolhos Islands. See Annex A.

The survivors from HSK KORMORAN claimed that the battle took place in the vicinity of 26°S 111°E. (The northern site). Apart from the survivors' statements, NO support for this claim can be found.

Detailed analysis of the available data points to KDLS Target No 3 as the final resting place of HSK KORMORAN. This is close to the probable site of the battle.

2. DRIFT EVIDENCE FOR THE LOCATIONS OF HMAS SYDNEY AND HSK KORMORAN, - RESEARCH REPORT NO 58

The report by Dr John Bye published by Flinders Institute for Atmospheric and Marine Sciences covers drift card experiments and the use of a drift model based on experimentally determined velocity profiles in air and water. The Author concludes that the result of the study clearly indicate the probability that the battle between HMAS SYDNEY and HSK KORMORAN occurred west of the Abrolhos Islands. **(Document No 6.)**

Points from Research Report No 56

2.1 The dispersion of drift objects it consistent with an origin west of the Abrolhos Islands. It is not consistent with an origin in the vicinity of the northern site.

2.2 The atmospheric conditions at the time may have been favourable for the sound of battle west of the Abrolhos Islands to be seen and heard from the shore. It would not have been possible for a battle in the northern area to be seen or heard from the shore.

2.3 Captain Detmers and Kapt. Lt. Meyer indicated that the sun set on a bearing of 250° on 19 November 1941. This is consistent with a battle in the Abrolhos area. The sun set on a bearing of 251° from the Detmers site.

2.4 For the Detmers site to be plausible, a wind speed of 5 m/s towards 360 degrees would have been required instead of 10 m/s towards 330 reported by Courtney and Southern.

2.5 Drift Card Experiment in November 1998 shows that the lifeboat washed up at Shoal Point probably came from HMAS Sydney and originated from south of the Abrolhos. (Note: The lighthouse tender Cape Otway reported finding bodies wearing life jackets floating at the foot of the Zuytdorp Cliffs during her passage from Carnarvon to Geraldton on or about 29 November. It is probable that these were the occupants of the lifeboat wrecked on the reef off Shoal Point.)

3. THE VOYAGE OF MEYER'S LIFEBOAT.

This paper is an analysis of German survivors' written records that refutes the view that the wrecks of HMAS SYDNEY and HSK KORMORAN lie in the so-called northern site. A corollary of this conclusion is that the statements by the KORMORAN survivors regarding the location of the battle are false.

The survivors from HSK KORMORAN stated that the battle with HMAS SYDNEY took place in the vicinity of 26°S, 111°E (The Northern or 'Detmers' area). The only other evidence from German sources relating to the site of the battle are the 'logs' of the voyage of Meyer's lifeboat.

These 'logs' contain clear evidence that the battle actually took place west of the Abrolhos Islands and not in the northern or Detmers area. The Abrolhos Islands site is consistent with KDLS Target No 3 (Suspected site of the wreck of HSK KORMORAN) at 28° 39'S, 113° 22'E. See **Document No 4.**

4. ANALYSIS OF DRIFT OBJECTS AND LIFEBOATS.

LCDR Ean McDonald, Master Mariner and Hydrographic Surveyor in submission to the Parliamentary Inquiry No 45 (Volume 3 page 519) showed that the drift objects were on a vector of 330° and could not have originated in the vicinity of the Detmers site. KDLS Target No 3 is on the 330° vector.

5. ANALYSIS OF WEATHER CONDITIONS DURING THE SAR PHASE

Messrs Courtney and Southern, Meteorologists submitted papers to the 1991 forum. (WA MM Report No 71.) The reports show that strong winds from the SSE were in place during the SAR phase. For details see **"Report on the Meteorological Conditions near 26°S, 111E for 17-28 November 1941"** by Joe Courtney **(Document No 7).**

Messrs Kirsner and Dunn argued that the estimates were made for the Detmers' site and would not apply to the area west of the Abrolhos Islands and the wind data can not be applied to the KDLS No 3 site. (Submission to the Parliamentary Inquiry No 135A Page 4024). Joe Courtney in an e-mail message dated 26 March 2001 said that the strong SSE'ly winds that were a feature of the times would occur at both locations.

6. HISTORICAL STUDY.

John McArthur has studied the history of the action between HMAS Sydney and HSK Kormoran and has concluded that the action took place in the vicinity of the Abrolhos Islands. He has chosen this subject for his Ph.D. Thesis.

7. HINDCASTING TO IDENTIFY THE ORIGIN OF DRIFT OBJECTS.

Data relating to drift objects, two rafts and two lifeboats provides very strong evidence that the action took place in the vicinity of the Abrolhos Islands. A detailed analysis has been published in: "**The Loss of HMAS Sydney – 1941: The Search for the wreck of HSK Kormoran" by T. Warren Whittaker.** (published privately on 10th September 2000). **(Document No 5).**

The following facts support the vicinity of KDLS Target No 3 as the probable site of the action:

- Visitors to **Dirk Hartog Island.** 15 visitors to Dirk Hartog Island saw a warship steaming south at high speed at 10:00 hrs on 19 November. The probability is that this was HMAS **SYDNEY.**

- **Oral History** collected by Glenys McDonald and others indicates that the battle took place over the horizon in the vicinity of the Abrolhos Islands.

- **The mean of wind speed and direction** estimated by Messrs Courtney and Southern as recorded in the WA MM Report No 71 has been used for all Wind Driven Current and Leeway calculations. I have rejected the accusation that I have double counted the effect of Wind Driven Current (WDC). Tables of Sea Surface Current (Ocean Drift) do NOT include an element for WDC. WDC is confined to the top 1.8 meters of the sea and is caused by the friction of the local wind. (Submissions to the Parliamentary Inquiry No 135A (Volume 16 Pages4023.)

- **The Origin of Drift Objects.** The drift objects were recovered about 150 nautical miles north of the Detmers' site. In a 21.3 knot wind towards 330°, these objects could NOT have originated from the Detmers' site.

- **The drift objects** would have travelled on a vector of approximately 330°. The reciprocal of this vector passes close to KDLS Target No 3 site (Suspected Wreck of HSK Kormoran).

- **The dispersion of drift objects** is a very strong indication that the objects originated from the KDLS Target No 3 site and NOT from the Detmers' site.

- **The voyages of two rafts.** The rafts were discovered by Aquitania and Trocas on a vector of 330°. The track of the Aquitania was the reciprocal of 330°. Her track passed close to KDLS Target No 3. It follows that the rafts must have originated on the 330° vector and could NOT have come from the Detmers' site.

- **The Voyage of Captain Detmers'** lifeboat between ET 0 and ET133. Captain Detmers reported that he drifted from ET 0 to ET 133 when he observed a search aircraft. Also, he reported seeing the Aquitania. This is proof that he was on the 330° vector and so must have started from the vicinity of KDLS Target No 3 site.

8. CONCLUSION

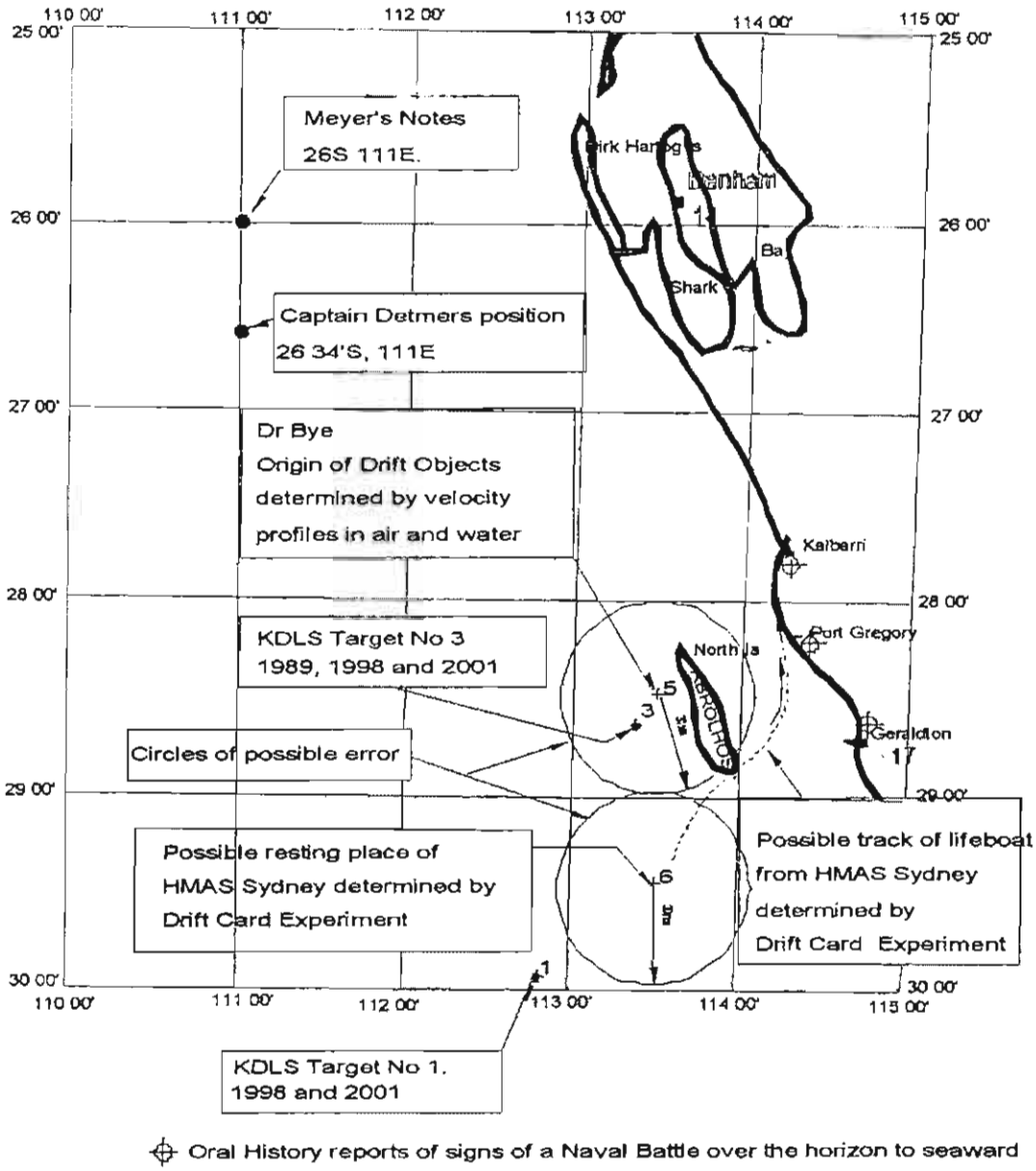
The evidence that the battle took place south west of the North Island of the Abrolhos Group is compelling.

A corollary of this conclusion is that the statements by the KORMORAN survivors regarding the location of the battle are false.

Warren Whittaker.
27-9-2001.

Annex A.

KDLS TARGETS No 1 AND 3
DR BYE AND Mrs McDONALD'S DRIFT CARD EXPERIMENTS
AND
DR BYE'S DRIFT VELOCITY CALCULATIONS



Document No 4.

THE VOYAGE OF MEYER'S LIFEBOAT.

AN ANALYSIS OF VON MALAPERT'S DIARY AND SAILING NOTES MADE BY MEYER.

By
T. Warren Whittaker.

1. SYNOPSIS.

This paper is an analysis of German survivors' written records that refutes the view that the wrecks of HMAS SYDNEY and HSK KORMORAN lie in the so-called northern site. A corollary of this conclusion is that the statements by the KORMORAN survivors regarding the location of the battle are false.

The survivors from HSK KORMORAN stated that the battle with HMAS SYDNEY took place in the vicinity of 26°S, 111°E (The Northern or 'Detmers' area). The only other evidence from German sources relating to the site of the battle are the 'logs' of the voyage of Meyer's lifeboat.

These 'logs' contain clear evidence that the battle actually took place west of the Abrolhos Islands and not in the northern or Detmers area. The Abrolhos Islands site is consistent with KDLS Target No 3 (Suspected site of the wreck of HSK KORMORAN) at 28° 39'S, 113° 22'E.

2. AIM.

The aim of this paper is to analyse the records of the voyage of Meyer's lifeboat in order to determine the starting point of the voyage.

3. BACKGROUND TO THIS SUBMISSION.

My qualifications to analyse the voyage of Meyer's lifeboat are:

- **Yacht navigation and seamanship.** I have 10 years experience sailing and racing keel boats and dinghies off shore and on inland waters. I held a Mates Certificate from the Royal Yachting Association (UK).

- **Light aircraft navigation and mapping using GPS technology.** I am consultant to companies involved in aerial mapping and inspection of power lines, gas pipelines and railways using light aircraft. I navigate light aircraft and capture spatial data during oil and mineral exploration.

4. LAYOUT OF THIS PAPER.

My paper is in three parts:

Part 1. Data and definitions. .

Part 2. Analysis of the WA Maritime Museum Report No 71 and the Fugro Survey Pty Ltd Report to the HMAS Sydney Foundation Trust.

Part 3. The Revised (Correct) Analysis.

PART 1.

DATA AND DEFINITIONS.

5. DATA.

The analysis of the voyage of Meyer's lifeboat requires the application of basic navigation skills to reconstruct the track from the site of the battle to Red Bluff where the voyage ended. The factors involved are:

5.1 Wind speed and direction. I have used an average wind speed of 21 knots from 150°. (Courtney (1991)) and (Southern (1991)).

5.2 Current. Two currents are involved:

- The Sea Surface Current. This is the West Australian Current. In November, typically this current sets towards 330° at 0.2 knots.
- The Wind Driven Current. The Australian Maritime Safety Authority (AMSA) uses a factor of 3% of wind speed to estimate Wind Driven Current. 3% of 21 knots = 0.63 knots towards 330°.
- Thus the combined current vector is 0.83 knots towards 330°.

5.3 Leeway. Leeway is the most important single factor to be considered in reconstructing the track of the lifeboat. The effect of leeway on a lifeboat is illustrated in Figure 1.

The following extract provided by Mr Anthony Hughes, AMSA, is from a small publication " SURVIVAL AT SEA - The Lifeboat and Liferaft" by the late Captain C.H. Wright A.M.N.I.

"*A lifeboat cannot normally be sailed any closer to the wind than six points (67 ½ degrees) from it. That is to say that if the wind were blowing from the North, a lifeboat could sail ENE or WNW, but no nearer to North than either of these two points. Even so, it is very doubtful if the boat would in fact make any way at all to windward, for as a lifeboat has no deep keel, there is always a lot of leeway, and you may well find that the boat still drifts to leeward*".

In the big seas encountered during the voyage a heading of eight points (90°) off the wind would be the best heading the lifeboat could maintain.

For this reconstruction, leeway is taken as 5% of wind speed (21 knots) for a drifting lifeboat = 1.05 knots and 7% of wind speed for a sailing lifeboat = 1.47 knots towards 330°.

5.4 **Course or Heading.** von Malapert's estimate of the speed and direction under sail was approximately 1.1 knots on a course of 068° for the period up to 1700 on 22/11/41 and 1.9 knots on a course of 045° from 1200 on 23/11/41 to 0830 on 25/11/41.

5.5 **Course Made Good.** The components of the Course Made Good are Current, Leeway and Course. They can be combined using vector algebra. See Figure 2.

It should be noted that during the period 0600 on 20 Nov to 1700 on 22 Nov, the combined current and leeway for the sailing lifeboat was Current 0.83 knots and Leeway 1.47 knots. Total 2.3 knots.

6. RECORDS OF THE VOYAGE MADE BY KAPT.LT VON MALAPERT AND KAPT.LT MEYER

The HSK KORMORAN survivors during interrogation gave various locations for the action in the vicinity of 26°S, 111°E. The only documentary evidence for these claims obtained from German sources was the von Malapert diary, confiscated at the time of his capture and Meyer's notes received by the WA Maritime Museum in March 2000.

I have combined the diary and notes for ease of comparison. See Annex A.

Meyer was Kormoran's navigator. His notes for 21 and 22 November contain conflicting statements. They are difficult to reconcile with von Malapert's diary. This makes a detailed reconstruction of the voyage very difficult. It is hard to believe that a Navigator wrote these notes!

PART 2.

ANALYSIS OF THE WA MARITIME MUSEUM REPORT NO 71 AND THE FUGRO SURVEY PTY LTD REPORT TO THE HMAS SYDNEY FOUNDATION TRUST.

7. PLOT OF THE TRACK OF MEYER'S LIFEBOAT BY THE MUSEUM AND THE TRUST.

von Malapert's diary was used by the authors of WA Maritime Museum Report No 71 to reconstruct the track of the lifeboat. The data used was published in Table 5b. See Annex A.

Fugro Survey Pty Ltd used the same data to reconstruct the track of Meyer's lifeboat for the HMAS Sydney Foundation Trust Sub-committee. A chart showing a reconstruction of the track of Meyer's lifeboat was included in the Trust's submission to the Parliamentary Inquiry (Volume 4, Page 839).

These tracks have been plotted on Chart No 13.

8 THE WA MARITIME MUSEUM VIEW OF THE NOTES MADE BY KAPT.LT HENRY MEYER.

The following is an extract from an article published in The West Australian dated Perth, 1 May 2000:

Dr McCarthy said Lt-Capt. Meyer's coordinates were consistent with evidence given by survivors of the Kormoran. "It corroborates everything that has been reported and includes details of the trip and the coast that can be cross-referenced with other accounts," he said. "More importantly, Meyer's diaries tells us we are on the right track to finding Sydney via the Kormoran's last known location. The Sydney was about 30km from Kormoran, so in looking for the Kormoran you might find the Sydney as well."

It appears that the museum has accepted Meyer's notes as proof that the battle took place at 26°S 111°E

9. SUMMARY OF ARGUMENT.

- The authors of the WA Maritime Museum Report No 71 and the Fugro Survey Pty Ltd report to the HMAS Sydney Foundation Trust reconstructed the track of Meyer's lifeboat using the data from von Malapert's diary.

- In both reports they found that the voyage started in the vicinity of 26°S, 111°E. They mistakenly interpreted records of "Course" to mean "Course Made Good". They assumed that Henry Meyer would have calculated his "Course Made Good" after making an allowance for the Sea Surface Current, Wind Driven Current and Leeway.

- It is important to note that Meyer and von Malapert **did NOT** record the direction or distance they drifted during the times when they were not sailing.

- It is not possible to estimate "Course Made Good" without making an estimate of the direction and distance drifted. It follows that Meyer and von Malapert did not record Course Made Good.

- In order to make good a course of ENE (068°) the course required was 130° at 2.8 knots. For reasons discussed in paragraph **5.3**, this was IMPOSSIBLE. See Figure 3

- As Meyer and Malapert did **NOT** record the "Course Made Good", it is concluded that the voyage of the lifeboat **DID NOT** originate in the vicinity of 26S 111E. A corollary of this conclusion is that the statements by the KORMORAN survivors regarding the location of the battle are false.

- It follows that Meyer's note "Departure 26S 111W (or E)" is false.

- No.wrecks were detected during two KDLS searches of the northern or Detmers area.

PART 3.

METHODOLOGY OF THE REVISED (CORRECT) ANALYSIS.

10. THE RECONSTRUCTION BASED ON THE ASSUMPTION THAT VON MALAPERT AND MEYER RECORDED COURSE AND DISTANCE SAILED.

The reconstruction of the voyage of Meyer's lifeboat based on the assumption that von Malapert and Meyer recorded the Course (Heading) sailed and is based on the data recorded in Paragraph 5.

The methodology used is shown in Figure 4 and the reconstruction is plotted on Chart No 14. This reconstruction places the origin of Meyer's lifeboat west of the Abrolhos Islands.

This location for the battle is supported by:

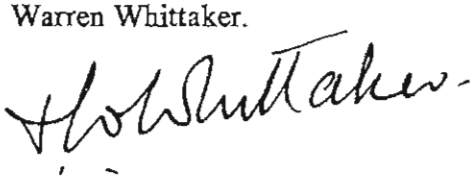
- Sighting of HMAS SYDNEY travelling south off Dirk Hartog Island on the morning of the battle.
- Qualitative evidence of a battle off Port Gregory.
- Recovery of flotsam having landed near Port Gregory.
- KDLS Target No 3 (Suspected wreck of HSK KORMORAN) 28° 38'S, 113° 22'S.
- Oceanographic evidence compiled by a number of researchers including.
    1. Drift analysis conducted by Dr John Bye.
    2. Analysis of the voyages of two rubber rafts.
    3. Analysis to determine the origin of drift objects recovered during the Search and Rescue phase.

11. CONCLUSION.

In view of the evidence it must be concluded that:

- Kapt. Lt. Reihold von Malapert and Kapt. Lt. Henry Meyer recorded the course and distance sailed. They did not record course and distance drifted.
- They made no attempt to calculate "Course Made Good", which would have given them a true or actual position for their lifeboat.
- The origin of the voyage of Meyer's lifeboat can only have been west of the Abrolhos Islands in the vicinity of KDLS Target No 3 (Suspected wreck of HSK KORMORAN)
- No further consideration need be given to the Northern or Detmers' sites.

T. Warren Whittaker.



VOYAGE OF MEYER'S LIFEBOAT.
Von Malapert's diary and Meyer's notes.

This extract from Kapt.Lt von Malapert's diary provided by Mr. Anthony Hughes, AMSA has been combined with the notes made by Kapt.Lt Meyer on the back of a set of family photographs supplied by the WA Maritime Museum. The aim was to assemble the information in a form that would enable the records for each day to be compared. (This procedure was suggested by Glen Hielshire).

19th November 1941.
Von Malapert.
19/20Nov. Drifting all night

Meyer
19.11 midnight explosion.

20th November 1941.
Von Malapert.
20 Nov Rowed/sailed, course ENE speed 1.5kts, wind SSE force 2/3.

Meyer
20.11 0600 meeting with von Goesseln's survivors with a rubber boat. 60+10.

Wind SSE, force 4. (0)800 departure 26S 111W? North-east. 3 sea miles.

20.11 0600 meeting with von Goesseln and one rubber boat: 1200 course NE, 3 sea miles.

21st November 1941
Von Malapert.
21 Nov Wind force 3, boat speed 1.5/2kts, total distance 63nm.

Meyer
21.11 Wind S to W. Course ENE. At noon 36 sea miles. 18hours. Sea anchor out, everything 11 sea miles.

21.11 Course ENE. Wind south force 4. Day's run 24 sea miles. Total distance 27 sea miles

21.11 Evening stormy from the south. Big swell from the south-east and south-west. Running before the wind the whole night.

22nd November 1941.
Von Malapert.
22 Nov 1700 down sail, wind SW force 5/6, sea rough from SSE/SSW, sea anchor Deployed.,

Meyer

22.11 Course ENE, wind S to E and S to W. Day's run 36 sea miles. Total distance 63 sea miles. 1800 sea anchor out.

22.11 0400 NNE and N with storm foresail then steered NW about 3 sea miles.

Wind SSW, S and SE from 0700. 40 degrees. 5 sea miles.

1200 Day's run 19 sea miles. Total distance 58 sea miles. From 1200 steered 50 degrees with foresail, at times with mainsail farther to the ENE at 2 knots.

At night the boat takes on a lot of water and we drift

23rd November 1941.

Von Malapert.

23 Nov Wind ESE force 4/5/7/6 sea SW, 1200 wind S course NE, total distance 81 nm.

Meyer

23.11 Day's run 18 sea miles. Course NE. Total distance 81 sea miles.
0400 Foresail set. Wind SW force 4/5/6. Big sea. SW swell.

24th November 1941.

Von Malapert.

24 Nov Sailing, course NE, wind SE. 1800 saw high cliffs 10nm distance. Total distance 121 nm.

Meyer

24.11 Course ENE. 2.5 knots, evening 1.5 knots. 1200 sighted high, steep coast from about 15 sea miles. Keep going until midnight. Marked time (stopped and held position).Sailed during the night with foresail. 0700 set the mainsail. From 0800 making 4 knots. SE wind. Big sea until 0700, from 0700 moderate. Day's run 30+10. 40 sea miles. Total distance 121 sea miles

25th November 1941.

Von Malapert.

25 Nov 0830 landed. Total distance 153nm "must have been much more".

Meyer.

25 Nov 0330 Seek under foresail a place to land. First bay is a good place but not reachable any more. Second bay all unsuitable. Third bay still to the north as there is no possibility of travelling south either under sail or with oars.

MY OBSERVATIONS.

- Von Malapert and Meyer made no estimate of the direction and distance drifted on 19/20 Nov or during the storm on 21/22/23 Nov. This is strong evidence that they did not record the "Course Made Good".

- Meyer's notes for 21 and 22 November contain conflicting statements. They are difficult to reconcile with von Malapert's diary. This makes a detailed reconstruction of

the voyage very difficult.

- It is hard to believe that these notes were written by a Navigator!

THE PLOT OF THE TRACK OF MEYER'S LIFEBOAT ACCORDING TO THE WA MARITIME MUSEUM.

The data in von Malapert's diary was used by the authors of WA MM Report No 71 to reconstruct the voyage of Meyer's lifeboat. The co-ordinates were published as Table 5b

Table 5b

Estimated point of origin for BIMeyer *based on von Malapert's diary*

Longtitude	Latitude	Force	Duration'	Velocity	Direction
111 09	25 57	**Drift**	6	(kph)	(degrees)
111 07	25 52	**Drift**	6		
111 37	25 41	**Sail**	24	2.3	68
112 41	25 17	**Sail**	36	3.2	68
112 38	25 10	**Drift**	6		
112 33	25 03	**Drift**	6		
113 21	24 19	**Sail**	36	3.2	45
113 18	24 13	**Drift**	6		
113 17	24 09	**Drift**	3		
113 25	24 02	**Sail**	5	3.2	45

1. Assumptions: Sea Current 0. 16 knots/6°; wind based on Courtney (1991) & Southern (1991).Vector=1.28Knots/46°

MY COMMENT.

The author of this reconstruction assumed that where Malapert recorded "Course ENE", he was recording the Course Made Good or Track 068°. Malapert made no estimate of direction and velocity of drift due to current and leeway. The authors supplied an estimate of drift.

This table was used to plot the track of Meyer's lifeboat using the data from WA MM Report No 71 and the Fugro Survey report to the HMAS Sydney Foundation Trust on my Chart No 13. See also Figure 3.

THE RECONSTRUCTION.

I have followed the example of the WA Maritime Museum and divided the voyage into segments:

1. 19 Nov. 1800 to 20 Nov. 0600. Drifting
2. 20 Nov. 0600 to 22 Nov. 1700: Sailed 63 miles, average course ENE (068°) at 1.1 knots, distance 63 miles.
3. 22Nov. 1700 to 23 Nov. 1200 Drifting 2.3 knots
4. 23 Nov. 1200 to 25 Nov. 0830: Sailed 81 miles, average course NE (045°) at 1.9 knots.

I realise some approximations are involved but the data is sufficiently accurate to show the estimated origin and track of the lifeboat.

Annex B.

Copied from THE WEST AUSTRALIAN, PERTH, MONDAY MAY 1 2000.
EXCLUSIVE By Carmelo Amalfi.

NOTES by a German naval officer kept secret until now have shed new light on the final resting place of HMAS Sydney.

The cruiser sank in a disastrous encounter with the German raider Kormoran off Carnarvon nearly 60 years ago, killing all 645 of Sydney's crew and about 80 German sailors. It was Australia's worst maritime disaster.

Lt-Capt. Henry Meyer, the Kormoran's navigation officer, jotted down coordinates of the battle area on family photographs as he sat wounded in a lifeboat for six days.

He hid the six small photographs from Australian authorities after his arrest. He was released at the end of World War II.

His son, Peter, who appears in the Photographs sitting on his father's knee, gave them to the WA Maritime Museum during a recent visit to WA.

Museum archaeologist Mike McCarthy said the evidence came as the Federal Government was about to release its response to recommendations by a parliamentary report into the Sydney tabled in March last year.

Dr McCarthy said Lt-Capt. Meyer's coordinates were consistent with evidence given by survivors of the Kormoran.

"It corroborates everything that has been reported and includes details of the trip and the coast that can be cross-referenced with other accounts," he said.

"More importantly, Meyer's diaries tells us we are on the right track to finding Sydney via the Kormoran's last known location. The Sydney was about 30km from Kormoran, so in looking for the Kormoran you might find the Sydney as well."

Lt-Capt. Meyer was one of 317 survivors. His Lifeboat reached Red Bluff about 100km north of Carnarvon on November 25, 1941, nearly a week after the camouflaged raider went down with 300 mines on board.

He was wounded when the Sydney shelled the Kormoran's radio' room on the night of November 19.

On one of the photographs, Lt-Capt Meyer wrote, "20.11 0600 meeting with von Goesseln's survivors with a rubber boat. 60+10. Wind SSE force 4. 0800 departure 26S 111 W North-east 3 sea miles."

Dr McCarthy said experts had pointed out that the coordinates should read 26S 111E, believed to be where the battle took place, and Lt-Capt. Meyer could have misprinted the letter.

The parliamentary report, by a joint standing committee on foreign affairs, defence and trade, found no substance to the many conspiracy theories about the disaster.

Dr McCarthy said researchers at Melbourne University and the University of WA had narrowed the last whereabouts of the Kormoran to an area about 120km west of Shark Bay. "The Kormoran search area is now no bigger than the Bismark and Titanic search area before they were found," he said.

The new evidence showed British and German archives also should be examined.

Researcher Wes Olson, whose new book on the 1941 disaster has been accepted for publication by UWA Press, said Kormoran changed course and headed towards the sun before the battle. The Sydney fired on it as it pursued the raider for about 30 minutes.

The raider came to a stand still but continued returning fire. Both vessels were on fire, the Sydney blazing from bow to stern. The Kormoran sent distress calls about an hour after it was sighted.

Capt. Joseph Burnett, the Sydney's commanding officer, did not send a signal to shore.

Mr Olson said this was consistent with the Captain's attempts to capture the Kormoran. He also did not want to disclose the Sydney's location to other German ships thought to be in the area.

Mr Olson said that during' 1940-41, warships were ordered to catch German merchant, ships which were in short supply.

The Germans began arming and using these ships in mid 1941, making it difficult for Allied forces to differentiate between heavily armed raiders and unarmed merchant ships.

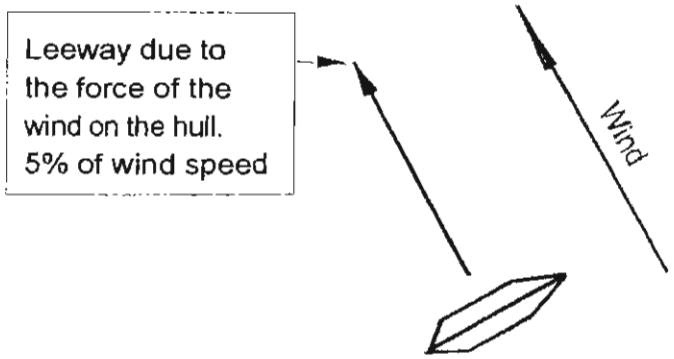
"The Admiralty's instructions were very vague," Mr Olson said. "This proved a big dilemma for the commanding officer of a warship. Signs of a potential disaster were there in 1941 and by November the Sydney tried to catch what it thought was an enemy supply ship."

Mr Olson began researching the mystery of the Sydney in the early 1980s after reading Barbara Winter's -1984 account of the incident.

Figure 1

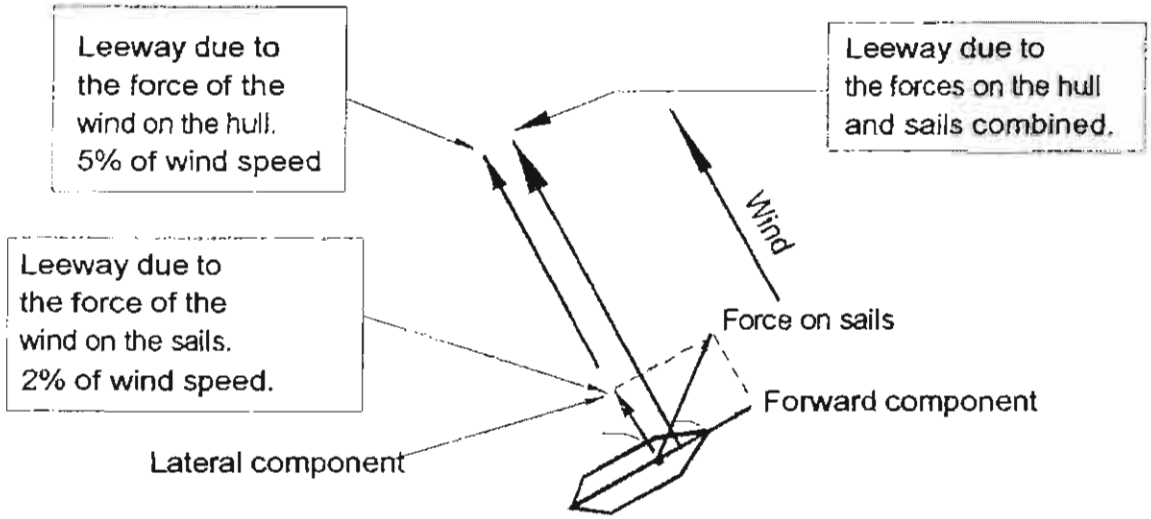
LIFEBOAT LEEWAY CALCULATIONS: WITH AND WITHOUT SAILS.

(Not to scale.)



Lifeboat without sails

Leeway is due to the force of the wind acting on the hull.



Lifeboat sailing at 90 degrees off the wind

Leeway is due to the force of the wind acting on the hull and sails.

T. Warren Whittaker, 1-9-2001 Leeway calculation final.dc

Figure 2.

DEFINITIONS

Course: Direction and speed of travel.

Alternative Definitions: Heading, Course steered.

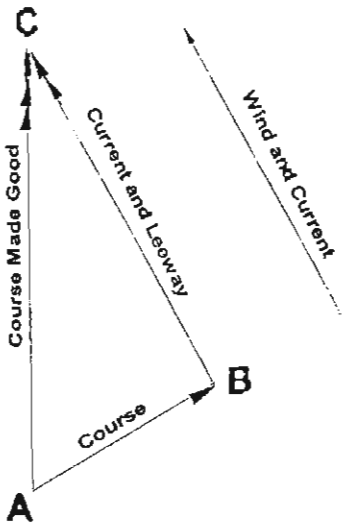
The course vector is the speed x duration in the direction of travel.

Current: A combination of Sea Surface Current and Wind Driven Current.
These two currents are combined by vector algebra.
The current vector is the speed x duration in the direction of the current.

Leeway: Leeway is the movement of an object down wind. The speed depends on the friction of the wind acting on the object. The Australian Maritime Safety Authority uses a factor of 5 percent of wind speed to calculate leeway of a drifting lifeboat. Sails cause additional friction. I have used a total of 7 percent of wind speed to calculate the speed of a sailing lifeboat
The leeway vector is the speed x duration in the direction of the wind.

Course Made Good. Also known as 'Track'.

The Course Made Good is the sum of the course, current and leeway vectors.



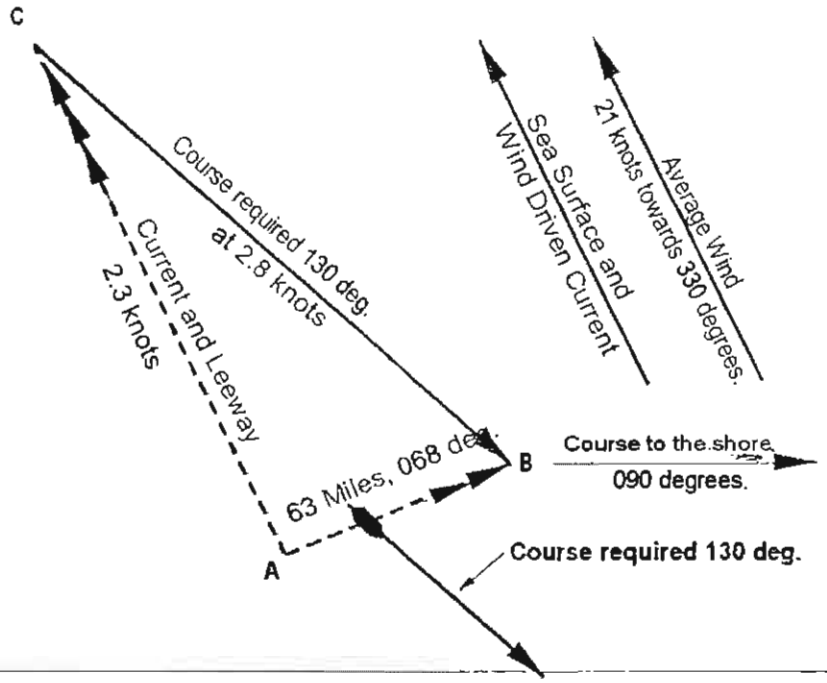
A boat starting at A sailing towards B would arrive at C.

Figure 3.

VOYAGE OF MEYER'S LIFEBOAT FROM 0600 on 20/11/41 to 1800 on 22/11/41.

WHAT THE WA MM AND THE TRUST CLAIM HAPPENED

CALCULATION OF THE COURSE REQUIRED
TO MAKE GOOD A TRACK OF ENE (067 DEGREES) AT 1.1 KNOT.



The authors of WA Maritime Museum Report No 71 and the Fugro Survey Pty Ltd Report to the HMAS SYDNEY Foundation Trust assumed von Malapert recorded the "Course Made Good". They claim Meyer's lifeboat travelled from A to B between 0600 on 20/11/41 and 1700 on 22/11/41. In order to travel from A to B, the lifeboat would have to sail on a heading of 130 degrees at 2.8 knots. This was IMPOSSIBLE because the lifeboat could not sail against the wind and current. It is concluded that Meyer and von Malapert did NOT record "Course Made Good". It follows that the voyage of Meyer's lifeboat did NOT start from the vicinity of 26S, 111E.

ANALYSIS

**Meyer would have sailed the shortest route to the shore.
The best course would be have been 090 degrees.
However, ENE (068 degrees) would be the nearest heading
he could maintain in the prevailing wind and sea conditions.**

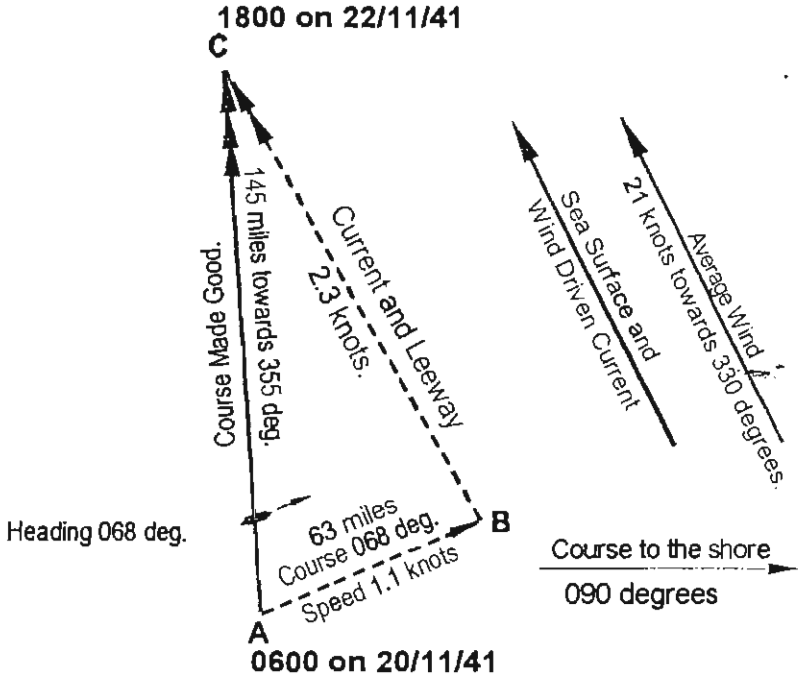
For the plots of the voyage accouding to the authors of WA MM Report No 71 and Fugro Survey Pty Ltd Report, see Chart No 13.

Figure 4.

VOYAGE OF MEYER'S LIFEBOAT FROM

0600 on 20/11/41 to 1800 on 22/11/41

CALCULATION OF THE COURSE MADE GOOD
ASSUMING VON MALAPERT RECORDED
COURSE AND DISTANCE SAILED.



COMMENT.

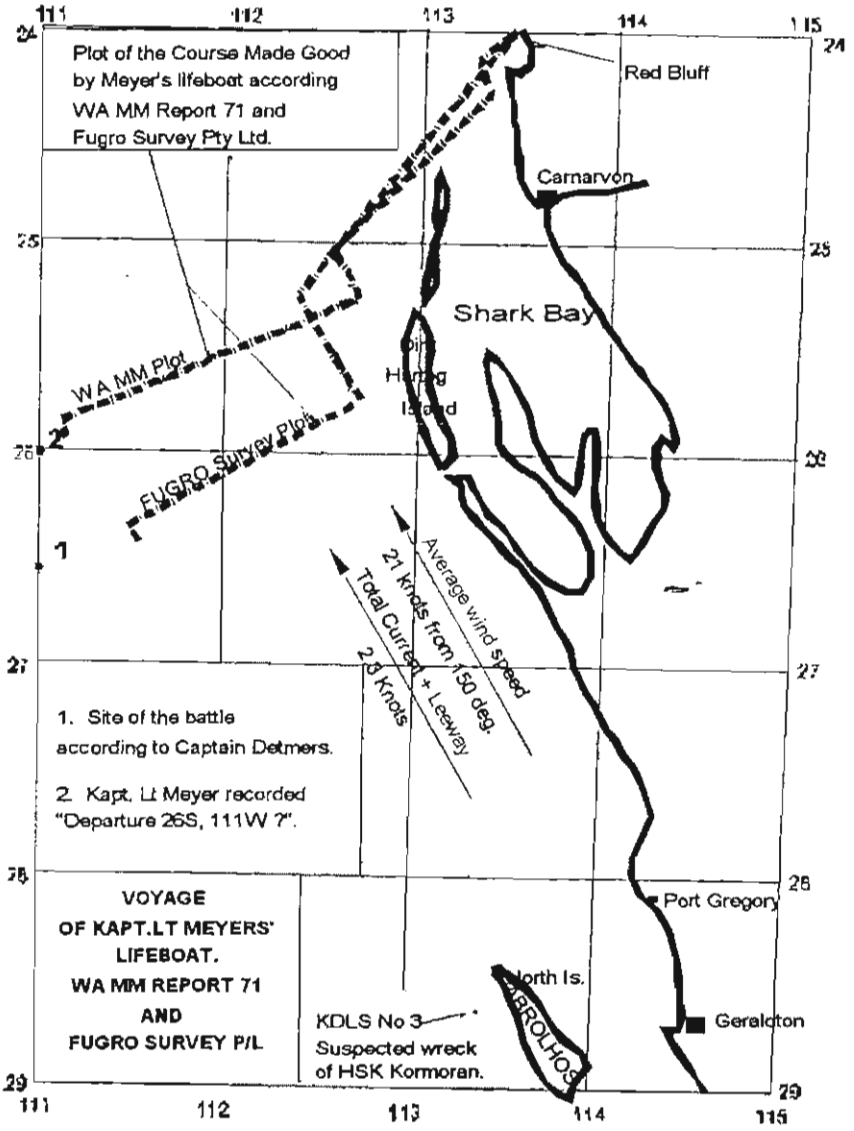
Meyer departed point A at 0600 on 20/11/41. He would have sailed the shortest route to the coast, i.e. East (090 degrees). Due to the prevailing wind and sea conditions Meyer could not steer 090 deg. The best course he could maintain was ENE (068 deg.) at an estimated speed of 1.1 knots. The combined current and leeway is estimated to be approximately 2.3 knots towards 330 degrees. He would have arrived at point C at 1800 on 22/11/41.

For a reconstruction of the voyage of Meyer's lifeboat based on the data in von Malapert's diary, See Chart No 14.

Chart No 13

VOYAGE OF MEYER'S LIFEBOAT.

WHAT THE WA MARITIME MUSEUM AND FUGRO SURVEY P/L SAID HAPPENED.



Data from von Malapert's diary was used by the authors of the WA MM Report 71 and the Fugro Survey Pty Ltd Report to the HMAS Sydney Foundation Trust to plot the voyage of Kapt.Lt Meyer's lifeboat.

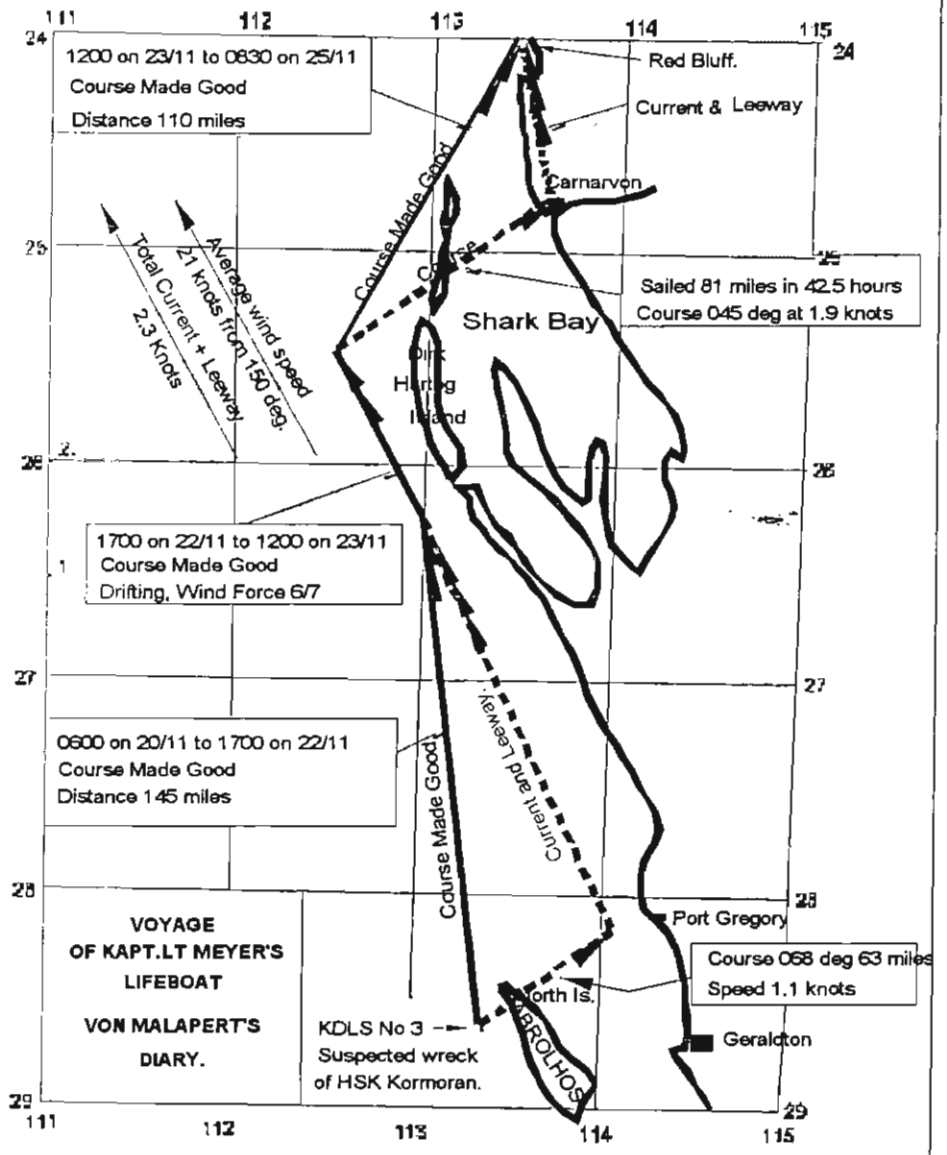
The plots were based on the assumption that von Malapert recorded the "Course Made Good" when the lifeboat was under sail. Analysis of von Malapert's diary shows that, due the conditions of wind and current, it was IMPOSSIBLE to make good the courses shown on this plot. For details, see Figure 3.

The conclusion is that the battle did not take place in the vicinity of 26S,111E and the statements by the KORMORAN survivors regarding the location of the battle are false.

Chart No 14.

VOYAGE OF MEYER'S LIFEBOAT.

ASSUMING MEYER AND VON MALAPERT RECORDED COURSE AND DISTANCE SAILED.



1. Site of the battle according to Captain Detmers.

2. Kapt. Lt Meyer recorded "Departure 26S, 111W". This is near Easter Island!

See Figure 4 for calculation of the Course Made Good.

This chart is proof that Meyer's lifeboat did not start its voyage in the vicinity of 26S, 111E. It follows that the statements by the KORMORAN survivors regarding the location of the battle are false.

Document No 2.

THE SEARCH FOR THE WRECKS

OF

HMAS SYDNEY AND HSK KORMORAN

IN

1989 1998 2001

USING THE

KNIGHT DIRECT LOCATION SYSTEM

REPORT

BY

Lindsay C. Knight. and T. Warren Whittaker. OBE.

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THE SEARCH FOR THE WRECKS OF HMAS SYDNEY AND HSK KORMORAN.

REPORT

by

Lindsay Knight and Warren Whittaker.

INTRODUCTION.

This is the summary of the three WA offshore searches for the wrecks of HMAS Sydney and HSK Kormoran by Lindsay Knight and Warren Whittaker using the Knight Direct Location System (KDLS). The KDLS is a remote sensing system invented, built and operated by Lindsay Knight. The portable equipment was installed in Light Aircraft. Warren Whittaker was the navigator. The detection range of the equipment is proportional to the altitude of the aircraft. The KDLS enables wrecks to be detected up to 70+ nautical miles ahead and at least 30 nautical miles on either side of the aircraft. The following testimonials are attached:

SUNKEN SHIP LOCATION BY KDLS. Dated 29th May 2001. By Wendy Mann. Justice of the Peace, Chief Pilot, Geraldton Air Charter Pty Ltd. **Annex A1.**

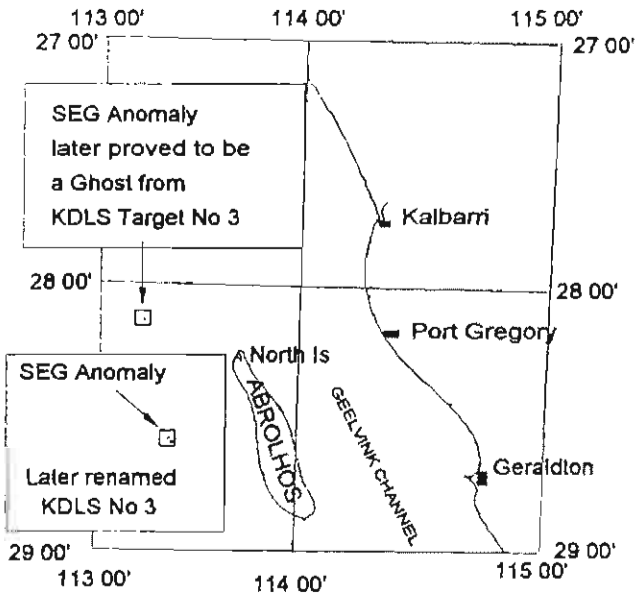
TESTIMONIAL ON THE APPLICATION OF ESR TECHNOLOGY IN THE SEARCH FOR PRECIOUS METALS AND HYDROCARBONS. Dated 9th July 1999. By Michael J. Garratt, B.Sc., M.Sc., Ph.D., F.G.S., M.Aus.I.M.M. **Annex A2.**

THE FIRST SEARCH IN 1989 USING KDLS Mk 4. (SEG 1.)

In 1989, after a presentation of KDLS capabilities to an officer of the Receiver of Wrecks in Canberra, it was suggested to Lindsay Knight, that KDLS be used to try and find the wreck of HMAS Sydney off the WA coast.

.In 1989, Lindsay Knight accompanied by Warren Whittaker carried out an aerial search to seaward from Kalbarri in a single engined light aircraft using SEG Mk 1. The aim of the search was to locate and datum over the remains of the Batavia in the Houtman Abrolhos Islands and to see if a signal could be detected from any wrecks that could possibly be the wrecks of HMAS Sydney and HSK Kormoran. Two anomalies were detected. The southern anomaly was also detected in the 2nd and 3rd Searches and was named KDLS Target No 3. The northern anomaly was later identified as a ghost or reflection from Target No 3. Due to the restrictions placed on single engined aircraft flying off shore, no further search could be carried out to seaward.

FIRST SEARCH USING SEG 1989



THE SECOND SEARCH IN JANUARY 1998 USING KDLS Mk 27 (SEG 5.).

On 28 and 31 January 1998, a KDLS search was carried out in a twin engined Cessna 337 aircraft chartered from Geraldton Air Charter piloted by Wendy Mann, JP. Lindsay Knight operated the latest Mark of KDLS (Mk 27).

- On 28 January 1998, **KDLS Target No 1** was located at **29° 58.53'S, 112° 48.26E**. This was believed to be the wreck of HMAS Sydney due to the type of material detected.

- **KDLS Target No 2** was located about 30 nautical miles northwards from KDLS Target No1. At the time, this was labeled the "Mystery Ship" (During the search on 26 May 2001, this anomaly was investigated and found to be a reflected point or ghost, on a northerly line, from Target No 1).

- **KDLS Target No 3** was located at **28° 38.39'S, 113° 21.86'E**. This was thought to be the wreck of HSK Kormoran. This site is consistent with the anomaly detected in 1989.

- On 31 January 1998, a KDLS Search was carried out starting from Denham (Shark Bay) and covering the sites identified by Captain Detmers and others. No wrecks were detected in the area. Two bulk carriers under way were detected at the entrance to the Geelvink Channel.

The results of these searches were reported in full to the Joint Standing Committee on Foreign affairs, Defence and Trade, Defence Sub-Committee formed to inquire into the Circumstances of the Sinking of HMAS SYDNEY. The report was published in Submissions Volume 9 Number 101. (Page 2203).

Details can be viewed on our web page: www.albury.net.au/~kipl/index.html

ANALYSIS OF EVIDENCE RELATING TO THE SITE OF THE BATTLE.

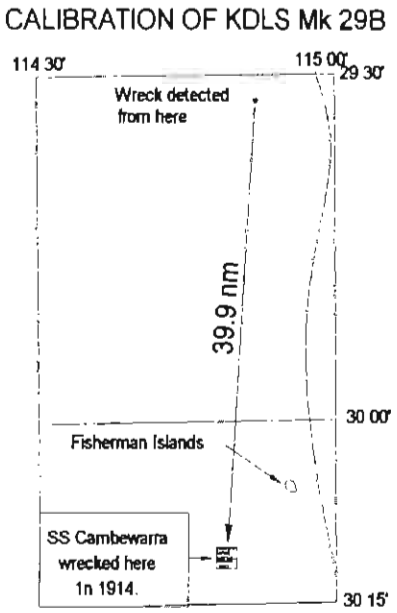
Warren Whittaker carried out an analysis of the available evidence relating to the location of the battle. The result of his investigation was published in Submissions to the Inquiry Volume 15, Submission No 161, Page 3635 etc. A revised version of the submission was published privately (**The loss of HMAS Sydney - 1941: The Search for the Wreck of HSK Kormoran) (Copy enclosed**). Warren Whittaker concluded that, apart from the statements of Kormoran survivors, the available evidence points to the location of the battle to be close to the KDLS Target No 3 west of the Abrolhos Islands.

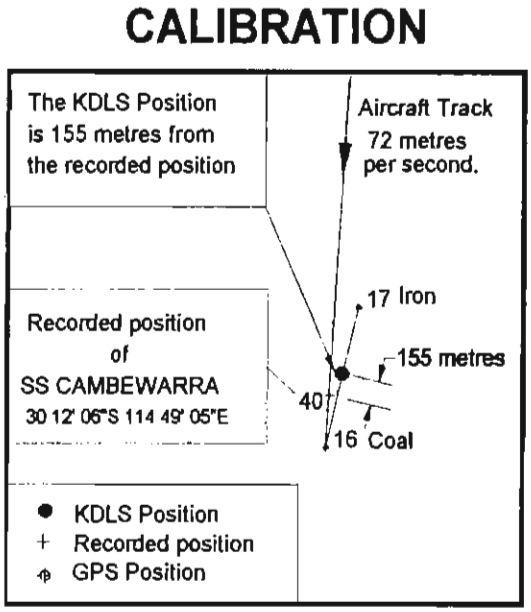
CALIBRATION.

The SS Cambewarra (coal fired, 450 tons) was wrecked off the coast of WA at **30° 12.1'S, 114° 49.0833'E** in 1914. The wreck is 10 nautical miles from the coast and 89 nautical miles south of Geraldton. This wreck was used to calibrate KDLS Mk 29B prior to the search for the

wrecks of HMAS Sydney and HSK Kormoran. On 24 May 2001, Bonanza VH-AVT piloted by Wendy Mann. JP. was chartered from Geraldton Air Charter to calibrate KDLS Mk 29B.

Lindsay Knight operated the KDLS and Warren Whittaker was navigator. A Garmin 12 XL GPS linked to a Fujitsu Stylistic 1000 Pen Computer was used for navigation and recording the aircraft's track. Spatial data was captured by the Garmin 12 XL





The KDLS was set up on the signature frequency of steaming coal. We flew South about 10 nautical miles off shore at an average speed of 140 knots. A wreck was detected ahead from just south of the 29 30' parallel. The coal anomaly was detected at waypoint 16. Another pass was made over the target with the KDLS tuned to the signature frequency of iron. An iron anomaly was detected at waypoint 17. The mean of these waypoints is the KDLS position. It is 155 metres from the recorded GPS position of the wreck. The wreck was detected from an altitude of 4,000 feet at a range of 39.9 nautical miles at a speed of 72 metres per second.

A testimonial of these events by Wendy Mann, Pilot, is attached. **Annex A1.**

THIRD SEARCH 26 MAY 2001 USING KDLS Mk 29B (SEG 6).

A Cessna 337 was chartered from Geraldton Air Charter, piloted by Wendy Mann JP. As before, Lindsay Knight operated the KDLS and Warren Whittaker was navigator. The objective of the search was:

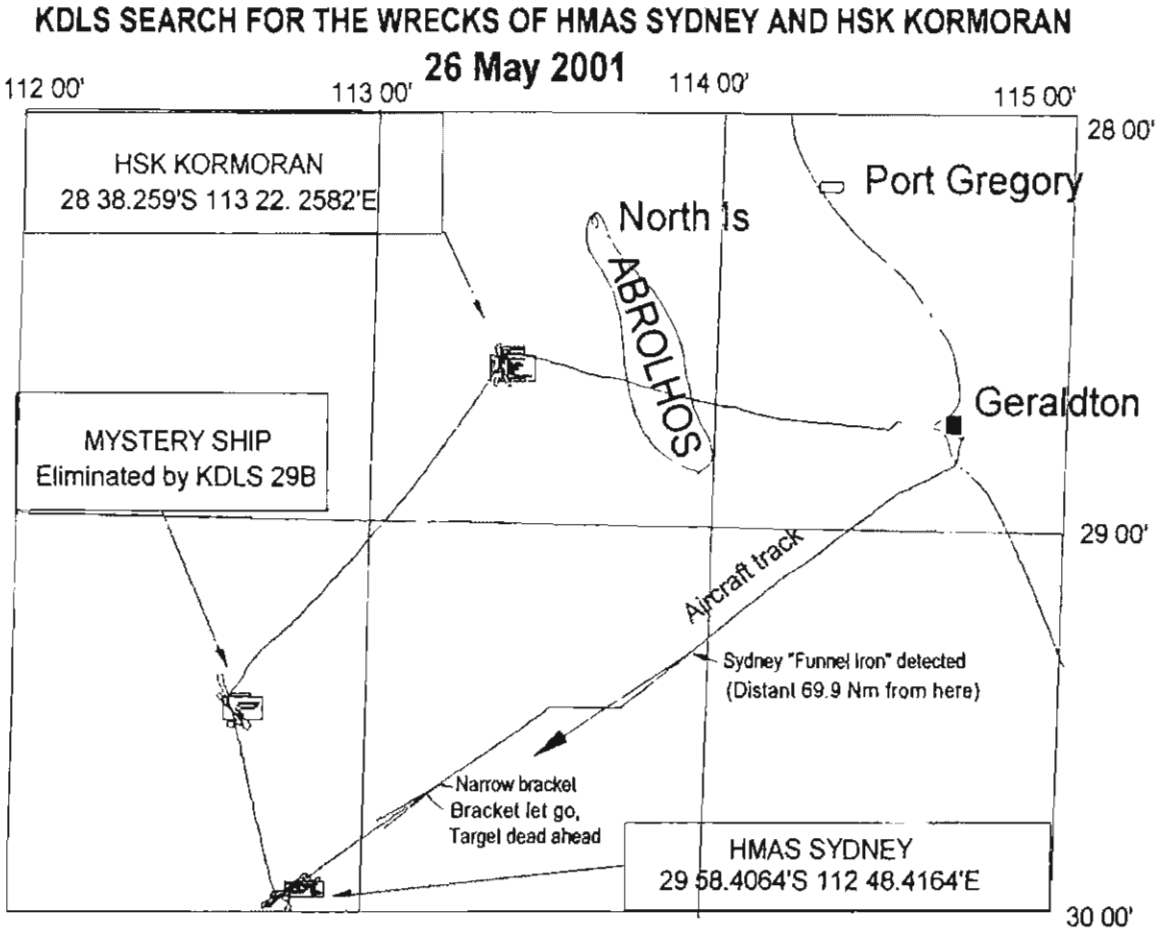
- To check the validity of the three targets detected in1998 (Second Search) using KDLS Mk27.
- To attempt to differentiate between the wrecks of HMAS Sydney and HSK Kormoran using additional materials and human bones.
- To examine the area to the West and South West of Shark Bay. This area contains the location of the battle reported by Captain Detmers. Our flight plan was designed to cover the possible locations the Battle Site and Wreck Sites recorded by the Joint Standing Committee on Foreign Affairs, Defence and Trade: "Report

on the Loss of HMAS Sydney" together with sites identified by other researchers..

- A further objective was to check the sites for any sign of the presence of a Japanese Submarine. (The Navy allowed Lindsay Knight to obtain drill cuttings from a Japanese submarine propeller at the Canberra War Museum. (The cuttings were taken from an unobtrusive location.) This is a different material from Imperial and European ship propellers. These cuttings with their signature frequency, were used in the search.

FIRST SORTIE.

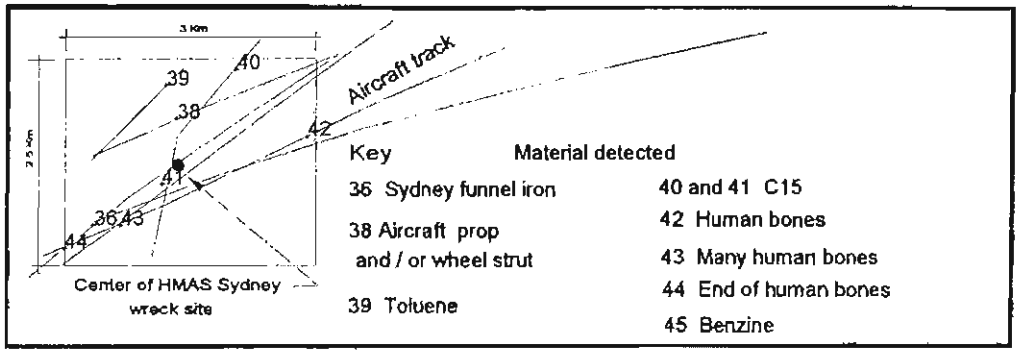
26 May 2001, West and South West of Geraldton.



KDLS TARGET No 1

HMAS Sydney's funnel was damaged during a battle with an Italian Warship in the Mediterranean. Mr. John Harrison provided a specimen from the damaged funnel obtained during repairs. **KDLS Target No 1** was detected from a distance of 69.9 Nm using this

KDLS TARGET No 1 HMAS SYDNEY



specimen.

In addition to the materials detected during the 1998 search, the following were detected:

- C15, indicating bunker oil, was detected in two positions.
- Many signals from human bones were detected at this site. In one spot, a strong signal was detected indicating many bones.

This target is believed to be the wreck of HMAS Sydney. Objects were detected over an area of 3 x 3.5 Km's. The center of the area is at **29° 58.4064'S, 112° 48.4164'E**.

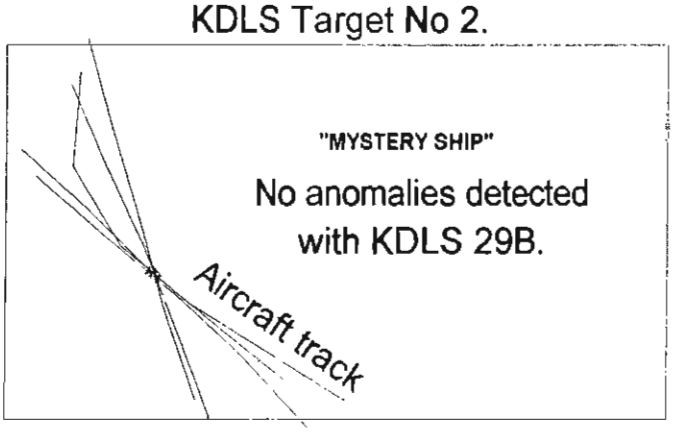
The position recorded in 1998 was **29° 58.53'S, 112° 48.26'E**. The GPS subject to selective availability error at that time. This is within 400m of the May 2001 position.

The spread of the objects appears to indicate HMAS Sydney could have broken up.

Continued on Page 7.

KDLS TARGET No 2.

KDLS Target No 2 detected in 1998 no longer exists.



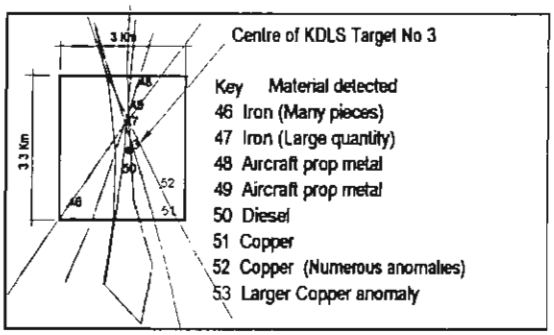
Using KDLS Mk 29B it was possible to identify the signals detected in 1998 as a reflected point (or Ghost target) from Target No 1.

KDLS TARGET No 3.

KDLS Target No 3 appears to be the wreck of HSK Kormoran located at **28° 38.259'S, 113° 22.2582'E.** The 1998 position was **28° 38.39'S, 113° 21. 86'E**

The following observations are made:

KDLS TARGET No 3
HSK KORMORAN

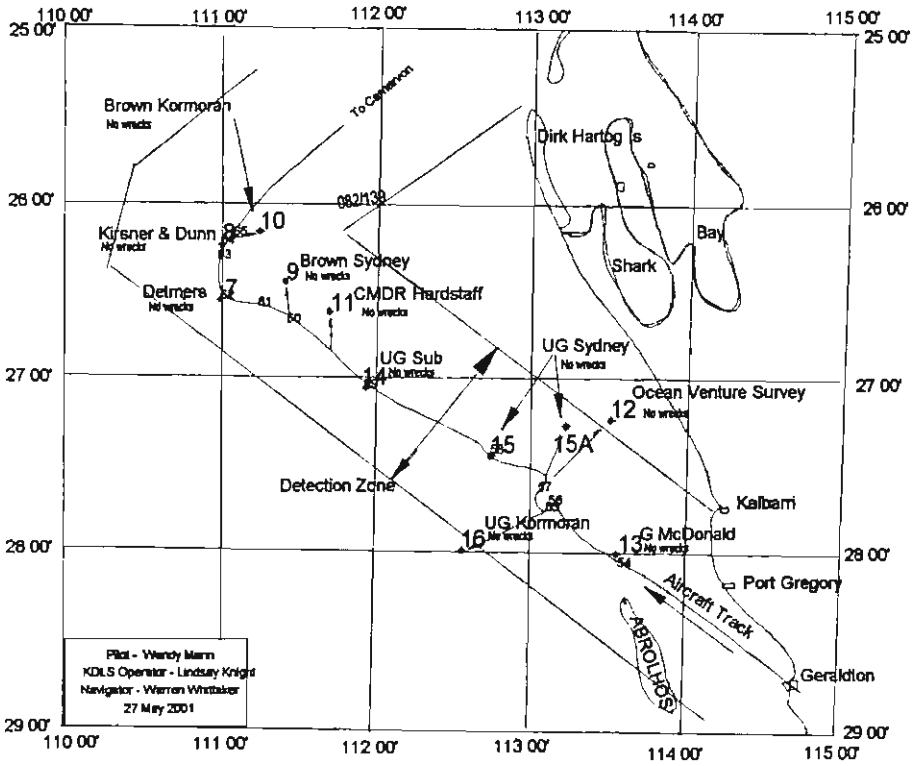


- The wreck appears to be distributed over an area of about 10 Sq Km's.
- No C15 was detected at this site. C15 is a bottom end hydrocarbon fraction of Bunker Oil, used by HMAS Sydney but not HSK Kormoran which used diesel fuel.
- Pieces of copper were detected spread out over a wide area. This copper could possibly be attributed to the copper degaussing cables around the ship, being blown apart when the mines blew up.

- Two sites containing aircraft propellers were detected. It is known that HSK Kormoran carried two float planes.
- The **KDLS Target No 3** position is consistent with the Oral History collected by Glenys McDonald and in particular with the statement by Adelina Cox, who as a young woman at Bluff Point near Geraldton in 1941,on the date of the action, saw an orange / red glow over the horizon .

SECOND SORTIE. 27 May 2001, West and South West of Shark Bay.

SEARCH FOR THE WRECKS OF HMAS SYDNEY AND HSK KORMORAN
SORTIE No 2 - NORTHERN SEGMENT. - 27 MAY 2001.
NO WRECKS DETECTED



- No signals were detected in the Detmers area or at any of the other possible locations listed in the report of the loss of HMAS Sydney or the sites identified by other researchers.
- During the third search, a number of fishing boats were detected before they came into view.
- These sightings are proof that the KDLS was working correctly.

JAPANESE SUBMARINES.

No signals were detected on Japanese Submarine Propellers in the area or over any of the sites.

CONCLUSION.

We conclude that KDLS Target No 1 is the wreck of HMAS Sydney and KDLS Target No 3 is the wreck of HSK Kormoran.

INTELLECTUAL PROPERTY.

This information obtained by the use of the Knight Location System is the intellectual property of Knight Industries Pty Ltd. The information may be used for in-water searches providing due acknowledgement is given to Knight and Whittaker.

Knight and Whittaker funded all three expeditions.

_____ _____

L.C.Knight. T.W. Whittaker.

Date _____ Date _____

SUMMARY OF INDEPENDENT EVIDENCE.

By

T. Warren Whittaker.

AIM

The aim of this paper is to draw attention to some of the evidence indicating that the battle between HMAS Sydney and HSK Kormoran took place south west of the North Island of the Abrolhos Group.

The HSK Kormoran survivors claimed that the battle took place in the vicinity of 26° 34'S, 111°E. I find NO support for this claim.

Detailed analysis of all the available data points to the vicinity of KDLS Target No 3 as the final resting place of HSK Kormoran close to the site of the battle.

1. DR JOHN BYE, MELBOURNE UNIVERSITY.

Dr John Bye's drift card experiments and his calculation of drift velocities using data obtained experimentally indicate that the action took place in the vicinity of the Abrolhos islands and not in the Detmers position. (**Drift Evidence for the Locations of HMAS Sydney and HSK Kormoran, Research Report No 58** by John Bye published by Flinders Institute for Atmospheric and Marine Sciences) An extract from this report is included with this submission. (Document No 6.) **We recommend that the Technical Workshop obtains a full copy of this important document.**

1. Experimentally determined velocity profiles of drift objects in air and water indicate that the origin of the drift objects was south west of the North Island of the Abrolhos Group and could not have come from the Detmers site.

2. The dispersion of drift objects it consistent with an origin west of the Abrolhos. It is not consistent with an origin in the vicinity of the Detmers site.

3. The atmospheric conditions at the time may have been favourable for the sound of battle west of the Abrolhos Islands to be seen and heard from the shore. It would not have been possible for a battle in the Detmers area to be seen or heard from the shore.

4. Detmers and Meyer indicated that the sun set on a bearing of 250 degrees on 19 November 1941. This is consistent with a battle in the Abrolhos area. The sun set on a bearing of 251 degrees from the Detmers site.

5. For the Detmers site to be plausible, a wind speed of 5 m/s towards 360 degrees would have been required instead of 10 m/s towards 330 reported by Courtney and Southern.

6. Drift Card Experiment in November 1998 shows that the lifeboat washed up at Shoal Point probably came from HMAS Sydney and originated from south of the Abrolhos. (Note: The lighthouse tender Cape Otway reported fining bodies wearing life jackets floating at the foot of the Zuytdorp Cliffs during her passage from Carnarvon to Geraldton on or about 29 November. It is probable that these were the occupants of the lifeboat wrecked on the reef off Shoal Point.)

2. ANALYSIS OF DRIFT OBJECTS AND LIFEBOATS.

LCDR Ean McDonald, Master Mariner and Hydrographic Surveyor in submission to the Parliamentary Inquiry No 45 (Volume 3 page 519) showed that the drift objects were on a vector of 330° and could not have originated in the vicinity of the Detmers site. KDLS Target No 3 is on the 330° vector.

3. ANALYSIS OF WEATHER CONDITIONS DURING THE SAR PHASE

Messrs Courtney and Southern, Meteorologists submitted papers to the 1991 forum. (WA MM Report No 71.) The reports show that strong winds from the SSE were in place during the SAR phase. For details see **"Report on the Meteorological Conditions near 26°S, 111E for 17-28 November 1941"** by Joe Courtney

- Messrs Kirsner and Dunn argued that the estimates were made for the Detmers' site and would not apply to the area west of the Abrolhos Islands and the wind data can not be applied to the KDLS No 3 site. (Submission to the Parliamentary Inquiry No 135A Page 4024).

- Joe Courtney in an e-mail message dated 26 March 2001 said that the strong SSE'ly winds that were a feature of the times would occur at both locations.

- It can be shown that the drift objects could not have originated from the Detmers site in the presence of an average wind speed of 21 knots towards 340°.

- See Document No 5 section 6 for a discussion on this subject.

4. NATIONAL UNDERWATER AND MARINE AGENCY, AUSTRALIA (NUMA AUSTRALIA).

Wayne Sampey, Project Director, NUMA (Australia) has selected KDLS Targets No 1 and 3 for in-water search projects. Wayne and his father have researched the Sydney/Kormoran affair over many years.

HISTORICAL STUDY.

John McArthur has studied the history of the action between HMAS Sydney and HSK Kormoran and has concluded that the action took place in the vicinity of the Abrolhos Islands.
He has chosen this subject for his Thesis for his Ph.D.

4. HINDCASTING TO IDENTIFY THE ORIGIN OF DRIFT OBJECTS.

I have studied data relating to drift objects, rafts and two lifeboats. There is very strong evidence that the action took place in the vicinity of the Abrolhos Islands. See **"The Loss of HMAS Sydney – 1941: The Search for the wreck of HSK Kormoran"** (published privately on 10th September 2000. (Document No 3) The following facts support the vicinity of KDLS Target No 3 as the probable site of the action:

- 15 visitors to Dirk Hartog Island saw a warship steaming south at high speed at 10:00 hrs on 19 November. The probability is that this was HMAS Sydney.

- Oral History collected by Glenys McDonald and others indicates that the battle took place in the vicinity of the Abrolhos Islands. If the battle had taken place in the vicinity of the Detmers' site, it could NOT have been observed from the shore.

- The mean of wind speed and direction estimated by Messrs Courtney and Southern as recorded in the WA MM Report No 71 has been used for all Wind Driven Current and Leeway calculations. I have rejected the accusation that I have double counted the effect of Wind Driven Current (WDC). Tables of Sea Surface Current (Ocean Drift) do NOT include an element for WDC. WDC is confined to the top 1.8 meters of the sea and is caused by the friction of the local wind. (Submissions to the Parliamentary Inquiry No 135A (Volume 16 Pages4023.)

- The Origin of Drift Objects. The drift objects were recovered about 150 nautical miles north of the Detmers' site. In a 21.3 knot wind towards 330°, these objects could NOT have originated from the Detmers' site.

- The drift objects would have travelled on a vector of approximately 330°. The reciprocal of this vector passes close to KDLS Target No 3 site (Suspected Wreck of HSK Kormoran).

- The dispersion of drift objects is a very strong indication that the objects originated from the KDLS Target No 3 site and NOT from the Detmers' site.

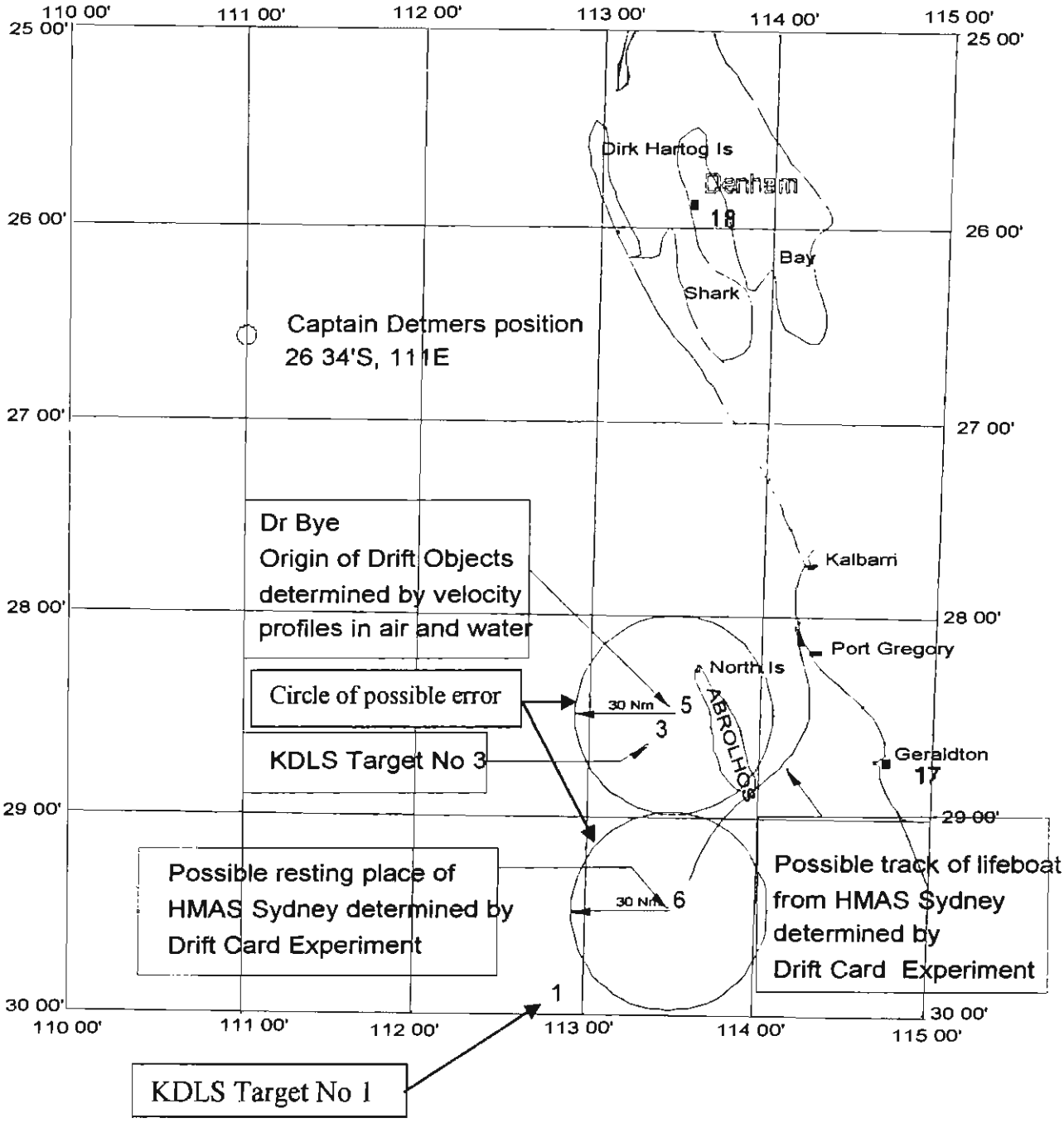
- The voyages of two rafts. The rafts were discovered by Aquitania and Trocas on a vector of 330°. The track of the Aquitania was the reciprocal of 330°. Her track passed close to KDLS Target No 3. It follows that the rafts must have originated on the 330° vector and could NOT have come from the Detmers' site.

- The Voyage of Detmers' lifeboat between ET 0 and ET133. Captain Detmers reported that the drifted from ET 0 to ET 133 when he observed a search aircraft. Also, he reported seeing the Aquitania. This that he was on the 330° vector and so must have started from the vicinity of KDLS Target No 3 site.

- The Voyage of Meyer's lifeboat. An analysis of von Malapert's diary shows that he recorded the estimated course and distance sailed each day. When the course made good is calculated, it is obvious that the voyage originated in the vicinity of KDLS Target No 3.

The circumstantial evidence that the battle took place south west of the North Island of the Abrolhos Group is compelling. The only conclusion must be is that the Kormoran survivors did not tell the truth about the location of the action.

KDLS TARGET No 3 (POSSIBLE KORMORAN.)
DR BYE'S DRIFT CARD EXPERIMENTS
AND
DRIFT VELOCITY CALCULATIONS.



Message 144/155

MIME structure of this message

1. (text/plain), 45 lines
2. (application/msword), 29K

Dear Sam,

I am having another look at the voyage of Meyer's lifeboat.

I have been using the figure of 5% of wind speed to calculate the leeway for Meyer' it was drifting. WA MM Report 71 Table 4.

For most of the time, Meyer's lifeboat was sailing. The wind was about force 4. tc degrees. Under these conditions, Meyer would have been sailing towards the coast s would have been as close as he could get to 090 degrees.

>From my sailing experience, I think that, in the wind and sea conditions prevailir would have averaged about 90 degrees off the wind. So, the best heading he could a 060 degrees. This agrees with Malapert's diary and Merer's notes where they recorc (heading or course steered) of 68 degrees, (Close to ENE). It could not have been Course made Good) as that would have required a heading (course steered) of about 1 Under these conditions, that is not possible.

As Leeway is the result of drag operating in the direction of the wind, I suggest t is set, the force of the wind can be divided into two components. One component ac centerline of the craft driving it forward. The other acting at 90 degrees to the the boat forcing it sideways.

When the boat is sailing at approximately 90 degrees off the wind, it appears that in the same direction as the force applied to the hull so it must be added to the h the drag is increased. When the forward speed of the boat is low (Say 1 knot) I th additional drag caused by the sail is significant.

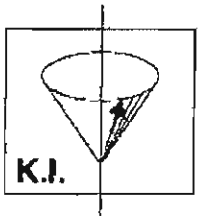
If I am right, please could you suggest a figure as a percentage of the wind veloci the 5% so as to calculate the leeway for a lifeboat sailing about 90 degrees off th

Best wishes,

Warren

--
T. Warren Whittaker
1060 Calimo Street
ALBURY
NSW 2640

Ph (02) 6025 6338
Fax (02) 6025 0365
Mobile 0409 256 339
e-mail wwhittake@albury.net.au



INTRODUCTION TO THE USE OF KDLS IN THE SEARCH FOR THE WRECKS OF HMAS SYDNEY AND HSK KORMORAN.

by

Lindsay C. Knight.

1. BACKGROUND.

1.1 THE RESEARCHERS:

Lindsay C. Knight.

I have 57 years practical experience in electrical and electronic manufacturing and Research and Development. I obtained many patents. I am the inventor and co-inventor and was manufacturer of the Dart Military Training Target System and the Super Dart Projectile Location System for Military and Police marksmanship Training. The equipment was installed in more than 20 countries world wide.

I am the inventor and operator of the Knight Direct Location System (KDLS). The primary role of the equipment is oil and mineral exploration. I have used KDLS to locate ship wrecks offshore Australia, PNG, Guernsey (UK), Indonesia, Philippines and Florida (USA). See Document No 5 (Testimonials) for details.

T. Warren Whittaker. OBE. Lieutenant Colonel (Retired)

He is an Aerial Survey Consultant. He has devised programs and procedures for mapping and inspection of Electricity Power Lines, Gas Pipelines and Railways from light aircraft. The procedures involve the use of Differential GPSs and Pen Computers.

He held a Mate's Certificate issued by the Royal Yachting Association (UK). He has 10 years experience navigating and racing keel boats and dinghies on inland waters and off shore. He has rowed a 17 foot rubber raft 600 miles on white water rivers in North America including two trips though the Grand Canyon. This experience enabled him to analyse data relating to the drift objects, rafts and lifeboats recovered in the SAR Phase of the action.

1.2 THE AIM OF OUR SEARCHES.

Our aim was to locate the wrecks of HMAS SYDNEY and HSK KORMORAN using the Knight Direct Location System (KDLS) in order to provide data designed to facilitate "in-water searches" funded and organized by others. **We carried out this work of national interest at our own expense.**

The initial search was carried out at the suggestion of an officer of the Receiver of Wrecks.

The KDLS findings have been assembled scientifically from field research over a period of 12 years. **The KDLS results are supported by researchers from a variety of other recognised disciplines.**

It is not possible to obtain a positive identification of the wrecks by means of KDLS. In view of this, we have designated the wrecks as "Targets" for the in-water search. KDLS Target No 1 is the suspected wreck of HMAS SYDNEY and KDLS Target No 3 is the Suspected Wreck of HSK KORMORAN

2. SUMMARY OF RESULTS OF KDLS SEARCHES.

Before the third search in May 2001, we confirmed the calibration of KDLS on the known site of the wreck of the SS Cambewarra.

Target No 3 as detected by KDLS appears to be spread over a considerable area. Captain Detmers reported that HSK KORMORAN was fragmented when her cargo of mines exploded.

The targets were located in the same place during each search. On each occasion, a number of aerial passes were made over the target area using the KDLS direction finding capability.

Table shows the number of times each target was detected in the same location.

Target	1998	2001	Total
SS Cambewarra	0	2	2
No 3, Suspected KORMORAN	3	6	9
No 1, Suspected SYDNEY.	5	8	13

KDLS data is repeatable and quantifiable.

Analysis of the data indicates that there are two targets to the west and south west of Geraldton, Western Australia. (The so-called "Southern Area" of research).

- KDLS Target No 1. (Suspected wreck of HMAS SYDNEY,)
  centred on 29°58.4064'S, 112° 48.4164'E (Detected in 1998 and 2001).

- KDLS Target No 3 (Suspected wreck of HSK KORMORAN),
  centred on 28° 38.259'S, 113° 22.2582'E (Detected in 1989, 1998 and 2001.)

Searches of the area claimed by Captain Detmers and other researchers to be the site of the battle were carried out in 1998 and 2001. (The so-called "Northern Area" of research) **No wrecks were detected by KDLS in the northern area of research.**

The location of KDLS Targets No 1 and No 3 are shown in Annex A.

3. THE KNIGHT DIRECT LOCATION SYSTEM (KDLS).

KDLS is a well-tried system that has been under continuous development and in commercial use for 12 years for oil and mineral exploration on and off shore. **KDLS technology is a very useful tool for of searching large areas of ocean quickly and economically**.

- Information relating to Direct Location Technology is set out in Document No 4.

- 14 testimonials are to be found in Document No 5. These testimonials cover ship wrecks, oil and mineral exploration and location of 100 year old graves.

I have used KDLS to locate ship wrecks offshore Australia, PNG, Guernsey (UK), Indonesia, Philippines and Florida (USA).

The location of these KDLS Targets has been published on a **"Take it or leave it"** basis. **I recommend that KDLS Targets No 1 and No 3 be included in future under water searches.**

Details of the equipment and procedural methods is proprietary information and will only be disclosed at the discretion of Knight Industries Pty Ltd on a need to know basis

In view of the proven performances of the KDLS in a wide range of environments Knight Industries Pty Ltd does not **see the need** to spend any further time or money on **demonstrating** the KDLS system.

I have made this information available free of charge on condition that in the event of a discovery of wrecks at these sites, **due acknowledgment is given to Knight Industries Pty Ltd.**

4. INDEPENDENT CORROBORATION OF KDLS FINDINGS FROM OTHER SCIENTIFIC DISICPLINES

The KDLS evidence that the battle took place in the vicinity of the Abrolhos Group is supported by:

- Independent marine experiments and research by Dr John Bye of Melbourne University. I attach an extract from **"Drift Evidence for the Locations of HMAS SYDNEY and KSK KORMORAN". Research Report 58** by John A.T. Bye, Flinders Institute for Atmospheric and Marine Sciences. See Document No 5.

- Analysis of weather conditions between 19th and 30th November 1941 by Messrs Courtney and Southern, Meteorologists. SEE **"Report On The Meteorological Conditions Near 26S, 111E For 17-28 November 1941**. Paper by Joe Courtney, Bureau of Meteorology and WA MM Report No 71.

- Analysis of drift objects and voyages of lifeboats by LCDR Ean McDonald RAN (Ret'd). Submission to the Parliamentary Inquiry, Volume 3, Page 519.

- Wayne Sampey, Project Director, National Underwater and Marine Agency, Australia (NUMA Australia). Research over many years by Wayne and his father.

- Historical research by John McArthur. Thesis. To be published.

- Independent analysis of drift objects, rafts and the voyages of lifeboats by T. Warren Whittaker. **"The Loss of HMAS SYDNEY – 1941: The Search for the Wreck of HSK KORMORAN"**. Dated 10th September 2000. Published privately. Document No 4.

For easy reference, the evidence contained in these documents has been summarised in "**A Summary of the Evidence Indicating that the Battle between HMAS SYDNEY and HSK KORMORAN Took Place in the Vicinity of the Abrolhos Group**" by T. Warren Whittaker (Document No 6).

SUMMARY

The scientific evidence does not support the statements by survivors that the KORMORAN sank in the vicinity of 26° 34'S, 111°E. No KDLS anomalies were detected in the area bounded by 26°S, 112°E, 27°S and 110°E. The Australian Hydrographic Office carried out a library search of the area and found no wrecks recorded. On the contrary, there is abundant evidence to prove that the battle took place in the vicinity of the Abrolhos Islands.

5. THE FIRST SEARCH.

On 25 August 1989, accompanied by Warren Whittaker OBE, I carried out an aerial search to seaward from Kalbarri in a single engined light aircraft using a SEG (An early version of the KDLS). The aim of the search was to pinpoint the **remains** of the Batavia in the Houtman Abrolhos Islands. The location of the wreck site was known to our pilot, Mr. R.L. Erenshaw, but not known to us. As we approached the search area a target was detected at a distance of 25 nautical miles. In due course, I announced that we were overhead a wreck site. Mr. Erenshaw confirmed that we were above the Batavia wreck site. Mr. Erenshaw's testimonial with details are in Document 5 (Attached). This was proof that even the early versions of my technology could detect wrecks under water,

Some time previously, during a visit to Canberra, the Receiver of Wrecks suggested that I should use my equipment to locate the wrecks of HMAS SYDNEY and HSK KORMORAN.

Following the successful detection of the Batavia site, I carried out a SEG search to the west of the Abrolhos Islands to see if a signal could be detected from any wrecks that could possibly be the wrecks of HMAS SYDNEY and HSK KORMORAN. Two anomalies were detected. The approximate positions were recorded by VOR/DME. These were:

- 28° 07'S, 113° 12'E. During our second search, this target was identified as a reflection and eliminated.

- 28° 25'S, 113° 13E. During our 1998 search, this target was named KDLS Target No 3 (Suspected HSK KORMORAN.)

Due to our limited funds and the restrictions placed on single engined aircraft flying off shore, no further search could be carried out to seaward at that time.

6. THE SECOND SEARCH IN 1998.

The second search was carried out in 1998 using KDLS Mk 27. The aims were:

- To search for the wreck of HMAS SYDNEY using C15 as a fraction of bunker oil.
- To check on the anomalies detected in 1989 using the latest Mark of KDLS (Mk 27).

The results were as follows:

28 January 1998 - Southern Area.

- **KDLS Target No 1** was located at **29° 58.53'S, 112° 48.26E.** This was believed to be the wreck of HMAS SYDNEY due to the type of material detected.
- **KDLS Target No 2** was located about 30 nautical miles northwards from KDLS Target No1. At the time, this was labeled the "Mystery Ship" (During the search on 26 May 2001, this anomaly was investigated and found to be a reflection from Target No 1).
- **KDLS Target No 3** was located at **28° 38.39'S, 113° 21.86'E.** This was thought to be the wreck of HSK KORMORAN. This site is considered to be the same as the southern target detected in 1989.

31 January 1998. - Northern Area.

- A KDLS Search was carried out starting from Denham (Shark Bay) and covering the sites identified by Captain Detmers and others. **No wrecks were detected** in the area. Two bulk carriers under way were detected before they came into sight at the entrance to the Geelvink Channel. This was proof that the KDLS was functioning correctly.

7. THE THIRD SEARCH IN 2001

The third search was made in May 2001. Much development work was done on KDLS between 1998 and 2001 and successfully resolved the problem of reflected targets. The most advanced KDLS (Mark 29B) was used for this search.

The third search is recorded in detail in our report: **"The Search for the Wrecks of HMAS SYDNEY and HSK KORMORAN in 1989, 1998 and 2001 using the Knight Direct Location System"** dated 6 June 2001. (KDLS Report) See Document No 2.

KDLS Target No 1 at 29° 58.4064'S, 112° 48.4164'E. This target is believed to be the wreck of HMAS SYDNEY. Objects were detected over an area of 3 x 3.5 Km's. This confirmed the result of Search No 2.

KDLS Target No 2 detected in 1998 no longer exists. Using KDLS Mk 29B it was possible to identify the signals detected in 1998 as a reflection from Target No 1.

KDLS Target No 3 at 28° 38.259'S, 113° 22.2582'E. appears to be the wreck of HSK KORMORAN. This confirmed the result of Searches No 1 and No 2.

8. CONCLUSION.

The result of three KDLS Searches between 1989 and 2001 is that two wrecks have been detected.

- KDLS Target No 1 at 29° 58.4064'S, 112° 48.4164'E.
- KDLS Target No 3 at 28° 38.259'S, 113° 22.2582'E
- No wrecks were detected in the Northern Area.

The location of KDLS Target No 3 is generally supported by:

- Oral History,
- Reconstruction of the path of Drift Objects, Rafts and Lifeboats,
- Practical experiments and research by Dr John Bye.

9. RECOMMENDATION.

I recommend that an in-water search be carried out to verify and identify these sites:

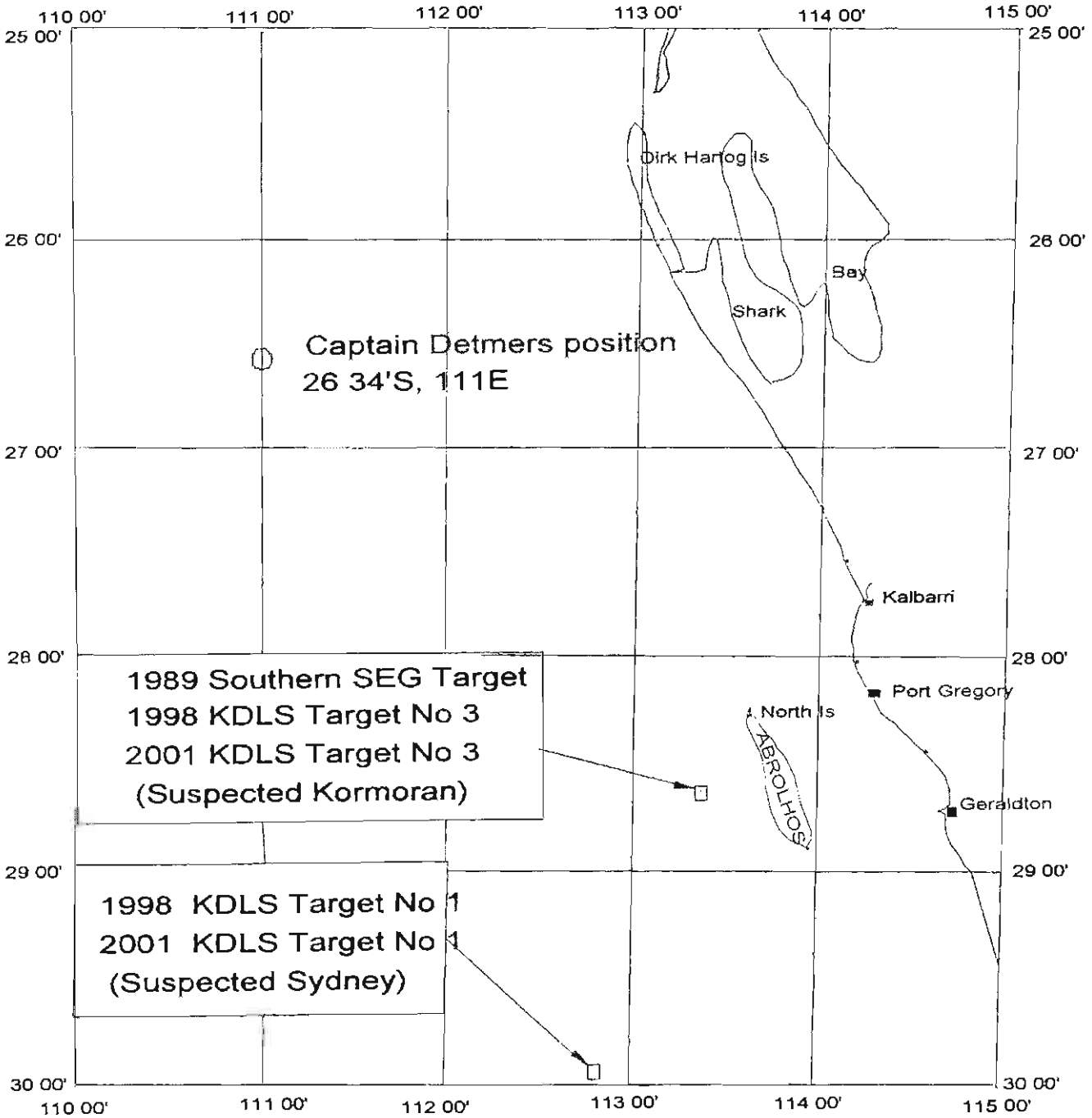
KDLS Target No 1 (Suspected HMAS SYDNEY) at 29° 58.4064'S, 112° 48.4164'E.

KDLS Target No 3 (Suspected HSK KORMORAN) at 28° 38.259'S, 113° 22.2582'E

Lindsay C. Knight
Albury
____August 2001

Annex A.

KDLS TARGETS No 1 AND 3



MIKE GARRATT PTY LTD
ACN 007 202 673

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ROMSEY
VIC 3434
Tel. (03) *5429 5256* **(H)**
(03)9602 3820 (B) Fax. (03) 5433 *3456* or (03) 9602 3827

9th July 1999

Lindsay Knight
Knight Industries Pty Ltd
677 Lyne Street
Lavington/Albury
NSW 2641

Dear Lindsay,

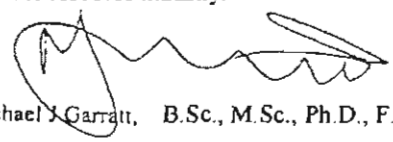
RE:TESTIMONIAL ON THE APPLICATION OF ESR TECHNOLOGY IN THE SEARCH FOR PRECIOUS METALS AND HYDROCARBONS.

Lindsay Knight of Knight Industries Pty Ltd has perfected a direct location system using electro spin resonance technology in the detection of precious metals and hydrocarbons. The technology has been developed over a number of years by Lindsay and his staff and operates as a sophisticated metal direction finder
In terms of Lindsay's system I have witnessed him using it to successfully locate gold nuggets, gold bearing ore and visible gold in quartz in a number of different situations and locations, especially where other metals are present. In one instance the gold was hidden behind 50cm thick reinforced concrete wall/pillar and the machine detected the accurate location of the gold immediately. I can vouch for the veracity of the tests as carried out in my presence.
I am also aware that grades and amounts of nugget gold can and have been detected as vouched for in the confidential attachment to this testimonial from Ray Borchers regarding the application of the technology to both an alluvial and hard rock prospects in central Victoria.
In addition to the above, I have witnessed the application of this technology in various field conditions in Victoria. The results of Knight Industries investigations confirm much of the results derived by conventional methods. In one instant the technology was applied to a mine site where the structure, location of ore bearing reefs and stoped areas had been mapped in detail.
Without any previous knowledge and within a matter of hours Knight had independently identified the following:

Thickness, strike length and orientation of ore bearing lodes

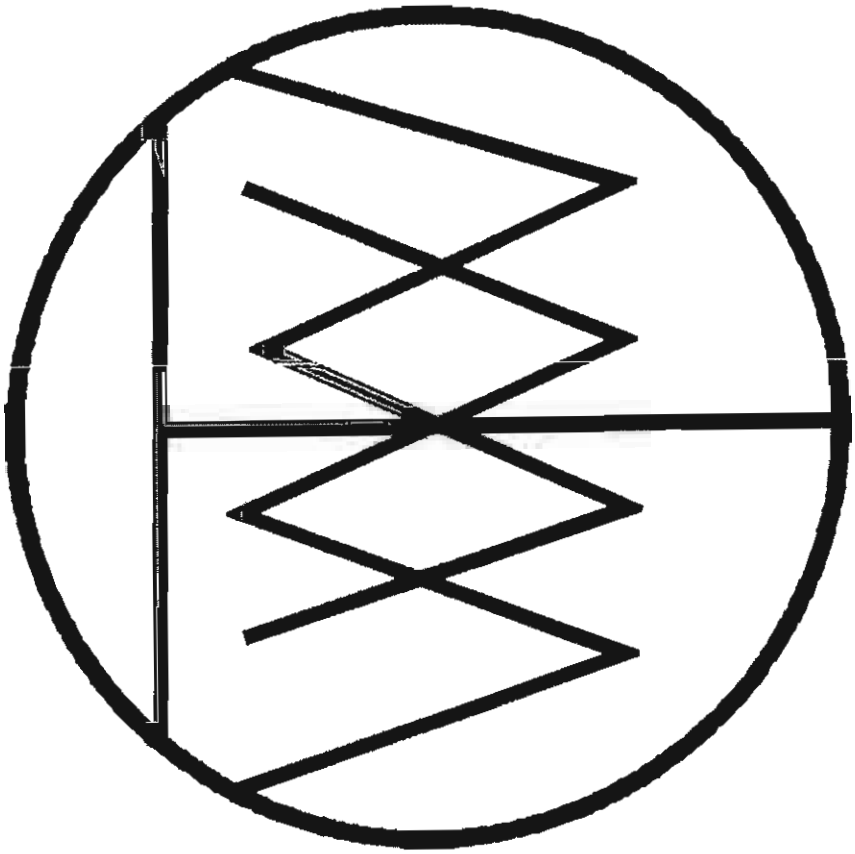
Grade of ore bearing lodes complimenting results of sampling to date
Depth at which ore would be located.
Areas of the mine already stoped.

The results of this work are staggering, in terms of exploration and development of resource projects within and outside Australia.
I do not profess to understand the physics of the system, but accept that it works just as I accept that the production of magnetic intensity or gravity maps generated from magnetometers and the like without comment.
To put it bluntly the system works and has phenominal potential for application in the resource industry. The need for exploration companies to spend large amounts of money on using other sophisticated techniques in exploration will no longer be necessary.
Of all the black boxes that have been developed over the last twenty years, this ESR technology has the potential to revolutionise the resource industry.



Regards

Michael J Garratt, B.Sc., M.Sc., Ph.D., F.G.S., M.Aus.I.M.M.



THE SEARCH FOR THE WRECKS OF HMAS SYDNEY AND HSK KORMORAN

RESEARCH REPORT

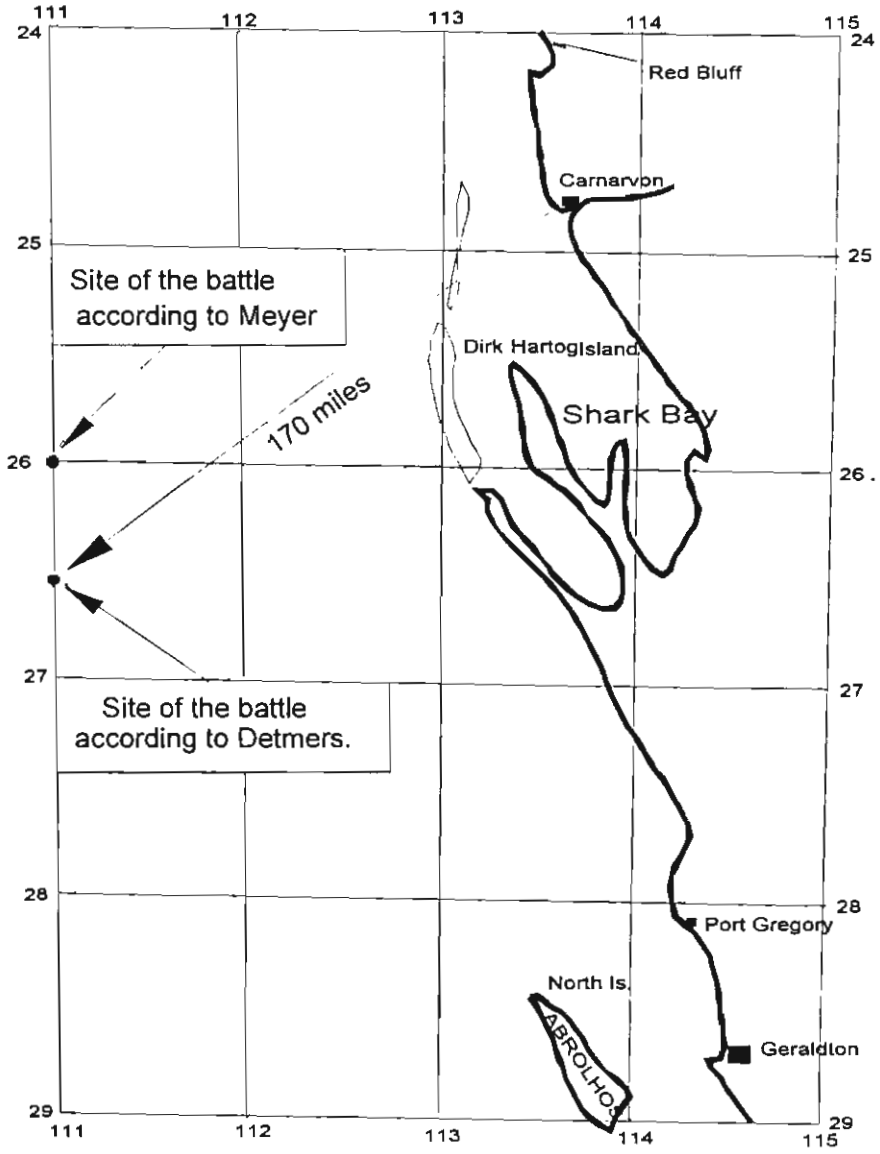
BY

T. WARREN WHITTAKER. OBE.

PREPARED FOR THE WRECK LOCATION SEMINAR

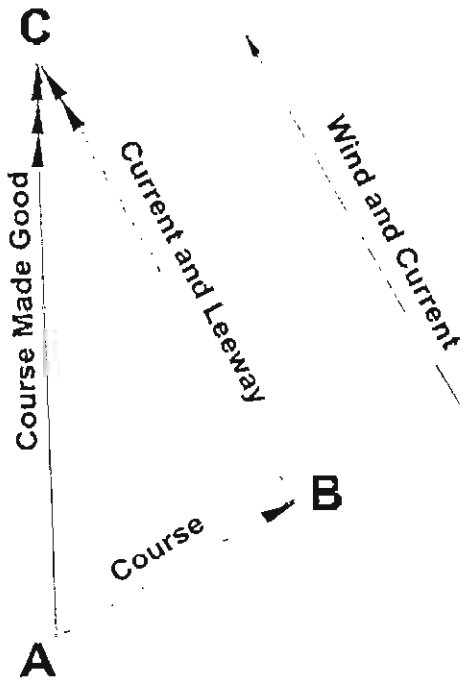
16 NOVEMBER 2001

THE SITE OF THE BATTLE ACCORDING TO SURVIVORS FROM HSK KORMORAN.



DEFINITIONS

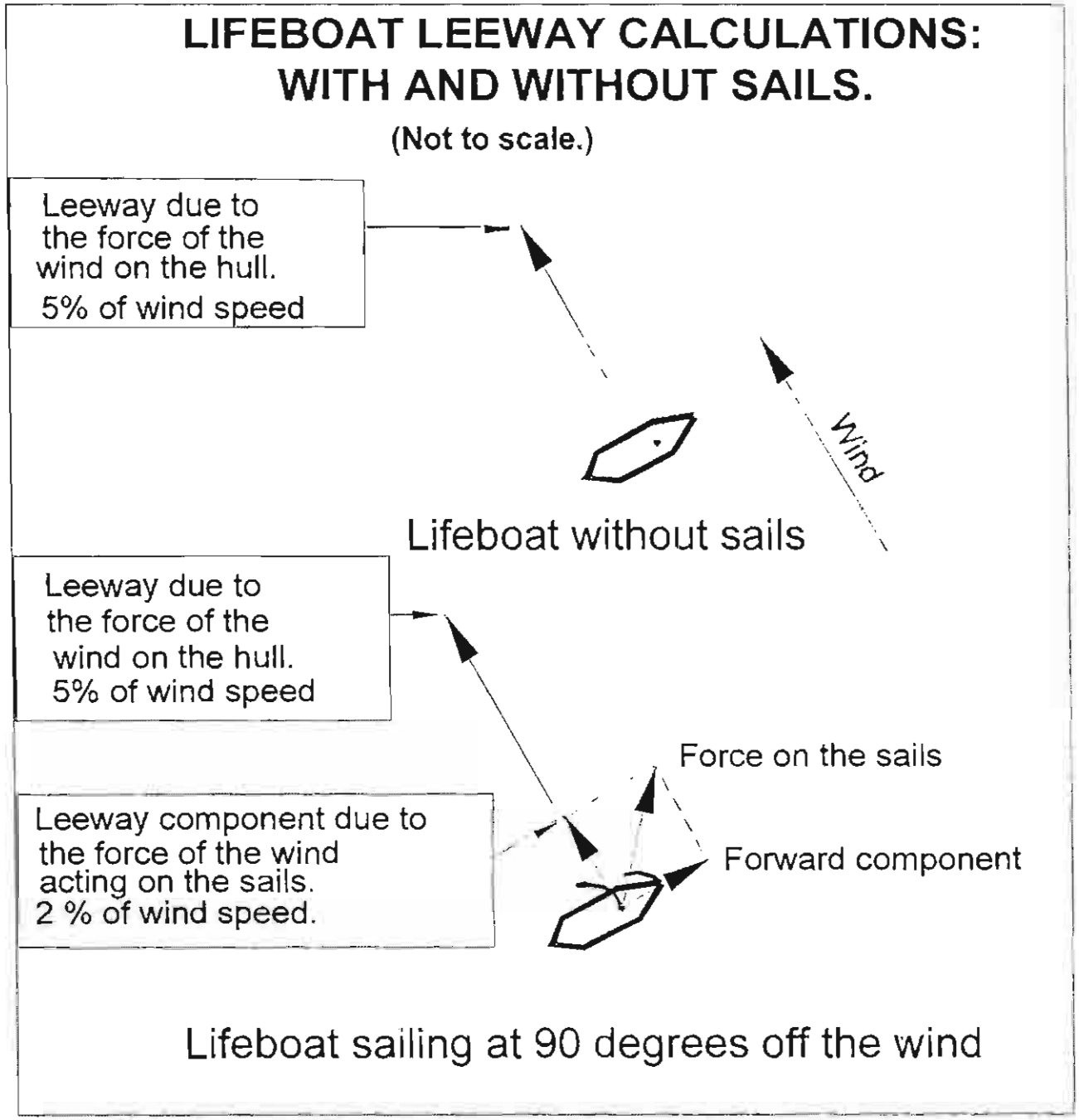
The Course Made Good is the sum of the Course Steered, Current and Leeway vectors.



A boat starting at A sailing towards B would arrive at C.

LIFEBOAT LEEWAY CALCULATIONS: WITH AND WITHOUT SAILS.

(Not to scale.)



VOYAGE OF MEYER'S LIFEBOAT
Wind and Current data.

WIND:

Speed and direction: **21 knots towards 330 deg.**

(Mean of Courtney (1991) and Southern(1991)).

CURRENTS:

Sea Surface Current: **0.2 knots towards 330 deg.** (Routing Charts).

Wind Driven Current: **0.63 knots towards 330.** (3% of wind speed. (AMSA))

Total Current: **0.83 knots towards 330 deg.**

LEEWAY:

Drifting **1.05 knots towards 330 deg** (5% of wind speed. (AMSA)).

Sailing: **1.47 knots towards 330 deg.** (7% of wind speed. (Estimate)).

TOTAL DRIFT:

Current + Leeway - Drifting **1.88 knots towards 330 deg.**

Current + leeway - Sailing: **2.3 knots towards 330 deg.**

Summary of von Malapert's diary and Meyer's sailing notes.

1800 19 Nov. to 0600 20 Nov. Drifting.

0600 20 Nov. to 1800 22 Nov. Sailed ENE 63 miles.

1800 22 Nov. to 1200 23 Nov. Drifting in a storm.

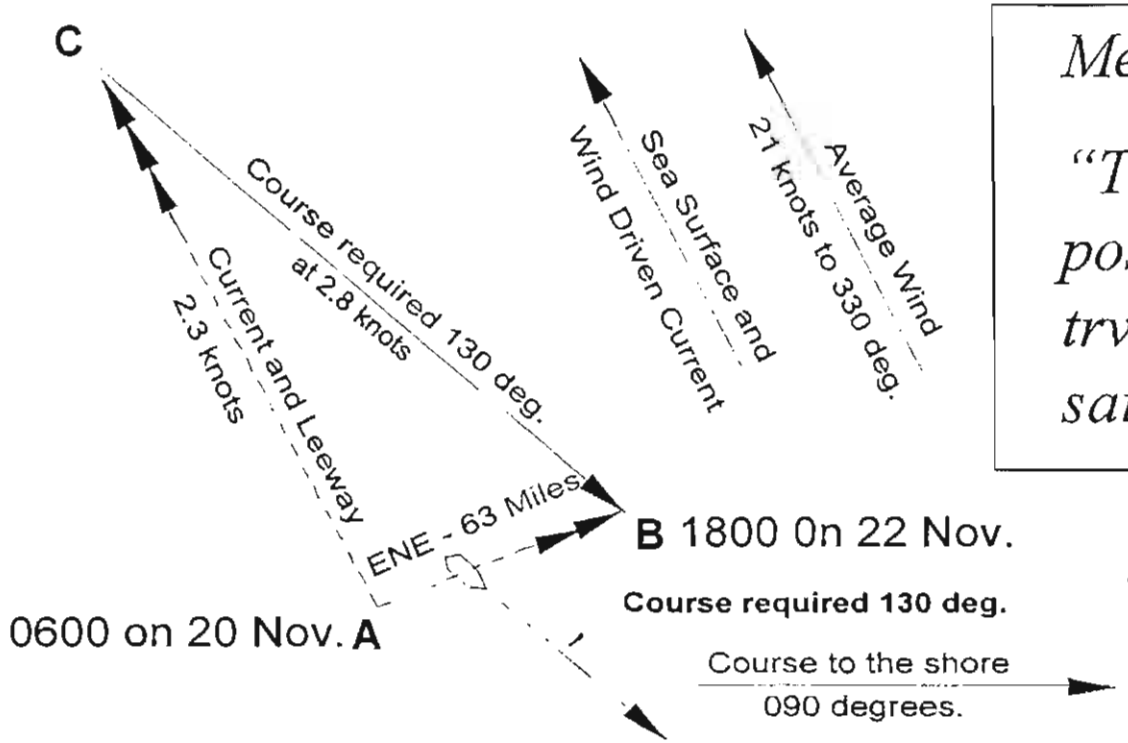
1200 23 Nov. to 0830 25 Nov. Sailed NE 81 miles.

VOYAGE OF MEYER'S LIFEBOAT FROM

0600 on 20/11/41 to 1800 on 22/11/41.

von MALAPERT RECORDED THAT THE LIFEBOAT SAILED ENE FOR 63 MILES
THE WA MM AND THE TRUST ASSUMED THIS WAS COURSE MADE GOOD

CALCULATION OF THE COURSE REQUIRED
TO MAKE GOOD A TRACK OF ENE (067 DEGREES) AT 1.1 KNOT.



Meyer's Comment:

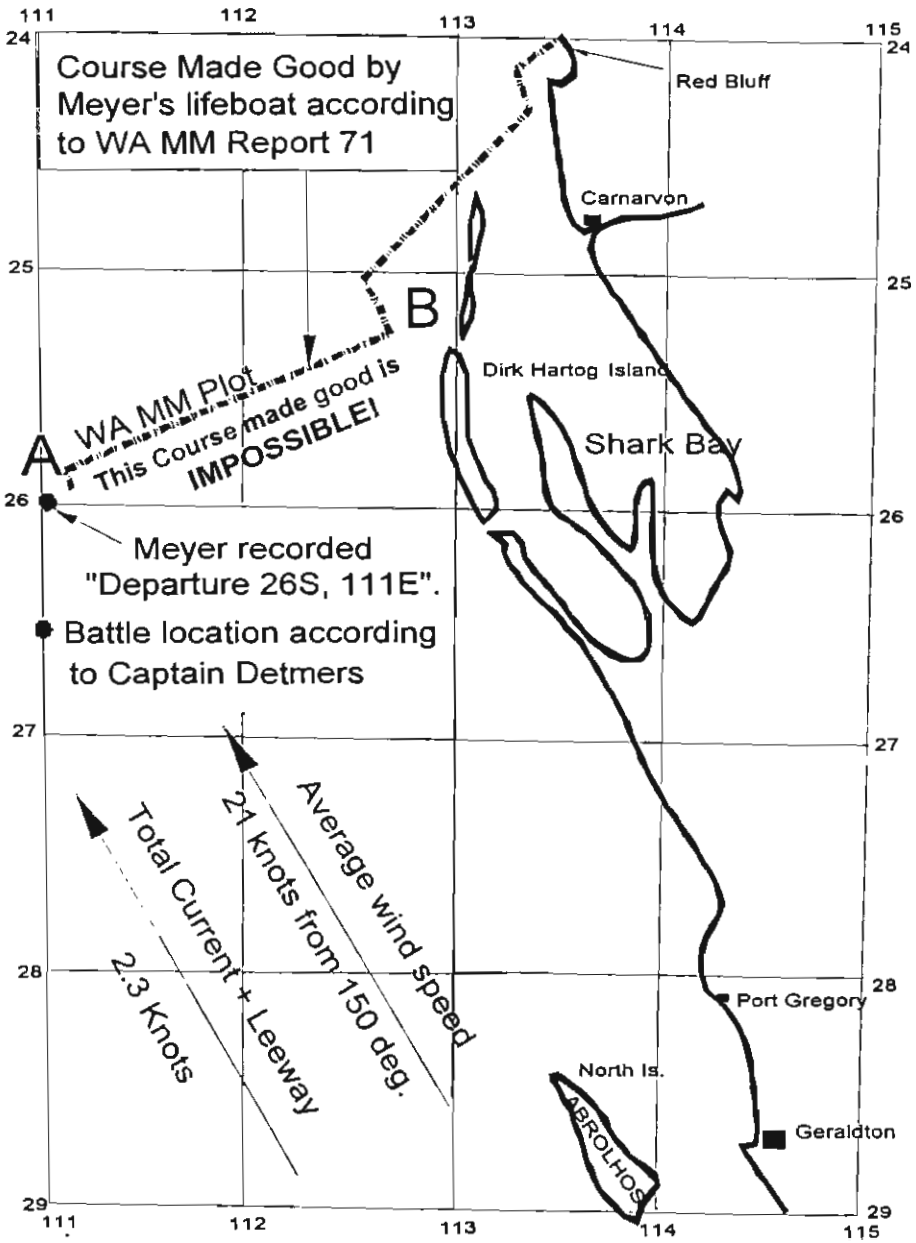
*"There is **no** possibility of trvelling south under sail or with oars."*

In order to travel from A to B, the lifeboat would have to
sail on a heading of 130 deg at 2.8 knots

A HEADING OF 130 DEG AGAINST WIND AND CURRENT WAS IMPOSSIBLE.

VOYAGE OF MEYER'S LIFEBOAT

ACCORDING TO WA MM REPORT No 71.



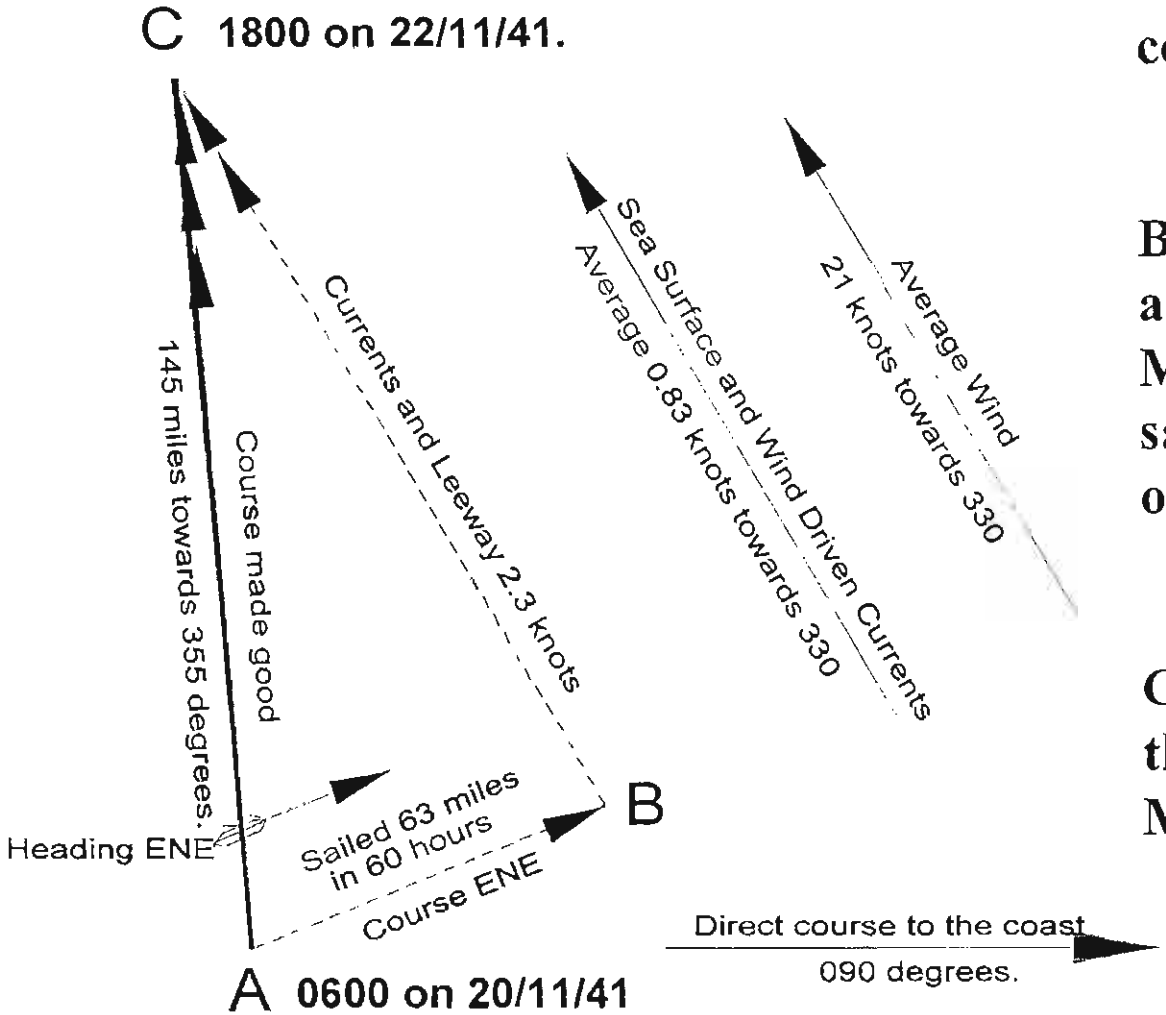
CONCLUSIONS

1. The battle did NOT take place SW of Carnarvon.

2. The Kormoran's survivors statements regarding the location of the battle were FALSE.

VOYAGE OF MEYER'S LIFEBOAT
FROM 0600 ON 20/11/41 TO 1800 ON 22/11/41

CALCULATION OF COURSE MADE GOOD
USING DATA FROM von MALAPERT'S DIARY



Meyer would have sailed towards the nearest land. With wind and and current towards 330 deg, the best he could do was to sail ENE.

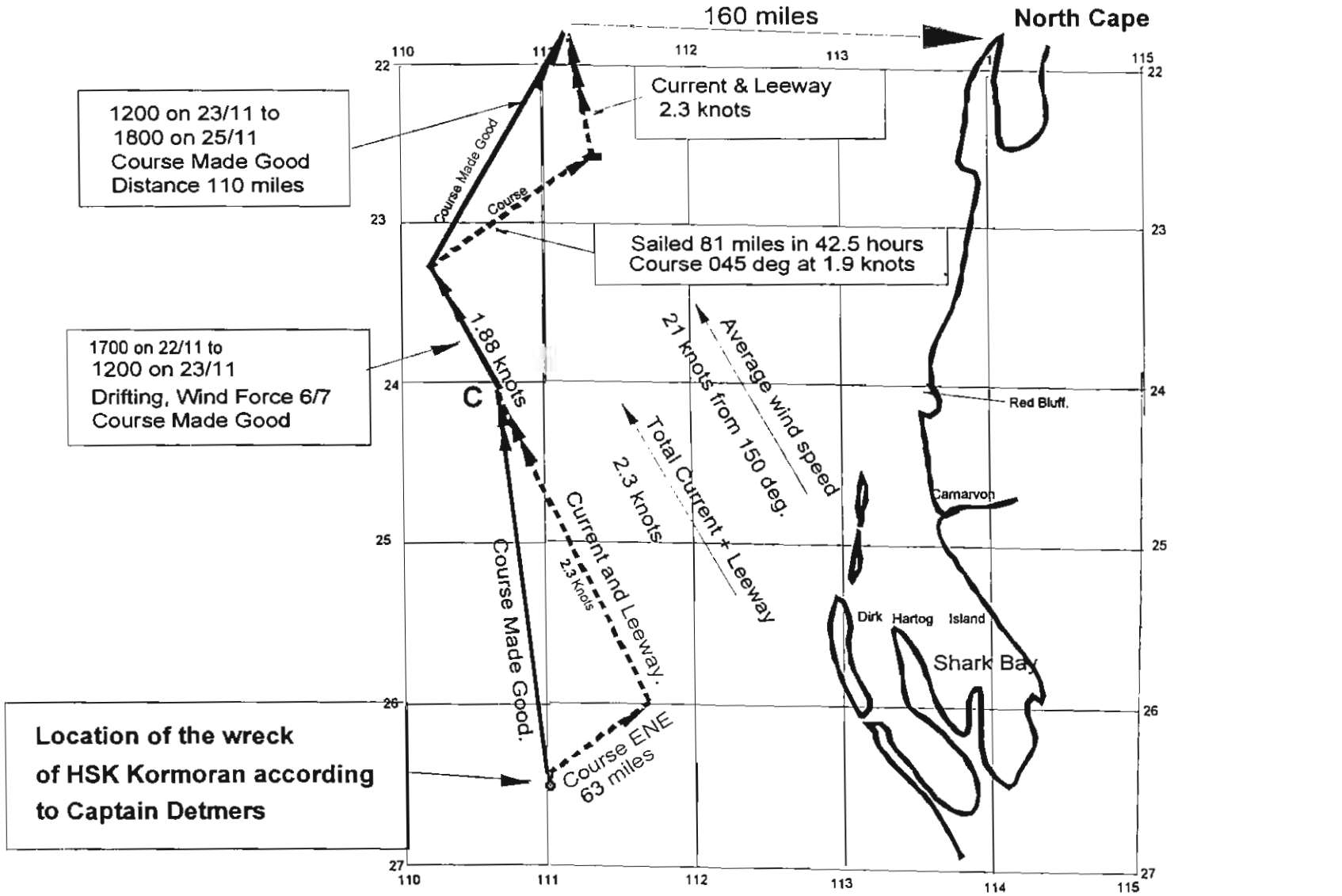
Between 1600 on 20/11/41 and 1800 on 22/11/41, von Malapert recorded that they sailed 63 miles on a heading of ENE. (From A to B).

Current and Leeway caried them to C, so their Course Made Good was A to C.

VOYAGE OF MEYER'S LIFEBOAT.

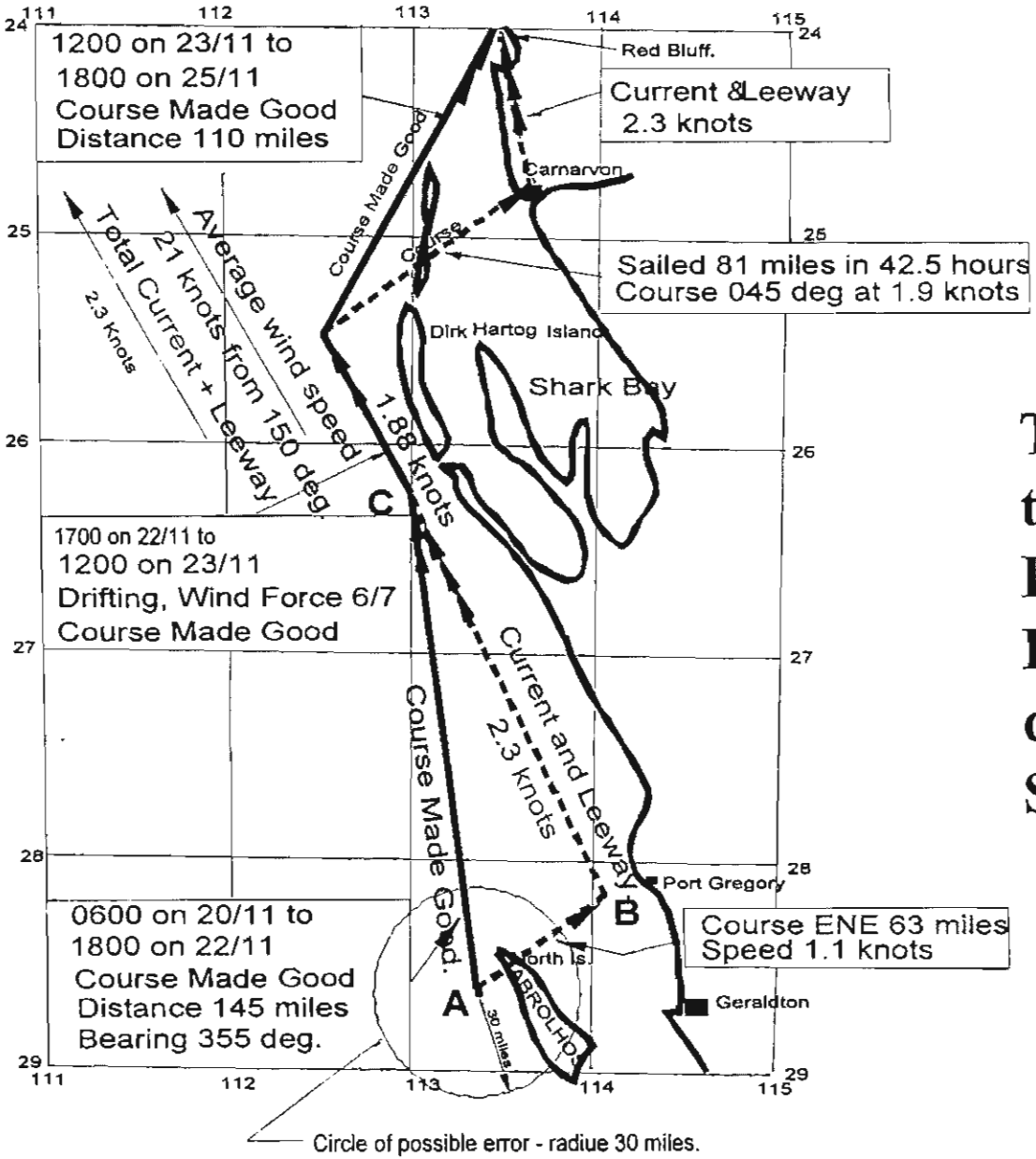
PLOT BASED ON von MALAPERT'S DIARY

ASSUMING THE VOYAGE STARTED FROM THE DETMERS POSITION



VOYAGE OF MEYER'S LIFEBOAT.

PLOT BASED ON von MALAPERT'S DIARY



This chart is PROOF that the battle between HMAS SYDNEY and HSK KORMORAN did NOT take place SW of Carnarvon.

SUMMARY.

Kirsner and Hughes (WAMM Report No 71) claimed the von Malapert diary recorded Course Made Good. **This analysis is proof that von Malapert and Meyer did NOT record Course Made Good and that the battle did not take place south west of Carnarvon.**

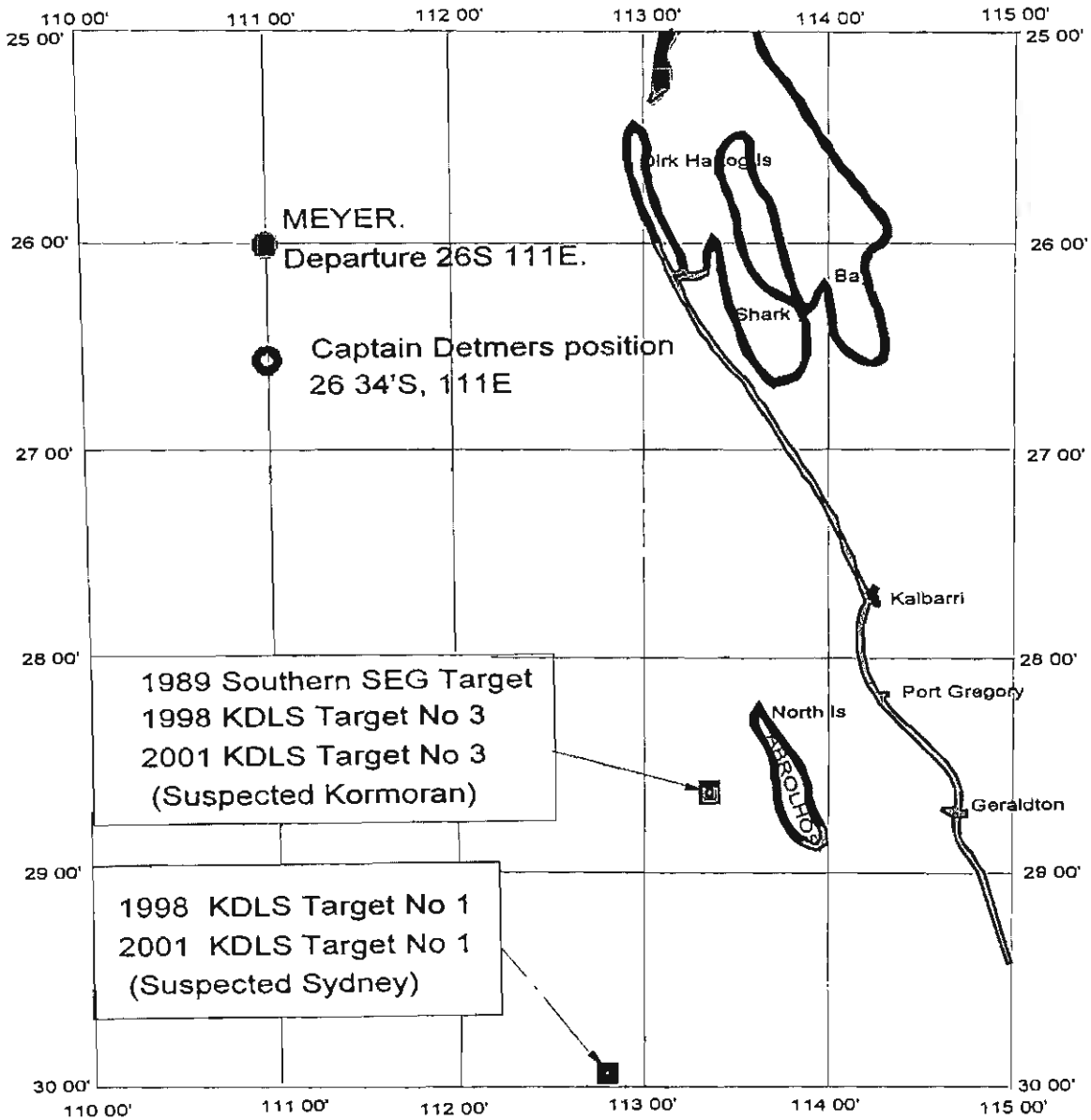
This analysis confirms that the diary and Meyer's notes recorded course and distance. The plot of the lifeboat's voyage indicates that the battle took place in the vicinity of the Abrolhos Islands.

CONCLUSION.

The survivor's statements that the battle took place south west of Carnarvon are FALSE.

Annex A.

KDLS TARGETS No 1 AND 3



KDLS Targets.

Target No 1.

Suspected wreck of HMAS Sydney in 5000+m.

At 29° 58'S, 112° 48'E.

Target No 3.

Suspected Wreck of HSK Kormoran in 800m.

At 28°38'S, 113° 22'E.

IN-WATER SEARCH PLAN.

I suggest an in-water search for KDLS Target No 3 in 800m of water.

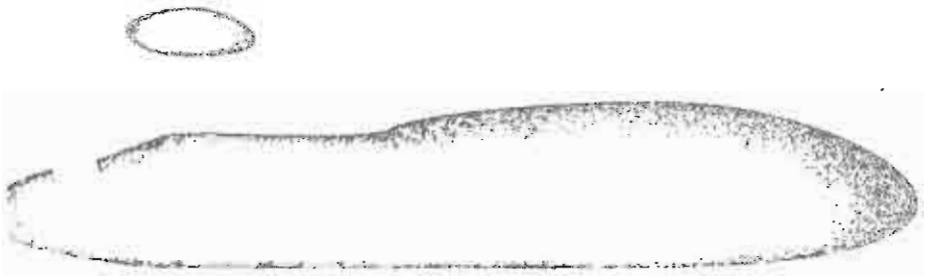
- If this is identified as the wreck of HSK Kormoran, the search for the wreck of HMAS Sydney in 5000+m of water at KDLS 1 can be mounted with confidence. No further consideration need be given to the Northern site.

- If KDLS Target No 3 is not the wreck of HSK Kormoran, then a search of the Northern site can proceed.

This plan gives the best chance of a discovery at munimum cost

See in full (6)
Bye -M-

DRIFT EVIDENCE FOR THE LOCATIONS OF HMAS SYDNEY AND HSK KORMORAN



JOHN A.T.BYE

RESEARCH REPORT 58

FIAMS

Flinders Institute for Atmospheric and Marine Sciences
GPO Box 2100
Adelaide, SA 5001
Australia

Ocean and atmosphere under one roof at Flinders University

DRIFT EVIDENCE FOR THE LOCATIONS OF HMAS SYDNEY AND HSK KORMORAN

JOHN A.T.BYE

School of Earth Sciences
The University of Melbourne
Victoria 3010
(Email: j.bye@earthsci.unimelb.edu.au)

RESEARCH REPORT 58

REPORT ON THE METEOROLOGICAL CONDITIONS NEAR 26S 111E FOR 17-28 NOVEMBER 1941.

INTRODUCTION

The process of determining winds over the open sea is still a challenge to the modern day meteorologist. To do it in an area where there are no observations or isobars on a 1941 surface chart further complicates the matter. However, a good approximation of winds can be achieved through a process incorporating several aids. Examination of the surface pressure charts comple with observations, together with a knowledge of the climatology of the area for November, and low level winds from balloon flights can be used to attain an estimate of winds. The area of interest is located over the open sea to the WSW of Carnarvon. A map of the area with observing stations l given in figure 1.

Major approximations result for the following reasons:

- Estimating offshore winds from land based stations.

- Using wind observations given in terms of a Beaufort number.

Extrapolating the analyses to the open sea where there are no observations. This is particularly evident when determining the strength and position of the Indian Ocean high pressure system.

- Interpolating between the 9 am charts to derive a 9 pm wind.

- Local variations over the ocean.

- Relying upon the accuracy of the plotted observations and the subsequent analysis. When the actual recorded pressure at Geraldton was compared to the plotted value on the chart, major discrepacies arose which puts the analysis out and also casts doubts on the reliability of the othe observations. A good example of this occurs on the 23rd when the chart has a Geraldton pressure of 1022.3 hPa whereas the value recorded in Geraldton's Journal of Meteorological Observations gives a pressure of 1018.5 hPa (see Table 2).

For these reasons, the accuracy of the estimated winds at 9 am should generally be within 3-5 knots, and slightly more for the 9 pm value. The direction is estimated to be accurate to within approximately 20-30 degrees (or a compass point). In situations where the pattern is changing rapidly, then these errors may be increased.

Joe Courtney
Bureau of Metereology

CLIMATOLOGY

November marks the return to more summer-like conditions over Western Australia. Winter depressions and cold outbreaks occur far less frequently than in previous months as the midday sur becomes more highly elevated. The synoptic pattern is characterised by the southward displacement of the sub-tropical ridge and the development of a semi-permanent heat low over the Kimberley and Pilbara.

Winds along the west coast are predominantly southeasterly, with the higher land temperatures resulting in persistent south to southwesterly afternoon seabreezes. Climatological wind frequency analyses of coastal stations indicate this, see Table 1. An analysis of the 1000ft balloon flight winds t Carnarvon over 19 years (at approximately 8 am WST) reveals a similar directional trend with 65% of the winds being southerly or southeasterly, however wind speeds are higher with 35% between 16-23 knots and 29% between 24-31 knots. The difference in speeds is because of friction near the surface. As the ocean surface has less frictional drag than land surfaces it is reasonable to assume that the ocean wind frequencies are somewhere between the surface and 1000 ft means.

The "Climatic Atlas of the Indian Ocean Part 1: Surface Climate and Atmospheric Circulation" (S.Hastenrath and P. Lamb, Universiity of Wisconson Press 1979), based on a total of approximately 5000 ship observations from 1911 to 1970 indicates a November mean southerly wind at 14-16 knots, see figure 2a. The U.S. Navy Atlas Vol 3 (1970 edition) indicates a predominantly south-southeasterly with a 44% occurrence of 11-21 knots, see figure 2b.

DATA

The main source of information for this study were the original analysed Mean Sea Level Pressure (MSLP) charts. These were archived together with the newspaper article from the following day containing the general forecasts and a 3 pm press chart, upper wind reports, ocean forecast statement, and a national synoptic statement.

Wind and pressure values were extracted from the chart itself, and the 9 am Bulletin which contain every 9 am observation from around the State. Observations from Geraldton, which is a Bureau staffed station, were extracted from the Journal of Meteorological Observations (A9). The wind data was given either in terms of a Beaufort number, or in miles per hour, and these have been converted into knots. Pressure data has been converted from inches of Mercury to hectaPascals (hPa).

Tables 2, 3, 4, 5, and 6 show wind and pressure observations at Geraldton; 9 am wind and pressure values at Carnarvon, and Hamelin Pool; 9 am wind observations at Shark Bay, Wooramel and Ajana; the 3000ft winds at Pearce RAAF base (just north of Perth), and Geraldton; and comparisons of pressure values at Carnarvon and Geraldton, and also estimated differences between 26S 111E and 26S 114E.

Other useful information used in this study were extracts from the log of a German survivor Kapt-L Reinhold V. Malapert, who made comment on the wind. A summary of these comments is supplied in table 7.

WSW'ly.

28th- The low to the south seems to have moved well into the Bight and the subsequent ridge develops to the south near Perth. Consequently, the wind increases and shifts southerly.

COMMENT ON SEAS AND SWELL

'Seas" or wind waves are produced by the local winds and can be determined from the estimate winds. The seas would have been at a maximum late on the 22nd and early on the 23rd as verifi c by the German log which describes the sea as being rough with the boat taking on water.

Swell determination is more complex and requires a detailed knowledge of systems over a wide area. Without the most basic information in the Indian Ocean, a detailed description is not possible. The swell would generally have come from the SW and does not appear to have been significant

CONCLUSION

Through a generally qualitative analysis of the November 1941 data, wind estimates are given tw ce daily between the 18-28. These are displayed in Table 8. The errors are estimated to be approximately 3-4 knots for the 9 am values and slightly more for the 9 pm estimate, with the directional error being approximately 20-30 degrees. In situations where the pattern is rapidly changing, the these errors may be increased.

The synoptic cycle over the period is representative of typical November patterns. The sub-tropic l ridge is rarely north of 25S, and a heat low in the tropics develops periodically. A semi-permaner high in the Indian Ocean generally results in SSE winds near the west coast, with winds increasing temporarily with the transitional movement of a high into the Great Australian Bight. Winds in this period were most likely the strongest on the 22nd and 23rd as a high moved into the Bight.

METHOD

For each day, a detailed examination of the MSLP charts was conducted. For the 19 and 20 November, the 9 am MSLP charts were re-plotted and analysed, see figure 3. For the other charts, the original analysis has been extended or corrected where necessary.

For a given pressure gradient, a wind can be estimated from the "geostrophic balance" which is simply a balance between the pressure gradient force and the coriolis force. Other factors to be considered are frictional effects and the isallobaric effect. A detailed investigation into these factors is not undertaken in this study, however, a subjective analysis has been done as is the general use in a typical forecasting scenario. Frictional effects alter the direction by approximately 10-20 degrees over the ocean from the geostrophic balance towards lower pressure. The 3000 ft wind is generally above the planetary boundary layer where friction comes into effect, and so is used to help overcome this complicating factor.

The "ageostrophic" wind component from the isallobaric effect, for areas where pressures are rising also shifts the wind towards lower pressures. A frequent situation where this occurs is when pressures rise with the movement of a high across southern parts of the State producing fresh or strong southerly winds along the west coast. As this is so significant, changes in pressure along the west coast are scrutinised, and can be compared with the coastal wind observations.

Complex methods exist to convert land based wind observations to offshore winds, but only a subjective estimate is used in this study. Coastal winds are significantly affected by local winds such as the seabreeze and landbreeze. The 9 am wind is not usually affected by the seabreeze mechanism, but winds in the early morning are generally lighter over land than the ocean due to a low level inversion and this has been given consideration. Afternoon wind observations at Geraldton are predominantly seabreezes and extreme caution must be used in extrapolating to the offsh conditions.

FIGURE 1. MAP WITH OBSERVING STATIONS

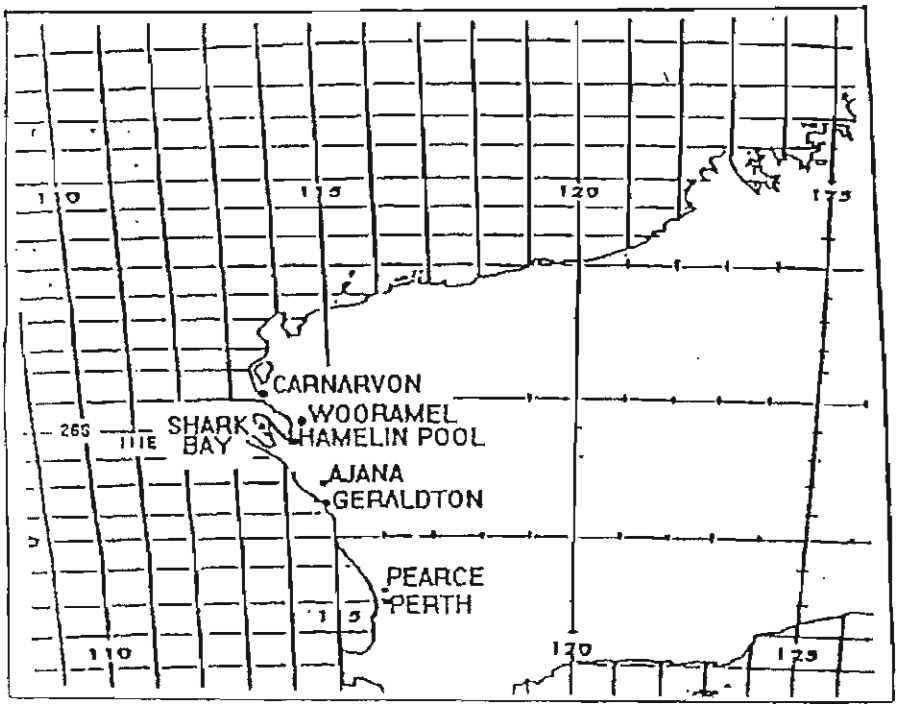
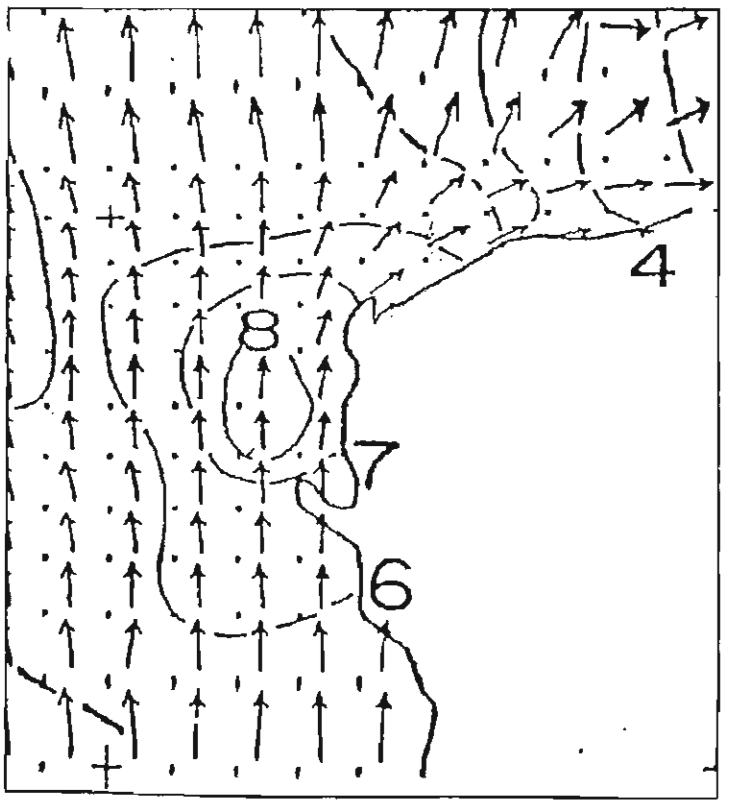


FIGURE 2. CLIMATOLOGY OF WIND SPEEDS

A. FROM "CLIMATIC ATLAS OF THE INDIAN OCEAN", WINDS IN METRES/SECOND

B. U.S. NAVY ATLAS VOL. 3 (1970 EDIT.)



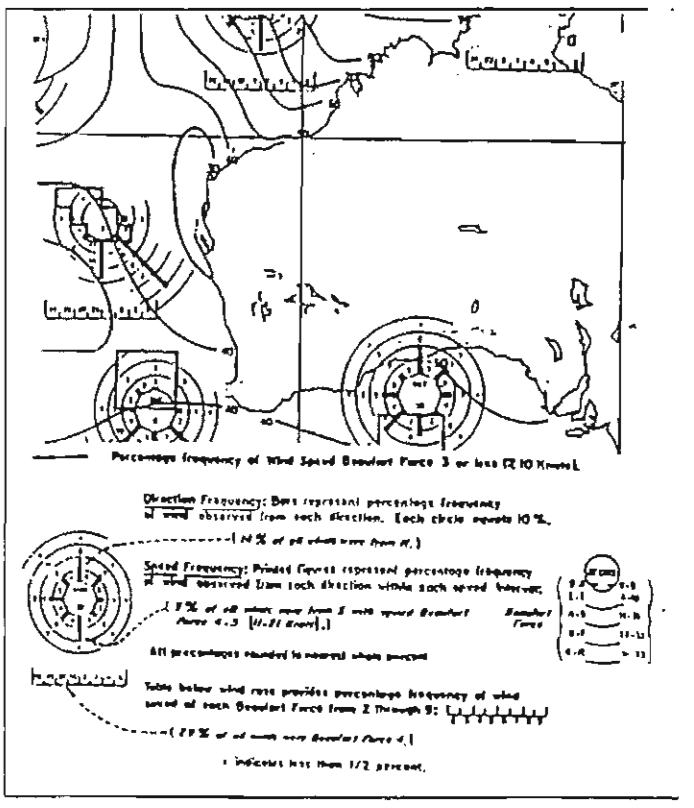
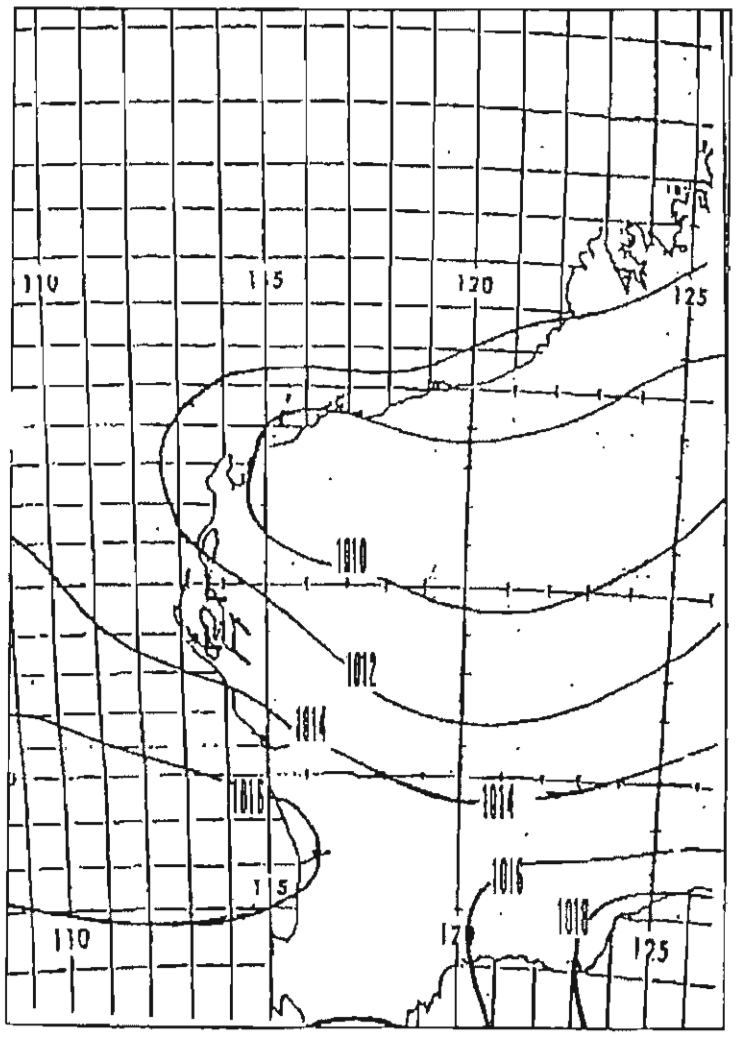


FIGURE 3A.

MEAN SEA LEVEL
PRESSURE ANALYSIS
FOR 19 NOVEMBER



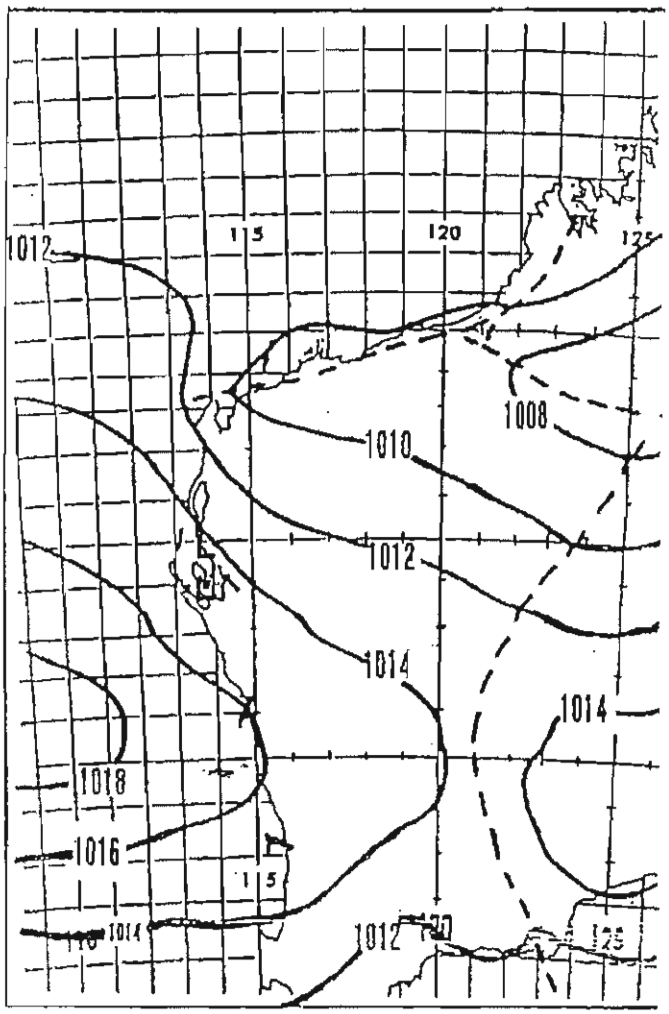


FIGURE 3B.

MEAN SEA LEVEL
PRESSURE ANALYSIS
FOR 20 NOVEMBER

TABLE 1.

CLIMATOLOGICAL WIND FREQUENCY FOR CARNARVON, HAMELIN POOL AND GERALDTON: NOVEMBER 1941.

STATION	TIME	%	WIND	%	WIND	%	WIND
CARNARVON	0900	53	S	17	SE	15	SW
(46 YEARS)		40	11-16	25	6-10	20	17-21
	1500	55	SW	32	S	11	W
		44	11-16	37	17-21	10	6-10
HAMELIN POOL	0900	33	S	30	SE	12	E
(24 YEARS)		30	6-10	29	3-5	24	11-1
	1500	35	W	22	SW	21	S
		35	6-10	30	11-16	18	3-5
GERALDTON	0900	30	S	23	SE	12	SW
(50 YEARS)		36	6-10	30	11-16	13	17-21
	1500	47	S	35	SW	10	W
		44	11-16	28	17-21	17	6-10

TABLE 2.

GERALDTON OBSERVATIONS OF WIND AND PRESSURE: 17-27 NOVEMBER 1941

DATE	TIME	PRESSURE		WIND DIR'N	WIND SPEED	
		Inches Hg	hPa		Miles/hr	Knots
17	0600	29.880	1011.9	WSW	15	13
17	0900	29.906	1012.7	WSW	15	13
17	1200	29.907	1012.8	W	15	13
17	1500	29.884	1012.0	WSW	15	13
18	0600	29.843	1010.6	W	5	4
18	0900	29.901	1012.6	SW	10	9
18	1200	29.918	1013.1	SW	10	9
18	1500	29.907	1012.8	S	15	13
19	0600	29.957	1014.5	S	5	4
19	0900	29.982	1015.3	SSE	5	4
19	1200	29.961	1014.6	SSW	10	9
19	1500	29.918	1013.1	SW	15	13
20	0600	29.963	1014.7	E	2	2
20	0900	29.959	1014.5	SSE	10	9
20	1200	29.933	1013.6	SSW	10	9
20	1500	29.905	1012.7	SW	15	13
21	0600	29.883	1012.0	S	15	13
21	0900	29.901	1012.6	S	15	13
21	1200	29.871	1011.5	SSW	15	13
21	1500	29.871	1011.5	SW	15	13

GERALDTON OBSERVATIONS CONTINUED

DATE	TIME	PRESSURE		WIND DIR'N	WIND SPEED	
		Inches Hg	hPa		Miles/hour	Knots
22	0600	29.977	1015.1	SSW	15	13
22	0900	30.035	1017.1	SSW	15	13
22	1200	30.026	1016.8	SSW	15	13
22	1500	30.012	1016.3	SW	18	16
23	0600	30.085	1018.8	SE	8	7
23	0900	30.077	1018.5	SSE	16	14
23	1200	30.032	1017.0	S	15	13
3	1500	30.009	1016.2	SSW	20	17
24	0600	29.988	1015.5	CALM		
24	0900	29.971	1014.9	SSE	15	13
24	1200	29.893	1012.3	SSW	10	9
24	1500	29.858	1014.5	SSW	15	13
25	0600	29.831	1010.2	SE	5	4
25	0900	29.813	1009.6	S	18	16
25	1200	29.768	1008.1	SSW	15	13
25	1500	29.740	1007.1	S	15	13
26	0600	29.766	1008.0	CALM		
26	0900	29.768	1008.1	S	5	4
26	1200	29.786	1008.7	W	10	9
26	1500	29.791	1008.8	S	10	9
27	0600	29.844	1010.6	NE	5	4
27	0900	29.872	1011.6	NW	10	9
27	1200	29.898	1012.5	WSW	20	17
27	1500	29.912	1012.9	W	15	13

TABLE 4.

9 AM OBSERVATIONS OF WIND AND SEAS AT SHARK BAY, WOORAMEL, AND AJANA : NOVEMBER 1941

	SHARK BAY			WOORAMEL		AJANA	
DATE	WIND		SEAS	WIND		WIND	
	DIR'N FROM	SPEED knots		DIR'N FROM	SPEED knots	DIR'N FROM	SPEED knots
17	SW	4-6	SLIGHT	S	4-6		
18	W	1-3	CALM	S	1-3		
19	S	7-10	MOD	SE	1-3	SSE	4-6
20	S	7-10	SLIGHT	SE	1-3	SE	11-16
21	S	7-10	MOD	SW	11-16	S	17-21
22	S	11-16	MOD	E	22-27	SW	17-21
23							
24	S	11-16	MOD	SE	1-3	ESE	11-16
25	S	11-16	SLIGHT	SW	4-6	S	11-16
26	SW	1-3	SM	CALM		S	7-10
27	SSW	1-3	CALM	S	1-3	W	11-16
28	S	17-21	ROUGH	S	4-6	SSE	11-16

TABLE 5.

3000 FT WIND AT PEARCE AND GERALDTON : NOVEMBER 1941

		PEARCE			GERALDTON		
DATE	TIME	DEGREES	MILES/HR	KNOTS	DEGREES	MILES/HR	KNOTS
17	0500	-	-	-	260	28	24
	1100	200	16	14			
18	0500	210	16	14	260	22	19
	1100	-	-	-	210	28	24
19	0500	250	07	06	130	22	19
	1100	270	07	06	150	04	03
20	0500	130	13	11	-	-	-
	1100	-	-	-	160	10	9
21	0500	?	10	09	?	19	17
	1100	-	-	-	-	-	-
22	0500	230	22	19	190	25	22
	1100	-	-	-	-	-	-
23	0500	160	03	03	130	19	17
	1100	200	03	03	140	16	14
24	0500	-	-	-	150	22	19
	1100	200	06	05	-	-	-
25	0500	?	09	08	?	25	22
	1100	200	09	08	170	09	08
26	0500	?	22	19	?	19	17
	1100	100	16	14	270	12	10
27	0500	320	16	14	310	07	06
	1100	-	-	-	250	11	09

TABLE 6.

PRESSURE GRADIENTS : 9 AM, NOVEMBER 1941

DATE	P(GER'N) - P(CAR'N)	P(26S 111E) - P(26S 114E)
17	-2.2	1.5
18	-2.0	1.0
19	1.1	1.5
20	2.3	2.0
21	1.5	1.5 - 2.0
22	2.1	2.0 - 2.5
23	2.9	2.0 -2.5
24	3.1	2.5
25	-0.9	2.5
26	-3.1	1.5 - 3.0
27	-2.3	0.5 - 1.0

TABLE 7.

EXTRACTS FROM THE LOG OF KAPT-LT. REINHOLD V. MALAPERT

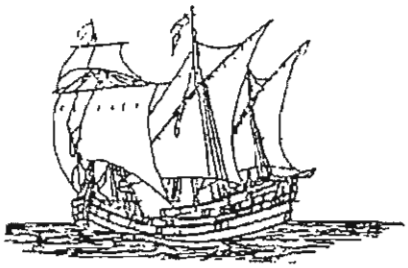
DATE	COMMENTS
20	Quiet sea, SSE wind 2-3. (4-10 kn)
21	In the morning somewhat more wind.
22	Wind increased. Evening- wind suddenly increased till 5 (17-21 kn) and 6 (22-27 kn) from SW. 1800...rough sea from SSE and SSW. Taking plenty of water, 6 men baling in 3 positions.
23	At dawn 0400, wind ESE 4/5/6 (11-27 kn). Rough sea SW waves 1200 southerly wind.
24	Medium sea, 1200 wind SE. 1800 saw high cliffs about 10 sea miles distant.At midnight, wind decreased, waves remain.
25	0330- drifting strongly wind SW Force 4 (11-16 kn). Waves medium.

TABLE 8.

ESTIMATED WINDS NEAR 26S 111E : NOVEMBER 1941

DATE	WIND			
	9.00 AM		9.00PM	
	DEGREES	KNOTS	DEGREES	KNOTS
17	220	08	200	08
18	200	05	180	10
19	170	13	160	14
20	150	13	150	12
_1	16	15	170	18
22	170	20	170	26
23	160	25	150	20
24	150	20	160	20
25	190	18	190	18
26	210	14	220	12
27	250	10	230	10
28	190	17		

8.



KNIGHT INDUSTRIES PTY LTD.

DIRECT LOCATION TECHNOLOGY

TO FIND

OIL - Gas - Gold - Minerals - Artifacts

SHIP WRECKS -HISTORICAL AND RECENT

TREASURE CARGO AND SITES

ARCHEOLOGICAL AND PALAEONTOLOGICAL REMAINS

LOST PEOPLE -SEARCH AND RESCUE ON LAND OR SEA

USING

K.D.L.S.

ELECTRON SPIN RESONANCE- (ESR) Geophysical Surveys

The Knight Direct Location System, (KDLS), uses advanced technology
Which enables large areas on and off shore to be searched efficiently and economically.

KDLS Targets can be located at any depth regardless of type of cover.

KDLS has an important role in search and rescue. People lost at sea or in remote areas can be located from the air.

Knight Industries Pty Ltd 677 Lyne St Lavington. NSW. 2641. Australia.
E mail kipl@ albury.net.au Fax 61 (0) 2 60 258754 Ph 61 (0) 2 60 251335
Mobile 0408 389 251

8 /05/98
issue 10

KNIGHT DIRECT LOCATION SYSTEM.

History and abridged description for Minerals, Artifacts and Hydrocarbons.

Lindsay Knight, Principal of Knight Industries Pty Ltd, with over 40 years experience in R&D and electro / mechanical design and manufacturing, started the development of the **Knight Direct Location System (KDLS)** in 1986. Since then, the system has been developed and refined to current model, Mark 28. Particular attention was given to the needs of the Mineral and Oil Industry, also to Marine and land based Artifact Projects. Large Copper, Gold and Hydrocarbon deposits, have been located and are now being commercialised. Artifacts have also been recovered.
K.D.L.S. has been successfully used in **USA, AUSTRALIA, PHILIPPINES, SEYCHELLES, NEW ZEALAND, UK, PNG, JORDAN.**

2. **K.D.L.S.** uses a combination of the following principles :
Electron Spin Resonance, ESR (or Electron Paramagnetic Resonance)
Hetero-Nuclear lock.
Bio-Micro Magnetics

THE KDLS INSTRUMENT AND OPERATION.

3. The ESR system consists of a Transmitter/Receiver, and a set of specially constructed and tuned hand held aerials. In addition, a magnetometer and computer is used for limited NMR surveys.
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. The strength of the signal is related to the quantity of target material present. If a targeted material is not present, above normal background quantities, no meaningful response will be detected. This feature alone has many uses.

3.1 Each material has its own unique K.D.L.S. resonant frequency signature which enables the system to detect and identify the individual elements, compounds or alloys that could comprise a sought after target.
A large resonant frequency data bank is kept, which includes the known KDLS signatures for C1 to C6, C8, C10, C14, C15, C20, C26, bitumen, diesel, leaded and unleaded fuels, uranium, thorium, potassium, bone, aircraft props, human hair, toluene (for explosives) and 360 other minerals and materials and lithology types.

3.2 The system is man portable and can be used from a ship , aircraft (fixed wing or helicopter), from a vehicle or on foot. Usually, two people are required to operate and to record and map meaningful results of the survey.

3.3 The details of the design and operation of the equipment are of a proprietary nature and will only be disclosed on a need to know basis.

3.4 The system is constantly being improved as a result of practical experience gained in field exploration.

KDLS CAPABILITIES

The strength of the signal depends on the column thickness of the target material. The stronger the signal, the larger the target. The Knight Direct Location System bas the following capabilities:

Area Search.

In long range search mode, large areas can be surveyed to locate specific targets. Large targets can be detected from a distance of approximately 15 Km from a point on the ground. During an aerial search from 5,000 feet large targets can be detected anywhere in a strip approximately 50 Nautical miles wide.

Target Identification.

Targets can be identified according to their detected material composition . If samples of new materials are available a new KDLS resonant frequency, which will give precise discrimination, can be derived, if not already listed.

Target Location

Targets can be located at any depth. Layers of sand, thick concrete, steel , rock or coral are not a deterrent. The outline of a large target can be mapped. Where the target is broken up, (for example, a ship wreck), the size and position of the parts of the target can be identified. For instance, the remaining silver cargo content of the Spanish Galleon "ATOCHA" was traced by aerial survey at 500 feet, over a 10 mile long under water trail, near the Marquises Islands off the Florida Keys, USA in Oct 1997, for Mel Fisher.

Measure the depth to the target.

The depth of targets on land can be measured with considerable accuracy. At sea, the position can be plotted on a marine chart and the depth read off the chart or determined approximately by KDLS.

Identification of ancient ship wrecks.

The origin of ancient wrecks can frequently be determined by identifying the building materials and artifacts present at the wreck site. The following materials and artifacts can be identified on the sea bed even when covered by sand, silt and/or coral:
Timbers: Mahogany, Red Oak, White Oak, Brittany Oak (European origin Roman ships) Dye wood, Cedar and many others.
"Gunmetal" anchors and cannons, Bronze cannons (particularly from Spanish Galleons) and bronze fittings (Roman or early bronze can be distinguished from modern bronze). Brass cannons and brass fittings.

Cargo: Gold bars, sovereigns and other gold coins,
Silver bars and coins including Roman coins, Dutch and Spanish Pieces of Eight and lead

Precious stones such as emeralds, sapphires, rubies and orange agate from Dutch East Indiamen.
Ming China and other plate, 16th Century glass, ivory, mother of pearl, human and animal bones.

Modern Ships and Aircraft.

The Knight Direct Location System is able to locate and identify components of wrecked ships and aircraft. The following artifacts can be identified:

Armour plate, "gunmetal", explosives TNT, CE and RDX. Japanese rifle bullets. **Japanese Submarine propellers (as distinct from Admiralty Spec bronze Propellers). Aircraft components:** Metal Propellers, Aluminium alloy skin. undercarriage oleo components etc.

Cargo Identification. Zinc, Copper, lead etc, A WW2 ammunition ship was located in PNG using the signature of Japanese small arms ammunition. Some ammo was recovered.

Search and rescue.

The Knight Direct Location System can detect the signature of **Human hair and Human bones,(distinct from animals)** which could give KDLS an important role in Search and Rescue at sea and in remote areas. People have been located at sea 20 nautical miles away from an altitude of 5,000 ft by detecting the response from their body hair (as distinct from animal hair). This can be done day or night, in any weather, when visual location is almost impossible. Different colour human hair can be discriminated.

Archeological and Palaeontological survey.

The Knight Direct Location System is able to detect buried artifacts, human and animal remains. For example:
Ceramics, Tools, lead pipes.
Fossil bones and skeletons (opalised or not) including dinosaur bones 65+ million years.
In 1999 Dinosaur bones were detected / located at Dinosaur Quarry, Vernal,Utah USA.

ENVIRONMENT

KDLS is environmentally friendly and does not require heavy equipment , seismic tracks, drill holes or underwater / ground disturbances of any kind to carry out survey work.

GENERAL

KDLS shipwreck surveys have been carried out in NSW, Victoria , Queensland, SA, WA, in Australia, PNG, Guernsey, Indonesia, Philippines and Florida keys USA.

The effectiveness of marine artifact signatures were tested and calibrated at the Maritime Museum Portsmouth U.K, Western Australian Maritime Museum in Perth and Mel Fishers "Atocha " Spanish Galleon Museum at Key West, USA

Papua New Guinea:

Japanese WW2. ships have been located by KDLS in P.N.G. and recoveries of Ammunition made . An underwater volcanic vent Gold Pipe was located by KDLS and identified by accurate side scan sonar complete with printout.
The signature of the Batavia white oak timber was confirmed on the recovered Batavia timber at the Fremantle Maritime Museum, the oak timbers on a recovered old Roman ship in Guernsey and the living Oak trees on the Hartley Whitney Common in Hampshire UK.

Philippines:

Many in ground Gold Treasure and mineral sites, surveyed by KDLS.

Four WW2 Japanese merchant ships carrying gold have been located, pinpointed and mapped by KDLS, in the Mindanao area and then authentically identified from records.
Mr Ray Borchers, of 1 Hewitt Crt Strathmore Vic, an Australian WW 2 bomber pilot witnessed the action when the ships were bombed and sunk and later confirmed the KDLS positions and provided the names of the ships.

A large Japanese sunken Battleship carrying gold was located and pinpointed by KDLS.
A diver confirmed the find by jump diving on it down 200ft. Pictures of this ship under attack, found after the survey, is to hand as is a KDLS survey witness testimonial by Helen Morris, explorationist.
Two other sunken Japanese warships were pinpointed close by, one was towing the Battleship when the three of them were attacked and sunk by American bombers during WW2.

Florida Keys- Marquises Islands USA.
Have carried out KDLS Surveys over the Atocha and Margarita Spanish Galleon sites for Mel Fisher, famous treasure hunter.

Offshore Western Australia.
Have carried out large off shore area KDLS Surveys, searching for the HMAS Sydney and German raider Kormoran, using C15 and Aromatic oil, copper, "gun metal" and iron .
Meaningful site positions were obtained. In 2001, KDLS MK29 "B" was used to locate and pinpoint the 450 ton steamship "Cumbewarra" detecting on steaming coal and iron. See testimonial by Pilot Wendy Mann JP.

Loogootee, Indiana, USA <u>GAS</u>
In 1997 seven gas prospects were delineated by KDLS and the seven prospects were subsequently drilled, completed and produced gas.. Fault boundaries, depth and the areal extent were also mapped.
Coldwater , Kansas USA
In 1997 a gas prospect together with an oil prospect, York 1, were delineated by KDLS, drilled and completed as a producers.

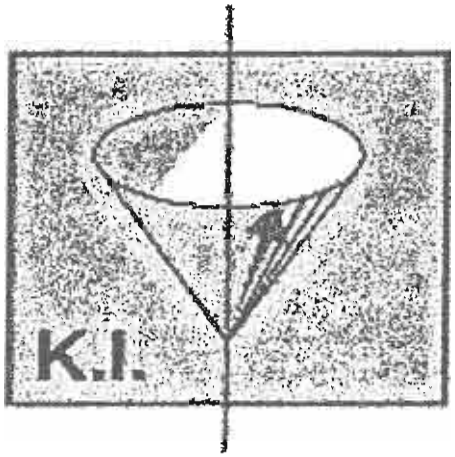
W.A.- Beharra Springs Gas field (3 wells) were detected and delineated before drilling.
Beharra Springs Wells 1, 2 and 3 were completed and supplied gas to Perth.
Yardanogo Oil well produced oil.

Hydrocarbon Fuels and Toxic Chemicals
Many successful KDLS surveys have been done for major Oil and Chemical Companies for the purpose of locating the source of leaks and spills of fuel and toxic chemicals and to delineate the contaminated area's down to parts per million.

<u>Navigation:</u>
Accurate Global Positioning System (GPS) and computerised Terratrip ground distance measuring equipment are used in surveys to ensure precise mapping. The results are plotted onto computerised maps together with co ordinate grids.

L Knight

9.



Testimonials For KDLS

The Knight Direct Location System

Knight Industries Pty Ltd 677 Lyne St Lavington. NSW. 2641. Australia.
E mail kipl@ albury.net.au Fax 61 (0) 2 60 258754 Ph 61 (0) 2 60 25133

Doc 9

KNIGHT INDUSTRIES PTY LTD

DIRECT LOCATION TECHNOLOGY.

TESTIONIALS.

Doc: No	Date	Country or State	Testimonial by	Subject
T1	25-8-1989	WA	Kalbarri Air Charter	Wrecks.
T2	13-4-1996	Philippines	Helen M. Morris	Jap battleship
T3	15-10-1996	Queensland	Air Facilities	Oil and gas exploration
T4	12-3-1997	South Australia	RUST PPK	Oil contamination
T5	7-10-1997	Indiana USA	Gale C. Miller	Gas exploration
T6	8-12-97	Kansas USA	Imperial Oil Properties, Inc	Oil and gas exploration
T7	12-2-1998	Indiana USA	Celtic Boomerang LLC	Oil and gas exploration
T8	3-4-1998	Australia	Coomooroo Explorations Coy Pty Ltd	KDLS Technology
T9	11-12-1998	Australia	CSAS	Introduction
T10	25-2-1999	Victoria	William J. Kyte	Gold in deep leads
T11	8-4-1999	Australia	Senator David MacGibbon	HMAS SYDNEY
T12	9-7-1999	Victoria	Dr Michael Garratt	Precious Metals and Hydrocarbons
T13	29-7-1999	Victoria	B. M. Dunlop & Associates Pty Ltd	Locating graves
T14	29-5-2001	WA	Geraldton Air Charter	Locating sunken ships.

T1.

Kalbarri Air Charter

R. L. & I. J. ERENSHAW

Charter, Scenic Tours and Air Work

LOT 308, MAVER STREET, KALBARRI W.A.

P.O. BOX 86, KALBARRI, 6532 W.A.

TELEPHONE (099) 37 1130

Lieutenant Colonel (Retired)

T. WARREN WHITTAKER O.B.E.

Consultant

1060 Calimo Street

ALBURY N S W 2640 Phone: (060 2563

TRIAL OF SUBTLE ENERGY DETECTION EQUIPMENT CARRIED OUT BY MR L C KNIGHT AT KALBARRI ON FRIDAY 25th AUGUST 1989

STATEMENT BY Lt COLONEL (Retd)

THOMAS WARREN WHITTAKER O.B.E.

1 The aim of the trial was to confirm the operation of the equipment in the detection of a known target. The target selected was the wreck of the "BATAVIA" on a reef 1 km south of Beacon Island in the Wallabi Group of islands in the Houtman Abrolhos.

2 At about 1030 am on Friday 25th August, 1989, we took off from Kalbarri air strip in a Cessna of Kalbarri Air Charter piloted by Mr. R. L. Erenshaw. The following passengers were on board:

Mr. L. C. Knight
Mrs W. Knight
Lt. Col. T. W. Whittaker

Mr. Erenshaw is a very experienced pilot who was familiar with survey work. He agreed to fly a pattern over the wreck site which was designed to test the functioning of the equipment. Mr. Erenshaw was the only person aboard the aircraft who knew the exact location of the wreck site.

We flew on a heading of 210° at 3,000 ft. I was seated behind the pilot and had a good view of Mr. Knight and the aircrafts instruments.

The target was detected at a distance of 25 nautical miles. The distance to the target was clearly indicated by the position of the rods held by Mr. Knight. The pilot was instructed to deviate 30° from the direct course. The rods remained locked on to the target.

The following materials were detected :-

Metal objects (Anchors and or Cannon)
Pieces of Eight to the right of the target and at the target
Bronze
Oak
There was no indication of Mahogony, Gold or Emeralds.

2/ Cont.

T1/1.

The aircraft was flown over the wreck site on four occasions on various headings. On every occasion the instrument gave an unmistakable indication of the presence of the target vertically below the aircraft.

The location was confirmed by Mr. Erenshaw on each occasion.

I am completely satisfied that the SUBTLE ENERGY DETECTION EQUIPMENT located the wreck accurately.

During the return flight from the wreck site of the "BATAVIA", Mr. Knight detected another wreck close to the coast. Details will be reported to the appropriate authorities for further investigation.

H.S. Whittaker.
.....

25th August, 1989

- - - - - - - - - - - - - - - - - - - -

STATEMENT BY CAPT. R. L. ERENSHAW

I was impressed with the fact that Mr. Knight announced we were overhead the wreck, just as I was about to say ... "We are now directly overhead the "Batavia" wreck". There was no way Mr. Knight nor Mr. Whittaker could see under the aircraft, nor did I indicate to them that we were approaching the wreck.

I recall Mr. Knight saying "We are getting closer and closer". I then saw his hand held rods cross fully when we passed directly overhead. Mr. Knight made adjustments to his machine, and after each adjustment stated the material he was trying to detect. At one stage close to the wreck, he said his rods were pointing out at two o'clock to the nose of the aircraft stating there was pieces of eight near an adjacent island. I know that Island as Beacon Island where the crew and passengers of the "Batavia" were known to have gone ashore.

25th August, 1989

Raymond L. Erenshaw

Raymond L. Erenshaw

The following materials were detected :-

Metal objects (Anchors and or Cannon)
Pieces of Eight to the right of the target and at the target
Bronze
Oak
There was no indication of Mahogony, Gold or Emeralds.

2/ Cont.

T 1/2.

Helen M. Morris

12.

2/37 BRITANNIA STREET, LEEDERVILLE, 6007, WESTERN AUSTRALIA.
TEL: (619) 443 3821 FAX: (619) 277 1848

13th April, 1996.

TO WHOM IT MAY CONCERN

In early February, 1994, I was instrumental in bringing Mr. Lindsay Knight to the Philippines for the purpose of utilising his unique scanning equipment to investigate suspected treasure sites in various locations.

For some time prior to his visit, I had been having discussions with a certain Filipino businessman "Jun" who is engaged in marine salvaging. Jun had described to me the sinking of a warship which he believed was the second largest in the Japanese fleet. In fact his father had seen this ship go down and had taken rough bearings in order to be able to locate the vessel at a future time. He gave these bearings to Jun and when he later became a salvor, from time to time he visited the area and with his best divers searched for the ship. His perseverance was eventually rewarded and he did locate the ship and mark it.

He was able to confirm that it was indeed a mighty warship. He also located two other ships lying close by. This confirmed the report of his father that the warship was being towed by two other ships as it had incurred considerable damage from U.S. bomber attacks.

Jun conducted some research into the history of this particular ship and was of the opinion that it was carrying a substantial quantity of gold bullion. There have been many books and documentaries on the treasures that the Japanese plundered from China and around S.E. Asia, which they had then taken to their 'stronghold' the Philippines for on-shipment to Japan. While President Marcos was able to recover large quantities, many believe that there are still large quantities to be found in and around the Philippines.

12/1.

I introduced Jun to Mr. Knight and after several meetings and the establishment of good rapport, it was decided that we would charter a light aircraft and fly to the area to give Mr. Knight the opportunity to pinpoint the target and determine whether or not there were any significant gold readings.

It was not until we boarded the aircraft that we were given longitude and latitude bearings of the target and these were entered into the GPS. I sat in the front with the pilot and was responsible for recording data in the GPS at the instruction of Mr. Knight. Jun sat in the back with Mr. Knight and his equipment.

We headed south from Manila and in due time Mr. Knight picked up a substantial gold reading which he estimated was approx. 30 kms away. With the approval of Jun. he directed the pilot according to the direction indicated by his scanning equipment rather than the course plotted by the GPS.

The signal became stronger and stronger and we were all quite excited. When instructed by Mr. Knight I recorded the location on the GPS. Mr. Knight then suggested that we go on to the original target which was the purpose of our trip, but Jun said "no need, this is it". We were quite surprised as we were approx. 30 kms north of the original bearings entered into the GPS. We're not quite sure whether or not Jun gave inaccurate readings just to test the equipment, or he had made a mistake in the readings he had given us. He was non-committal when asked this question.

Jun then asked Mr. Knight if he could give an estimate of the size of the ship. In order to do so he reprogrammed his equipment to pick up iron not gold and we flew over the area again. Immediately he was able to pick up the ship, the direction in which it was lying and its approximate length. Flying over again from a different direction, he picked up another substantial iron reading which he believed could be a smaller vessel and while scanning this he picked up another substantial iron reading which appeared to be another vessel lying on the other side of the main target.

Jun then informed us that the warship had been escorted by two other vessels which had also sunk as a result of U.S. airforce attacks and that Mr. Knight had correctly located them.

The actual site was a few kilometres offshore from one of the southern Philippine Islands. The mouth of a fairly large river was identified and the area seemed quite remote and sparsely inhabited.

We were all very pleased with the results of the trip and upon returning to Manila signed a non-disclosure/confidentiality agreement with Jun.

While Jun is an accredited salvor, he does not have all the equipment necessary or funds to undertake a recovery of this magnitude. He estimates that the ship is lying at a depth of approx. 150'. He asked Mr. Knight and myself to try and find a Joint Venture Partner who had the capacity to undertake this project, but at the same time, requested that we do so very discreetly. He did not want to involve people within the government or the national museum at this point in time, for fear of losing the project.

It would be his preference to undertake the project, quietly, without attracting the attention of political or business 'crocodiles' at least until everything was 'set to go'. Because of his knowledge of how the system works and the fact that he is an accredited salvor, he is most adamant that it must be done this way.

Should you wish to discuss this matter further, I can be contacted through Mr. Knight or the address details given above.

Sincerely,

HELEN M. MORRIS.

12/3

Air Facilities
Arcus Airways Pty Limited A.C.N. 003 111 340

FLIGHT OPERATIONS
Albury Airport
P.O. Box 675
Albury NSW 2640
Phone (060) 41 1210
Fax (060) 21 8508

ENGINEERING
Phone (060) 21 7897
Fax (060) 41 4161

12.

To Whom it may Concern

15 October 1996

Knight Industries Pty Ltd, Direct Location System (KDLS)

On the 12th of August 1996 we flew Mr Knight and his KDLS equipment on a ESR Geophysical Survey of the South West corner of the State of Queensland in Australia.

After watching the system work en route, we approached the Moonie underground gas pipeline at right angles, at an altitude of 3000 feet. The pipeline was clearly identified on our navigation map.

Mr Knight, who was operating the equipment from the middle seats of the aircraft, said he was tuned to Methane Gas (C1) and we could clearly see the twin aerials closing as we approached the pipeline. The pipeline was visible to us, as a disturbed earth line across the barren ground.

When we were directly overhead the pipeline the aerials gave a quick flip inwards, then opened outwards momentarily along the pipeline.
We were told the calibration of the system was being tested and were amazed at the accuracy demonstrated.

Mr Knight instructed us to follow the gas pipeline, flying slightly to the left and then to the right of it. As we moved away from the precise overhead position, the aerials opened and pointed out to the side of the aircraft, back to the pipeline.

We later flew over and around the Jackson Oil Field and watched the positive response of the system when Mr Knight said it was tuned to C5.

We certify that this is a true and accurate description of our observations.

GEOFF W MILTON
Chief Pilot

JENNIFER McWHAE
Line Pilot-Navigator

13.

Rust PPK Pty Ltd
ACN 058 381 507

100 North Terrace
Adelaide, South Australia
GPO Box 398 Adelaide
SA 5001 Australia
Telephone (08) 8405 4300
Int Tel +61 8 8405 4300
Facsimile (08) 8212 4688
Email rustadel@ozemail.com.au

A HAIA Consulting Group Company

RUST PPK
Environment & Infrastructure

Our Reference JPI/2905/58G209C

12 March 1997

T4.

David Powter
Breakaway Group
Technology Enterprise Centre
2 Research Avenue
BUNDOORA VIC 3083

Dear David

**HMAS - PLATYPUS - Tar Pit - ESR Geophysical Survey (KDLS)
Results Provided by Field Analysis and Sampling Technologies (FAST)
and Knight Industries Pty Ltd**

We are pleased with the end results of the ESR/KDLS survey and were impressed that you could detect the Tar and particular hydrocarbon fractions (C6, C9, C15 and Tar Asphaltic) immediately.

The non intrusive nature of the survey, ie no drilling or trenching and no large machinery or excavators, meant that you could reach areas of the site that we were unable to get to using conventional methods, including narrow lane ways and inside buildings. Also the HMAS Platypus Submarine Base is still in use and no interruption to normal base operations was encountered during your survey.

Most importantly the time in which you carried out your survey (6 hours) and provided accurate plans of where the thick tar was located; and differentiated between the small plumes, and tar filled joints and fracture pathways within the bedrock underneath the car park and buildings to a depth of 8 metres. We only needed to drill within the areas that had been mapped out by you as opposed to the normal grid like approach.

Our drilling program confirmed your results and later sampling and certified lab results supported your findings in some cases to ppb levels of tar present. We believe the overall survey was a success and would recommend your technology and scientific backup to others in the remediation and clean up industry.

Sincerely

Jeffrey P Impey
National Manager - Environmental Remediation
Rust PPK Pty Ltd

T4

15

Gale C. Miller, CPL/ESA *Certified Professional Landman*

Telephone (812) 853-5895
Fax (812) 853-5895

P.O. Box 5162
Evansville, Indiana 47716

October 7 1997

Mr. Lindsay C. Knight
Knight Industries P/L
677 Lyne Street
Lavinton/Albury
N.S.W. 2641, Australia

Dear Mr. Knight:

I was very impressed on your recent technological survey for us in Knox County, Indiana.

You will recall the Joe Baker #1 in our Bicknell North Prospect. The gas pay zone (New Albany Shale) in the Joe Baker #1 is at a depth of 2,386 feet. You called the depth at 2,390 feet!

That accuracy is amazing and I congratulate you.

Sincerely,

Gale C. Miller

GCM/id

15

T6.

IMPERIAL OIL PROPERTIES, INC.

212 N. MARKET • SUITE 513 • WICHITA, KANSAS 67202 • TEL 316-265-6977 • FAX 316-265-2541

8 December 1997

DISCUSSION AND CRITIQUE OF EXPERIENCES WITH THE KNIGHT DIRECT LOCATION SYSTEM

by

Robert L. Williams, Jr.-Owner/Imperial Oil Properties, Inc.
Certified Petroleum Geologist-#4573
Independent Professional Earth Scientist #2462
Member-AAPG,SIPES,RMAG, KGS,WGA,NMGS(USA)
Areas of Exploration History-United States
Anadarko Basin, Central Kansas Uplift/Hugoton Embayment
Rockies-Overthrust Belt/Hingeline, Greater Green River Basin
Basin and Range, Coastal California

I first met Lindsay C. Knight in the summer of 1993 through an introduction by persons involved in investing in some of Imperial's exploratory oil and gas drilling Programs in Central Kansas. The following is an account of some of my observations of the KDLS in operation over the ensuing years.

I have observed Knight datum the System over literally dozens of oil and gas fields containing hundreds of oil and gas wells and upgrade his data base over the same fields and wells on each successive visit to the area in order to continue the advance of the System. Additionally I have seen Knight differentiate new wells from old wells by determining the distance of the radius of oil/gas depletion from the well-bore in single formation oil-pay reservoirs, as well as determine the depth to and pay thickness of said reservoirs!

For a multi-pay well I observed Knight delineate a very small "patch reef" coquina limestone zone which contained crude oil in an area of only 300 feet by 300 feet. He called it "depleted", which it was, but commented that there was a separate natural gas pay in a dolomite bed within the well, also. There was indeed such a gas pay about which we had purposely refrained from telling Knight at the outset of the investigation of that lease.

Imperial has recently been involved in developmental drilling to approximately 6,000 feet in a rapidly expanding natural gas field in Comanche County, Kansas on the northeastern flank of the Anadarko Basin in the South Central United States. Knight has been instrumental in detecting and delineating both the presence and orientation of significant structural normal faults on our prospective acreage. Said faults result from the tectonic uplift responsible for the trapping of over 25 Billion Cubic Feet of Gas, worth in excess of US$60 Million, in the Nescatunga Gas Field. Knight has also contributed valuable knowledge regarding pay thickness and the gas chemistry of the deepest pay zone which carries high percentages of poisonous hydrogen sulfide gas.

T6/1

Late in the year 1993 Knight accompanied me to North Central Kansas, the site of an infamous non-oil and gas producing Basin (the Salina Basin). Numerous geologic theories have been advanced for the fact that this Basin is absent any *discovered, commercial* quantities of hydrocarbons. I was quite dubious about even spending the least amount of time traveling through the region, however Knight was able to establish several prospective spots that deserved further attention over time. Subsequently almost all of the areas in question were discarded through the ongoing fine tuning development of the System by Knight. One area continued to stand out, though. This area, several miles removed from the highway, was first picked out by Knight while we were traveling in my car at over 50 mph. An independent Kansas oil operator first drilled in this spot in 1990 and found a small, but profitable oilfield (the Sigle Field) which now has 4 wells in it. This field was not visible from the road and Knight had no idea that it was over a hill when we first received the positive return on the System. It exists in Osborne County on the west margin of the Salina Basin as it slopes upward onto the rich oil province of the Central Kansas Uplift.

On Knight's most recent visit to the Mid-Continent United States, Autumn 1997, we were traveling at a speed over 60 miles an hour when the KDLS received the data from a now defined, but undrilled, crude oil Prospect known as the Smoky Hill River Prospect. When the data was detected in my car we were at a 7 mile distance from the resultant Prospect. The data received on closer observation was very strong, yet originated from an area of only 1/4th square mile. This Prospect is a definite exploratory drilling target as it resides in an oil and gas fairway equidistant between two major oil producing trends. Other oil and/or gas Prospects have been located over time and the strongest have survived all System upgrades.

IMPERIAL OIL PROPERTIES, INC.
Robert L. Williams, Jr.
President/Geologist

Addendum 13 April 1998

Imperial has recently drilled, completed and equipped a commercial natural gas well, the Willbanks #17-1 in Comanche County, Kansas, at an offsetting location to another of Imperial's wells, the Bergner #16-1, which completed for a daily flow rate of 10.5 mmcfd. The two wells are separated on the surface by 1102 feet. The Knight Direct Location System accurately predicted the successful effort by pinpointing the appropriate site while profiling the bounding structural faults. Another system, that of surface geochemistry, inferred the probability of drilling a dry hole at the proposed location and standard seismic sections (24 fold CDP) were ambiguous, at best!

Another KDLS suggested location will be drilled on trend with the two abovementioned successful wells, later in this year, most likely around November 15.

T6/2

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CELTIC BOOMERANG LLC

USA Address: 22 West Water Street
NEWBURGH IN47630
Tel: 1 812 853 5895
Fax: 1 812 853 5895
Aust Address: c/- Keogh & Co
Level 6/ 1 Collins St
MELBOURNE VIC 3000
Tel: 61 (0)3 5441 3292
Mobile: 017 945 867
Fax: 61 (0)3 5444 1242

12 February, 1998

Mr Lindsay Knight
Managing Director
Knight Industries Pty Ltd
677 Lyne Street
LAVINGTON NSW 2641

Dear Lindsay

Re: KDLS Surveys in Indiana August and November 1997.

This letter is to confirm that Knight Industries Pty Ltd conducted a series of surveys using the KDLS technology for both oil and gas in the Indiana portion of the Illinois Basin, USA during the above periods.

KDLS was able to perform the following functions:

1. Identified the presence of methane

2. Provided an accurate view of the net gas column in metres later confirmed by drilling. The greater the gas column the greater the permeability due to more intense fracturing.

3. Determined the outer limits of many gas fields, located low or nil permeable areas within the fields and identified the orientation of the major fracture positions.

4. Ranked nearby wells under development which had been artificially fracture, KDLS was able to identify, over several trips, whether or not fracturing had been improved as a result of stimulation.

5. KDLS was also used to identify where the loss of cement had taken place during casing operations.

6. Able to identify if carbon dioxide was present in sufficient proportions to cause

17/1

the need for scrubbing units to be installed prior to the transporting of the gas to the grid.

7. KDLS was used to determine the thickness of the shale, the thickness of the gas, the "free" gas in the shale in the individual beds; the depth of the shale and gas below ground level and the base of the gas and the shale.

8. In the search for oil, KDLS was used to locate potential oil fields; determine the depth of the oil, its composition, its possible thickness and the nature of the reservoir.

9. KDLS was found to correlate most effectively with other geochemical techniques.

Celtic Boomerang LLC would be pleased to act as a referee on KDLS.

With kind regards,

Ian MacCulloch
Managing Member

C:\WPWIN60\WPDOCS\CELTIC\BOOMERANG\CONTRACT\KNIGHTIN.K102.WPD

T7/2

T 8

Coomooroo Explorations Coy Pty Ltd

A.C.N. 002 137 233

Aust Address: 88 Lowndes Street
BENDIGO 3550
Tel: 61 (0)3 5441 3292
Fax: 61 (0)3 5444 1242

5 April, 1998

Attn: M/s Joanne Towner
Standing Committee for Foreign Affairs
Defence & Trade
Parliament House
CANBERRA ACT 2600

Dear M/s Towner

Subject: HMAS Sydney Enquiry

I have been reviewing the web site of Knight Industries Pty Ltd and I came across a reference to the use of Electron Spin Resonance Spectroscopy (ESR)in locating the *HMAS Sydney*. ESR and its associated technique Nuclear Magnetic Resonance (NMR)are well established laboratory procedures with NMR imaging techniques in radiology the better known application

It may be helpful to the Committee's deliberations if the techniques used by Knight Industries Pty Ltd were to be put into context.

My profession is that of exploration geology and in that time I have used many differing remote sensing techniques. In fact, my first use of geophysics was attempting to locate marine gravel deposits off Bermagui in 1967/8. The technique involved was shallow seismic and the energy source was imported transducers. In continental shelf areas this was inadequate and the survey was largely unsuccessful. Later developments in this area saw the development of double ended sparkers developed in Queensland which were more powerful and operated very successfully on the continental shelf.

Since that period as a student and graduate I have used, in my career, magnetics, radiometrics, electromagnetics, induced polarisation, gravity and satellite spectroscopy to name but a few. These techniques when coupled together are valuable exploration tools. These techniques may be termed indirect as they involve gathering data on an associated physical characteristic rather than from the target component itself

As effective tools these techniques may well be they are in no way comparable to the direct technology as developed by Knight Industries Pty Ltd in the form of the ESR

T 8/1

based technology, KDLS.

In mid 1993, I first trialled the KDLS technology, as developed by Knight Industries, in central Victoria where I ran a series of double and triple blind tests over gold mineralisation known only to myself. I can report that the initial airborne results were startling. The ground follow up reproduced the airborne results but with greater accuracy. For the first time I had access to a technology which provided an accurate result of the target mineral at depth and produced a 3D response.

Since then I have used the KDLS technology of Knight Industries throughout Australia and the USA. Recently, I used the technology to site a series of gas wells in the Illinois Basin, USA. The results were outstanding and far superior to the competition from the existing gas industry. The significance of this information is that the gas profile was accurately determined by Knight Industries at a depth of 440m and confirmed by later drilling. Any depth errors were due to survey control.

Put another way unlike any other induced remote sensing technique there was no interference of the type which occur, for example, with electromagnetics.

With respect to distance the maximum distance from a target which I have had recorded for me is 170km during a trial airborne survey for diamonds south east of Broome.

Over the years I have found the KDLS system to have been quite accurate over quite large distances and unaffected by the intervening material whether it is water or rock. I have also found that this technology's main strength is that it free from interference.

When I saw the information on the web site belonging to Knight Industries Pty Ltd I felt that Mr Knight had reliably and accurately reported the data relating to the possible discovery of *HMAS Sydney*. It also comes as no surprise that the wreck has been located in approximately 4000m of water while the *Kormoran* appears to lie at comparatively shallow depths of 800m.

The obvious question is how was Knight Industries able to discriminate between the two wrecks. Both Mr Knight and I have for the last 5 years actively pursued oil & gas deposits. These deposits vary from one to another and we have been able to discriminate quite accurately between the various different classes of oil in reservoirs. The *Sydney* and the *Kormoran* drew on differing types of fuel oil (or diesel) and it is quite a simple matter to gain an equivalent sample and identify the frequency. The KDLS system is so sensitive and precise it will receive only signals from similar material or a similar frequency. In other words, unless there was an equivalent sample of the bunker oil from the Sydney loaded to the KDLS the Sydney would not be located.

T8/2

No doubt the next question is did the bunker oil survive the event. It is well known that oil breaks down in sea water and leaves a residue. This event is commonplace in the migration of oil into reservoirs. Therefore, oil reservoirs can be detected by following the migratory path or by detecting the oil in the reservoir itself. The KDLS can used to detect both events. If there is a trace of bunker oil in the wreck of the *Sydney* then the KDLS technology will detect it. It is well known that oil or its decayed equivalent does survive in pipes and bunkers in vessels which have foundered. The oil is never totally lost.

Our group has been a strong supporter of KDLS technology as developed by Knight Industries Pty Ltd as this Australian developed technology is of the breakthrough category. Our group has paid to Knight Industries Pty Ltd for seven survey trips to the USA and many more in Australia. Other elements of the mining industry including RTZ/CRA have been following this style of development for many years but have not achieved the portability of KDLS.

Our group is prepared to assist in the funding of the next survey over the sites using a wider array of materials which are possibly particular to each of the three wrecks. This approach should confirm the essential make up of the ships' construction or chemical fingerprint. This should confirm Mr Knight's assessment of which wreck is which and the possible nationality of the 'mystery' wreck or third site also in deep water.

Detailed sea floor survey can be carried out by side scan sonar, possibly high resolution surface magnetics but the ultimate test will be to use a camera either as a remote or fixed to a submersible. It is too late for indirect airborne techniques of the type as described earlier.

Finally, the locations as described by Knight Industries Pty Ltd will be accurate to the limits of the GPS used in the survey.

If I can be of any assistance please do not hesitate to contact the writer.

In the meantime, I wish the Committee all the very best in its deliberations on this very vexed matter which goes to the heart of the Australian psyche.

With kind regards,

Ian MacCulloch BSc FAIMM MMICA
Managing Director

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Our Ref: AG:CR: 02/0052
W:\CORRESPOMRI.LET

CSAHS
CENTRAL SYDNEY AREA HEALTH SERVICE

11 December 1998

02935122222

Dr Carolyn Mountford
Executive Director,
Institute for Magnetic Resonance Research,
Department of Medicine
Building D06
UNIVERSITY OF SYDNEY 2006

COPY FOR YOUR INFORMATION

Dear Carolyn,

I recently met with a most interesting man, while I was cruising on the Murray River in company with Tim Fischer and the Trade Policy Advisory Council. A man I suggested should make your acquaintance.

He is a Mr Lindsay Knight of Knight Industries Pty Ltd. He is a man with a passionate interest in Magnetic Resonance Spectroscopy, who has spent considerable time putting it to use in unconventional ways, despite considerable opposition (and disbelief) from his colleagues. He seems to be a true lateral thinker, and prepared to sacrifice much in pursuing his quest for results from the applications he has developed.

It occurred to me that you might benefit from an exchange of ideas, to mutual satisfaction, or even creative development. When I suggested this to him, he was keen to take the opportunity to meet someone who was similarly fascinated by the untapped potential of MRS. I offered to arrange the introduction, and hence this letter.

Lindsay will probably contact you in the next few weeks, and I will be most interested to hear if anything emerges from the contact.

Best wishes for the coming festive season,

Yours sincerely

Dr Diana G Horvath AO
Chief Executive Officer

cc Mr Lindsay Knight
Knight Industries Pty Ltd
677 Lyne Street
Lavington NSW 2641
tel: 02 6025 1335
fax: 02 6025 8754

19

William J. Kyte

B.E.(Met.), R.P.E.Q., F.Aust.I.M.M.

Telephone 02 60 328 376
Facsimile 02 60 328 376
Mobile 0409 958 178
E-Mail kyte@netc.net.au

Post R.S.D. 1155,
Rutherglen, V. 3685 Australia
Site Great Southern Road
E-N Coordinates 55H.DA.$_4$542.$_{60}$079

25. 2. 1999.

The Manager,
Knight Industries Pty. Ltd.,
Lyne Street,
Lavington, NSW.

Attention: Mr Lindsay Knight

Dear Lindsay,

Knight Direct Location System (KDLS)

You provided exploration services to me on my Exploration Licence 3976 in central Victoria, using your KDLS process, and I wanted to let you know the results of your work.

The area contains the Moolort Deep Lead and its tributaries. Parts of the deep lead system were delineated a century ago by diving and drilling. The sheer volume of water and the extensive basalt overlay has prevented mining in recent decades. I became interested in developing a technology for locating, mining and treating this alluvium, so I asked for your technical help.

We toured the area last year in your vehicle. I came with a map of the deep leads published by the Victorian Mines Department and a topographical map published by the Victorian Survey Department. One of my associates was the driver; you sat in the front passenger seat and took readings with your equipment; and I sat behind you and made notes and correlated your readings with the two maps. Both of us thought it better that you did not have access to the maps, and that I should not prompt you with information that only I had, except to say when we had left the Licence area.

We toured the Licence area and nearby land. We had not made agreements for entry to freehold land, so all scanning had to be done from public roads. There were two objectives:

* Make a general assessment of the whole Licence area for gold in deep leads;
* Select a spot where a deep lead passes under a public road, so that a confirmatory drillhole could be sunk. The deep lead should preferably be auriferous and water-bearing.

With 35 years' experience as an Engineer, I considered these objectives to be tough tests.

The correlations between your KDLS and the two maps was excellent. On the one occasion where there was a 50 m difference, I now consider that this was an error in map drafting. As we crossed our path from time to time, I had the opportunity to make a check your details from another direction. You made many predictions that could not be checked (but will be), but some predictions were confirmed.

We selected a site for a drillhole, based solely on your predictions. The map does not show a deep lead at this position, but you predicted the presence of gold and basalt forming part of a deep lead, and you predicted the depth to bedrock.

We drilled at this spot earlier this month. The basalt started at 3 m, the water started at 40 m, and the bedrock was intersected at your predicted depth of 52 m. No sample was taken for gold, because this was not part of the objective, and because the type of drilling did not allow this to be done with accuracy.

Surveying by the KDLS is far more efficient and cheaper than drilling. The accuracy of the KDLS predictions will enable us to design a complete deep lead alluvial mining procedure before mining is actually commenced, after we have made a detailed survey of the Licence area. We expect to build up a three-dimensional map showing depth and thickness of basalt and alluvium, depth to the water-table, depth to the bedrock and gold grades. This will be superimposed on the topographical map, and can be built into a computer model.

Congratulations!
Regards,
Bill K.

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T 11.

THE SENATE
PARLIAMENT OF AUSTRALIA

Senator David MacGibbon

8th April 1999

Mr Ian MacCulloch
88 Lowndes Street
BENDIGO NSW 3550

Dear Mr MacCulloch,

I first met Lindsay Knight nearly 20 years ago in the days when he was marketing his target scoring devices. I have a great admiration for his ability.

I met him again after a long break when he turned up at the hearings in Melbourne. I was very interested in his submission on the KDLS and I did speak to him privately afterwards. As someone with a scientific background I was interested in what principles it was based on, for there was no information released in the public hearing. I was not seeking any trade secrets, just the basic principles on which it operated and even in private Lindsay would yield no advice. Despite that I still have enormous regard for his technical ability. I was therefore pleased to read your letter offering an independent view on the capabilities of the KDLS.

I think it is fair to say the Committee has an open mind on the possible location of both 'Sydney' and 'Kormoran'. I am interested in the claim that Sydney was last observed on a S.E. heading. Was the ship under command and if it was, why not an Easterly heading? If it was not under command then the ability to hold a fixed heading would seem to be non-existent.

We now await a response from the government to the report. If the government does accept our recommendations then the proposed planning conference to precede any search will hopefully provide you with a forum to argue the case for the southern area search.

I hope the KDLS does prove able to pin point the wreck site of 'Sydney'. The potential search areas are so vast that, apart from the KDLS, the site will remain unknown unless there was a fortuitous finding.

Thanks for your letter.

Yours sincerely,

David MacGibbon

Senator David MacGibbon
Chairman
Joint Standing Committee on Foreign Affairs
Defence and Trade.

T 11.

307 Queen Street, Brisbane, Queensland Australia 4000 · Telephone (07) 3221 5680/82 · Toll free 1800 177 498 · Fax (07) 3229 8954
The Senate, Parliament House, Canberra ACT Australia 7600 · Telephone (02) 6277 3720 · Fax (02) 6277 3238

T 12.

Annex A 2.

MIKE GARRATT PTY LTD
ACN 007 202 673

139 Main Street
ROMSEY
VIC 3434
Tel. (03) *5429 5256* (H)
(03)9602 3820 (B) Fax. (03) 5433 *3456* or (03) 9602 3827

9th July 1999

Lindsay Knight
Knight Industries Pty Ltd
677 Lyne Street
Lavington/Albury
NSW 2641

Dear Lindsay,

RE:TESTIMONIAL ON THE APPLICATION OF ESR TECHNOLOGY IN THE SEARCH FOR PRECIOUS METALS AND HYDROCARBONS.

Lindsay Knight of Knight Industries Pty Ltd has perfected a direct location system using electro spin resonance technology in the detection of precious metals and hydrocarbons. The technology has been developed over a number of years by Lindsay and his staff and operates as a sophisticated metal direction finder.
In terms of Lindsay's system I have witnessed him using it to successfully locate gold nuggets, gold bearing ore and visible gold in quartz in a number of different situations and locations, especially where other metals are present. In one instance the gold was hidden behind 50cm thick reinforced concrete wall/pillar and the machine detected the accurate location of the gold immediately. I can vouch for the veracity of the tests as carried out in my presence.
I am also aware that grades and amounts of nugget gold can and have been detected as vouched for in the confidential attachment to this testimonial from Ray Borchers regarding the application of the technology to both an alluvial and hard rock prospects in central Victoria.
In addition to the above, I have witnessed the application of this technology in various field conditions in Victoria. The results of Knight Industries investigations confirm much of the results derived by conventional methods. In one instant the technology was applied to a mine site where the structure, location of ore bearing reefs and stoped areas had been mapped in detail.
Without any previous knowledge and within a matter of hours Knight had independently identified the following:

Thickness, strike length and orientation of ore bearing lodes

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B. M. Dunlop & Associates Pty. Ltd.
A.C.N. 080 857 583
2/356 Eden Street,
Lavington NSW 2641
Tel/Fax (02) 6025 1166
E-mail polnud@bigpond.com

July 29, 1999

Testimonial

L C Knight - Knight Industries Pty Ltd.

On Wednesday 27 July 1999 I accompanied Lindsay Knight, using his KDLS locating equipment, to locate the missing graves of persons buried in the now Old Baptist Cemetery, 5 km East of Wangaratta, Victoria.

A previous owner of the property had advised me that two persons had been buried in, approx, 1903 and that there was an unconfirmed story that a baby may have also been buried prior to 1900 in a close location. The head stones had been removed during construction of the adjacent freeway and the exact location was not visual. I had visited the site with him and shown their location.

On 27 July I accompanied Mr Knight. He activated his equipment from 3 km north of the site, unknown to him and he immediately received a positive directional signal on long buried human bones. I was driving the vehicle and the equipment continually indicated the position of the graves to a position on the adjacent roadside approx 25 meters from the graves, a second grave was also indicated further east. There were no visual indications as the position of the graves and the area was overgrown with grass about 1 meter high.

Mr Knight continued to test the first site from that position and delineated the location just left (east) of an old tree. He then entered the burial area on foot with the KDLS equipment on his back and the KDLS led him to the exact location. The area was approx 2.5 m long and 2.5 m wide. Hidden under the grass was a small remaining part of the original iron railing that was discovered later, confirming the correct position of the graves.

I had previously been advised that there were two bodies, but it was unknown whether the bodies were buried on top of each other or beside each other. Mr Knight's equipment indicated there were two bodies beside each other approx 1⅓ meters deep.

At the site Mr Knight conducted various tests, which indicated that both bodies contained teeth, one showed signs of red hair and the other brown, there was no response on black hair.

Following their location Mr Knight then pinpointed a further grave site approx 30 meters east of the location. This was a smaller area, consistent with the size of a baby.

B M Dunlop J.P
No. 5710018.

1 13

Grade of ore bearing lodes complimenting results of sampling to date
Depth at which ore would be located.
Areas of the mine already stoped.

The results of this work are staggering, in terms of exploration and development of resource projects within and outside Australia.
I do not profess to understand the physics of the system, but accept that it works just as I accept that the production of magnetic intensity or gravity maps generated from magnetometers and the like without comment. To put it bluntly the system works and has phenominal potential for application in the resource industry. The need for exploration companies to spend large amounts of money on using other sophisticated techniques in exploration will no longer be necessary.
Of all the black boxes that have been developed over the last twenty years, this ESR technology has the potential to revolutionise the resource industry.

Regards

Michael J Garratt, B.Sc., M.Sc., Ph.D., F.G.S., M.Aus.I.M.M.

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Chart No 17.

LOCATION OF THE BATTLE ACCORDING TO CAPTAIN DETMERS.

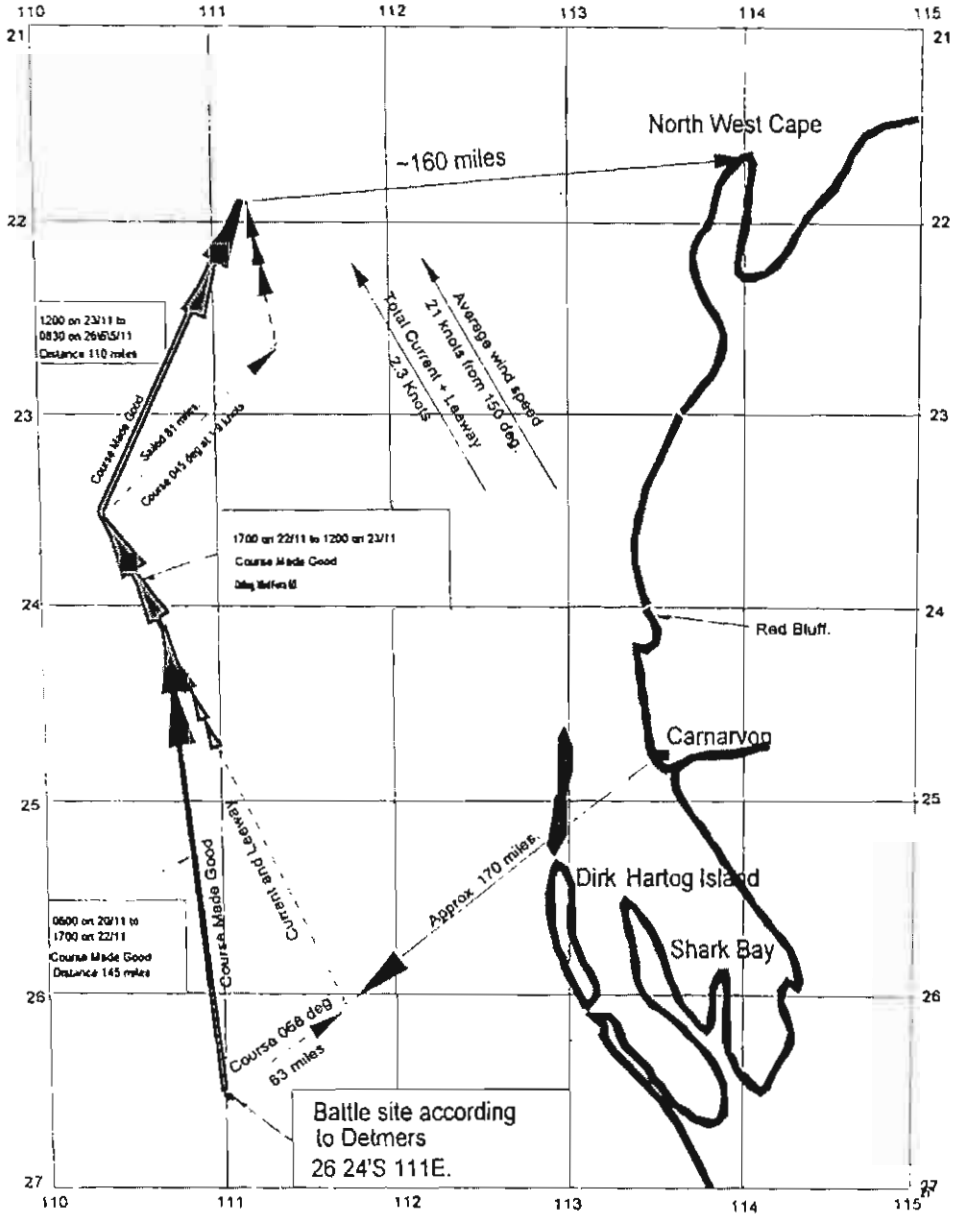
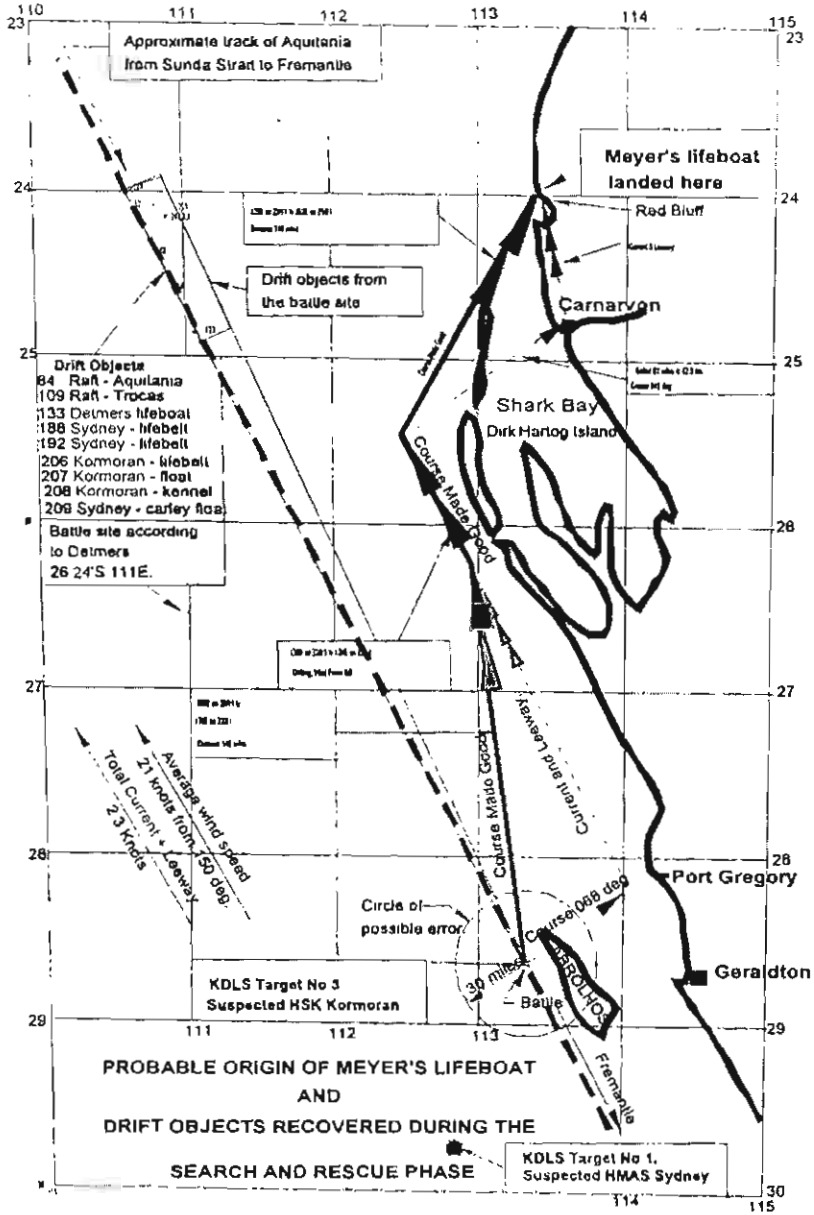


Chart No 16.

PROBABLE LOCATION OF THE BATTLE ON 19 NOVEMBER 1941.



ANNEX A.

SUMMARY OF EVIDENCE INDICATING THAT THE BATTLE TOOK PLACE IN THE VICINITY OF THE ABROLHOS ISLANDS.

by

T. Warren Whittaker.

1. Voyage of Meyer's lifeboat started in the Southern province. (Bye, Whittaker, E. McDonald and Hielscher.)
2. Detmers' and Gosseln's lifeboats up to ET 133 drifted on the reciprocal of Aquitania's track and started in the Southern province. (Whittaker.)
3. Voyage of rubber raft picked up by Aquitania started in the Southern province. (Whittaker.)
4. Voyage of rubber raft picked up by Trocas started in the Southern province. (Whittaker.)
5. The origin of drift objects using experimentally determined velocity profiles is in the Southern province. (Bye.)
6. The origin of drift objects using AMSA figures for Wind Driven Current and Leeway is in the Southern province. (Whittaker.)
7. Dispersion of drift objects indicates an origin in the Southern Province. (Bye and Whittaker.)
8. Oral History: Signs of the battle in the Southern province were observed from the shore in the vicinity of Port Gregory. (G. McDonald.) If the battle had taken place in the Northern province, signs of the battle could NOT have been observed from the shore. (Bye.)
9. Lifeboat and debris cast up at Shoal Point could have come from the HMAS Sydney following a battle in the Southern province. They could NOT have come from the Northern province. (Bye and G. McDonald.)
10. Drift Card experiments indicate the location of the battle in the Southern province. (Bye)
11. The sighting of HMAS Sydney steaming south at high speed at 1000 on 19 November 1941 off Dirk Hartog Island is consistent with the battle in the Southern province. (Whittaker)
12. Captain Detmers and Navigator Capt.Lt Meyer indicated the sun's magnetic bearing at sunset on 19th November 1941 to be 250°. This would have occurred in the Southern province. The sunset bearing at the Northern site was 251°. (Byron-Scott and Bye 1998.)
13. KDLS Detected Target No 3 (Suspected HSK Kormoran) at 28° 38'S, 113° 22'E in the Southern province. The Kormoran sank close to the site of the battle. KDLS Target No 1 (Suspected wreck of HMAS Sydney) was detected about 90 miles to the South South West. (Knight and Whittaker).
14. A library search for wrecks by the Hydrographic Office found no records of wrecks in the vicinity of KDLS Target No 1 or No3 in the Southern Province. (Whittaker.)

Contact information.

T. W. Whittaker, 1060 Calimo Street. ALBURY NSW 2640
PH 02 6025 6338 Fax 02 6025 0365 MOB 0409 256 339 e-mail wwhittake@albury.net.au

THE SEARCH FOR THE WRECKS OF HMAS SYDNEY AND HSK KORMORAN.

by T. Warren Whittaker.

There are two possible areas for an in-water search: **The Northern province**: 170 miles south west of Carnarvon. **The Southern province**: West and south west of the Abrolhos Group.

This analysis demonstrates that the voyage of Meyer's lifeboat did NOT start in the Northern province.

It is probable that the voyage started in the Southern province west of the Abrolhos Group.

Apart from my own work, this analysis is supported by other experts including Oceanographer Dr John Bye, Navigators LCDR Ean McDonald and Glen Hielscher also Historian John McArthur. Also, most importantly, a submission by the Navy's Chief Navigational Instructor LCDR David McDonald.

THE NORTH - CHART No 17.

Captain Detmers stated that the battle took place in the vicinity of 26° 34S, 111°E.

- No wrecks located by KDLS in the area bounded by 26°S, 110°E and 27°S, 112°E..
- The Hydrographic Office has no records of wrecks in the area.
- The voyage of Meyer's lifeboat did NOT originate from this location. See Figure 3 and Chart No 19, Submission to the seminar: "The Voyage of Meyer's Lifeboat" by W. Whittaker also assessment by LCDR D.V. McDonald PWO SW N+ C:
- The drift objects did not originate from this area.
- If the battle had taken place in the vicinity of 26° 34S, 111°E, it is probable that all the survivors from the Kormoran would have been swept into the Indian Ocean and perished.

THE SOUTH - CHART No 16.

It is probable that the battle took place west of the Abrolhos Islands. KDLS Target No 3 located at 28° 38'S, 113° 22'E is suspected to be the wreck of HSK Kormoran in approximately 800m of water. The debris field covers about 10 square km. KDLS Target No 1 located at 29° 58'S, 112°48'E is suspected to be the wreck of HMAS Sydney in 5000+m of water. The debris field covers about 8 square km.

Altogether 14 sets of evidence supporting the vicinity of the Abrolhos Islands as the site of the battle have been identified. See **Annex A.**

CONCLUSION.

1. The statements by Kormoran survivors that the battle took place in the SW of Carnarvon are false.
2. **It is probable the battle took place in the vicinity of the Abrolhos Islands.**

RECOMMENDATION.

Mount a search for KDLS Target No 3 in 800m of water. If this is identified as the wreck of HSK Kormoran, the much more expensive search for the wreck of Sydney at KDLS Target No 1 can be mounted with some confidence. There will be no need to search the Northern area.

This plan provides the best chance of success at minimum cost.

GERALDTON AIR CHARTER PTY LTD
BREARLEY TERMINAL
GERALDTON AIRPORT
MOONYOONOOKA WA 6532

Phone 08 99233434 Facsimile 08 99233262

T 14.

TESTIMONIAL

SUNKEN SHIP LOCATION BY KDLS

BACKGROUND

In 1914 the SS Cambewarra, a coal fired ship of 450 tons was wrecked off the Western Australian coast at Latitude 30^0–12'-6" and Longitude 114^0-49'-5", approximately 18 kilometres off the coast, and 165 kilometres South of Geraldton.

SHIP DETECTION

On the 24th of May 2001 I flew Lindsay Knight, owner and designer of MK29"B" KDLS (the Knight Direct Location System), and Warren Whittaker, Navigator, towards the above co-ordinates. Lindsay said he had set up the KDLS to detect black steaming coal.

At about 40 nautical miles from the target area, and at a height of 4000 feet, Lindsay announced that he had a signal on coal ahead. As we approached the target area he gave a running commentary into a tape recorder indicating the closing KDLS distance from the target and Warren indicated the GPS distance from the target for calibration purposes.

Within very close proximity of the target co-ordinate, the KDLS indicated we were directly over the top. Then the readings stopped as we passed over. We continued on for about 2 nautical miles to give Lindsay time to put iron into the KDLS aerials and to tune the machine to iron. He then announced that iron was at a bearing of 2 o'clock. We flew back and the KDLS aerials pointed at the target, then indicated we were over the top again at the same place as indicated by the coal reading.

I witnessed the above proceedings, and certify that the above is a true account of what took place.

I have flown Lindsay Knight and Warren Whittaker on many KDLS survey trips in the past.

SIGNED

WENDY MANN
JUSTICE OF THE PEACE
CHIEF PILOT, GERALDTON AIR CHARTER PTY LTD

29/5/01

CONFIRMED

WARREN WHITTAKER
NAVIGATOR

T 14

AUSTRALIAN CRUISER HMAS SYDNEY
British "Amphion Class Light Cruiser, HMS Phaeton

RAN

CAN YOU HELP US ?
DO YOU HAVE ANY POSITIVE INFORMATION ?

KRIEGSMARINE SHIP KMS KORMORAN
HILFSKREUZER NO. 8 (OR HSK VIII) SCHIFF 41 (SHIP IDENTITY SHIP 41)

Kriegsmarine

Adjoining Chart Aus 415

Aus 327 Aus 328 Aus 329 Aus 330 Aus 331 Aus 332 Aus 326

E x m o u t h Plateau

C U V I E R BASIN

I N D I A N O C E A N

Suggested plot of HMAS Sydney return from 17.11.1941 to 19.11.1941.

Catalina oil slick

'Tietmers' site

K suggested Kormoran Kriegsmarine sinking

KMS Kormoran on 19.11.1941. (actual course not known)

calculated plot from von Malapert diary. (Courtesy K.Kirsner, S Hughes)

KDLS Wreck No 3 Is it HMAS Sydney ?

S RAN

H.M.A.S. SYDNEY

K.M.S. KORMORAN (HSK V111)

WHERE WAS *KMS KORMORAN* AT THE TIME SHE SIGHTED HMAS SYDNEY ?

It is obvious that no person positively knows the true position where the German *Hilfskreuzer KMS Kormoran* was when she sighted *HMAS Sydney* at around 1550 hours on 19.11.1941.
What we do know as a fact, are the locations where survivors and flotsam were recovered.

We are aware of 15 different sites that have been submitted by various bodies purporting to be the position that *Kormoran* was occupying at that time .
Nine of these submissions appear within an area of 90 x 60 nautical miles, two are 180 nms from that area while four are very close to the coast. Some fail to relate to recovery positions
We can only find one site that appears to have any scientific basis.
K.Kirsner from the University of WA has conducted an exercise in which he has back-tracked the lifeboat commanded by Kapitanleutnant Meyer from diary details recorded by the German sailor von Malapert whose boat reached the coast at approximately 113.25E / 24.02S on Tuesday 25.11.1941.
S Hughes from the Australian Maritime Safety Authority also undertook a similar survey and we thank those two gentlemen for permission to quote their findings.
The Kirsner position is 111.09E / 25.57S. The Hughes position is 111.30E / 26.00S
These two estimations are remarkably similar, in a general area of thousands of square miles, they have been able to suggest a possible area of "Abandon Ship" of about 63 square miles, an area bounded in the west by longitude 111.09 and in the east by longitude 111.30, a variation of 31 miles, in the north by latitude 25.57 and in the south by latitude 26.00, a variation of just 3 miles
We can be reasonably certain that *Kormoran* sailed on a course of 253 degrees for about 90 minutes after the sighting and an unknown distance while exchanging fire with *Sydney* for less than 30 minutes,we suggest a distance of 25 to 28 nautical miles
We can return from the "Abandon Ship" position detailed above, to the sighting position, by placing *Kormoran* about 25 nms on a reciprocal bearing to 253 degrees
When we complete that exercise, we find *Kormoran* roughly at 111.09E / 25.57S and again roughly in line with a fairly regular course that *Sydney* had established when travelling between Sunda Strait and Fremantle. (proof of this is supplied by the Western Australian Maritime Archaeology Report number 71, clause 9.3)
During interrogation of survivors, and in other reports released after the war, it has been reported that *Kormoran* made the first sighting of masts on the horizon "fine on the port bow"
On this chart we have assumed that *Sydney* was conforming to her previously established line of travel when she crossed 26 degrees of latitude at : 111.34E. 111.37E. 111.39E.
For the purpose of this exercise, we have placed *Sydney* so that she would cross 26 degrees latitude at 111.38E which we suggest could be feasible but we must stress that we have no definite proof that this was the correct course. **But it does appear to be within *Sydney's* established pattern.**

We do have positive facts concerning the recovery of survivors and flotsam

Recovery number 1
His Majesty's Australian Transport Ship *Aquitania*, sighted a rubber raft laying low in the water at 0600 hours on Sunday 23.11.1941 at position 110.57E / 24.35S and recovered 26 adult males about 83 nms from the Kirsner position after it had been adrift for about 83 hours, a drift rate of 1 knot.
This recovery was effected about 151 nms almost due west of the Port of Carnarvon

Recovery number 2
The Shell Company Tanker *Trocus* recovered a raft containing 25 adult males at 1500 hours on Monday 24.11.1941 at position 111.40E / 24.06S about 115 nms from the Kirsner position and about 114 nms west-north-west of Carnarvon after about 113 hours adrift, drift rate again 1 knot

Recovery number 3
The Motor Vessel *Centaur* located a heavily laden lifeboat containing 62 adult males at 1700 hours on Wednesday 26.11.1941 at position 111.35E / 24.30S. it has been calculated that the weight of 62 adult males could be between 4 and 5 tonnes, so there can be no doubt about it being heavily loaded.
This lifeboat was recovered after being adrift for about 149 hours but, almost certainly due to it's gross overloaded weight which may have precluded any chance of it being pushed by winds, it drifted for only 90 nms, an indicated drift rate of 0.65 knots which is relative to the speed of the ocean currents

Recovery number 4
The coastal steamer *Koolinda* recovered 31 adult males at position 112.47E / 24.07S on Wednesday 26.11.1941 from a steel lifeboat, but as this boat only had 31 men aboard (compared with 62 and 72 from the two badly overloaded lifeboats) it's lighter weight obviously contributed to the fact that it drifted for 140 nms in 149 hours, an indicated drift rate of 0.94 knots similar to recoveries 1 and 2.

Recovery number 5
The RAN Auxiliary vessel *HMAS Yandra* recovered 72 adult males from yet another grossly overloaded lifeboat on Thursday 27.11.1941 at position 112.22E / 24.59S
After 159 hours adrift, this heavy lifeboat had only drifted 78nms, an indicated drift rate of 0.49 knots and once again relative only to ocean current speeds.

Recovery number 6
A lifeboat equipped with effective sails reached the Australian coast at Quobba Sheep Station on Monday 24.11.1941 with 46 adult males aboard about 160 nms from the Kirsner position As a sailing boat, no purpose would be served by any attempt to calculate it's speed . It reached the coast about 45 miles north of Carnarvon

Recovery number 7
A second steel lifeboat equipped with sails and containing 57 adult males (plus a dog and a monkey) reached the coast at Red Bluff, about 167 nms north west of the Kirsner position. This boat arrived offshore at dusk on Monday 24.11.1941 but Kapitanleutnant Meyer would not risk negotiating the offshore reefs in darkness so did not make landfall until the morning of Tuesday 25.11.1941
As with recovery number 5, no purpose would be served by attempting to calculate it's speed but a sailor maintained a rough diary, recording basic details which has enabled a scientific study by K Kirsner / S Hughes to back-track this lifeboat from it's point of origin
We have now recorded the recovery of 319 survivors, let us now examine flotsam recovery.

Recovery number 9
At 1815 hours on Friday 28.11.1941, 8 full days after the encounter, *HMAS Wyrallah* recovered an RAN type lifebelt at position 110.49E / 24.06S which appears to be 95 nms from the Kirsner position and about 160 nms approximately west of Carnarvon

Recovery number 10
The British Freighter *Evagoras* recovered a British type lifebelt, Friday 27.11.1941 at position 110.47E / 23.06S about 171 nms from the Kirsner position and about 190 nms from Carnarvon

On Friday 27.11.1941 *HMAS Heros* recovered a damaged Carley Float at position 110.58E /24.07S which is about 113 nms from the Kirsner position and 152 nms approximately west of Carnarvon
This float had not been damaged by flames and rests in the Canberra War Museum

Recovery number 12
HMAS Wyrallah recovered four German rafts that had lashed together, on Saturday 28.11.1941 at position 111.09E /25.57S. The body of a German sailor was aboard and this was buried at sea after the clothing had been removed for identification purposes. This recovery was effected about 116 nms from the Kirsner position and about 162 nms west of Carnarvon. These rafts could have been adrift for approximately 183 hours, a drift rate of possibly about 0.63 knots

Catalina Oil Slick
A Catalina Search and Rescue Flying Boat saw what they thought was an oil slick about 140 nms north north west of the Kirsner position and 215 nms off the coast. It is thought that this was just too far from the proposed area of engagement to be associated with the battle and surface craft were unable to locate any trace when they reached that area, so sadly, this must be ignored.

We refer you to KDLS 3, a site selected by the Knight Direct Location System in January 1998 as the location of an unidentified wreck. This wreck appears to be 220 nms south east of the Kirsner position only 22 nms west of Wallabi Island in the Abrolhous group and possibly in a water depth of 800 m
German survivors reported that they saw *Sydney* sailing in that general direction at "about 8 knots"
But they had problems of their own, they were in the process of Abandon Ship procedures and the exact course that *Sydney* was sailing may not have been of major importance to them
KDLS 3 appears to be on a bearing of 146 degrees which may be close enough to the German estimate, but at 8 knots, *Sydney* would have to have remained afloat with her engines operating for about 25 hours conceivably to sink around 1900 hours on Thursday 20.11.1941.

Nobody knows the true facts about what occurred all those years ago, but surely there is enough doubt raised in these documents to make it worthwhile for our Authorities to arrange for an examination of the wreck at KDLS 3, that is in the area 113.21.56E / 28.38.39S, followed by a thorough search for *KMS Kormoran* in the general area around 111.09E / 25.57S ?

What do we positively know about *HMAS Sydney* ?

1. **She left position 104.40E / 07.56S near Sunda Strait around noon on Monday 17.11.1941 to return to Fremantle where she was due during the morning of Thursday 20.11.1941.**
2. **We have proof that, on many trips to and from Sunda Strait, she sailed north west from**

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What do we positively know about *HMAS Sydney* ?

1. **She left position 104.40E / 07.56S near Sunda Strait around noon on Monday**