Registered by Australia Post Publication No. NBP 0282 ISSN 0312-5807



VOLUME 14 NOVEMBER 1988 NUMBER 4

#### JOURNAL OF THE AUSTRALIAN NAVAL INSTITUTE



# AUSTRALIAN NAVAL INSTITUTE INC

The Australian Naval Institute Inc was formed and incorporated in the Australian Capital Territory in 1975. The main objects of the Institute are:

- a. to encourage and promote the advancement of knowledge related to the Navy and the maritime profession.
- to provide a forum for the exchange of ideas concerning subjects related to the Navy and the maritime profession, and
- c to publish a journal.

The Institute is self-supporting and non-profit-making. All publication of the Institute will stress that the authors of articles express their own views and opinions and that these are not necessarily those of the Department of Defence, the Chief of Naval Staff or the Institute. The aim is to encourage discussion, dissemination of information, comment and opinion and the advancement of professional knowledge concerning naval and maritime matters.

The membership of the Institute is open to:

- a. Regular members. Regular membership is open to members of the RAN or RANR and persons who having qualified for Regular membership, subsequently leave the Service.
- b. Associate Members. Associate Membership is open to all other persons not qualified to be Regular members, who profess an interest in the aims of the Institute.
- c. Honorary Members. Honorary membership is open to persons who have made a distinguished contribution to the Navy or the maritime profession, or by past service, to the Institute.

#### CONTRIBUTORS

In order to achieve the stated aims of the Institute, all readers, both members and non-members, are encouraged to submit articles for publication. Preferably, submissions should be typed, double spaced, on A4 paper; the author's name and address must be shown clearly, even if a pseudonym is required for printing purposes; to be eligible for prizes, original articles must be accompanied by statements that they have been written expressly for the ANI; and short biographies will be welcomed. The Editor reserves the right to reject or amend articles for publication.

#### DISCLAIMER

Views expressed in this journal are those of the authors, and not necessarily those of the Department of Defence, the Chief of Naval Staff or the Institute.



#### CONTENTS

TITLE	GE
From the President	2
From the Editor	3
	4
Letters to the Editor	
Sail Training — Young Endeavour by Commander F.A. Allica, RAN	5
The ANZAC Frigate Project: The Crucial Choice	100
by Commander P.J. Shevlin, AM, RAN (Rtd)	10
A Personal Comment on Personnel Appraisals	
— Part 2, by Commander G. Cutts, BA, PGCE, GradDipLib, RANEM	14
The Two-Ocean Navy — A Realistic Maritime Strategy	
by Lieutenant Commander I.G. Broadsmith, RAN	28
Forgotten Policy, Forgotten Ship (by Ray Jones)	42
	47
	51
Book Reviews	53
	58
4.00 4.00 10 4.00	60
	60
	61
	62
- Cake assessing the residence of the re	63
	-
Nomination Form for Election of ANI Officer Bearers	64

Articles or condensations of articles are not to be reprinted or reproduced without the permission of the Institute. Extracts may be quoted for the purposes of research, review or comment provided the source is acknowledged.

Cover: STS YOUNG ENDEAVOUR captured during a relaxing moment off Jervis Bay.

## FROM THE PRESIDENT



In his letter to the editor in the last issue of the Journal, Commander Dovers expressed very clearly the concerns many have regarding the future of the Institute. The membership is growing old, and too many are not prepared to participate.

I believe these trends are true, and we must reverse them by making membership of the Institute attractive and professionally rewarding. I hope the Vernon Parker Oration will be a step in the right direction, and offer members the opportunity to hear eminent speakers to whom otherwise they would not have access. In early 1989 a brochure describing the Institute and inviting membership will be available for distribution to ships, establishments and the Defence Force Academy. I am also considering the establishment of an annual, or possibly quarterly, ANI prize for the best paper specially written for the Journal — on a subject related to the aims of the Institute. The competition would be open to all comers and the prize would be financial. Is there anything else we should be doing? What do you think?

The Institutes Annual General Meeting will be held in Legacy House, 37 Geills Court, Deakin, ACT, at 1930 for 2000, on Thursday 23 February 1989. There are important matters to discuss apart from the election of Councillors and office holders for 1989. If you have a view on the way

ahead come and express it.

The Institute has been well served by a team of enthusiastic councillor's during 1989, but several must leave. If you are confident you have the answers and can help steer the Institute in the right direction think about joining the Council. You will be surprised how satisfying 'participation' can be.

Sincerely lan Callaway

#### FROM THE EDITOR

It is embarassing to any editor when typographical and layout errors occur in a publication. The August Journal had too many and my apologies go to all readers and LCDR. M. Brice in particular.

The objective of keeping the magazine to 64 pages (plus cover) cannot occur without more articles from members and non-members of the Institute. Evidently I need six weeks lead time to ensure timely distribution of the magazine — particularly at the festive end of the year.

Institute members are asked to view the membership listing insert and forward corrections to

the Secretary — it helps ensure you get your next copy of the magazine.

This issue of the journal includes the second part of Geoff Cutt's article on 'Personnel Appraisals' and I anticipate some letters on this subject. The article by CMDR Allica on the YOUNG ENDEAVOUR will interest those readers not already familiar with the adventure in sailing that YOUNG ENDEAVOUR provides for young Australians. An article of historical flavour — by Ray Jones — reflects upon the early years of the RAN when the need to establish a RAN was of pressing importance to Australians but not considered so by the Admiralty. In a different vein, the article by LCDR Broadsmith reflects on the two-ocean Navy policy being implemented by government and the consequential resources required. Whilst the article concerning the 'Näcken' submarine is a press release from KOCKUMS it provides a useful introduction into the concept of utilising a Stirling cycle engine as the propulsion unit for a submarine.

Finally, I would like to hear from readers who feel they have positive suggestions to improve the

standard of the journal.

Sincerely Don Agar

#### LETTERS TO THE EDITOR

Recently I have had occasion to reflect on my involvement in the Institute and I have the feeling that the Institute, and in particular the Seminar, seems to have lost touch with a major group through which it could and, I suggest should serve; I refer to the career officers and sailors, who are not necessarily first XI.

I accept that I had my chance to change this and admit that I accept the priorities which we set for ourselves. However, with the penetrating perception of hindsight, I believe that too much attention was paid to organisational aspects and too little on the intellectual process which we were offering. I think that we were all blinded by the outstandingly pucka way in which previous Seapowers were presented and set out to beat this rather than produce more impact.

I now believe that we could have made a greater effort to provide a stimulating program which capitalised on this opportunity. This could have been achieved through more use of younger members in the shaping of the program and in participation of some of the more formal and

social proceedings. I guess I have a burr about the almost sycophantic way the RAN treats its senior officers, and ignores the rest. I guess that I am saying it was all very fine for the "in crowd", but not a big draw to the majority of the profession of arms.

As it is now I believe that the seminar, and perhaps the Institute caters more for the older and more senior and the "gun runners" than it does for this greater body who have a career commitment to things naval. Additionally, we would seem to have lost the attendance of many of the host of retired officers who live in Canberra, but who were not unduly distinguished in their naval careers, I am now amongst them.

With those few words, I close the last door on what was a singularly proud period of my life. Thank you to the Institute for what it did in keeping me in touch for a few extra years, and thank you for the experience of working with you on Seapower 87; in whatever role.

K.P. Railton CMDR RANEM



# SAIL TRAINING — YOUNG ENDEAVOUR

By Commander F.A. Allica, RAN

#### BACKGROUND

On 25 January 1988 the Government and the people of Great Britain and Northern Ireland presented their Bicentennial gift to the people of Australia in the form of the sail training vessel—YOUNG ENDEAVOUR.

When the gift was first announced by the Prime Minister in 1986 there were considerable debate as to who would operate and maintain the vessel and how would it be used.

In the terms of the gift it was to be for the Youth of Australia. It involved outdoor educational activity and would cost money to operate. Who indeed was to be responsible for the vessel? The debate went on for some time and many interdepartmental meetings were held. As the gift was government to government. Prime Minister and Cabinet must take the lead, it would cost money to operate so Department of Finance were interested. Naturally Sport and Recreation and Education too were involved as were Defence (Navy). Perhaps the Australian Maritime College or Outward Bound (Australia) might wish to operate the vessel. The debate went on. Fortunately, the Chief of Naval Staff, Vice Admiral Michael Hudson, was keen to see the white ensign flying from the gaff of this most prestigous vessel and volunteered Navy's services to man and operate the vessel. Whilst the operation of the vessel was resolved, the operation of the Youth Scheme was subject to debate for another 12 months before time ran out and Navy were instructed to inaugurate the Youth Scheme as well. This is a most unusual step and created a precedent. The Royal Australian Navy is the only arm of a defence force in the world which operates a sail training scheme for civilian youth.

There is no doubt that YOUNG ENDEAVOUR is a most imaginative and generous gift by the British people and of significantly greater use than the alternatives of an English country garden or a clock tower.

Fortunately, the atmosphere was right for the inception of the YOUNG ENDEAVOUR Youth Scheme. Already a lot of interest had been created by the Bicentenary celebrations. The Tall Ships event was the major Australia Day attraction and the First Fleet Re-enactment vessels had caused significant media interest, albeit not all favourable. Already a market for sail training was being pursued by the barquentine LEEUWIN in Western Australia, and a second

vessel, the ONE AND ALL, had been built in South Australia.

YOUNG ENDEAVOUR, a 44 metre (OAL) brigantine of 200 tonnes displacement, had already received considerable media coverage. She was built in Lowestoft, Suffolk, was named by the Duchess of Kent in June 1987, and departed Cowes, UK on 3 August 1987 for Australia. Although flying the British red ensign she was manned by a joint British and Australian crew. The 38 member crew included four RAN personnel and 24 young people aged between 18 and 24, most of whom were experiencing their first time at sea. The young Australians had been chosen from 17,000 applicants, male and female who had responded to a national selection campaign run by the Australian Bicentennial Authority.

YOUNG ENDEAVOUR's route was via Tenarife. Rio de Janeiro, Triston da Cunha and Fremantle before participating in Bicentennial events in all states including the Tall Ships event. When YOUNG ENDEAVOUR arrived in Sydney she had taken line and handicap honours in the square rigged division of the Tall Ships race and, after leading on handicap for several days, finally was awarded 3rd place on handicap in the race overall. Her name was already well known and the scheme was reasonably assured of success.

#### **OBJECTIVE**

The objective of the YOUNG ENDEAVOUR Youth Scheme is to aid in the personal development of Australians in the areas of self discipline, team spirit, pride of accomplishment and leadership.

These objectives are similar to those of any number of organisations, particularly in the outdoor education environment. Certainly sail training is not the only means by which such objectives can be achieved, but it is one of the most rewarding. In the process, young people will gain considerable knowledge of sailing, seamanship and a broader knowledge of the maritime environment.

#### PROGRAMME

YOUNG ENDEAVOUR's programme is based on a ten day training cycle. The ship normally sails on a Tuesday and arrives at the port of disembarkation the following Friday week. Generally the ship remains at sea or at remote

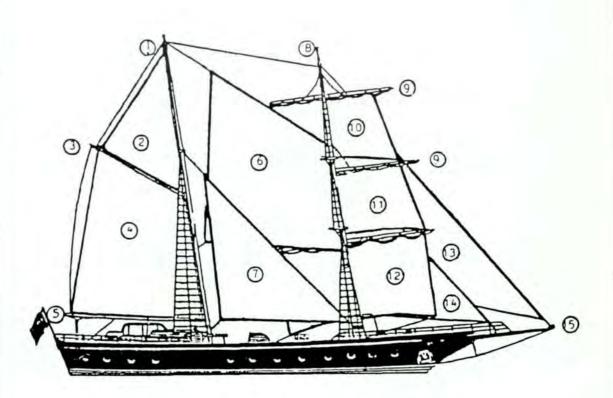
#### YOUNG ENDEAVOUR

The Royal Australian Navy (RAN), on behalf of the Young Endeavour Youth Scheme, has responsibility for operating the ship.

STS YOUNG ENDEAVOUR will be operated by a RAN crew of nine and will operate around the Australian coast and adjacent waters.

#### SAIL PLAN

- 1. Main Mast
- 2. Main Topsail
- 3. Main Gaff
- 4. Main Sail
- 5. Main Boom
- 6. Fisherman Staysail
- 7. Main Staysail
- 8. Foremast
- 9. The Yards
- 10. Fore Topgallant
- 11. Fore Topsail
- 12. Fore Course
- 13. Outer Jib
- 14. Inner Jib
  - 15. Bowsprit



anchorages except for a short call at the mid point of the voyage when the ship normally opens for public inspection.

#### IMPLEMENTING OBJECTIVES

Whilst the aims and objectives of the scheme are similar to other outdoor education organisations, the means of achieving these objectives are often quite different and certainly, the problems are significantly different. A square rigged sailing ship is a complicated machine. The maritime environment is also unique and beyond the experience of most young people. In order to live and work as a member of the ships company, it is necessary at least in the initial stages of a voyage, to implement, a programme of instruction on the principles of sailing, shipboard safety, nautical terminology, navigation and other subjects which allow them to assimilate into the marine environment.

It is difficult to find the right balance and level of instruction. The Youth Crew have been through no selection process or screening and come from all walks of life. Some are interested in sailing and have worked hard to earn their fee to come aboard. Many however, are there because their parents thought it would be good for them. Some also may be sponsored as part of a scheme to allow disadvantaged persons to sail in YOUNG ENDEAVOUR. The Government has stated publically that 25 percent of the Youth Crew will be from the disadvantaged sector.

Some are still at school, some are in the workforce, others are at university and several will probably be unemployed. One of the principles of sail training is to bring all these persons together, to live and work closely so that each will learn from the other. It breaks many out of their protective cocoon and introduces them to persons and ways of life they may never have experienced.

Naturally all respond differently. Some are keen to learn, some do their bare minimum. But all are put under pressure, at least in the first few days.

The emphasis is on teamwork and working in a team environment. The trainees are the crew and the ship cannot operate without them. They keep watches and are involved in sail setting and furling, anchorwork, berthing, rigging ladders and awnings and all maner of general shipboard duties including cleaning the ship and working as the cooks assistant and as messmen. They may be called on deck at any time of the day and night, to tack or wear the ship or hand sail if the weather deteriorates. They soon learn a sense of responsibility. Loners don't do well. Peer pressure is a significant factor in making most conform.

The fear of going aloft is real to most. The tentative steps of the first day for most, give way to a confident scramble aloft at the end of the voyage. Nevertheless, its prudent to shorten sail early in deteriorating weather, as volunteers to hand sail in foul conditions are sometimes hard to find and often the staff crew may have to be called out. Those that do join in get a "buzz" and real feeling of achievement when they lay below.

Instruction is pitched at a level equivalent to stage 1 midshipman sea training. That is, at officer level although terminology may be simplified. Naturally not all respond or absorb at the same level and so it is necessary to grade the level of activity that Youth Crew will be required to take part in as a leader. Towards the end of each voyage, individuals are elected from each watch to act as captain, sailing master or XO, navigator and as watch leaders. Each watch is then given the task of sailing the ship between two points, generally from one anchorage to another. This is an intensive but rewarding part of the voyage.

Unlike outdoor education institutions it is difficult to hand over total control to the trainee. In the bush, it is possible to leave trainees totally to their own devices so that it is solely their own actions which determine the outcome. In the shipboard environment this is more difficult. In inshore waters and even on the high seas, most captains will be reluctant to hand the ship over to the trainee without some supervision. The asset is too expensive, and the risks to a great. In strong winds also, it is easy for gear to be damaged and for accidents to happen, Whilst trainees take charge of most activities they realise that help is at hand.

The trainee must also be able to absorb and apply a lot of technical information to be able to adequately carry out many outboard activities. Not all are leaders nor have the potential. It is also important to build on the trainee's confidence. He/she should be given the opportunity to succeed despite limited technical knowledge. A total failure in an activity destroys confidence and in general is destructive of leadership prowess.

#### **VOYAGE LENGTH/LASTING EFFECTS**

Ten days is very limited period in which to achieve the objectives of the scheme. In comparison, Junior Officers who are selected for training in the RAN, have already been thoroughly screened academically, physically and mentally prior to being accepted for entry. By the time they commence their first training at sea, they will have completed several months intensive training. Even then the level of responsibility given them during their first sea service is very low. In

YOUNG ENDEAVOUR, a similar process is being attempted with unscreened persons, but with much higher levels of responsibility and expectations. It is quite amazing to see the transformation from the uncoordinated individuals on day one, to the closely knit team on

departure 10 days later.

For lasting effects however, the time aboard is insufficient. Although feedback from the Youth Crew is very positive and most encouraging to the staff, most likely it is attributable to what is termed the "warm bath syndrome". All have been through an unusual and somewhat harrowing experience and have survived. They have pushed boundaries they either consciously or unconsciously thought they would never cross. They have learnt a lot and worked closely with others in a very new environment. Most have made friends. They have (usually) enjoyed the experience and are elated. But whether or not the skills gained and qualities brought out during the voyage are lasting is difficult to quantify.

Outward Bound (Australia) consider that in order to have lasting benefits, 26 days is about the minimum time in which this can be achieved. There is a need to "unfreeze" a person, early in the cycle, to bring them all to the one level, and obviate their normal hierarchial structure. Then begins the process of education followed by a period where the new values and standards imposed are "refrozen". Outward Bound has spent significant resources in determining the success (or failure) of their courses and a large amount of data has been collected which suggests their standard course has life long effects.

There is no reason why similar lasting effects could not be gained in YOUNG ENDEAVOUR. A 10 day voyage is probably too short, and in keeping with Outward Bound experience the course may have to be lengthened significantly.

probably doubled to 20 days.

This could have several adverse effects. Firstly the Youth Crew throughput would be halved. At present 23 voyages per annum are programmed with 24 trainees (total 552). Doubling the time onboard must result in doubling the fee. This would put the price beyond the average persons resources. In addition, whilst 2 weeks is a period that can be taken off from work or studies, four weeks would be too long. Most applicants would wish to sail during the summer vacation or end of year breaks. At other times it would be difficult to fill billets. Perhaps however, it might be possible to operate a pilot course to establish the feasibility of programming a few longer courses at appropriate times.

In order not to use any more ship time it could be possible to incorporate a land component into the course so that trainees were landed at some point in the voyage for outdoor adventurous activities ashore, this would require the provision of a shore support cell, which must include, trained outdoor educationalists and appropriate equipment. In this manner, ship time could be maximised but costs minimised. Outward Bound Hong Kong offer a course similar to this with their brigantine JI FUNG which regularly transits between Hong Kong and the Phillipines.

A similar use of YOUNG ENDEAVOUR would require her to operate in a more confined area than present, so that one Youth Crew could be brought from a major port, disembarked into the shore training area, and a second group of trainees could be then embarked for passage back to the original port of embarkation. Confining the ship to a limited area of operations may result in increased costs, as trainees would need to be brought from all over Australia, rather that the present system which in most cases allows the shi freedom to move to where the trainees live, thus reducing the cost of travel which is a component of the voyage fee.

Lengthening the training time as proposed above is a possibility, but should not be attempted without in depth evaluation and cost analysis. Whilst it may be possible to have lasting long term effects from a longer course, the trainee throughput is not high and additional supporting infrastructure would be required. Perhaps it is better to accept that the shorter 10 days voyage does achieve all the stated objectives and, although trainees may not experience lasting effects, they have experienced an exciting and stimulating adventure under sail which has introduced them to the maritime environment. For all, it is a memorable experience. For most, they will return to their life where they left it. For some, it is a turning point, a time to re-evaluate their lives, where they are coming from and are going to. For most, the environment is so different, that they do stop to think and evaluate. Perhaps that is enough.

#### FINANCIAL ASPECTS

In comparison with other outdoor educational institutions, sail training is relatively expensive as trainee throughput is not as high as can be achieved in land operations. Nevertheless there is a place and demand for sail training.

In the United Kingdom, the UK Sail Training Association has been operating two ships for over 20 years. New Zealand has recently built a second ship and has been running a most successful operation for many years. The LEEUWIN in Western Australia is finding operations difficult, mainly because of the limited market and that she is continually operating in rough weather on a lee shore with limited ports of shelter. There a several other sailing organisations either operating, or about to commence operations on the Australian coast, the ONE AND ALL and FALIE in South Australia, the ALMA DOEPEL in

Victoria and several other smaller vessels. YOUNG ENDEAVOUR is well placed, being a national vessel, operating in the major population centres and sponsored by the Federal and to a lesser degree, State Governments. But how long will this last?

YOUNG ENDEAVOUR is for the moment funded by a special appropriation set aside for this purpose. She is operated, manned and maintained by the Royal Australian Navy. The Youth Crew are selected by each state government and nominations are forwarded through the YOUNG ENDEAVOUR office in Darling Harbour.

A Board of Management has been appointed to administer the scheme. Two of their responsibilities are fund raising and supervising the expenditure of funds. Whilst the Scheme relies primarily on Government financial support, it is probable that in time, it may be required to become more self-supporting. This would indicate a requirement for the Board to control both income and expenditure. While in essence this is the case, the vessel is operated by Navy which is not necessarily the cheapest means and is to a degree, beyond the Board's control. Whilst Navy are providing the men and technical means to support the scheme, all costs incurred are debited to the appropriation item. Not only are wages debited but the full on costs of RAN personnel as well. In all cases whether stores or services are provided by Navy, or from a commercial source, a cost is incurred. Consequently the cheapest source is sought and often Navy is not the preferred supplier.

Operating costs are not cheap. Whilst fuel is not a significant factor for a sailing vessel, provisions, maintenance, travel and particularly wages are expensive. The voyage fee of \$623.50, which includes an element for insurance, is only a quarter of the levy it would be required to charge to recover total expenditure. Consequently either costs must be reduced, or sponsorship is continued by the government or sought from the private sector.

Operating under the white ensign lends a great deal of respectibility to the scheme. Officers and men are specially selected, qualified and trained for the task. Food is of an excellent standard and there is a discipline amongst the Staff Crew not found in other similar schemes. Feedback from the Youth Crew has been very favourable and indicates that despite the disciplined background of the Staff Crew, they are very human and have a strong rapport with the Youth Crew.

Nevertheless this professional expertise is exacted at an expensive price to the scheme. Department of Finance continues to insist upon levelling a charge for full on costs for the naval salary. This effectively doubles the cost of manpower. Qualified crew could be hired from mer-

chant sources at significantly less cost. Most other sail training schemes also rely upon the assistance from a "supporters scheme" who often fill billets or carry out maintenance tasks on a volunteer basis and at no cost. In some sail training ships, qualified crew are employed at less than market rates because of the love of the sea and the attraction of sailing a square rigger. Unfortunately, this sometimes attracts less desirable or less qualified persons and often has been a factor in the failure of such sailing ventures. As each cruise goes by, YOUNG EN-DEAVOUR continues to attract a growing number of young people who would be keen to assist in the maintenance and operations of the vessel. The basis of a supporters club is already there. It would be a shame if Navy was priced out of business because of a policy decision of Department of Finance.

#### SPONSORSHIP

Sponsorship from the private sector would appear to be a solution. There is a lot of interest in tall ships at the moment and most corporations would like to be identified with youth and an adventurous, outdoor activity involving the sea.

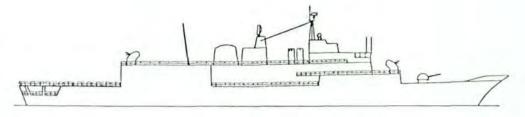
Unfortunately here too, the white ensign could cause some difficulty. Unlike the First Fleet Reenactment vessels, which, as a commercial venture, wore the emblems of their commercial sponsors, YOUNG ENDEAVOUR as a naval vessel, would not be able to engage in such blatant promotion. Other lesser forms of acknowledgement might be possible but usually sponsors require a quid pro quo. Evening cocktail cruises for the sponsors board of directors and their guests would be quite satisfactory for most sail training ships, but might raise eyebrows if under the white ensign.

This matter is ongoing like many of the other issues raised above and (no doubt) in time will be satisfactorily resolved.

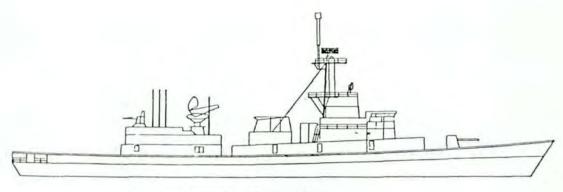
No matter the outcome, it is clear that YOUNG ENDEAVOUR will continue to operate for many years on the Australian coast in the service of the Youth of Australia. It is hoped that the Royal Australian Navy will continue to be closely involved in the operation.

#### The Author

Commander F.A. Allica is commanding officer of STS YOUNG ENDEAVOUR. He stood by the ship whilst she was under construction in UK in 1987 and saild as mate on the delivery voyage from UK to Australia. Whilst in UK he sailed in several square rigged vessels to gain experience in this type of vessel and also to evaluate these organisations as a basis to establish sail training in YOUNG ENDEAVOUR.



GERMAN DESIGN 'MEKO' FRIGATE



DUTCH DESIGN M-FRIGATE

### THE ANZAC FRIGATES PROJECT: THE CRUCIAL CHOICE

by Commander P.J. Shevlin, AM, RAN (rtd)

All readers of the ANI Journal will be aware that the RAN is seeking to procure eight frigates, and the RNZN to obtain four frigates of the same type, but, from questions directed to this writer, few people outside the project seem to be aware of the unusual features of this project. This article aims to brief members on what is being offered to the two Navies and offers the author's views on the choice that should be made. It should be acknowledged that the author is involved in this project as a consultant to one of the competing consortia. Australian Warships Systems.

#### The ANZAC Frigate Concept

In past years the RAN has selected warship designs that were seen by the Naval Staff to fit an RAN staff requirement and has then sought tenders to build such designs, either in Australia or in the country of origin. The ANZAC frigates project has evolved in markedly different ways. The ANZAC frigate concept was conceived from the report of Paul Dibb, the academic you will remember from whom the Minister for Defence sought to obtain an independent assessment of Australia's Defence needs. The report that Dibb produced in 1986, as regards Maritime Defence. recommended the procurement by Australia of a class of ship that would be less capable than the RAN's guided missile armed destroyers and frigates but more capable than the Fremantle class patrol boats. The roles that he envisaged for the recommended eight ships was long range patrolling of our Northern approaches in order to exercise Australian sovereignty in the country's 200 miles off-shore economic zone; dealing with low level harassment in our ocean approaches: but also being able to play a supportive role in higher levels of conflict. Dibbs' recommendations were accepted by the Government in the 1987 Australian Defence White Paper and the Royal Australian Navy was authorised to seek world-wide registrations of interest by companies with a proven light frigate design of under 3000 tonnes displacement, and by Australian based companies or consortiums who would undertake to build eight such ships in Australia for delivery between 1993 and 2004. The Royal New Zealand Navy then obtained their Government's agreement that four of these new light frigates would meet New Zealand's needs as replacements for their ageing Leander class

frigates. Thus was borne the reqirement for a 12 ships ANZAC frigate project. Eight European design yards offered designs and these were slowly whittled down during 1987 until, in January 1988, the Ministers of Defence of both Australia and new Zealand announced that they had selected two designs, either of which they considered would meet the two Navies requirements, the Dutch multi-purpose or 'M' type frigates, and the German Meko frigate.

#### The Build Strategy

At the same time as the two Navies were seeking suitable frigate designs to offer for tender, they were separately seeking registrations of interest from Australian companies or consortiums willing and able to build 12 frigates of whichever design the Navies selected, and provide necessary logistic support facilities. Six Australian or joint Australian/New Zealand consortiums registered such interest at the end of November 1987 and on Christmas Eve the two Ministers for Defence announced their selection of two consortiums to enter into competition to build the require frigates:

- The NSW based Australian Warships Systems (AWS); and
- The Victoria based Australian Marine Engineering Corporation (AMEC).

These two consortiums were told that when the two Governments had selected two suitable designs, each consortium was to select one of those designs and develop a tender package based on their selected design, but modified in detail as might be necessary to meet RAN/RNZN requirements.

#### Design Selection

Which of the two designs selected by the two Defence Ministers should each consortium select to go out to tender on was a crucial decision each had to make. The RAN and RNZN had specified the same weapon and equipment fits for both designs (see Note) so the two consortiums' selections of a design to tender had to be made on a comparison of the ship platform capabilities, the previous naval history of the design yards, building costs in Australia and through life costs to operate, and the parent Navy support likely to be forthcoming. The

Factors	'M' Type	'Meko'
Age of the design	First ship to this design ordered by R.NL.N. in 1984, incorporating lessons of Falklands war.	First ship to this design ordered b Nigeria in 1977.
Origins of design	Designed by Royal Schelde of Flushing to meet the staff requirements of the Royal Netherlands Navy for a new front line NATO frigate.	A commercial venture by Blohm Voss of Hamburg, aimed at an export maket & sold over 10 year to Nigeria, Argentina, Turkey and Portugal.
Number of frigates from the design yard operated by the national Navy	17 frigates from Royal Schelde in service with R.NL.N. with 8 more, 'M' class, on order.	None by Federal German Navy, which, on the contrary, operates of frigates based on the Dutch Kortenaer class design.
Through life support likely to be available from parent Navy	With the R.NL.N. taking delivery of 8 of this class of ship between now and the mid-1990's, substantial Navy-to-Navy cooperation in the training and logistic support fields can be expected.	As the Federal German Navy does not operate these ships, there is no potential for Navy-to- Navy cooperation with a Meko design.
Economy of Manpower	Dutch 'M' class require complement of 154.	Latest Mekos (for Portugal) a complement of 184
Range	'M' class designed for 5000 nm.	Turkish and Portugese Mekos designs for 4000 nm.
Ease of Construction	Royal Schelde claim that their design allows a variety of advanced naval construction methods, and is more economical to update.	Blohm and Voss claim their modular containerised construction methods are the most economical to use.

Figure 1

Australian and New Zealand Defence Departments had said that either design was acceptable, but they are in significant ways so different that it is considered useful for readers to summarise the factors which had to be taken into account when the two contenders were selecting which designs to tender. For ease of comparison, factors considered important to the two client Navies are listed at figure 1, with notes on how the Dutch 'M' and the German 'MEKO' designs compare in these areas.

After negotiations between the two Australian/ New Zealand consortiums and the two frigate design companies, by the end of February 1988 AWS had selected the Dutch Royal Schelde 'M' class design to tender and AMEC had selected the German Blohm Voss design. The two consortiums which were now ready to receive the RAN/RNZN Request for Tenders comprised:

a. Australian Warships Systems (AWS): the electronics firm, AWA, the shipbuilder, Carrington Slipways, the New Zealandbased engineering firm McConnell Dowell, the Dutch shipyard Royal Schelde, and the Australia-based international transport company TNT. AWS has shipbuilding facilities

- available at Carrington Slipways, where HMAS *Tobruk* was built and where Australia's new 7800 tonnes Antarctic support ship is currently building, and at the former NSW State Dockyard at Newcastle.
- b. Australian Marine Engineering Corporation (AMEC): the engineering companies Transfield, Eglo, ICAL and the West Australian Shipbuilder ASI, in partnership with Blohm and Voss (Australia) and the New Zealand Company MECNZ. AMEC owns the former RAN dockyard at Williamstown where the two Australian FFG's 05 and 06 are currently being built.

#### Request for Tender

The two consortiums have been requested to:

a. modify each of their designs to provide the capabilities required for patrol frigates in the Indian Ocean and South Pacific, and incorporating specific RAN/RNZN requirements. In many cases this has meant down-grading both the Dutch design, specifically created to provide a front-line frigate for the NBCD environment of a NATO Atlantic maritime war, and the German MEKO design as developed for the Southern NATO navies of Turkey and Portugal;

- b. tender to build:
  - (1) 12 of the ANZAC frigates;
  - (2) a Platform Systems Technical Support Centre;
  - (3) a Combat System Technical Support Centre; and
- (4) a Combat System Tactical Training; and
   c. tender to provide comprehensive Integrated Logistic Support.

It is a requirement of the tender that there should be a maximum of 70 percent Australian and New Zealand content and, of this, 25 percent should be New Zealand content. Obviously the two Governments are aiming to obtain a large technology transfer programme from this project as well as providing to two Navies with new surface combatants.

#### The Decision Making Process

Both competing consortiums must have their tenders in by mid-January 1989 for evaluation by the two Navies, two Defence departments, and associated Governmental departments such as the Department of Industry and Commerce. What sort of weightings will be given to what factors?

To an observer from outside the Defence complex, and a one time frigate captain, the choice would seem quite clear. The latest stateof-the-art, post Falklands War design from a design house that has been producing a series of very successful frigate designs for its country's Navy compared against a 1970's private enterprise commercial design that has not been accepted by its nation's Navy but has been selected by foreign navies not capable of building to their own naval needs. (See Factors' list above.) Selection of the former design would bring to the RAN and RNZN the backing of the Royal Netherlands Navy and the chance to liaise with that Navy on training, maintenance, modifications etc. Selection of the German design would not involve three Navies sharing in support of the same design ships.

From this seaman's viewpoint, the Dutch design provides a long, low, sleek silhouette with

a clear upper deck running from stem to stern, so helpful for evolutions, whereas the German design is shorter with a bulkier superstructure which extends to the ship's side in the vicinity of bridge and hangar, making rapid movement from fore to aft less easy. Having been to sea in the Royal Netherlands Navy's KORTENAER class frigates, lineal predecessors of the KAREL DOORMAN 'M' class, one can appreciate why the RNZN tried so hard to obtain KORTENAER class ships a few years back. They are impressively quiet and vibrationless ships with very clean lines, and their successors could only be seen as ideal new ships for the ANZAC Navies. One can only hope that competitive pricing will enable the evaluation teams to confirm this author's personal assessment.

#### NOTE:

Required equipment fit: Plus Options on:

Medium calibre gun Close-in Weapon System Surveillance radar Sonar Point Defence Missile System ASW Torpedoes Towed Array Sonar

Seahawk Helicopter Command and Control System

#### The Author

Commander Peter Shevlin had 41 years naval service as a seaman officer from 1942, joining his first ship, HMS Mutine in 1943. His Service, which included two periods of exchange in the RAN after becoming a Gunnery specialist in 1951, (1952-4) and '69-71), provided his with experience in 8 destroyer/frigate types of the RN and RAN including command of an RN frigate, HMS Loch Fyne, in the Persian Gulf, with strike carrier operations in HMS Victorious, and of amphibious ships as the Senior Officer of the RN's first Assault Ship, HMS Fearless. On transferring to the RAN in 19071, he was the first Director of Joint Warfare Policy in Navy Office until 1981 and was Project Director for the Procurement of the LCH Squadron and of HMAS Tobruk before commanding the RAN Component of AJWE until 1983. On retirement he joined Carrington Slipways as Project Coordinator for the building of the prototype Inshore Minehunters and is now representing Australian Warships Systems in Newcastle.



# Excellence in computing systems engineering



DEFINITION
DESIGN
IMPLEMENTATION
MANAGEMENT

#### SPECIALISING IN

- Real Time Applications
- Combat Systems
- Ada Software Language
- · Expert Systems
- Electronic Warfare
- Communications
  - Simulation and Modelling
  - · Computer Aided Instruction

### C3 Pty Limited INCORPORATED IN A.C.T.

A.C.T. 133/135 Newcastle St Fyshwick 2609 PO Box 184 Fyshwick 2609 Telephone (062) 80 6966 Telex AA61467 (CCCACT) Fax (062) 80 6721

S.A. PO Box 196 Elizabeth 5112 Telephone (08) 256 0291

#### A PERSONAL COMMENT ON PERSONNEL APPRAISALS — PART 2

# CASE STUDY — AN EXAMPLE OF ONE SYSTEM IN PRACTICE

By Commander G. Cutts BA, PGCE, GradDipLib., RANEM

The confidential reports that were sent to me by the Director of Naval Officers' Postings conveniently fell into two distinct groups — 11 which were written when I was a Lieutenant commander, and eleven when I was a Commander. There were three reports from my time as a Lieutenant in the RAN — I joined as a late entry with five years seniority from the RN — but no reports from the Royal Navy, even though the RAN assured me that I could not join until they had received copies of my reports from England. Perhaps some reader in England could ascertain if they still exist and let me know what I have to do to obtain copies for my family archives.

To set the background to the reports, I should say that I joined the RN as an Instructor in October 1959 on a three year Short Service Commission, with two years seniority because of my honours degree, and I served until December 1962. My service included some nine months training, including four months in HMS Hermes, two of which were her commissioning run to the Mediterranean, and a couple of years in HMS Collingwood. On completion of my short service commission, I migrated to Australia, and worked as a teacher for three years before joining the RAN in January 1966; I resigned in January 1986.

Three reports as a Lieutenant on entry to the RAN are listed as Reports A. B. and C; the 11 as a Lieutenant commander are Reports 1-11; and the 11 as a Commander are Reports 12-22. There was a slight change in format from Report 19, but I consider the changes made no difference to the overall results. For those not familiar with the system. Section I contained a narrative by the immediate supervisor about specific job performance; Section II was a numerical assessment (1-9) of personality traits; and Section III contained a narrative about general characteristics. In practice, both narratives were often written by the immediate supervisor and edited by the Commanding Officer. There was a further section where a Senior Officer higher up the line could append a remark if he so wished. I have

separated the narrative sections by a couple of asterisks and indicated where the authors were different people. Narratives were often repetitious and sometimes made remarks not worthy of this article (He has been teaching geography...) so I have taken the liberty of editing them, objectively without fear or favour! Section II numerical assessments are presented later in the article — I suggest the sections be read as presented, and then be compared.

Summaries of Narrative Reports Report A (Lieutenant)

Shows evidence of being a better than average instructor officer. Cheerful and willing. Quite satisfactory as a cadets' assistant divisional officer. No hesitation in recommending him for a permanent commission.

#### Report B

Vigorous approach to teaching and stimulates high level of interest. Shows commendable concern for detail and establishes fundamental concepts in their correct perspective.

Pleasant and vital personality. Successful as a cadets' Divisional Officer — firm but understanding approach to human problems. Well endowed with commonsense and initiative. Thoroughly reliable as OOD. Coaching rugby and squash.

#### Report C

Vigorous and resourceful. Mature and good relationship with.

Vital personality. Contributed actively in wide range of activities. Coached with vigour rugby and squash. Revitalised and supervised debating — prominent in concert and dramatic activities.

Sound reliable OOD. Cheerful and sociable messmate.

#### Report 1 (Lieutenant-Commander)

Prepares lessons thoroughly and presents them with verse and skill. Engenders enthusiasm and achieves creditable results. Over and above specific academic duties, has accepted. . .

Pleasant personality. Strong personal beliefs always oriented towards the good of the Service. Willing enthusiasm to accept extra curricular tasks. A misplaced exercising of personal conviction. He will come to realise the necessity for invariably exercising tact and discretion. Will become a forceful and effective leader in his branch. Neat in appearance, gregarious and a social asset. Enters fully into all activities of this establishment. Reliable and conscientious OOD.

#### Report 2

Despite his rank, is very inexperienced. Unsure approach to his various duties. Little initiative, drive or enthusiasm in those subjects in which he is qualified and interested.

Poor bearing and untidy appearance. Miscast as a Naval officer. Displays certain amount of disinterest in traditional Naval procedures. Performs below average in other than purely academic spheres. Not an entirely satisfactory Naval officer.

#### Report 3

Power of expression above average.

Controls junior civilian staff well. Manners and social attributes are good. Forceful in presenting arguments. Requires more experience in evaluating situations (4 months in staff job).

#### Report 4

Energy and enthusiasm of a very high order. Developed a high level of cooperation with other members. Plans effectively and produces results of excellent standard. Friendly yet correct relationship with subordinate members. A very sound officer doing an excellent job.

Highly regarded professionally and personally. (Admiral — suspect marks are too high.)

#### Report 5

Carries out duties with enthusiasm. Judgment and professional knowledge of a high order. Thoroughly competent and reliable. Ability to organize his commitments is worthy of high praise. An extremely competent officer.

(By Commandant, RAAF Staff College)

Displays initiative and organising ability well above the average. Posseses initiative, common sense and high degree of professional skill. Discharges duties most effectively. Inclined to be rather tactless at times. Straightforward, integrity never in question, completely loyal and a credit to his Service.

(Admiral — suspect markings are too high.)

#### Report 6

His work is marked by enthusiasm and professional knowledge of a high order. Sense of duty is most commendable. Organises his work most efficiently and applies himself most conscientiously. A very competent officer. Initiative and organising ability well above the average.

Discharges his duties in a most efficient manner. Possesses qualities of common sense, judgment and professional knowledge in abundance. Has made a definite effort to overcome his tactlessness. Well regarded by his peers. Hardworking completely straightforward officer of unquestionable integrity. Devotion to his duty is outstanding. Credit to his Service.

#### Report 7

Very efficient and capable. Can be completely relied upon to undertake any task and produce results of high quality. Meticulous in planning and organising his work.

Impressive officer. Dynamic in his approach to resolve a problem. Written and oral expression of exceptional quality. Occasionally has strong and inflexible opinions — manner of argument can become irritating. Mixes well socially — keen sportsman. Highly regarded in RAAF Staff College.

(Admiral — marks probably high by normal standards.)

#### Report 8

Energetic and meticulous approach. Fluent writer and speaker. Tendency to sarcasm can be irritating — nevertheless, his ability and drive have contributed significantly to the efficiency of...

Thoroughly reliable and very competent. High standard of efficiency. Liked and respected by officers and other ranks. Has represented his Service well. His ability, loyalty and zeal would make him an asset to any establishment within Australia or overseas.

(Admiral — index error of -0.5 applied; based on the CO's other assessments as I have not personally observed this officer. (The reference to sarcasm?)) AWA: where ideas are turned into realities

AWA is a highly diversified company. The Defence and Aerospace Sector specialises in high technology, electronics and communication products.

Systems for Governments, industrial, commercial and consumer markets throughout the world are on the AWA list of achievements.

of achievements.

AWA Defence and Aerospace applies innovation and entrepreneurship to its idea development and problem solving. Our breakthrough solutions are respected internationally.

In this world of constant change our inventiveness and capabilities keep our finger on the pulse.

We have built our reputation on this responsible attitude for over 60 years. Some of our capabilities include:

- AWANET Voice and data communications network
- MILNET Data Bus for Military Combat Communication Systems
- JINDALEE Over the Horizon Radar
- Project Management
- Turnkey Prime Contractor
- Secure Communication Facilities
- Airborne Electronic Support Measures
- Electronic Counter Measures
- · Satellite Systems
- Fibre Optic Cable System
- · Air Traffic Control Systems
- DME/DVOR Navigation Systems
- 0.03
- Magnetic Degaussing Ranges
- Extensive Research and Development Facilities
- Quality Assurance to Standard AS 1821
- · Integrated Logistic Support.



For more details contact: AWA Defence and Aerospace PO Box 96, North Ryde NSW 2113 Australia Telephone: (02) 887 7111 Telex: AA20623 Fax: (02) 887 7333

#### Report 9

Has organised his department well. Shown the capacity to give direction to his staff and at the same time encourage their individual abilities and interests.

Mature officer with a keen interest in the Service. Good breadth of perspective. Approach is quietly determined and realistic. Thoughtful and independent approach to problems. Willingness to propose innovation. Keenly interested in many facets of sport.

#### Report 10

His staff have worked harmoniously and industriously and have been given opportunity to develop individual interests.

A keen and broad interest in the Service. Even temperament, thoughtful and quietly determined. Establishes good personal relations. Shows initiative and indepedence. Keen sportsman—has made a valuable contribution. Strong Service loyalty. Performs duties with efficiency and imagination.

#### Report 11

Organised his section well. Injected direction into the teaching and developed individual initiatives within his staff.

Thoughtful and responsible, strong Service loyalty and good sense of Naval involvement. Quietly forceful approach. Shows independence of thought and willingness to take the initiative. Able to establish good interpersonal relations and exert considerable influence on people. Keen sportsman as participator and official and has contributed substantially. A highly competent officer.

#### Report 12 (Commander)

Sound administrator.

Personable and gregarious. Enthusiastic about his participation in the Navy. Cooperative attitude and carries out duties thoughtfully and effectively. Interested in people and perceptive as to their strengths and weaknesses. Expresses himself lucidly both verbally and in writing. (Commodore — does not inspire confidence as a leader outside his stated line of interests.)

#### Report 13

Sound administrator. Does not allow his thinking to be constrained by convention.

Personable officer with a gregarious nature. Enthusiastic about his participation in the Navy. Cooperative attitude and carries out his duties thoughtfully and effectively. Interested in people and perceptive about their strengths and weaknesses. Expresses himself lucidly both verbally and in writing.

(NB: exactly same as previous report, plus addition about thinking, but no comment from higher authority.)

#### Report 14

Sound grasp of issues involved. Shown initiative in developing related policies and practice (to education in RAN). Has exercised adequate control in the directorate and at the same time maintained a harmonious and achieving approach amongst staff.

Strong Service loyalty. Steady and responsible approach. Thinks independently and is able to reach a decisive position. Has shown willingness to accept a position which may differ from his own and then support it. Equable temperament with good sense of humour. Displays firmness in dealing with situations. Has related well to both seniors and juniors and has achieved good working relations in his area.

#### Report 15

An able officer. Developed the ZZZ Department from its inception, an efficient organisation. A considerable amount of reorganisation of (other) sections was necessary and he achieved this through careful planning and negotiation. New extra tasks are willingly undertaken. The reorganisation and revitalisation of the College library during the period when no librarian was in office were due in large measure to his persistence.

A talented officer who has made a significant contribution to the improved administration of the College. Has introduced new ideas and practices which have streamlined procedures. Administrative skills are soundly developed. Communicates effectively both orally and in written work. Able to see clearly through extraneous detail to the heart of an issue. Can exhibit an abrupt and abrasive manner which borders on insensitivity. Participates actively in social and other activities. Gregarious quality with considerable wit and charm. Dress and bearing are satisfactory. A capable officer who has much to offer the Navy.

#### Report 16

Takes a keen interest in the work of his department. Willing to take on extra tasks on

behalf of his department, but at times the execution falls short of the original intention.

Considerable talent in the area of social organisation and activity. Much intellectual ability but tends to be impatient with those he considers less endowed, so leading to an inability at time to recognise flaws in his own conclusions. Certainly of his own perception tends to create a brusque and somewhat abrasive manner. Very interested in sporting matters though reluctant to give opinions in that sphere. At times has acted as Mess President, with flair and a very good sense of proportion and correctness.

(Admiral — index error of -0.1 in view of remarks on reliability.)

#### Report 17

Ability to identify important issues on a problem and derive relevant and practical solutions. Works quickly and accurately. Clipped speech and writing style often mean initial presentation is not as persuasive as it may have been if he spent more time demonstrating the level of his research and the balance and logic in his approach. As secretary of two star committee, he is regarded as reliable, quick and accurate. A good organiser once given direction, but his background has not given his the breadth of perception to identify the directions in which initiatives should be taken. With experience, he is improving.

Cheerful and cooperative. Gets on well with people and has no trouble working as a member of a team. Has assisted Navy teams as a coach (badminton).

#### Report 18

Is now both confident and competent. As secretary of a two star committee, he is to include a one staff committee — he has been reliable, cooperative and of considerable assistance to the chairman. Handles allocated work intelligently and presents well-researched and balanced solutions.

Active and effective member of the section. Has filled the position of Colonel on a number of occasions and has performed well each time. (Admiral — index error of + .2: 'He does well as secretary of committee of which I am chairman. I note with pleasure his enthusiastic participation in "public spirited" activities eg, Naval Institute'.)

#### Report 19

Continues to perform well in a demanding environment. Works quickly and accurately and is innovative. Very good ability to perceive important issues in complex situation. As secretary, his work is sometimes exasperating and very demanding of patience — handles it in calm and controlled manner.

Active and effective member and a competent deputy. Active sportsman involved in Navy squash and badminton. Secretary and then editor of ANI, President of P & C at local school. (Admiral — index error of -.4 for RAN standards. He has had a big increase in workload and responsibility since the last report and has done very well. I see him more as an Instructor Officer than a General List officer.')

#### Report 20

Effective and efficient. As secretary to two committees, he is quick accurate, responsive and enthusiastic. Keeps firm control of all actions. Has shown commendable initiative in the use of his private computer as an aid to improving secretarial support. Can be relied upon to produce well researched and soundly based solutions.

Wide interests but not detrimental to duties — ANI Symposium, innovative paper on fitness in the RAN, P & C, active personal participation in sport. Performed most satisfactorily as my deputy when called upon. Demonstrated suitability for promotion.

(Brigadier — I have been impressed with enthusiastic approach to many facets of Service life.)

(Admiral — index error of -.3: no reason.)

#### Report 21

Continues his good work in an appointment requiring dedication, patience and loyalty, apart from sound organisational skills. Now widely experienced in management, modus operandi and support of a high level committee operating in a broad policy area. Has shown considerable initiative and drive. Handles allotted work intelligently and presents well-researched and balanced solutions.

Active and effective. Deputised as director on number of occasions and performed well. Active sportsman etc. Interest in ANI and P & C. Demonstrated suitability for promotion.

(Brigadier — 'Displays a better grasp of policy issues than I would have expected from an Instructor Officer. Currently acting as the director, a Colonel position'.)

(Admiral — index error of -.3: no reason.)

#### Report 22

Carried out duties as secretary in most satisfactory manner. Able to assist other members in a variety of matters. Acted as director on several occasions in a satisfactory manner.

Produced good results. Exhibited initiative. Worked well with senior officers and had a good sense of judgement. Wide range of interests etc.

#### Some Clarifying Remarks

I said that I would offer no remarks in selfjustification, nor self-defence, but I will add to some of the reports so that readers may have a better understanding of their background. My aim is to be objective, difficult though that is in the circumstances!

#### Report 1

The reference to a personal conviction involved a memo from the commanding officer ordering all officers to attend church every Sunday, unless they had his formal permission not to do so. Three of us took exception to the ordering bit and wrote Sir, I have the honour etcs. The CO said we were deliberately upsetting him, because he really meant that all we had to do was mention it to him over a cup of coffee; the matter got out of hand as the acting Senior Instructor Officer, I was accused of collusion and mutiny (sic). The upshot was that, as my records showed I was an Anglican, I would do as he directed, or change my records to show I was of No Religious Affiliation — I have been known as the president of the NRAs by some of my friends ever since. Readers can decide whether or not my personal conviction was misplaced, whether or not the CO was within his rights, and whether or not he finally made a fair comment. (We met again later and were good friends.)

#### Report 2

A case of personality conflict, perhaps? Interesting that no index error was ever applied. On the last day in the ship, when I, the head of department, and the Captain were off to other pastures, the head of department insisted on reading this report to me—the first inclination I had that all was not well. I commented about all the positive things I had done and achieved, of which he made no mention—they were numerous, in all modesty, and I had documentary evidence, ie, photos, memos, daily orders, minutes of meetings, sporting programmes—and his comment was that I should have let him know what I was doing. My tactless reply was that as reporting officer he should have been

aware, found out, or asked; he said it was too late and he did not intend to change the report which has already been typed out. I was persuaded by friends to collect my documentary evidence and show it to the Captain when he sent for me — however, his opening words were I hear you have complained. Well, let me tell you that I have no intention. . . (Years later, I was shown a letter in Navy Office that my head of department had written at the same time to my head of branch, elaborating on my shortcomings. As my immediate posting was as a staff officer to the head of branch, he must have wondered what he was about to get! Luckily, he knew me well from my previous posting.)

#### Report 5

My tactlessness on this occasion occurred during a RAAF Staff College social lunch for staff members, at a civilian club. The two Naval officers present wore white shirts, club ties, plain sports jackets and grey flannel trousers; the RAAF officers all wore lounge suits. After lunch, one of these gentlemen commented on our appalling standard of dress, and said that if we turned up at his house for dinner dressed like that, he would not let us in. I remarked peaceably that he must be joking and it was really the drink doing the talking; the Commandant said that he agreed with his fellow officer, but he would let us in and then call us on one side for a stern warning. I then remarked tactlessly that if I invited any of them to my house for dinner, they could wear jock straps and seaboots and I would make them welcome! I think the Commandant was more than fair in his remarks on the report. but it does serve to illustrate the power of critical incidents.

#### Reports 7 and 8

My argumentative nature was not really put to the test, but I was somewhat terse occasionally with a boss who often spent the night and forenoon at his desk in full mess kit, snoring noisily, oblivious to all the staff. He would remain so until he woke himself up — the record was 1215 when he was not fit to attend an important lunch, for which we had to tell lies to the Commandant to explain his absence. (And I got into trouble for my manner of argument and my sarcasm!)

#### Report 13

I like the second sentence — it serves to illustrate the different remarks made about my problem solving ability and tact(lessness): some people approved of my methods and made effective use of my talent, others took exception.

Readers should note the differences and ask why they occurred — there was no change in my ability, effort or task perception, and yet the comments are markedly different. This particular comment arose from an altercation I had with the Commodore — his comment was made in Report 12: both comments referred to the same critical incident! See also Report 15 for another reaction.

#### Report 16

More of the same. The critical incident this time concerned publication of an information booklet about the establishment, which a senior officer made a mess of; the Captain asked me to sort it out; it got back to the original senior officer who took three months to reply to a revised draft; then lost the next draft... I tactlessly said I wished to have no more to do with it since it was not my responsibility in the first place. The senior officer drafted my report, even though I did not work for him - he happened to be in the same branch. The reference hesitancy was brought about because the CO asked me, on separate occasions, what I thought about taking over the rugby coaching position (a Naval officer) and the presidency of the golf club (a civilian) when he disagree with the methods of the incumbents. I said I did not think it was a good idea in the middle of the season and considering the atmosphere at the small, isolated community in which we lived.

#### Report 19

Instructor officers were promoted in competition with general list officers, and shared a number of "pool" billets (jobs). How would you interpret the admiral's remarks and index error if you were the general manager of the organisation? The brigadier who made a comment on Report 21 would not have seen this remark, nor the adjustments to his assessments. Readers may consider whether or not some of the reports, especially those from the other two Services, were worthy of bouquets rather than brickbats.

#### Confidential Report Numerical Scores

The numerical assessments are presented separately. Indeed, they were separated in Navy Office and a running-tally sheet was maintained, showing progressive scores for each trait, a report average, a cumulative total, a cumulative total divided by the number of reports, and a summary of the promotion recommendations. I have added a few statistical columns for which readers can draw their own conclusions. In some cases, an Index Error was applied to the report average by a very Senior Officer, often with no reason attached - where there was a reason, I have quoted it in the narrative report summary. IK meant that the reporting officer did not have sufficient knowledge in his opinion to make a comment or a score; no substitute score was made in these cases, although one Senior Officer did change UK for Leadership into a 6 averages were worked out on the actual number of scores given.

I mentioned earlier that the headings for the personal traits changed as from Report 19, but that I had ignored the changes as being of little relevance. Navy Office also seems to have ignored the changes, as the columns on the running tally sheet merely recorded the scores in columns "A–J", and figures from the new report forms were simply added to the old ones regardless of name changes (implying the contents were the same?) For those interested, the comparisons are as follows:

Column	Original Heading
A	Zeal & Energy
В	Reliability
C	Commonsense
D	Intelligence &
	Reasoning Power
E	Initiative &
	Alertness
F	Leadership
G	Power of Expression
H	Organising Ability
1	Tact &
	Cooperation
J	Social Attributes

rickided ricading
Professional Competence Reliability
Sense of Judgment
Intellectual Qualities
Initiative
Leadership
Power of Expression
Management Ability
Personal Qualities
Motivation & Drive

Revised Heading

#### Passing Comments

The Navy saw my best characteristic as my power of expression, and my worst was my quality of leadership. My students in Basic Communication At Work will be impressed, but how can I hold my head up when I teach Leadership in the Associate Diploma course? The mark is somewhat lower than it could be because of the four IKs that were listed, but even awarding an average of 6 for each, the placing is not much better - 129 still leaves it at the bottom!

I never rose above deck level for tact, and I seem to have begun the Big Run Down very early in my career if the placing of Zeal and Energy is anything to go by! Restraining myself just this once, I will offer no comments in mitigation.

Table 6 could give a false impression of my various qualities unless you note the slight difference in averages from first to last. However, I do wonder what anyone has to do to score higher than 6.7 for Power of Expression: I have an honours degree in English, taught English and staff work most of my career, held a couple of staff jobs, worked at a staff college (and the RAAF set far more emphasis on such formalities than the RAN ever has), won the Peter Mitchell Essay Competition a few times (open twice, second twice), wrote physical fitness booklets for the RAN, secretary of a senior Defence Committee (and they never complained), even a moderately capable secretary and editor of the ANI . . . Or is it just what I said earlier about low differentiators - many assessors do not like giving high or low marks at the extremes? I notice that the only people to give me an 8 for Power of Expression were the RAAF.

Table 1 Confidential Report Scores Lieutenant

Confidential Report Scores Li	euten								
	A	В	C	MIN	Max	Range	Total	Average	St Dev
Zeal & Energy	6	7	8	6	8	2	21	7.0	.82
Reliability	6	7	7	6	7	1	20	6.7	_47
Commonsense	5	7	7	5	7	2	19	6.3	96
Intelligence & Reasoning Power	6	7	7	6	7	1	20	6.7	.47
Initiative & Alertness	6	7	7	6		1	20	6.7	.47
Leadership	5	6 7	7	5	7	2	18	6.0	.82
Power of Expression			7	6	7	1	20	6.7	-47
Organising Ability	6	6	7	6	7	1	19	6.3	.47
Tact & Cooperation	5	6	6	5	6	1	17	5.7	.47
Social Attributes	6	7	7	6	7	1	20	6.7	.47
Averages	5.7	6.7	7.0						
Adjustments (Index Error)									
Cumulative Total (CT)		12.4	19.4						
CT/No of Reports		6.20	6.47						
Minimum	5	6	6						
Maximum	6	7	8						
Range	1	1	2						
Standard deviation	.5	.5	.6						
Source of report	RAN	RAN	RAN						
Promotion	ioc	EARLY	IOC						

Table 2			
Confidential	Report	Scores	Lieutenant-Commander

	1	2	3	4	5	6	7	8	9	to	11	MIN	Max	Range	Total	Average	St Dev
Zeal & Energy	7	4	5	7	7	7	8	В	6	6	6	4	8	4	71	6.5	1.16
Reliability	6	5	5	7	7	8	8	8	6	7	7	5	8	3	74	6.7	1.05
Commonsense	6	5	5	6	В	8	7	7	6	6	6	5	8	3	70	6.4	98
Intelligence & Reasoning																	
Power	6	7	5	7	8	8	8	7	7	7	7	5	8	3	77	7.0	85
Initiative & Alertness	7	4	5	6	7	7	8	8	7	7	7	4	B	4	73	6.6	1.15
Leadership	6	5	5	5	ik	ik	160	7	5	6	6	5	7	2	46	5.8	66
Power of Expression	7	5	6	7	8	В	8	8	7	7	7	5	8	3	78	7.1	.90
Organising Ability	7	4	5	6	8	-8	8	7	6	6	6	4.	8	4	71	6.5	1.23
Tact & Cooperation	5	5	5	6	5	6	5	5	6	7	7	5	7	2	62	5.6	.7.7
Social Attributes	6	5	5	5	5	5	7	5	6	7	7	5	7	2	63	5.7	86
Averages	6.3	4.9	5.1	6.2	7.0	7.0	7.4	7.0	6.3	6.6	6.6						
Adjustments (Index error)								6.5									
Cumulative Total (CT)		11.2	16.3	22.5	29.5	36.5	43.9	50.4	56.7	63 3	69.9						
CT/No of Reports		5.60	5.43	5.63	5.90	5.08	6.27	6.30	6.30	6.33	6.35						
Minimum	5	4	5	5	5	5	5	5	6	6	6						
Minimum	7	7	6	7	8	8	8	В	7	7	7						
Range	2	3	1	2	3	3	3	3	4		+						
Standard deviation	.6	.8	3	7	1.2	1.0	1.0	1.1	5	5	5						
Standard deviation	.0	.0	3	11	116	1.0	1.0	7.1									
Source of report	RAN	RAN	RAN	RAAF	RAAF	RAAF	FLAAF	RAAF	RAN	RAN	RAN						
Promotion	ioc	LATE	IOC	NOW	NOW	NOW	NOW	NOW	NOW	NOW	NOW						

Table 3 Confindential Report Scores Commander

	12	13	14	15	16	17	18	19	20	21	22	MIN	Max	Range	Total	Average S	t Dev
Zeal & Energy	5	5	6	6	6	6	6	7	7	7	6	5	7	2	67	6.1	7
Reliability	6	6	6	6	6	6	7	8	7	8	6	6	8	2	72	6.5	8
Commonsense	6	6	7	5	6	6	6	7	7	7	7	5	7	2	70	6.4	6
Intelligence & Reasoning																	
Power	6	6	6	6	6	6	6	7	7	7	7	6	7	1	70	6.4	.5
Initiative & Alertness	5	5	6	7	6	6	6	7	7	7	6	5	7	2	68	6.2	7
Leadership	5	5	6	5	6k	6k	6k	ik:	7	7	6	5	7	2	59	5.9	7
Power of Expression	6	6	7	6	6	6	6	6	7	7	7	6	7	1	70	6.4	5
Organising Ability	6	6	6	7	6	7	7	7	7	7	6	6	7	1	72	6.5	5
Tact & Cooperation	6	6	6	4	5	6	6	7	7	7	7	4	7	3	67	6.1	9
Social Attributes	6	6	6	7	7	6	6	7	7	7	6	6	7	1	71	6.5	5
Averages	5.7	5.7	6.2	5.9	6.0	6.1	6.2	7.0	7.0	7.1	5.4						
Adjustments (Index error)					5.9		6.4	6.6	6.7	6.8							
Cumulative Total (CT)		11.4	17.6	23.5	29.4	35.5	41.9	48.5	55.2	62.0	68.4						
CT/No of Reports		5.70	5.87	5.88	5.88	5.92	5.99	6.06	6.13	6.20	6.22						
Minimum	5	5	6	4	5	6	6	6	7	7	6						
Minimum	6	6	7	7	7	7	7	8	7	8	7						
Range	1	1	-1	3	2	1	4	2	0	1	1						
Standard deviation	5	.5	4	.9	4	3	4	5	0	.3	-5						
Source of report	RAN	RAN	RAN	RAN	RAN	ARA	ARA	ARA	ARA	ÁRA	ARA						
Promotion	IOC	IOC	IOC	IOC	NOW												

This means that regardless of any change of intention, the scores awarded for *Motivation & Drive* from Report 19 onwards were simply added to previous scores for *Social Attributes*, and the same applied in the other areas.

The numerical scores were related to a set of score definitions which ranged from:

- 1 = Quite Inadequate
- 4 = Satisfactory, with Slight Shortcomings
- 7 = Very Good Indeed to
- 9 Absolutely Outstanding

The row marked Promotion refers to the assessor's indication of promotion potential

chosen from a suitable list:

for those eligible by time-now, not yet, no, ik
for those ineligible — early, ioc (in ordinary course)
late, not at all, ik

Tables 1 to 3 show my confidential report scores as a Lieutenant, Lieutenant-Commander and Commander. Table 4 gives a summary of the 22 assessments since promotion to Lieutenant-Commander; Table 5 is the same set of figures sorted by total, whereas Table 6 shows how my personal traits developed or regressed as I grew older, but not wiser!

Table 4 Summary of Confidential Report Scores

	MIN	MAX	Range	Total	Average	St Dev
Zeal & Energy	4	8	4	138	6.3	1.0
Reliability	5	8	3	146	6.6	.9
Commonsense	5	8	3	140	6.4	.8
Intelligence & Reasoning Power	5	8	3	147	6.7	.8
Initiative & Alertness	4	8	4	141	6.4	1.0
Leadership	5	7	2	105	5.8	-7
Power of Expression	5	8	3	148	6.7	.8
Organising Ability	4	8	4	143	6.5	.9
Tact & Cooperation	4	7	3	129	5.9	.9
Social Attributes	5	7	2	134	6.1	-8
Average for 220 assessments					6.35	
Standard deviation						.92

Table 5
Summary of Confidential Report Scores — Sorted by Total Score

	MIN	MAX	Range	Total	Average	St Dev
Power of Expression	5	8	3	148	6.7	.8
Intelligence & Reasoning Power	5	8	3	147	6.7	.8
Reliability	5	8	3	146	6.6	.9
Organising Ability	4	8	4	143	6.5	.9
Initiative & Alertness	4	8	4	141	6.4	1.0
Commonsense	5	8	3	140	6.4	.8
Zeal & Energy	4	8	4	138	6.3	1.0
Social Attributes	5	7	2	134	6.1	.8
Tact & Cooperation	4	7	3	129	5.9	.9
Leadership	5	7	2	105	5.8	.7

#### Table 6 Traits sorted by Total — in descending order

Lieutenant
Zeal & Energy
Reliability
Intelligence & Reasoning Power
Initiative & Alertness
Power of Expression
Social Attributes
Commonsense
Organising Ability
Leadership
Tact & Cooperation

Lieutenant-Commander
Power of Expression
Intelligence & Reasoning Power
Reliability
Initiative & Alertness
Zeal & Energy
Organising Ability
Commonsense
Social Attributes
Tact & Cooperation
Leadership

Commander
Reliability
Organising Ability
Social Attributes
Commonsense
Intelligence & Reasoning Power
Power of Expression
Initiative & Alertness
Zeal & Energy
Tact & Cooperation
Leadership

Not being a statistics expert, I can offer little clarification of the standard deviation column. My computer works it out automatically, so I thought I would include it for those for whom it has some meaning. As I understand it, a high percentage of marks will fall one deviation either side of the mean. In general, for lay persons: the lower the standard deviation, the less the *range* of marks and the greater the bunching. Whether this is good or bad in personal appraisals, I leave others to inform us.

#### Conclusion

Readers may care to ask themselves if the scores match the narratives, or vice versa; I may consider asking my students to produce their own narratives to match these scores, or their own scores to match these narratives. I may ask students in my Leadership course to extract all the comments referring to leadership qualities to see if I really was so lacking in that quality that I should be preaching that which I could not practise! The value of this article will come from assessors and potential assessors analysing both systems of performance appraisal illustrated in this case study, narrative and graphic rating scale, in line with my comments on the library in the first part, ie, do the reports effectively measure job performance, or is there undue emphasis on substitutes for performance?

How would they react as senior management to individual reports — would they think they were receiving a valuable management tool? How would they react as the individual assessed, on being told the contents? These reports were written in a closed system and I was not informed on many an occasion that a report had even been written, let alone what it contained — should I have been informed of any or all of the contents? Significantly, perhaps, RAAF officers always read my report to me, and the Army officers let me read them for myself, including the scores. I can only recall anything like this happening to me twice in the RAN. Would the

readers see the Naval comments being different if reporting officers had had to show them to me, or if I had been allowed to append my comments? Were the officers of the other two Services generous because they knew they would be letting me know the contents?

Another valuable task would be to look at the system as a whole, examining the roles played by everyone from the one assessed to the Naval Board who decided who would be promoted or not. Did they all use this management tool wisely — fairly — effectively? And lastly, no good will come from negative or neutral criticism — so what does this case study show us that will allow us to make current systems more effective?

I hope everyone reads this article in the spirit in which it is intended, and that we might see some further articles or letters to the editor, discussing this or any subjects arising from it.

Evaluation requires a supervisor to say how he or she feels about a person and how well he believes the employee is performing the task. There is a risk involved in stating how you feel about a person, but it is a risk and responsibility the supervisor must accept.<sup>[16]</sup>

#### **Endnotes**

- 1. Stoner, p658.
- 2. Rue & Byars, p207.
- 3. Rue & Byars, p376.
- 4. Stoner, p659.
- 5. Rue & Byars, p382.
- 6. Rue & Byars, p384.
- 7. Dixon, p254.
- 8. For a specific example, see Robbins, p318.
- Robbins, p325.
- 10. Robbins, p326.
- 11. Robbins, p327.
- 12. Subsequent figures from Robbins, p322.
- See the section on Cognitive dissonance in Dixon, p164.
- 14. Halloran, p305.

#### The Author

Geoff Cutts was educated at the universities of Leeds and London, and at the Canberra College of Advanced Education, he was trained in the Royal Navy and the Royal Australian Navy. He is currently lecturing in Management subjects to associate diploma students at the Gold Coast (Queensland) College of Technical and Further Education. A foundation member of the ANI, he has served as Councillor, Secretary and Editor, and written several articles for the Journal.

#### Bibliography

- Blanchard, K, and others. Leadership and the One Minute Manager. London, William Collins, 1985.
- Dixon, Norman F. On The Psychology of Military Incompetence. New York, Basic Books, 1976.
- Eyre, EC. Mastering Basic Management. NK, Macmillan, 1982.
- George, CS, Jnr, and others. Supervision in Action. Sydney, Prentice-Hall, 1987.
- Halloran, Jack & Frunzi, George L. Supervision: The Art of Management. Englewood Cliffs, Prentice-Hall. 1986.
- Robbins, Stephen P, and others. Managing Human Resources. Sydney, Prentice-Hall, 1986.
- Rue, LW & Byars, LL. Management Theory and Application. Homewood (Illinois), Richard D Irwin, 1980.
- Samuelson, Michael. Supervision in Australia. Milton (QLD), Jacaranda Wiley, 1985.
- Saville, J. Supervision in Australia. South Melbourne. Macmillan, 1984.
- Stoner, James AF and othersf. Management in Australia. Sydney, Prentice-Hall, 1985.

## THE TWO-OCEAN NAVY — A REALISTIC MARITIME STRATEGY

By Lieutenant Commander I.G. Broadsmith, RAN

'We must have a Navy so strong and so well proportioned and equipped, so thoroughly ready and prepared, that no enemy can gain command of the sea and effect a landing in force on either our western or our eastern coast'.

Republican Party platform, 1916

#### INTRODUCTION

 In tabling the 1987 Defence White Paper, the Minister for Defence announced the intention to create a genuine two-ocean navy by basing half the fleet at HMAS STIRLING in Western Australia. This will enhance the navy's capability to operate throughout our area of direct military interest'. This statement confirms clear recognition that our national interests lie in both the Pacific and Indian oceans and the need to establish a maritime presence in these areas is paramount.

2. It also marks a re-assessment of the November 1978 statement by the Department of Defence that there was no identifiable threat of substance to Australia. In recent years Soviet naval presence in the Indian Ocean has been steadily increasing and its influence in the Pacific Ocean has been boosted through fishing agreements with the South West Pacific (SWP) island nations of Vanuatu and Kiribati.

 Moreover, the decision to permanently base a substantial part of the navy in Western Australia re-inforces the 1984 statement by the Minister for Foreign Affairs, Mr W. Hayden, in referring to the Indian Ocean, that:

'Australia had an interest, shared with our allies in ensuring secure lines of communications for its trade with and civil aviation traffic through the region and in promoting regional concern for peace and stability. Australia would also become increasingly important to the region as a trading partner and as a source of aid, training, technology and investment.'3

4. Australia's concern for the protection of sea lines of communications (SLOC's) in the Indian Ocean is equally reflected in the Pacific. Further, our immense coastline, including largely unprotected areas in the north, north-west and west, offers would-be aggressors easy access to

our shores. The function of the RAN in deterring these aggressors is the conduct of operations at sea for one defence of Australia and her national interests. However, a realistic maritime strategy in necessary, as VADM Sir James Willis says, for the 'organisation, training and equipping of forces for a great diversity of operations at sea including ... surveillance and reconnaissance, offensive activities against enemy forces and installations, naval support for ground forces and the conduct of hydrographic and oceanographic surveys. Naval forces for these operations will be, of course, supported by the Air Forces which have essential maritime roles, particularly air and sea surveillance and patrol in our sea approaches."

 This essay will propose a realistic maritime strategy for Australia and identify some implications of permanently establishing elements of the RAN on the east and west coasts on the development of this maritime strategy.

#### THE NEED FOR A TWO-OCEAN NAVY

- 6. Australia's area of prime strategic concern is the SWP, SE Asia and the Eastern Indian Ocean. The decision to position elements of the navy on both coasts is based on the assessment of possible political, economic and military developments originating in both the Pacific and Indian Oceans<sup>5</sup> and to uphold Australia's national defence interests, which are:
- a. the defence of Australian territory and society from threat of military attack;
- the protection of Australian interests in the surrounding maritime areas, our island territories and our proximate ocean areas and focal points;
- c. the avoidance of global conflict;
- the maintenance of a strong defence relationship with the United States;
- the maintenance of a strong defence relationship with New Zealand;
- f. the furtherance of a favourable strategic situation in South-East Asia and the South-West Pacific;
- g. the promotion of a sense of strategic community between Australia and its neighbours in our area of primary strategic interest; and

## Know who your friends are? Cossor Cryptographic IFF Mark XII does

Identifying friends from enemies in wartime is a matter of life and death. With faster aircraft and powerful modern weapon systems today's commander has no room for error.

That's why the latest Cossor Cryptographic IFF Mark XII instantly identifies friendly air assets while system security leaves the enemy in the dark.

And Cossor's Cryptographic IFF Mark XII is designed to integrate easily with the electronic suites of the latest generation warships and aircraft. One of the reasons why Cossor is offering this latest generation system for the ANZAC frigate programme as well as updates of existing systems.

With forty years experience in IFF manufacture and using the latest in VLSI and solid state technologies, Cossor can provide naval, ground and airborne IFF systems tailored specifically to the needs of modern defence forces.

For further information about Cossor Cryptographic IFF Mark XII capability please contact:

#### Australia

Hawker Pacific Pty Ltd Defence Sales Division PO Box 820, Canberra ACT 2601 Telephone (062) 473 099

> Cossor has over forty years of IFF experience, the Rapier system being a prime example

#### Cossor

A Raytheon Company



h. the maintenance of the provisions of the Antarctic Treaty, which ensure that contiment remains demilitarised.<sup>6</sup>

#### South-West Pacific

The SWP is vital to Australian interests because of its geographic proximity to Australia. Our interest has grown since the 1970's when a number of the island nations began to attain independence and the interest of external powers was stimulated. The recent fishing agreements by two nations - Vanuatu and Kiribati — and the USSR give cause for concern as do the continuing attempts of Libya to gain a foothold in the area. There has also been strained relations between the United States and the SWP countries over fishing fees for the US fishing fleet. These factors, combined with the damage to the goodwill of the Western ailiance caused by French nuclear testing, contribute to an increasingly complex political and strategic situation in which Australia, as the dominant power in the region, must play a more influential role.

#### South East Asia

8. The countries of SE Asia form Australia's closest and strongest neighbours. It is an area of prime strategic concern and one which has seen many changes over the recent years. The continuing economic and political problems of the Philippines are of interest to both the United States and Australia because of the strategic importance of the US military bases located in that country. The establishment of Cam Ranh Bay as a major Soviet naval and air base and the subsequent build-up of forces there will impact upon Australian defence policy. It is through SE Asian routes to the unprotected north or northwest that the most likely threat of invasion to Australia will occur."

#### Eastern Indian Ocean

9. Although RAN deployments within the Indian Ocean region have become fewer, the area is growing in importance to Australia. Whilst they are a considerable distance away, Soviet littoral bases are firmly established and an increased Soviet presence emanates from them. The advent of a class of Soviet submarine new to the Indian Ocean may necessities a re-think by the RAN on anti-submarine warfare and impact on defence policy. It is not only the Soviet increase in the Indian Ocean which gives cause for concern but also the developing naval powers of India, China and Indonesia. The importance attached to the Indian Ocean was highlighted in 1984 by the Minister for Foreign Affairs, Mr Bill Hayden, when he said:

... Australia has important national interests in the Indian Ocean region. Together with the Pacific Ocean and the region to Australia's north, the Indian Ocean was an area of strategic significance to Australia. In particulr the Government had an enduring responsibility to protect Australia's western coastline and our offshore resources interests, and deep interest in the territories of Christmas and the Cocos Island. . ."

#### The Threat to Trade

10. Continuation of overseas trade in both peace and war is important to many countries, including Australia. The amount of Australian trade moving across the two oceans is evenly balanced. The Pacific caters for about 50 percent of our exports and imports. The remaining 50 percent is divided between trade moving across the Indian Ocean and that directed to the north-west through the Sunda, Lombok and Ombal Straits of Indonesia. Among the commodities traded across these routes are strategically important materials such as ferrous and non-ferrous metals and ores, energy minerals, agricultural products, oil, chemicals and industrial and electrical equipment.

11. While it is suggested that Australia could survive significant disruption to overseas trade in event of war, it would only be at the expense of living standards and after a concerted stockpiling programme. <sup>13</sup> Further, although no regional power has the capability to seriously threaten our international trade routes at present, our coastal shipping routes could be disrupted. This disruption would have a serious effect on our economy as much of our bulk cargo can only be transported effectively by sea. Therefore, protection of the movement of coastal cargo is a high priority for Australian maritime forces. <sup>14</sup>

#### **Geographical Position**

12. The intrinsic geographical features of Australia provide both strengths and weaknesses. The majority of our population is centred in the south and south-western region of the country. For these areas, the inhospitable areas in the north and north-west provide a natural buffer from invasion by land and the large expanses of ocean to the east and west provide further protection. Any major force crossing these oceans must give ample notice of its intentions and even when, and if, such a force landed the most likely site is in the north or north-west. In attempting to traverse the harsh inland environment, an enemy's lines or communications and logistic support would be stretched to the limit, making defeat highly likely.

13. However, these geographical features can work against us as well. In the northern areas, harassment of such aspects as coastal shipping, remote settlements and off-shore resource facilities together with landings on our Indian Ocean island protectorates, could all be done with relative impunity. Our maritime and land forces are stretched thinly and are predominately located in the south and south-east. To effectively deter or counter such threats Australia's maritime forces need to be more efficiently positioned to be able to respond rapidly and provide the infrastructure for future force build-up<sup>16 18</sup>

#### Self-Reliant Defence

14. A self-reliant defence force is fundamental to the development of an appropriate maritime strategy for Australia. To exert our sovereignty and ensure our security it is vital that we be seen to have authority in all areas of regional interest. While we still form a necessary part of the western Alliance, we cannot, and should not, expect our more powerful allies to be at our beck and call in times of emergency or conflict. In any event, in the case of the United States, she is already militarily committed to many parts of the globe and has made her wishes clear in regard to the desire for a self-reliant ADF through the terms of the Guam Doctrine.

 The importance placed on self-reliance was borne out by the Minister for Foreign Affairs. Mr W. Hayden, when he said:

... we cannot assume military support from our Treaty partner in every contingency ... we should therefore develop a self-defence capability in case, in a particular contingency, we need to rely on our own resources. By definition, therefore, it would not be prudent to base the development of our Defence Force structure on the assumption that forces will necessarily be part of a superpower deployment in the event of any form of hostilities in which we are involved."

This concept of self-reliance was re-inforced by the following finding of the Joint Committee on Foreign Affairs and Defence which stated:

'Australia is more likely to suffer low-level contingencies than the intermediate levels of threat or invasion. These low-level threats could arise at short notice and could give rise to challenging problems. There is uncertainty regarding the timing of allied support for several contingencies in the regional environment that may confront Australia. This calls for continuing emphasis on self-reliance by Australia and possession of well-balanced defence forces."

16. All the factors so far addressed — including possible regional threats, political statements and espoused defence policy — either point to or specifically spell out the need to have maritime forces located on each side of our continent. Not to do so in the light or changing political and military situations would be folly. But a maritime strategy for our specific requirements needs to be carefully planned, as Australia will depend upon its doctrine into the next century.

#### A REALISTIC MARITIME STRATEGY Basic Naval Strategy

17. For Australia to approach the development of a realistic maritime strategy in a rational and logical way it must decide what type of navy it requires to meet its needs. To decide what it's needs are it must ascertain what it hopes to achieve and quite clearly define it's missions both in peace and in war.

18. Historically, there are three types of navies — those belonging to maritime nations, continental nations or small nations. A maritime nation is one which projects its power through its naval forces which control vast areas of the seas; a continental nation has a navy which is basically defensive and supports the operations of its army; and a small nation allies itself with a larger nation and adopts its maritime and overall defence strategies as its own. Australia does not fit easily into any of these categories and therefore, our maritime strategy will be a mix of all or part of these three basic concepts of the strategic use of navies.

#### **Planning Ahead**

19. Now that the need for a 'two-ocean' navy has been established and the government has stated its intention to permanently base 50 percent of Australia's naval forces in Western Australia, what form should Australia's maritime strategy take to incorporate this division of forces? Should we aim for a large, powerful fleet in the classic Mahan tradition or perhaps adopt the policies of the 'jeune ecole' and build only small, fast patrol boats and submarines? What, in fact, does the term 'two-ocean' navy mean?

20. The answers to the first two questions will be developed in the following discussion, but in answer to the last question, it is not sufficient to postulate that Australia has always been a two-ocean navy because we have always had a bluewater capability and therefore, could always operate in two, four or all the oceans of the world. This decision means much more than that and marks a new era in Australian maritime development. It centres around the permanent establishment of two forces — two Task Groups — which

will have to adapt to the demands, both professionally and environmentally of their particular areas. Nevertheless, it is important that the naval forces do not become a Western and an Eastern navy with different standards and procedures. They must remain as one Navy operating permanently from two coasts. Australia's future maritime strategy must be developed around this concept. However, the fundamental basis for any maritime strategy must be to first identify the foreseeable threats and then to structure a force to counter such threats.

21. Although, at present, there is no immediate threat to Australia and defence strategies predict that this is likely to remain so for many years, <sup>30</sup> it would be irresponsible to plan forward on this basis. Paul Dibb asserts that Australia needs to plan for three major eventualities, which are:

 a. that there is a range or intermediate and low-level contingencies which could involve direct threat to Australia, or its vital interests;

 there is a prospect that the military power of some of Australia's neighbours could change dramatically ... Australia could face, for the first time, a potential regional threat from a force-in-being;

c. the notion that Australia's higher technology levels over regional states provides us with a sufficiently advantageous margin for our numerical deficiences ... will increasingly need sceptical examination.<sup>21</sup>

#### **Historical Strategies**

To aid in the development of a maritime strategy applicable to Australia's particular needs and its integration into our overall defence strategy, we at least have the benefit of the knowledge of the strategies of history. In 1890 Mahan's 'Influence of Sea Power' advocated that the battle fleet was essential to command of the sea. In turn, command of the sea was the object of naval forces and formed the basis of maritime strategy. In 1911, Corbett claimed that command of the sea meant nothing more than control of SLOC's. He concluded from historical evidence that limited war could be waged only by maritime empires. Further, the key to limited war lay in deterrence and geographical isolation. Naval forces would be used to ensure security of the homeland and to sever the outside ties of the enemies overseas colonies which could then be conquered by ground forces.22

23. Since World War II, many noted writers on maritime strategy have emerged — Turner, Mcc-Gwire, Roskill and Gorshkov among others — and all have generally agreed that the Mahan/Corbett doctrine was not totally correct. However, all have adopted a statement by Cor-

bett as the basis of modern maritime strategy, which says:

'Command of the sea, therefore, means nothing but the control of maritime communications, whether for commercial or military purposes. The object of naval warfare, therefore, is the control of communications and not, as in land warfare, the conquest of territory'.

#### Post WW II Application

24. It was Corbett's further contention that command of the sea was too great a task for any one nation. The most that could be achieved was the control of specific areas of the sea that a nation wished to use for a particular purpose at a particular time. Post WW II writers expanded this theory until three objects of maritime strategy emerged, which were:

- to prevent the enemy using the sea to your disadvantage;
- to secure the use of the sea to your own advantage:
- as a corollary to securing the sea for yourself, to be able to use the sea to project power on land.<sup>24</sup>

25. In terms applicable to today's maritime strategy concepts, these objectives equate to 'sea denial', 'sea assertion' and 'power projection'. For Australia to be considered a force within our region of interest, our maritime strategy must incorporate these three elements. The degree to which we employ our forces in each role will depend on our perceived need or capacity to indulge each separate activity. Within this framework, our force must be structured to cater for the requirements of both coasts. This applies both to the external threats and also to the internal complications of having dedicated forces and supporting infrastructure in two distinct, widely separated areas.

#### THE ELEMENT OF SEA DENIAL

26. Admiral Stansfield Turner's concept of Command of the Sea was that it was divided into two sections — Sea Control and Power Projection. The sea denial element formed the deterrent side of Sea Control while the sea assertion element formed the combat bound together. For a force to act as a deterrent, it must have the capability — or the potential enemy must believe it has the capability — to be effective in combat. By maintaining strong maritime forces in the sea denial role, these forces will fulfill both deterrent and combat roles within the one element. Similarly, both roles will also be met within other elements or this overall maritime strategy.

# **ACTION STATIONS!**

Response times to anti-ship missiles have to be short. A matter of seconds from detection to reaction.

And most naval vessels don't even have the means to detect them.

#### Making every second count

Your operators need time.
Every lost second increases the risks.
ERICSSON Sea GIRAFFE gives you the edge you need. It detects anti-ship missiles when they are still 15-20 km away. Aircraft targets are acquired at a range of 40-60 km. Sea GIRAFFE suppresses clutter and jamming so the operator sees targets – and nothing else.

### Sea GIRAFFE - the only truly versatile naval radar system

Sea GIRAFFE is a single integrated radar system featuring three functions – air surveillance, surface surveillance and surface fire control. Sea GIRAFFE's low masthead weight and compact below-deck dimensions enable installation in a wide range of naval vessels. From small, fast patrol craft to frigate-size vessels.

### Leaders in fully coherent radar for more than 20 years

Behind Sea GIRAFFE are Ericsson's twenty years of experience in Travelling Wave Tube Doppler radar. With more than 1000 TWT radars on order throughout the years for airborne, ground and naval applications you can refer to an existing record of real achievement.

Sea GIRAFFE is now in full operational service with the Royal Swedish Navy and in series production for the Canadian Navy's new Patrol Frigate (the CPF or CITY class).

They've given themselves time to react. You can do the same, Contact Ericsson and give yourself those extra seconds you need.



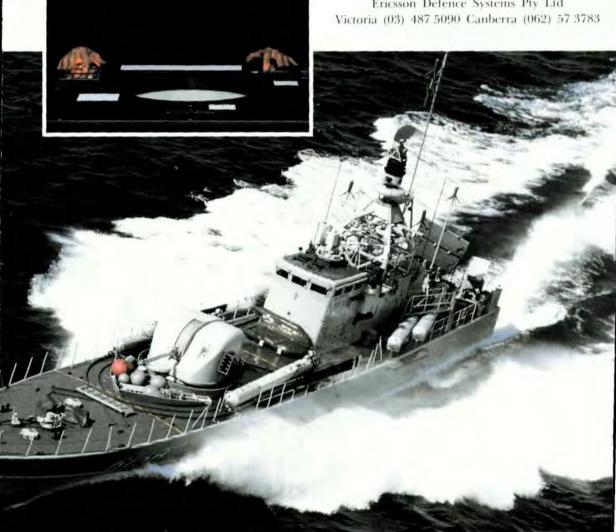
#### Check these Sea GIRAFFE features

- Long range detection of anti-ship missiles even in heavy clutter.
- Excellent simultaneous suppression of clutter with different velocities.
- Suppression of multiple-timearound clutter.
- Large number of transmitter frequencies.
- · Full frequency band in all antenna beams.
- Adaptive side lobe suppression.
- Threat adaptable search pattern.
- Digital pulse compression.
- · Compact and lightweight.

### **ERICSSON**



Ericsson Defence Systems Ptv Ltd



#### Seaborne Invasion

27. But where, and for what reasons should Australia practice sea denial? There are a number of scenarios where sea denial is applicable such as to attack a seaborne invasion force; to counter sea-based strikes against military and industrial targets; defence against mine warfare by enemy forces; or the protection of coastal sea routes necessary to our economy. The prospect of seaborne invasion is of special concern to strategies because of the limited cover our present forces supply to many remote areas and in this essay, only this aspect will be expanded.

28. Defence analysts, such as Paul Dibb, have indicated that the unprotected areas to the north and north-west pose the most likely areas for a foreign power to attempt to land in force — this in spite of the enormous problems they would then face. Of course, sea denial should not be excluded as a maritime role in areas other than the north or north-west but perhaps, at least initially, we should concentrate our forces for this role in these areas.

29. A force intent on seaborne invasion of Australia should not necessarily be intercepted and joined in battle while it is at sea, far from Australia's shores. In fact, the most vulnerable period for such a force is when it is shifting from the sea-passage to land-assault formation. Under sea denial, the object of Australian maritime forces should be to deny the enemy use of the sea in our immediate area, such that he would be unable to land forces or operate his own maritime forces in that area. Should an enemy force reach the position of launching a land assault, an attack by Australian maritime forces during this phase would also accord with the principle of war of concentration of force, using combined attacks, especially when the foe is at his weakest.

#### **Force Structure**

30. However, the aim of our maritime forces should be to totally deny the enemy use of our territorial seas for any purpose. The optimum way in which to achieve this is to structure a force, which although it may not be large, is formidable. The desired effect is to make the enemy believe that any attack or incursion would have consequences and casualties too large for the effort expended and gain obtained.<sup>28</sup>

31. Should this fail then naval forces must have the ability to carry out offensive attacks against the enemy. In these days of fast patrol boats which can carry missiles possessing as much punch as a battleship, coastal protection craft are a formidable opposition. At present, Australia lacks such a capability but if we are to achieve a viable sea denial role, acquisition of such craft

should be a priority task. Further, greater emphasis must be placed on the weapons fits of surface ships and submarines. Assuming that an attacking force would be numerically superior to Australian forces, our surface vessels must be armed with long range missiles as well as comprehensive self-defence weapons. The submarine, of course, is a trump card in any maritime strategy. The simple threat that a submarine is operating may be enough to keep fleets either in harbour or out of the area where the submarine is believed to be, achieving — among other elements — sea denial.

32. Additionally, maritime air forces for both reconnaisance and strike missions are vital to sea denial. The FA18 base at Tindal will provide a necessary platform for close support to the surface fleet. However, should opposing Air Forces, internal saboteurs or enemy Special Forces be able to reach Tindal, the damage they inflict could be severe enough to stop operations. Therefore, air fields at such places as Derby, Learmonth, Broome and Port Hedland should be developed as contingencies.

33. Of course, the strategy of sea denial is not confined to wartime situations alone. The simple presence of warships — whether they be first, second or third-tier ships — patrolling our territorial zones and visiting outlying protectorates in peacetime is a display of national resolve. Similarly, flights by Long Range Maritime Patrol (LRMP) and fighter/strike aircraft endorse this policy. This presence forms part of the deterrent factor of sea denial and is an important aspect in an outward though inoffensive show of strength.

#### Importance of Supporting Bases

34. For sea denial to be a credible element of Australia's maritime strategy, proximity of established bases to deployed forces is paramount. Access to a comprehensive fleet base is vital to keep major forces supplied and to provide a level of maintenance sufficient to attain a high degree of ship availability. The areas in Australia's north and north-west must be granted high priority for naval presence and the new second-tier ships due to commission as the Light Patrol Frigate must be given duties in this area. Operating from HMAS STIRLING and with air cover from RAAF Tindal they have the potential to carry out a satisfactory sea denial role. Without the ability to operate and exercise permanently from a West Australian port they would achieve no more than short, mainly ineffective deployments.

#### THE ELEMENT OF SEA ASSERTION

35. However effective the strategy of sea denial may be. Australia should not pursue this one element alone. To do so would promote an isolationist policy and signify a selfish — not just self-reliant — attitude to our allies. Australia has the capacity and indeed the need, to involve itself in other elements of maritime strategy, not the least of which is the concept of sea assertion.

In his Sea Control thermometer.<sup>29</sup> Admiral Turner placed sea assertion at the top level and this indicated total control of the sea. To operate at this level involves the use of aircraft carriers and cruisers to assert global superiority. In Australia's case this is obviously unrealistic but the middle level of the thermometer - one control or sea lanes and exerting power within zones or influences - is within our reach and should form part of our maritime strategy. The concept of sea assertion is also in line with the defence strategy detailed by the Defence White Paper which advocates a policy of defence-indepth. In major surface combatants used in a sea assertion role may well be, by virtue of the fact that they operate far from home shores. among the first units engaged in battle. However, in simple terms, the element of sea assertion is merely being able to use part, or parts, of the sea for your own purposes.

#### Securing Sea Communications

37. In Australia's case, we must use the sea for trade. This is certainly true in peacetime and would be equally true, if not more so, in wartime. Grave economic damage could be done to Australia by an enemy who never got closer than 1–2 000 kilometres from our shores, through attactks against our SLOC's. This is especially true in the case of the supply of oil. By the year 2000, Australia will rely on middle east oil for at least 50 percent of its requirements and the safeguarding of the ships carrying this oil will be on overriding consideration in maritime strategy.<sup>30</sup>

As almost all of Australia's import and export trade — some 250 million tonnes per year moves across either the Pacific or Indian Oceans the protection of these SLOC's is of paramount importance. A theory sometimes postulated is that because most of Australia's trade is carried in foreign bottoms, most vessels carrying goods for or from Australia will be safe from attack. However, situations such as merchant ships not going to Israel during conflict31 and the recent attacks on merchant ships of all flags in the Gulf war give lie to this concept. Under the terms of the Radford/Collins agreement, Australia also has some responsibility for the convoying of merchant ships from the eastern Indian Ocean, south-about Australia and then northwards, to the east of Papua New Guinea. We must also safeguard our sealanes to the north in the event of conflict with one or more of our regional neighbours.

39. With regard to convoy requirements two schools of thought exist; one says that the merchant ships sould be in convoy as soon as they leave the originating port; the other says that they should make their way independently to a pre-determined point before forming a convoy. The former method will offer protection for the merchantmen from departure to arrival but the routes will be well known. The latter will necessitate attacking submarines or surface raiders hunting for individual targets in a vast area — even though information from surveillance satellites will make their task easier. <sup>30</sup>

Whichever method is adopted. Australia's role will change little. In a general war scenario. under a protected convoy procedure warships from allied nations - which may include Australian first-tier ships as part of a multi-national force - would escort the convoy to a position some way off the Australian coast. Other Australian warships and aircraft would then assume responsibility for further protection. Similarly, merchant ships proceeding independently would converge on, and form their convoy at, a position which could be afforded protection from Australian maritime forces. Under both schemes Australia would need surface ships with sophisticated ASW sensors and weapons together with a surface and anti-air warfare capability. Fixedwind aircraft from shore-based airfields should also be able to cover the area of Australian interest to ensure maximum protection and deterrence. Additionally, submarine operating as either hunter-killers of other submarines, or in their traditional role are an invaluable asset in the sea assertion aspect of maritime strategy. Able to stay at sea for long periods and protected from satellite surveillance, the very threat of their presence may deter raiders from concerted attacks on merchant shipping.

The primary sea assertion role of protection of SLOC's is not confined to one coast or the other. Our sea trade is evenly balanced to and from both east and west and the requirement for blue-water naval forces to be able to operate for long periods from either shore is essential. But to do this effectively they must operate as two separate Task Groups as their particular operating parameters will depend to a large extent on the environment. At present, operating in the SWP or in SEA is different to operating in the Indian Ocean. Among other factors, disposition and composition of other forces, distance between ports and climate conditions all contribute to the demand for dedicated forces on each side of our vast continent.

#### THE ELEMENT OF POWER PROJECTION

- 42. A refinement of the two major facets of seapower sea denial and sea assertion is the projection of power ashore. It is a doctrine recognised by many defence writers and, although Admiral Turner has a slightly different view, he also produced a thermometer of 'Projection'. In this thermometer, amphibious assualt and naval bombardment appear halfway up the scale and it is these areas that Australia should incorporate in her maritime strategy.
- 43. In wartime, the projection of power ashore is obviously to defeat the enemy and take strategic military targets by force. However, the peacetime reasons for this strategy can only be to:
- support a state against external military threat.
- b. coerce a state or regime.
- affect the balance of an internal struggle for power, or
- d. secure the safety of Australian interests and property.<sup>34</sup>

Supportive action can be assumed to have cooperation from within the country being supported. Any such support to areas within Australia's immediate area of interest, especially those countries which are close to our shores, would probably be best supplied by air lift. Coercive intervention in areas which are nearby could also be achieved by airborne assault with naval support and merchant ship logisite back-up.

- 44. But should an unfriendly power invade the Cocos or Christmas islands or establish a menacing presence on islands of the SWP, projection of power falls to naval forces. Where reaction time is critical, airborne response could be used, but access to these areas, lying some 700–2 500 kilometres from the Australian coast, is normally by sea. An amphibious assault force of men and machinery or the requirement for bombardment could only be realistically met by naval forces.
- 45. In today's international political climate the SWP is the more likely area for a projection of power by Australia. With this in mind and also the requirements of the north and north-west, it may be prudent to base a strong sea denial force in the west and retain our amphibious capability predominately in the east. In conjunction with first-tier ships, both forces fufill the peacetime roles of deterrence and such a division of units would be more sensible than simply 'basing half the Fleet in HMAS Stirling' as stated, without elaboration as to force disposition, in the 1987 White Paper.

#### INTERNAL IMPLICATIONS

#### Intelligence

- 46. The development of a realistic and successful maritime strategy for Australia and the adoption of a two-ocean navy policy will be dependent to a large degree on threat assessment, both now and in the future. Up-to-date, valid assessments and projections are impossible without comprehensive, competent intelligence organisations. The ability to disseminate intelligence information quickly to commands ashore and afloat, will impact upon every element of our maritime strategy whether it to be sea denial, sea assertion or power projection.
- 47. For Australia to be capable of reacting to even low-level threats, an efficient intelligence service able to monitor continuously Australia's strategic environment, is essential. Through intelligence services we will be able to analyse changes in force structure and the build-up of forces in particular areas and deploy or re-deploy appropriate forces in ample time to counter the perceived threat.
- 48. Our intelligence capability is well served through our own experience and through links with Western Alliance partners and will be improved by such developments as over-thehorizon-radar (OTHR). However, the bulk of our intelligence community is located in the eastern states and to effectivly utilise the facility in the development of a maritime strategy, increasing importance should be placed on the rapid dissemination of information to the west coast. Current and long-term strategic assessments form the corner-stone of defence planning and dictate the direction of maritime strategy and force structure. The importance placed on the intelligence community to defence planning is borne out by the following statement from Paul Dibb:
  - ... Australia needs a greater independent intelligence collection capacity of its own and it requires more intelligence analysts, who are trained in strategic, scientific and military as distinct from political disciplines. The great tendency that all Australian governments have to overburden the intelligence system with demands for current intelligence can only detract from the ability of any organisation to carry out serious long-term strategic assessments. <sup>135</sup>

#### Command, Control and Communications

49. With the advent of half the fleet operating permanently from Western Australia, communications and thereby command and control of

these units may pose some problems. Current Fleet and Local Area broadcasts are adequate in area coverage to cope with our present number and disposition of ships. However, as our fleet grows and becomes more widely dispersed and the role of the two 'Task Groups' differs, our means of directing, controlling and communicating with these forces must become more efficient.

50. Communications is an integral part of defence strategy and is fundamental to the building of a coherent maritime strategy. The military hardware of our two-ocean navy policy will be no more than a collection of scrap iron awaiting destruction unless well-laid plans are formulated to cater for the increased workload and possible re-siting of our communications stations. Such provisions are necessary to facilitate and expedite information flow between ships and shore commands.

#### Personnel Aspects

51. In discussions on maritime strategy, thoughts usually centre around concepts of force structure, deployment of forces and threat assessment. This is quite proper but when, for Australia, the factor of dividing the naval forces across a great expanse of land is introduced, the 'personnel aspect' must be considered. It is an important element in the successful transition to a two-coast navy and, therefore, to the development of Australia's future maritime strategy. It is important because it concerns a necessary principle of war — morale.

52. Other than HMAS STIRLING, there are no other naval establishments catering for the Permanent Naval Forces (PNF) in Western Australia. All training establishments are still located in the eastern states as are all trials and testing facilities and units. The continual travel back east for professional and personal development courses for all WA personnel may not only strain the defence budget and affect naval efficiency but may seriously undermine family stability.

53. In addition, when the sailors who are serving on ships based in Western Australia are due for shore service, where do they and their families go? Is there to be a steady stream of naval personnel moving back and forth across the country to take up new postings? The Hamilton report of 1986<sup>36</sup> identified posting turbulence as a prime factor for dissatisfaction among service personnel and their spouses. Unless certain facilities presently locted on the eastern seaboard are moved to WA and the supporting defence infrastructure expanded, all theories of maritime strategy and force structure

will cease to be relevant. To man our ships and aircraft and implement policy, 'manpower' is necessary and if, through poor planning of this two-ocean policy, morale is allowed to deteriate, we may face shortages which jeopardise the credibility of our total defence strategy. The single most important factor in maritime strategy is the 'man' and his well-being will go a long way towards ensuring a competent, well organised and properly structured maritime force.

#### CONCLUSION

54. The recently announced 'two-ocean' navy policy is significant for Australia for a number of reasons. It recognises the fact that our area of interest extends well beyond all our shores and is not confined to the islands and seas off our eastern seaboard, we have as much interest in the political and military affairs of the Indian Ocean littoral as we do of those in the SWP regions. The identification of possible threats — both in the immediate and long-term future — and the need to protect our SLOC's and provide a measure of self-reliant defence, will determine our maritime strategy and force structure requirements.

55. A realistic maritime strategy for Australia should not be confined to an isolationist, sea denial policy or to simply forming an arm of the American global sea assertion forces. We are the most powerful military nation in our region and have the need to capacity to incorporate a strategy embracing the elements of sea denial, sea assertion and power projection. To do this we will need a properly structured force with purpose designed units to provide, primarily, sea denial forces in the north and north-west, sea assertion forces to protect our vital trade routes and assist our allies as well as power projection forces to assist regional friends or ensure stability in our area of interest.

This strategy must evolve around the 'twoocean' or 'two Task Group' policy and the division of maritime forces should cater for the requirements of both coasts while not splitting the force into two entirely separate navies. Thought must also be given to the internal requirements and problems of two widely separated naval bases, one of which is far from existing defence infrastructure. Communications and intelligence organisations and procedures must take cognizance of increased requirements to ensure adequate command and control of all forces. Of importance also is that planners must recognise the special circumstances surrounding sailors and their families and endeavour to provide a degree of family stability; thereby retaining that all important factor — morale.

57. If all these objectives are achieved, the implications of a two-ocean navy policy on the development of Australia's maritime strategy will be to broaden our defence infrastructure, enhance our regional credibility, achieve a well-structured, well-maintained maritime force and provide a solid foundation for the furtherance of our national and military objectives. Although Australia's maritime strategists have set the right course, they should continue to keep uppermost in their minds, Admiral John Davidson's aphorism:

'Logistics are the key to operations: bases are the key to logistics'.37

#### Acknowledgements

- Beazley K. Minister for Defence, in a statement made when tabling the 1987 Defence White Paper, Australian, 20 March 1987.
- Sunderland R. 'Australia's Emerging Regional Defence Strategy'. The Strategic and Defence Studies Working Paper No. 80. AGPS, Canberra, 1984. p1
   Hayden W. Minister for Foreign Affairs, 'Australian Policy
- Hayden W. Minister for Foreign Affairs, 'Australian Policy on the Indian Ocean.' Backgrounder, 17 January 1984, pVII.
- 4 Willis VADM J., KBE, AO, RAN Australia's Maritime Defence: Australia's Maritime Horizons in the 1980's. Occasional Papers in Maritime Affairs: 1. Canberra 1982.
- The Detence of Australia 1987 A Policy Information Paper — AGPS, Canberra, 1987 para 2.14.
- 6. ibid, para 2.69
- 7. ibid. paras 2.41-2.52
- 8. ibid, paras 2.20-2.40
- Grazebrook A.W. Major New Soviet Moves in the Indian and Pacific Oceans' Pacific Defence Reporter, Vol 11, No. 3. September 1984.
- Robertson A. RADM. Why Australia Need a Two-Ocean Navy Weekend Australian, 7–8 March 1987.
- Hayden W. 'Australian Policy on the Indian Ocean', ioc cit.
- 12 Sturkey D 'Australia and the Indian Ocean' AFAR. December 1984, p1285.
- 13. The Defence of Australia 1987, op cit, paras 3.26-3.32.
- 14 ibid, paras 3.26-3.32
- 15. ibid, paras 2.63-2.68
- 16. Willis J. 'Australia's Maritime Defence', op cit.
- 17 Sunderland, op cit, p4
- 18. ibid. p10.
- Maritime Strategy Tutoriai Outline. RAN Staff College Study 3 Notes. Ran Staff College, HMAS Penguin pp3–5.
- The Defence of Australia 1987, op cit. paras 2 58, 2 66, 3.2
- Dibb P World Political and Strategic Trends Over the Next 20 Years — Their Relevance to Australia'. Strategic and Defence Studies Working Paper No. 65, Canberra, January 1983.
- 22 Till G. Maritime Strategy and the Nuclear Age. Macmillan Press, London, 1984 pp 39–43.
- 23 ibid, p15.
- 24. ibid. p16.
- Turner S. ADM 'Designing a Modern Navy: A Workshop Discussion'. Adeloni Papers. No. 123. London, 1976.
- Robertson J.A. The Fundamentals of Maritime Strategy Journal of ANI, Vol 4, No. 4, November 1978, p.20.
- MccGwire M. Australia as a Regional Seapower. Journal of ANI. Seapower 79, February 1979, p18.

- Langtry J.O., Bail D. The Development of the Australian Defence Force. Strategy and Defence — Australian Essays. Canberra, 1982. p273.
- 29. Turner, op cit, p26.
- Kirk J.F. Industry's view Journal of the ANI. Seapower '84, August 1984.
- 31. Robertson, op cit, p23.
- 32. MccGwire, op cit, p27
- 33. Robertson, op cit, p22.
- 34. MccGwire, op cit, p28.
- Dibb P Issues in Australian Defence , Australian Outlook, Vol 37, No. 3, December 1983, pp160–167
- 36 The Hamilton Report, Supporting Service Families, Canberra, 1986, pp21–22.
- Alves D. 'A Strategy for the Indian and Pacific Oceans'. Pacific Defence Reporter, October 1983, p10.

#### **Bibliography**

- Babbage R. Rethinking Australia's Defence. University of Queensland Press, St. Lucia, Queensland, 1980.
- Booth K. Navies and Foreign Policy, Holmes and Meier Publishers, New York, 1979.
- Langtry J.O., Bail D. The Development of the Australian Defence Force', Strategy and Defence — Australian Essays, Canberra, 1982.
- O'Neill Ř Australian Detence Policy for the 1980's University of Queensland Press, St. Lucia, Queensland, 1982.
- Till G. Maritime Strategy and the Nuclear Age. Macmillan Press, London, 1984.

#### **Government Publications**

- Dibb P. 'World Political and Strategic Trends Over the Next 20 Years — Their Relevance to Australia' Strategic and Defence Studies Working Paper No. 65, Canberra, January 1983.
- Sunderland R. Australia's Emerging Regional Defence Strategy'. The Strategic and Defence Studies Working Paper No. 80, AGPS, Canberra, 1984.
- The Defence of Australia 1987 A Policy Information Paper — AGPS, Canberra. 1987.
- The Hamilton Papers, Supporting Service Families, Canberra, 1986

#### Articles

- Alves D. 'A Strategy for the Indian and Pacific Oceans', Pacific Defence Reporter, October 1983.
- Beazley K. Minister for Defence. A statement made when tabling the 1987 Defence White Paper, Australian, 20 March 1987.
- Dibb P. Issues in Australian Defence, Australian Outlook, Vol. 37, No. 3, December 1983.
- Grazebrook A.W. Major New Soviet Moves in the Indian and Pacific Oceans. Pacific Defence Reporter, Vol 11, No. 3. September 1984.
- Grazebrook A.W. India's Naval Buildup Could Pose Serious Threat', Pacific Defence Reporter, July 1984.
- Hayden W. Minister for Foreign Affairs, Australian Policy on the Indian Ocean. Backgrounder, 17 January 1984.
- Kirk, J.F. 'Industry's View' Journal of ANI, Seapower '84, August 1984.
- Kitney G. 'Why are the Soviets in our Backyard?', The Times on Sunday, 22 February, 1987.
- Maritime Strategy Tutorial Outline. RAN Staff College Study 3 Notes. Ran Staff College, RMAS Penguin.

- MccGwire M. 'Australia as a Regional Seapower' Journal of the ANI, Seapower '79, February 1979.
- Papp Dr. D.S. Moscow's Long-range Pacific Plans', Pacific Defence Reporter, March 1987.
- Robertson A, RADM, 'Why Australia Needs a Two-Ocean Navy' Weekend Australian, 7–8 March 1987.
- Robertson J.A. The Fundamentals of Maritime Strategy' Journal of the ANI, Vol 4, No. 4, November 1978.
- Sturkey D. 'Australia and the Indian Ocean'. AFAR. December 1984.
- Turner S. ADM 'Designing a Modern Navy: A Workshop Discussion', Apelphi Papers, No. 123, London, 1976.
- Willis VADM J., KBE, AD, RAN 'Australia's Maritime Defence'. Australia's Maritime Horizons in the 1980's. Occasional Papers in Maritime Affairs: 1. Canberra, 1982.



# **GID**

Garden Island Dockyard

Garden Island Dockyard
has been the premier repair
and refit dockyard for the
Royal Australian Navy since
1911. We are now proud to
be able to offer Garden
Island's comprehensive
facilities to commercial
shipping and other non
traditional customers,
on a competitive basis.

#### This includes:-

- ★ Ship repair and modernisation services
- ★ Dry dock facilities including floating dock
- ★ Full range of engineering services
- ★ Sophisticated communication and weapons technology expertise
- ★ NATA registered laboratories
- ★ Hydraulic, pump, refrigeration and diesel engine test facilities
- ★ Small craft repair in wood, fibreglass, aluminium and steel



Garden Island Dockyard Sydney NSW 2000 Australia Telephone: (02) 359 2333 Facsimile: (02) 359 3287 Telex: GIDOCK AA 74849

# FORGOTTEN POLICY, FORGOTTEN SHIPS?

By Ray Jones

Recent celebration of the RAN's 75th anniversary has tended to give the impression that significant Australian naval history began in 1911. Concentration on events in that year, and on the formal arrival of the RAN Squadron in Sydney in 1913, has overshadowed the prior existence of an Australian naval force with well defined roles aimed at meeting national requirements. Emphasising Australia's sudden emergence onto the international scene with an ocean control naval squadron of battle-cruiser and light cruisers has caused the preceeding inshore defence phase to be overlooked. The earlier policy has been largely forgotten but it is worth remembering as a stage in Australia's naval evolution and because the ships were an important milestone in Australia's naval development.

This phase in Australian naval history began just after Federation when the decaying colonial navies were amalgamated into the Commonwealth Naval Forces or CNF (the term 'navy' was scrupulously avoided) under Captain W.R. Creswell. Australian naval policy then was to rely on the Royal Navy, and to minimise expenditure on the CNF, but there was also a growing belief that the Royal Navy was not absolutely trustworthy and Australia should acquire its own coastal defence forces.

Alfred Deakin, several times Prime Minister before the First World War, was a leading figure of a diffuse group working towards an Australian navy. The Admiralty was horrified by Australian interest in a local navy and did its best to convince Deakin to place his trust completely in British sea power. Unfortunately for Admiralty plans, committees of Australian naval and military officers separately advised Deakin that Australia should not rely on Britain completely and needed its own inshore navy. This conclusion arose from considerable confidence in the Royal Navy's ability and willingness to thwart large scale action against Australia, combined with concern that a small number of enemy ships may evade British forces and reach Australian waters. There was also some concern that enemy merchant ships on the high seas at the outbreak of war would convert themselves into auxiliary cruisers (by mounting guns carried below in peacetime) and embark on a career of commerce raiding. Such raiders would be attracted to the vicinity of ports where they could easily find prey unless measures were taken to drive them away.

Against Admiralty advice, but with the support of Andrew Fisher, the Labor Party leader, Deakin began the lengthy process of acquiring ships to meet this requirement. He lost office to Fisher at the end of 1908 but the Labor government, under Creswell's persistent urging, maintained the nationalist naval policy. Since 1906, when Deakin had decided to go ahead with the destroyer programme, Creswell had made considerable progress with his pet project. Professor J.H. Biles, a recognised expert in Britain in small warships and a member of the Admiralty Committee of Design, had been engaged as a consultant and had modified the Royal Navy's River class destroyer design to meet Australian requirements as defined by Creswell.

The modified design emphasised heavy armament, long range, high speed and good seakeeping. Australian destroyers were expected to shadow raiders and report their movements by wireless telegraphy so merchant ships could shelter in defended ports. When opportunity offered, particularly at night or in bad weather, they would attack the raiders with torpedoes and guns. For this inshore sea control task, the Australian destroyers needed the high speed and seaworthiness of Royal Navy fleet destroyers but they also needed long range capability for patrolling the extensive Australian coastline. As well, individual ships needed to be heavily armed because there would not be an Australian cruiser squadron to back-up the destroyers with bigger guns.

Primary armament comprised three single trainable 18 inch (457mm) torpedo tubes on the upper deck. Gun armament was one 4 inch (102mm) gun on the forecastle and three 12 pounders (76mm) along the upper deck. Although the torpedo was the primary weapon, the ability of a 4 inch gun at short range to cause considerable damage to auxiliary cruisers with thin merchant ship plating and unarmoured upper works was not ignored. In those far-off days before aircraft complicated naval warfare even more than the torpedo was doing, guns

were only intended for use against surface targets and River class maximum guns elevation was 20 degrees giving a maximum theoretical gun range of 10 210 yards (9 336 metres) for the 4 inch main gun. Weapon range at night would probably be limited by the range of the 20 inch (508mm) searchlight on the bridge.

Creswell insisted that the destroyers must have oil-burning boilers because of the lower boiler room manning possible and because stoker fatigue did not limit the duration of high-speed steaming of an oil-fired ship. Coal-fired boilers were more usual in destroyers at the time and the Australian ships were novel in this respect. They had three Yarrow boilers supplying steam at 220 psi to Parsons compound turbines driving three shafts. 174 tons (177 tonnes) of oil fuel were carried (and one ton of coal for the galley fire). Maximum speed was 26 knots and radius of action was 2 800 miles at 11 knots.

Early progress with this first Australian warship design was independent of the Admiralty. When construction began, the British government was opposed to members of the British Empire having independent navies and Biles had designed the ships without Admiralty participation. The construction contract was signed between Australia and the ship-building firm and Biles supervised construction under a separate contract with the Australian government. The first destroyer, HMA TBD (Torpedo Boat Destroyer) Parramatta. was launched on 9 February 1910 and HMA TBD Yarra was launched on 9 April 1910. Both commissioned in the CNF in September 1910. The third destroyer, HMA TBD Warrego, was assembled in a British shipvard then taken apart and sent to Sydney for final assembly as the first step in estblishing a warship building industry in Australia.

Admiralty attitudes towards an Australian navy had reversed while the destroyers were being built. Permission was readily granted to employ classified oil burning equipment and the Admiralty made available sailors with experience of oil-fired boilers to man the boiler room, as well as assisting greatly in storing the new ships and working to the crews.4

Apart ...om the boiler room personnel and some sick berth staff on loan from the Royal Navy, Parramatta and Yarra were manned by CNF personnel for passage to Australia. For that voyage the destroyers were commissioned as Royal Navy ships and their officers were given temporary Royal Navy commissions. This action resulted from a Crown Law assessment that the Australian Defence Act, under which the CNF operated, had jurisdiction only in Australian waters and the theory was whispered that the vessels may technically be pirate ships if they

were not commissioned in the RN before leaving Britain. The destroyers were the White Ensign until they arrived at Broome on 16 November 1910 when Australian Blue Ensigns and the blue and red CNF commissioning pendants were hoisted.<sup>5</sup>

After reaching Melbourne on 9 December 1910 the destroyers were organised in a flotilla under a Commander (D), Commander G.F. Hyde, and based at Williamstown Naval Depot established by the Victorian Government in the nineteenth century for Victoria's torpedo boats. As well as extensive flag-showing in Australian ports the destroyer flotilla practised harbour defence. One exercise, held in February 1913, is an excellent example of the way they planned to operate.

For this exercise, the cruiser HMS Pyramus of the Royal Navy's Australian Squadron was tasked to simulate a raider approaching Hobart from the south-east. This represented the perceived threat of a raider approaching a prosperous Australian port under cover of darkness to attack merchant shipping at first light. After 2200 on each of the three nights chosen for the exercise. Pyramus was to approach Storm Bay from the south-east while the three destroyers patrolled ready to intercept the 'raider'. All ships would be darkened and would not burn navigation lights until after the attack. Pyramus could use searchlights after the destroyers had been sighted and destroyers would remain 1000 yards clear of the cruiser, if possible.

The destroyers movements were severely restricted by fuel availability. Oil fuel was only regularly available for the CNF from civilian contractors in Adelaide, Melbourne and Sydney. There were no naval tanks or tankers because naval planning so far had emphasised fighting ships. Of the 174 tons of oil the destroyers carried, about 100 tons was needed for the round trip between Melbourne and Hobart so strict economy had to be exercised in using the remaining fuel.

Shortage of fuel, and the large area of Storm Bay to be patrolled, prompted Commander (D) (T.W. Biddlecombe in Warrego) to establish fixed patrol lines in Storm Bay along which the destroyers patrolled at six knots. Ships were to report sighting Pyramus by wireless telegraphy (W/T) and attack immediately, otherwise W/T silence was ordered. On the first night, Pyramus did not enter the patrol area and was not sighted. On the second night, Warrego intercepted a wireless transmission from Pyramus indicating she was nearby: Warrego saw her in the distance but had insufficient fuel to close. Biddlecombe reported that he would have called the other destroyers to join for a combined attack if sufficient fuel had been available.

Next night Warrego sighted Pyramus in the search area and shadowed her for ninety minutes, without being seen, before carrying out a simulated torpedo attack. Once again, fuel retrictions limited Warrego's freedom to use the high speed she would normally use in a genuine attack. The simulated attack, delivered from an estimated range of 800 to 1000 yards, was judged unsuccessful by the Admiral's Flag Lieutenant (acting as umpire in Warrego) partly because of the cruiser's aspect of the moment of attack. Nevertheless, it is clear from Pyramus' signals that the destroyer had closed to torpedo range before the cruiser counter-attacked.

This small exercise illustrated several important points including the tactical use of a radio interception as early as 1913 and an associated awareness of the possibility of wireless transmissions being intercepted. Another important lesson was the problem of operating oil-burning ships in a coal-burning environment. Despite the long range capability of the Australian River class destroyers they still needed additional fuelling sources to cover Australia's great distances. Oil barges holding 550 tons were under construction for stationing at suitable ports as the oil equivalent of a coal hulk, and a tanker was planned as a mobile source of oil for the destroyer flotilla. This exercise stressed the need for these facilities.

While the Australian destroyers were proving they could intercept, shadow and attack a raider at night in a focal area, an entirely different national policy was being implemented and the River class vessels were soon absorbed into the new RAN. This new navy, designed for ocean-control, was built around a battle-cruiser and light cruisers which overshadowed the smaller destroyers. Despite losing their pre-eminence, the Rivers' attributes of heavy armament, good speed, long range and good seakeeping specified by Creswell ensured they remained useful units and they did sterling work during the First World War.

On the night of 11 August 1914, while the cruiser HMAS Sydney lay at the harbour mouth and the battle-cruiser HMAS Australia lay further out to sea, the three destroyers, painted black to make them even harder to see at night, slipped into Simpsons Harbour at Rabaul. They planned to torpedo the German armoured cruisers Scharnhorst and Gneisenau which were thought to be there. Unfortunately for the chances of an epicmaking initiation into active warfare for the RAN, the harbour was empty of warships.<sup>8</sup>

When most of the RAN returned to Rabaul with an invasion force in the following month the destroyers and *Sydney* again led the way to confirm that German warships were not defending Rabaul. During the next few days, while the

German colonial authorities were being rounded up and Australian rule established, daylight patrols were maintained in the sea approaches to Rabaul to ensure that the German East-Asia Squadron, under Vice-Admiral Count von Spee, did not arrive on the scene without warning. These patrols were mounted by a destroyer further out to sea in the direction of the threat with a submarine on the surface closer to Rabual. A destroyer stood very little chance of successfully attacking an alerted cruiser squadron by day, and was intended to be more of a lookout than a defence unit, but the submerged submarine could successfully attack the German cruisers as they drew closer.

In the period immediately before the war, procedures for defending focal areas had altered as the submarine evolved from a curiosity into a useful naval weapon and as anti-destroyer gunnery improved. By 1914 the usual method of defending a focal area was to mount destroyer patrols at night when darkness and a low profile provided the ships with detection, even at close range. Daytime patrols were reserved for submarines which could submerge for concealment when attacking raiding cruisers. The division of labour was adopted when the RAN moved from Rabaul into the Pacific Ocean searching for the German squadron and using Fiji as a base. While the cruisers searched ocean areas the destroyers and the remaining submarine (AEI had disappeared off Rabaul) patrolled the approaches to Fiji by night and day respectively."

Schamhorst, Gneisenau and several German light cruisers were sunk by a superior British squadron near the Falkland Island on 8 December 1914 and Von Spee's squadron, which had caused grave concern in Australia, ceased to exist. The German threat to Australia, in the form of warships which could have damaged Australian trade and sunk troop convoys, was gone and the German colonies north of Australia were in Allied hands. RAN warships separately redeployed to European waters which became the focus of the naval battle.

After some time patrolling, first around Australia, then in present-day Indonesia and South-East Asia, the three original RAN destroyers and another three ships of the class (*Huon, Torrens* and *Swan*) built in Australia, were sent to the Mediterranean in the middle of 1917. They were fitted with depth charge racks for anti-submarine purposes and entered into routine naval operations in the Mediterranean under Admiralty control.

Ironically, this was the time they were most needed in Australia for their original purpose of defence against raiders. The German raider SMS Wolf laid mines near the Victoria/New South Wales border in July 1917, then sank

# THE GOALKEEPER



Signaal's Close-in Weapon System

## Signaal systems in both ANZAC frigate baselines

Sensor, Weapon control and Command systems of Hollandse Signaalapparaten of The Netherlands have been included in both offers for the ANZAC frigates. The Blohm & Voss and the Royal Schelde Shipyards have selected Signaal's radars, gunnery and missile control and combat information systems for their basic offers.

Signaal, a Philips company and long standing supplier to the Royal Australian Navy will work closely with Philips Defence Systems to provide an outstanding Australian-New Zealand Industry involvement package.

Goalkeeper, and the other systems, vividly illustrate Signaal's capabilities as one of the world's foremost suppliers of integrated naval combat systems.

Hollandse Signaalapparaten B.V. – P.O. Box 42 – 7550 GD Hengelo – The Netherlands Communication & Control Ltd – P.O. Box 15 – 337 Auckland 7 – New Zealand Philips Defence Systems Pty Ltd – 2 Greenhills Avenue – Moorebank NSW – Australia

TACKLE THE FUTURE WITH SIGNAAL INTEGRATED SYSTEMS



merchant ships in the South-West Pacific, and a lively awareness of raiders developed in Australia. But most RAN warships had been handed over to Admiralty control for the duration of the war and the Admiralty did not share Australian concern at defending Australia. RAN destroyers remained in the Mediterranean protecting commerce bound from the Suez Canal to Britain while the Australian Naval Board pressed a miscellany of vessels into service for patrolling focal areas, especially in Bass Strait and the Tasman Sea. Fortunately, no more raiders operated in Australian waters before the end of the First World War when RAN warships returned home.

The immediate post-war years are among the least distinguished in RAN history, as Australia tried to adapt to new international conditions, and naval policy was often blurred. Whatever role destroyers had in this post-war Navy was not for the Rivers which were now regarded as small and old-fashioned. They had been replaced in front line service by five bigger nad more heavily armed S-class destroyers donated by the British government. Availability of free ships removed any incentive to build destroyers and plans to maintain the practice, begun with the Rivers, of building warships in Australia were dropped."

The River class destroyers were reduced to care and maintenance in Sydney for a few years before being distributed around RANR ports where they remained in care and maintenance while being used for alongside training. In the late 1920s, as the Great Depression began to take hold, they were called to Sydney and paid-off for disposal.

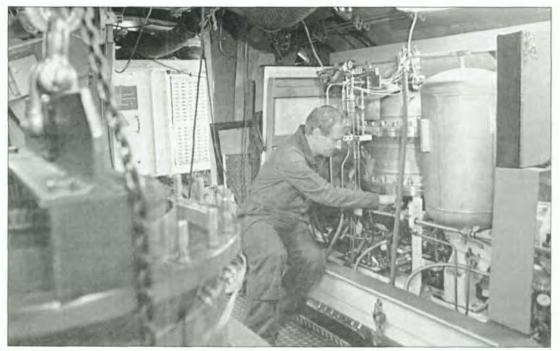
By then, Australia had adopted a naval policy firmly aligned with Britain's Singapore strategy and the RAN concentrated on operating cruisers and submarines to augment Royal Navy forces based on Singapore. The Admiralty had weaned Australia away from considering destroyers as front line ships and the S-class were looked on as useful mainly for training men for cruisers. This policy dominated inter-war naval development in Australian and has over-shadowed the

policy of independent inshore defence adopted by Deakin and Fisher before the First World War and for which *Parramatta*, *Yarra* and *Warrego* had been bought.

A thorough assessment of Australian naval history should look behind the euphoria and enthusiam of the 1911-1913 period and take account of an earlier, more independent, national policy before the Royal Australia navy was established. Under this policy, Australia planned to defend commercial harbours and inshore waters entirely from its own resources in what could be described as an early example of self-reliance. Time did not allow the policy to develop fully and the resulting naval force was fragmentary and incomplete, lacking many attributes needed to be a self-sustaining navy. But the River class destroyers, and that night exercise in Storm Bay in 1913, are a reminder that Australia had a different naval policy before the RAN was established.

#### **Endnotes**

- Stephen D Webster, Creswell, The Australian Navalist: A Career Biography of Vice Admiral Sir William Rooke Creswell, KCMG, KBE (1852–1933) unpublished PhD thesis, Monash University, 1976, pp177–179.
- N.J.M. Campbell, "British Naval Guns 1880–1945 No 17" Warship No 37, p53–56.
- Paper by Creswell, 6 August 1913, file 13/0226, accession MP1049/1, Australian Archives Victoria (AAV), Middle Brighton, Melbourne.
- H.J. Feakes, White Ensign Southern Cross Ure Smith, Sydney, 1951, p143.
- Admiralty to Colonial Office, 6 September and 18 November 1910, both CO 148/84, Public Records Office, London.
- Hyde was to have a long association with the RAN becoming Chief of the Naval Staff in the 1930s.
- Orders and reports relating to this exercise are in file 13/ 055, accession MP 1049/1, AAV.
- S.S. Mackenzie, Office History of Australia in the War of 1914–18 Volume X The Australians at Rabaul (3 ed), Sydney, 1936, pp34–35.
- Commander H.G. Stoker, Straws in the Wind Herbert Jenkins, London, 1925.
- C Ernest Fayle, Official History of the Great War Seaborne Trade Volume III The Period of Unrestricted Submarine Warfare John Murray, London, 1924, p310.
- 11. File 20/0416, accession MP 1049/1, AAV.



The neutrally buoyant Stirling section is built before the submarine is cut in order to reduce the time the submarine is non-operational.



Stirling generators are being installed in the Stirling section.

### PRESS RELEASE

#### KOCKUMS LAUNCH THE STIRLING SUBMARINE

A conventional submarine has to recharge the batteries using its diesel generators. This recharging might take hours and have to be repeated daily depending on how the submaarine is operated.

During snorting the risk for the submarine being detected is increased substantially as the noisy diesels are detected at long ranges as is the air induction mast. Snorting will also increase the IR and magnetic signatures as well as the risk for optical detection.

Nuclear powered submarines need not snort. But they are expensive in comparison with conventional submarines and are regarded as noisy.

Sweden, operating its submarine in the waters between the Superpower blocks, has long been studying ways of controlling the risks during periods of snorting to affordable costs and has come to the conclusion that the Stirling generator alternative is advantageous.

In short, the Stirling air-independent propulsion system charges the submarine batteries from generators driven by silent Stirling engines. For the Stirling combustion pure oxygen kept in liquid form (LOX) is used and pure oxygen will give only limited exhausts which are dissolved in water.

Recharging the batteries with Stirling generators will thus minimise detection as the recharge does not increase any of the signatures used for ASW while the Stirling submarine stays immersed.

September 6, 1988 marks the beginning of a new submarine era. This day, the world's first naval submarine with Stirling air-independent propulsion was launched at Kockums Marine AB in Malmö, Sweden.

The Swedish submarine Näcken, first delivered in the late 70s, was launched for sea trials after having been lengthened with the neutrally buoyant Stirling power section developed by Kockums Marine AB.

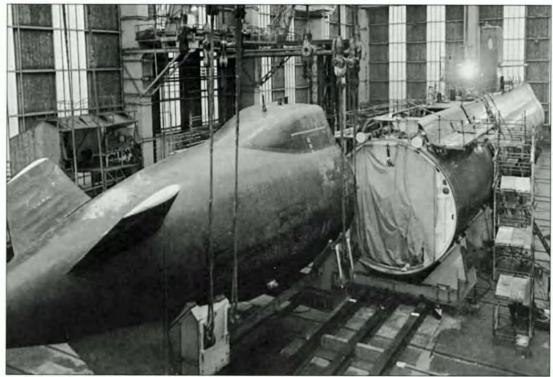
The section contains the Stirling generators, the supply of LOX and the control systems, By lengthening the Näcken submarine by some 10 per cent the immersed endurance is increased from a couple of days to a couple of weeks. The time submerged is limited only by the supply of LOX.

Sea trials will start in spring 1988. It should be noted that the installation on board the Näcken is designed for operational use and not as a test or laboratory installation.

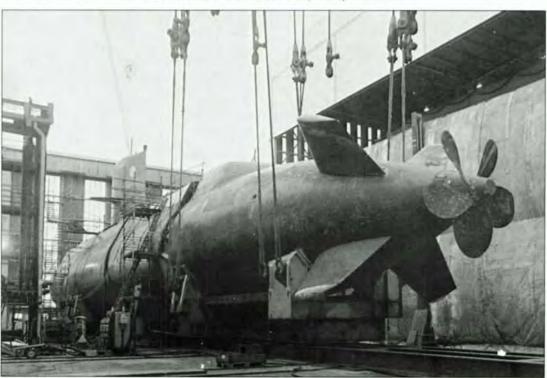
The Stirling technology is safe and simple, with LOX carried daily by road transport all over the world. Given the existing infrastructures, the Stirling system thus meets the requirements of limited costs.

The Näcken submarine was — without replacing anything — lengthened with a neutrally buoyant add-on Stirling section. Any conventional submarine, existing or being developed, could thus be modified in a similar way.

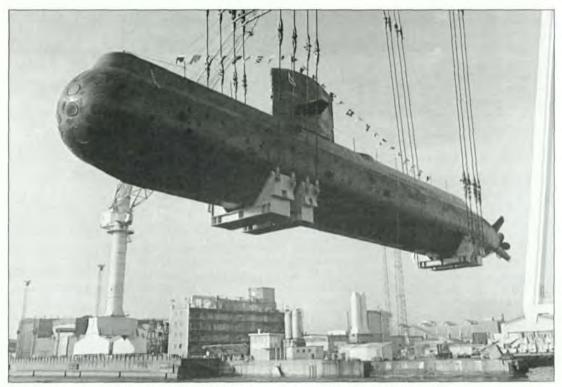
Stirling air-independent propulsion systems have been delivered to the French Comex company for its Saga submarine, and Australia has an option for Stirling systems for the Kockums designed 471 submarines of 2500 ton.



The Näcken submarine is cut and the aft section temporarily removed.



The Stirling section has been added to the forward section of the submarine. The aft section is lifted to be welded to the Stirling section.



The Näcken is ready for sea trials. The Stirling system installed is dimensioned for operational use — not only for tests. The submarine endurance is increased from a couple of days to a couple of weeks.



# 1990 Churchill Fellowships for overseas study

The Churchill Trust invites applications from Australians, of 18 years and over from all walks of life who wish to be considered for a Churchill Fellowship to undertake, during 1990, an overseas study project that will enhance their usefulness to the Australian community.

No prescribed qualifications are required, merit being the primary test, whether based on past achievements or demonstrated ability for future achievement.

Fellowships are awarded annually to those who have already established themselves in their calling. They are not awarded for the purpose of obtaining higher academic or formal qualifications.

Details may be obtained by sending a self addressed stamped envelope to:

The Winston Churchill Memorial Trust 218 Northbourne Ave, Braddon, ACT 2601.

Completed application forms and reports from three referees must be submitted by Tuesday 28 February 1989.

# CHURCHILL TRUST THE CHANCE OF A LIFETIME

Take the chance of a lifetime by applying for a 1990 Churchill Trust Overseas Fellowship to pursue your particular passion.

You will get an allowance to cover expenses anywhere in the world, usually for around three months — longer or shorter if it suits your project — plus air fares and fees.

But there is a condition: On your return your must use your knowledge and experience to enrich Australian Society.

For further information send a stamped, addressed envelope to:

The Winston Churchill Memorial Trust 218 Northbourne Avenue BRADDON ACT 2601

STOP PRESS: Additional sponsored Churchill Fellowships offered in 1990 are:

THE AUSTRALIAN INSTITUTE OF PARKS AND RECREATION EDUCATION TRUST FUND CHURCHILL FELLOWSHIP for the study of a subject directly related to parks and recreation in Australia:

THE PERCY BAXTER CHARITABLE TRUST CHURCHILL FELLOWSHIP for the study of a subject of benefit to the wider community of Victoria:

THE SAMUEL & EILEEN GLUYAS CHURCHILL FELLOWSHIP for study and research into the pastoral industry particularly as it applies to the tropics;

THE JACK GREEN CHURCHILL FELLOWSHIP for the benefit of people engaged in the Diary Industry:

THE A.V. JENNINGS CHURCHILL FELLOW-SHIP for study overseas in the field of domestic architecture, home building and residential planning:

THE KERN CORPORATION CHURCHILL FELLOWSHIP for the study of organised crime and its suppression;

THE RETAIL MANAGEMENT INSTITUTE OF AUSTRALIA CHURCHILL FELLOWSHIP for the study of overseas developments in retail management;

THE JACK SHEERAN CHURCHILL FELLOW-SHIP for the study of an aspect of bread manufacturing in Queensland;

THE SWIRE GROUP CHURCHILL FELLOW-SHIP for the study of an aspect of the Australian Cotton Industry.

Application, including references, mut be forwarded not later then Tuesday 28 February 1989.



# The logical approach.

It seems logical to us that if you are located in the central government office area, it makes for faster liaison with the people that make the decisions.

As a long established Canberra company staffed by senior ex Australian Service officers with over 100 years of combined experience in defence equipment, we can offer unmatched knowledge and skill in negotiation with government for you.

For more information about our professional approach, ring us on (062) 85 1855 or write to PO Box 67 Deakin ACT 2600.



An AVIO Group Company

## BOOK REVIEWS



RABUKA — NO OTHER WAY as told by Eddie Dean and Stan Ritova Doubleday price — \$12.95 Reviewed by Captain John Lord, RAN

This book is a paperback of no great thickness and therefore a short read. Having been fairly close to the first coup it is easy to be cynical about the content but that would mask the purpose and value to the outsider of the book.

There is no hiding the fact that this book is pro-Rabuka. It is the vehicle by which he explains why the coup(s) was necessary and his thoughts over some eight to ten months that have been Fiji's most turbulent of recent times.

Rabuka's story does fill in several gaps in reporting the lead up to the first coup, particularly the meetings with ex-Prime Minister Ratu Mara. His secrecy in developing the coup plans makes interesting reading as does his version of the choice of the date for the operation. The scantness of information in the "Operation Order" is understandable and supports the secrecy and individualness giving him signs that his coming actions were correct are hard to believe but readers need to put their own interpretation on this aspect.

I found the sequence of the book somewhat frustrating as it kept jumping back and forward over the entire period from before the first coup to just after the second. Perhaps this was the way it was told to the authors, but one would have expected them to sort out the chronological sequence.

Rabuka — No Other Way does not provide the detailed evidence that is needed to justify Rabuka's actions. One is continually asking more questions, particularly with regard to Rabuka's pre-coup military ambitions; as third in line in the RFMF did he consider he would ever achieve the top military position? Was the timing of the first coup really only decided some 24 hours from Fiji and with no recognition of two RAN warships arriving in port at exactly the same hour?

Perhaps the coup was executed as naively as we are led to believe and therefore Rabuka's subsequent shock at the reaction of other nations and particularly their media is understandable. Outsiders did not understand and this book does give Rabuka the chance to rationalise to his critics the necessity of the coups.

Rabuka — No Other Way will not prove an important historical document. However, it is an interesting insight into how Brigadier Rabuka would like to be recorded and an important contribution to those trying to understand one of the most influential military leaders in the South West Pacific.

#### SHIPS ON THE AUSTRALIA STATION

By John Bastock

Child and Associates, 175pp Plus 12 Colour Pages, \$85. ISBN 0-86777 348 0

Reviewed by Mr Alan Zammit

Many books have been written about the R.A.N., but little has been published concerning Australia's naval defences before the arrival of the First Australian Fleet Unit in 1913.

The Royal Navy had kept a watchful eye on this Pacific outpost since the arrival of the first settlers here, but it was not until 1821 that a British warship was stationed regularly in New South Wales as it was then called.

In the mid 19th century, increased Russian naval activity in the Pacific caused much alarm amongst the colonists, and as a result, the British Government decided to establish an Australian Squadron independent of the East Indies Station

which had hitherto been responsible for the Colony's naval defence.

John Bastock's book provides the first completely illustrated listing of all vessels known to have served on the Australia Station and offers a ship-by-ship account of these vessels from the official proclamation of the Station in 1859, to the Squadron's disbanding in 1913.

The book covers the eras of sail, paddle and screw, with over 130 photos, many never before published, and some 150 of the author's drawings of ships, silhouettes and diagrams, and 15 colour plates taken from John's paintings of the Station's flagships, from the *Iris* in 1859 to the

Cambrian in 1913; all supported by exhaustive technical and historical detail.

A very fine foreword has been contributed by Rear Admiral David Martin AO RAN (RETD) who describes the contents as "... full of the language and excitement of the sea ... a valuable book of reference for all those who are fascinated by the sea, and interested in our history..."

Anyone familiar with John Bastock's work will know that he spares no effort to ensure completeness and accuracy of detail. The book has a very attractive cover depicting one of the Station's flagships in full colour. It is published by Childs & Associates, French's Forest, in an edition of 750 copies. Don't miss it!

#### WORK HARD, PLAY HARD

The Royal Australian Naval College 1913–1988 by Lieutenant Commander I.J. Cunningham, RAN AGPS Canberra 1988 (\$29.95 including postage) Reviewed by Lieutenant James Goldrick, RAN

The writing of official history is almost invariably a thankless task. Often constrained by both budget and time, limited to a pre-defined and generally insufficient word count, the historian must maintain his integrity as a commentator in the face of both the proponents and the critics of the organisation which he is recording. He must produce a work which will please those who commissioned it while at the same time maintaining a sufficient measure of detachment and honest criticism.

The seventy fifth anniversary history of the Royal Australian Naval College was clearly written within such a context. It is therefore by no means the definitive work, either as an assembly of facts or as an analysis of a system of training and education. Work Hard, Play Hard is not as detailed a treatment as F.B. Eldridge's History of the Royal Australian Naval College, published in 1949. It lacks the potted biographies (for reasons wholly beyond the control of the author) of former cadets which were assembled by Eldridge and which constitute the most fascinating and important extant record of the officer corps of the RAN. The last few decades have seen many more changes than did the first three to follow the establishment of the College. Much text had therefore to be devoted to explaining the differences between the various approaches as opened to treating with what went on at the College within each system.

All of these considerations made the production of a coherent thesis within the course of little more than a hundred heavily illustrated pages a formidable prospect. Yet, in large measure, lan Cunningham has succeeded. Work Hard, Play Hard is an honest and workmanlike look. While he has (wisely) eschewed discussion of personalities, the author has not refrained from allowing space to the critics of RANC. Eldridge's book suffered somewhat from a golden haze of nostalgia. Cunningham is more austere and more honest. Unable to devote sufficient space to an analysis of the issues which become apparent to him in the course of his research, he has very properly concluded his largely descriptive work with a short epilogue to ask, "What was it really like?"

It is particularly significant that the author includes, as a summary of the dilemma, an extraordinarily perceptive passage by Commodore Adrian Cummins detailing his opinion of his own time at RANC;

"The basic aspects of the qualities and disciplines required at sea were all in those (RANC) routines but they had been distorted in the means of application. The line between the obsessions of "Bullshit" and the need to train for a safe life at sea were muddled."

Cunningham does not attempt to arrive at a final judgment as to the validity of this proposition. It may not even be possible that a formal history could ever deal with it within the lifetimes of those concerned, given the laws of libel. It may require a novelist to do the job. Anyone who has read John Lodwick's *The Cradle of Neptune* would have few illusions about life at Dartmouth

in the 1930s — or, by extension, at Flinders under the same system of thirteen year old entry.

Cunningham's style is clear, direct and equable and his mastery of the facts generally impressive. The inconsistences of naval "race memory" mean that he is occasionally out in his estimates of dates (for example, the gym shoe had gone long before the end of the 1970s) and that his description of institutions such as the "Scran Line" missed details of the permutations of at least the mid 1970s but he has done much to cover the ephemera of college life in a way that historians do not often essay.

The photographs clearly reflect what was available to the author rather than the ideal, yet they are well chosen. Some classes such as the 1973 Junior Entry have coincidentally done better than others but all vintages will find

something of interest. The annexes are comprehensive, including all entries of RANC, prizes (as at 1988) and all who served on the staff of the College. It is to be hoped that the privacy laws will at some time and in some other place allow an update of the "Stud Book" of the Eldridge volume.

A handsome and nicely produced work, the history faces a relatively limited market. At \$29.95 (including postage) it is not particularly cheap but it stands as a useful addition to the very limited store of Australian naval history. If graduates of the Royal Australian Naval College will close the covers of Work Hard, Play Hard wanting more, they can at least be consoled with the thought that the picture it paints, however incomplete, is fair.



#### **Bicentennial Naval Visitor**

The Indian Navy guided-missile frigate INS GODAVARI arrived in the Port of Fremantle on 8th September for a two-day stopover before proceeding east for the Bicentennial Naval Review in Sydney. She is pictured entering Fremantle Harbour under overcast skies.

Photo; Navy Public Relations (WA)



#### Battleship Makes Historic Visit To Western Australia

The United States Navy battleship USS NEW JERSEY made a historic voyage when she steamed into Cockburn Sound in the Port of Fremantle's outer harbour on 3 September, 1988. USS NEW JERSEY holds the distinction of being the first battleship to ever enter the Sound. USS NEW JERSEY steamed down from Gage Roads where she went alongside the Fremantle Port Authority's bulk cargo wharf at Kwinana where she spent 36 hours alongside to take on fuel. The HMAS Stirling-based water/oil fuel lighter WOFL WYULDA conveyed fuel across from HMAS Stirling to the battleship.

Photo; Navy Public Relations (WA)



#### Patrol Boat Leaves For Its New Home

Seen leaving the HMAS Stirling fleet support facility in Western Australia on 7th September, 1988 is the Royal Solomon Islands Police Vessel LATA.

Commissioned in a Handover Ceremony in the yards of Australian Shipbuilding Industries at South Coogee, Western Australia on 3rd September she is the fifth 315 patrol boat to be completed in a program of 12 in the Australian Government's Defence Cooperation Activity with South Pacific countries.

RSIPV was handed over by the Minister for Defence, Mr Kim Beazley MP to the Right Honourable Ezekiel Alebus. Prior to commissioning LATA had undergone extensive sea trials. She is designed to meet specific surveillance requirements associated with patrolling the Solomon Islands Economic Zone.

Displacing 165 tonnes (full load) she carries a complement of 14 and is armed with three .05 heavy machine guns. LATA has a range of 2500 nautical miles at economical speed.

Photo; RAN Public Relations (WA)

## COUNCIL TELEPHONE NUMBERS AND WORK ADDRESSES EFFECTIVE 29 NOVEMBER 1988

MEMBER	POSITION	ADDRESS	PHONE
CDRE I.A. Callaway	President	L-5-14	65 5270
CMDR S.P. Lemon	Snr Vice Pres	A-1-02	65 5020
CMDR I.A. Noble	Jnr Vice Pres	APW1-5-36	65 7025
LCDR G.L. Spencer	Secretary	A-1-07	65 5108
LEUT M. Barnes	Treasurer-Insignia	A-1-02A	65 5019
LCDR D. Agar	Editor	M-1-30	65 2020
LCDR T. Bloomfield	Councillor	HARMAN	80 1374
CMDR W. Dovers	Councillor-Chapters	Strat. Studies Centre, ANU	91 9879
LEUT T. Frame	Councillor	A-4-22	65 6959
LEUT C. Maxworthy	Councillor	CP 1-2-13	66 2118
CMDR S.E. Tapley	Councillor-Records	A-1-6A	65 5034
CMDR N. Torrens	Councillor-Library	A-3-26	65 5124
CMDR R. Sharp	Councillor	NBH4-13	46 6362
Officer Manager			
CDRE D.R.O.S. Fox AM	RANEM		80 1214
Public Officer			
CAPT L.G. Fox RANEM			70 6983
ANI Photographer			
POPH E. Pittman		I-G-17	65 3766
SYDNEY Chapter			
CAPT C. Skinner	President	RANTAU	(02) 929 7722
LEUT A. Brown, RANR	Secretary	40 Mandolong Rd	Astronomy and a second
		MOSMAN NSW 2088	(02) 238 6061

#### **MELBOURNE** Chapter

The Melbourne Chapter meets in the Wardroom, HMAS LONSDALE, Port Melbourne at 1800 on the fourth Monday of February, May, August and November.

Each meeting has a Guest Speaker to talk on "Naval or Maritime" matters appropriate to the aims of the Institute.

Enquiries from prospective members and visitors are most welcome and can be made by contacting:

CMDR E.J. Coles, President, HMAS LONSDALE (03) 6478200 (DNATS) 835 2911 CAPT N.G.R. Daniel RANR, Secretary, 71 Board Street, DONCASTER 3108, (03) 848 4935 LCDR A. Hinge, Liaison Officer, HMAS CERBERUS (DNATS) 857 7214



MEKO® - Latest in Warship Modular Design: From:

Blohm+Voss (Australia)

Pty. Limited

#### Blohm + Voss (Australia) Pty. Limited

P.O. Box 1704, GPO, CANBERRA A.C.T. 2601 Telephone: (062) 411565, Teletax: (062) 413476

Telex: AA 62249 (PHNX)

#### In association with:



#### Blohm + Voss AG

P.O. Box 100 720-D-2000 Hamburg 1

Telex: 2 11 047-0 bv d



#### THYSSEN RHEINSTAHL TECHNIK GmbH

P.O. Box 80 23-D-4000 Düsseldorf 1

Telex: 8 58 997-0 tr d

#### ADVERTISING INFORMATION

Size of Journal — B5 International (Print area 215mm x 145mm)

Printing Process — Offset Litho.

Full Page Size — 50 picas deep by 33 picas wide.

Half Page Size — 50 picas deep by 16 picas wide.

— 25 picas deep by 33 picas wide.

Material Form Required — B & W: Clean art work or negatives.

COLOUR: Four colour separation negatives.

Screen Size — 133 preferred but 125–150 acceptable.

#### ADVERTISING CHARGES — 1989

Colour	Standard \$A	Discount SA	Bulk \$A
Centre Double Page	800	700	630
Back Page	500	450	405
Internal Page - Single	400	350	315
Internal Page — Double	700	600	540
Half Page	300	275	250
Black and White			
Centre Double Page	330	330	270
Back Page	180	160	150
Internal Page - Single	165	150	135
Internal Page — Double	300	275	250
Half Page	135	120	110

#### Notes:

- The Discount Rate applies if a booking is for four or more successive journals with the same advertisement. The Bulk Rate is for the same if the total bill is paid with the initial order.
- 2. The deadline for material are: No.1 21 Jan, No.2 21 Apr, No.3 21 Jul, No.4 21 Oct.
- 3. Payment should be made on receipt of the invoice.
- 4. The above prices are nett and do not include any agency commissions.
- 5. A copy of each journal will be sent to the advertisers.
- Two Three and Four-colour line advertisements can be inserted. Prices will be supplied on request.
- Further information can be supplied, on request to the Advertising Manager, who can be contacted by phone on (062) 80 1214 between 08.30 and 11.00 Tuesdays and Thursdays, or on (062) 81 0757 at other times.

#### AIR MAIL RATES

Members and libraries overseas who would like to receive their journals by air mail, should add the following sums to their subscription orders:

For those in	New Zealand, PNG	A\$ 9.00
	Indonesia, Malaysia, Singapore	A\$11.00
	Hong Kong, India, Japan	A\$13.00
	USA, Canada	A\$16.00
	UK, Europe, South America	A\$18.00
	Other countries	on request

NOTE: Surface/ordinary rates are included in the description.

#### NAVAL INSTITUTE INSIGNIA

(Order form on page 62)

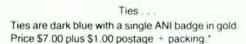
#### Crests . . .

Crests are meticulously hand-painted in full colour and are handsomely mounted on polished New Zealand timber. They measure 175mm  $\times$  130mm (5"  $\times$  7"). The price is \$13.00 each, plus \$2.00 postage + packing.\*



## Cuff-links ...

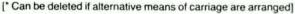
The cuff-links are robustly made and are attractively finished in gold and black. They are epoxy-capped to ensure long life and are packaged in presentation boxes. The price is \$10.00 a pair, plus \$1.00 postage + packing.\*





#### Journal binders

Journal binders are coloured blue, with gold lettering and ANI crest. Each binder holds copies of the journal by means of a metal rod inserted simply through the middle page of each journal and held firmly at top and bottom of the binder. Plastic envelopes on the bottom of the spine enable volume numbers or years to be inserted. Price \$8.00 each plus \$2.00 postage + packing.\*





#### AUSTRALIAN NAVAL INSTITUTE INC

# \* APPLICATION FOR MEMBERSHIP/SUBSCRIPTION \* NOMINATION OF CHANGE OF ADDRESS

(Block Letters)

Rank/Title Surname: .			****************************	
Other Names:		Service/Li	orary/Organisation:	
Street:				
City:	State:		Posto	ode:
* I apply to join the Australian Na cheque for \$	ival Institute Inc	as a Regula	Associate member, a	nd enclose my
* The above library/organisation			he Journal of the Au	stralian Naval
If accepted for membership, I a	igree to abide t	by the Cons	titution and By-laws of	f the Institute
(Date)				(Signed)
(Members or subscribers who joi the Journal).	n during the yea	r will receive	back copies of the cur	rent volume of
* Delete as appropriate.				
Membership fees are kept to remain self-supporting. As of 1	a minimum, o January 1989	ommensural the subscrip	e with the need for the bition rates are:	ne Institute to
	,	Annual	2 years	3 years
Members (Regular and Associate) Journal Subscribers		25 27	48 52	65 75
A copy of the quarterly journal is January.				annually on 1
Inquiries and applications for			ected to:	
	Australian N PO B	ecretary aval Institute ox 80 ACT 2600	Э	
		1001 0000		
	INSIGNI	A ORDE	RS	
Please forward:				
pairs of cuff-link	s (a \$10.00 \$	11445121411414	journal binder	s (a \$ 8.00
mounted crests	(a \$13.00	\$	tie	s (a \$ 7.00
I enclose my cheque for \$	including \$ (delete if		delivery is to be by Aus neans of carriage are	
Name:				
Address:			.,,	
		***********	Post Cod	e
All cheques/money orders and should be in Australian Naval	in currency. Th	payable to is address i	The Australian Naval I s:	nstitute Inc

PO Box 80

CAMPBELL ACT 2601



## NOTICE OF ANNUAL GENERAL MEETING

Notice is given that the Annual General Meeting of the ANI will be convened in Canberra on Thursday 23 February 1989 at 7.30pm for 8.00pm. The venue is Legacy House, 37 Geils Court, DEAKIN, ACT.

Items for inclusion in the agenda should be forwarded to reach the Secretary no later than 13 January 1989.



#### NOMINATION FORM FOR ELECTION OF OFFICE BEARERS AND ORDINARY COUNCILLORS FOR 1989/90

	(initials)			(surname)
Me	mbership number		nomina	ite:
	NOMINEE	FOR POSITION	SECONDER	SECONDER'S SIGNATURE
a.	***************************************		**********	************************************
b.	***********			***********
C.				***********************************
d.	********************		***************************************	***********************
e.				
f.				**************************
g.	**********************	***************************************		***************************************
h.		***************************************		************************
1.	******************		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
j.				***************************************
k.	************************			
1.	******************			
m.				************
n.	***************************************	******************************	***************************************	
0.	***************************************			

Return to:

The Secretary Australian Naval Institute P.O. Box 80 CAMPBELL A.C.T. 2601

NB: To reach the Secretary by 13 January, 1989

#### THE AUSTRALIAN NAVAL INSTITUTE INC

#### PATRON

His Excellency the Right Honourable Sir Ninian Stephen AK, GCMG, GCVO, KBE Governor-General of Australia

#### COUNCIL

#### OFFICE BEARERS

President
Commodore I.A. Callaway
Senior Vice President
Commander S.P. Lemon
Junior Vice President
Commander I.A. Noble
Secretary
Lieutenant Commander G.L. Spencer
Treasurer
Lieutenant M. Barnes
Journal Editor

Lieutenant Commander D.R.G. Agar

#### COUNCILLORS

Commander S. Tapley
Commander W.A.G. Dovers
Commander R. Sharp
Lieutenant T. Frame
Commander P. Torrens
Lieutenant Commander T. Bloomfield
Lieutenant C. Maxworthy

#### PAST PRESIDENTS

1975–77 Commodore V.A. Parker 1977–78 Commodore J.A. Robertson 1978–83 Rear Admiral R.C. Swan AO CBE 1983–86 Commodore I.B. James AW 1986–87 Captain A.H.R. Brecht

#### HONORARY LIFE MEMBERS

Admiral Sir Victor Smith AC KBE CB DSC
Vice Admiral Sir David Stevenson AC KBE
Admiral Sir Anthony Synnot KBE AO
Commodore J.A. Robertson
Rt Hon Sir Zelman Cowan AK, GCMG, GCVO, QC
Rear Admiral R.C. Swan AO CBE
Commodore I.B. James AM
Commander G. Cutts

#### **FOUNDATION MEMBERS**

Bennett, G.A.
Berlyn, N.R.B.
Bonnett, V.W.L.
Brecht, A.H.R.
Broben, I.W.
Calderwood, G.C.
Cole, S.E.W.
Cummins, A.R.
Cutts, G.
Dalrymple, H.H.G.
Davidson, J.
Dickie, D.D.
Fisher, T.R.
Fox, L.G.
George, J.

Gibbs, B.G.
Goddard, F.C.
Grierson, K.W.
Hall, I.W.
Hermann, F.J.
Histed, G.
James, I.B.
Jervis, G.E.
Josselyn, I.K.
Kemp, W.A.
Knox, I.W.
Lee, N.E.
Loftus, W.B.
Lossli, R.G.

Martin, D.J.
Martin, P.C.S.
Mayson, J.H.
McDonald, N.E.
Macleod, B.D.
Nattey, R.J.
Nicholson, B.M.
Nicholson, I.H.
Orr, D.J.
Parker, V.A.
Patterson, D.R.
Ralph, N.
Read, B.J.
Reynolds, I.

Robertson, J.A.
Scott, B.P.
Sharp, W.R.
Shearing, J.A.
Smyth, D.H.D.
Snell, K.E.
Stephen, K.C.
Stevens, E.V.
Stevens, J.D.
Summers, A.M.F.
Swan, R.C.
Swan, R.C.
Swan, W.N.
Williams, K.A.
York, D.

Public Officer: Captain L.G. Fox RANEM

