NAVIES IN ASIA

A Survey of the Development
of
Ten Navies in South and South East Asia
1945 - 1992

JAMES GOLDRICK

A project conducted within the Advanced Research Department of the United States Naval War College, Newport, Rhode Island

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The study analyses the development of the navies of South and South East Asia from the end of the Second World War until 1992. Included within the history are the services of Pakistan, India, Sri Lanka, Bangladesh, Thailand, the Philippines, Malaysia, Singapore, Brunei and Indonesia. The factors involved within the development of each navy over the last forty seven years are treated, with particular emphasis on strategic, economic and cultural considerations.

The great majority of these navies have undergone considerable expansion in size and improvement in capability within the last two decades. This is partly the result of increases in budgets arising from rapid economic development within the region, but it also reflects increasing awareness amongst the countries concerned of the significance of the maritime sphere and of the complex strategic environment arising from the end of the Cold War and the rise of powers such as China, Japan and India. All but the least developed now possess surface to surface missiles, modern ocean going combatants with organic helicopters and a variety of other weapons and sensors. India, Pakistan and Indonesia possess modern diesel-electric submarines, while India has experimented with a nuclear submarine. Still other countries are examining proposals to acquire submarine forces. Every nation is improving its maritime surveillance capabilities. The theme within the region is one of improved capabilities to meet ever more demanding requirements. The study analyses these changes and suggests the likely directions which each service will take, as well as the associated implications for the local security situation.

Particular emphasis was made in the course of the study in seeking reaction and comment from senior officers of the various navies and from regional experts and the analysis thus represents a more comprehensive picture of the naval situation in South and South East Asia than has hitherto been possible from open sources. Particular topics of note include the Info-Pakistan War at sea in 1971, the recent progress of the Indian Navy, developments within the Sprightly Islands in the South China Sea and the progress made in bi-lateral and multi-lateral naval co-operation.
ABSTRACT

NAVIES IN ASIA

Commander James Goldrick
Royal Australian Navy

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INTRODUCTION

This study aims to conduct a comprehensive examination of the South and South East Asian Navies, their strategies, policy, structure and operations since 1945. Why such a study - and why such a broad sweep? The navies of Pakistan, India, Bangladesh and Sri Lanka are generally considered to be "Indian Ocean" powers while those of Thailand, Malaysia, Singapore, Brunei, the Philippines and Indonesia are grouped within "South East Asia". The distances involved are considerable and the various cultures, strategic outlook, politics and capabilities are diverse and complex, but in an era of rapidly changing relationships between the great powers and profound economic developments within Asia and the Pacific basin, the future of these naval services is of great importance to the Western navies which operate in Asia. Given that there is little coherent information available concerning the majority of these ten navies, there is a clear requirement to improve our understanding of their history and present capabilities.

All of these navies operate in areas which are of direct military or strategic interest to Australia and America and their activities are of considerable significance not only to the Royal Australian Navy but to the United States Navy and to other Western powers operating in Asian waters. Whether formally non-aligned, as in the case of India, members of alliances such as the Five Power Defence Arrangement (Singapore and Malaysia) or more informally co-operative with the West, the ten navies are likely to be playing ever more active roles in regional security.

The open literature formally devoted to these services is scanty, although a great deal of incidental material is extant. With the possible exception of India, none has received the attention in the West which has been devoted to the navies of China and Japan and, to a lesser extent, the other North East Asian powers. There exists a clear need to bring together the material that does exist, especially that which has been derived from the western navies' frequent dealings with the South and South East Asian powers. It is not intended to exclude the other Asian navies as factors in the development and activities of the subjects of this study. China in particular remains an abiding concern of the majority and their futures must be directly affected by the paths taken by the People's Liberation Army - Navy and its government.
The selection of no less than ten navies is ambitious but the combination of Indian Ocean and South East Asian navies is deliberate. The "cross over" between the two regions is considerable. The activities of the Indian Navy, for example, are of direct interest to the powers surrounding the Malacca Straits and the South China Sea. For its part, India has as much of an interest in the activities of China as Malaysia or Thailand. The Western tendency to assume that there are NATO-like divisions between the Pacific and Indian Ocean theatres can create misapprehensions, often failing to recognise the complexities of international relationships and the possibility of conflicting interests.

All the countries involved in the study except Thailand are post-colonial states and even Thailand was profoundly influenced by external powers, particularly in the development of technologically oriented services such as the navy. Most of the services were formally established by and directly modelled upon the navy of the occupying western power. Even when this was not the case, as with Indonesia, there were considerable Western influences present which did not end with independence.

Most of the subjects of this study can be described as "Second Generation" regional navies which, in concert with the generally rapid economic growth apparent throughout Asia, are expanding in size and capability. With this expansion has come an increasing recognition of national maritime security interests and the steady attempts at evolving strategic doctrine within and without the various navies of the study is one of the most interesting - and significant - developments of recent years.

All these navies deserve examination and understanding; none have yet received such attention in unclassified texts in any country in the West. It is time that they did.

This text is a preliminary study only and is already in the course of revision and extension. Information continues to trickle in, new sources have yet to be tapped and many assessments remain tentative. Despite the extensive assistance which I have received from so many in the region and outside it, any errors or fact or inference are entirely my responsibility and I would be delighted to learn of any corrections or amendments.
It should be made clear that all views expressed are the author's alone and that they do not in any way reflect the opinions of the Royal Australian Navy, the Australian Department of Defence or of the United States Naval War College.

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24 November 1992

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To those who have not been mentioned individually within these acknowledgements go my thanks - and my apologies for failing to include them.
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Chapter One

THE INDIAN NAVY 1945-70

In August 1947, India and Pakistan gained their independence. This division of the former British Indian Empire into two countries meant that the components of the former Indian armed services had to be divided between them. As a result, neither India nor Pakistan inherited a substantial or easily workable naval organisation. The old Royal Indian Navy had been a minuscule and largely British officered service in 1939. Although it underwent extensive expansion during the Second World War, the Navy had never operated warships larger than sloops or frigates. It had, in fact, never operated as a true navy because it had been considered very much as a local defence auxiliary to the Royal Navy. The new Indian navy had thus to be grafted onto a military establishment which was preoccupied with land strategy and into a political structure dominated by domestic concerns. An effective force structure had to be created despite acute shortages of skilled personnel, funds and domestic technology.

Establishment

The problems which faced the Indian Navy on the day of independence had their roots not only in the separation of India and Pakistan but in the history of the old navy itself. Despite the long record of the Honourable East India Company’s Marine and a short period when a Royal Indian Navy (RIN) had existed in its own right, the Royal Indian Marine (RIM) had not become a fully militarised service until after the recommendations of the 1925 Rawlinson Commission were accepted. Political difficulties and the untimely death of Field Marshal Lord Rawlinson (newly interested in maritime defence through his friendship with Vice Admiral Herbert Richmond) prevented the formal constitution of a new Royal Indian Navy until as late as 1934 and the financial situation of the service was not encouraging for the next few years.

The truth was that the Indian Government, dominated in strategic matters by the Army, believed that "India required land defences but was less interested in naval supremacy." There had been no officer recruiting at all to the RIM for much of the 1920s. It was not until 1 April 1938 that the annual subvention of 100,000 pounds which India paid to Britain as a contribution to the Royal Navy was retained in India for "local naval defence" and only the beginning of
1939 when a committee chaired by Admiral of the Fleet Lord Chatfield produced recommendations for the limited expansion of the RIN over five years. Chatfield later consoled himself with the thought that the committee’s efforts "...though too late, were not wasted", because its report did help with the difficult process of wartime expansion.

The RIN, however, was too small in 1939, with only eight ships and 1600 officers and men, and India’s budget too constrained by other requirements to permit balanced expansion and the commissioning during the war years of the larger and more sophisticated ships required in a capable fleet. India lacked the political imperatives of Canada, which did undertake such an expansion, as well as most of the necessary technological capabilities. Aside from a programme of sloops in hand at the beginning of the war and the acquisition of other escorts, additions to the force reflected the needs of local defence and produced a navy with a very high proportion of small ships. The expansion of shore facilities had been extensive but the maintenance and supply establishments, despite the work which was undertaken for larger Royal Navy units up to and including cruisers, reflected the limited size and sophistication of the ships of the RIN.

**Ships**

The material division of the seagoing force was simple enough and the ratio of two ships for India to one for Pakistan was settled upon. The result was as shown below:

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<th>NAVAL FORCES AT PARTITION</th>
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<td>ML</td>
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<td>HDML</td>
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</table>

As constituted, the fleet of 33 vessels which India received was inadequate for the long term maritime needs of the country, but there was considerable homogeneity in weapons and equipment, which would ease stores, support and training problems. Furthermore, since the
allocated units were all relatively robust and simple, they would be adequate as training platforms from which to develop a solid foundation of expertise in what was collectively a most inexperienced body of personnel.

**Personnel**

The immediate difficulty for the Navy at independence was that manpower could not be as easily divided as the ships. The proportion of Moslems on the lower deck to others in the Navy had been 2 to 3. The recruiting policies of the RIN, forced to some extent by the cultural and educational circumstances, meant that the majority of technical ratings, as well as those in the more highly skilled of the executive branches, were Punjabi Moslems.\(^1\) Warships of any complexity simply could not be run without a sufficient complement of such men. To make matters worse for India, the location of the training facilities reflected the old constituency of recruits. The gunnery, communications, anti-submarine and navigation schools and the two boys' training establishments at Karachi went to Pakistan. An efficient system of producing skilled long service ratings, absolutely critical to the existence of a sea-going navy, would have to be created almost from scratch.\(^11\)

The officer corps of the Indian Navy did not suffer as much from the departure of the great majority of the Moslems to Pakistan but there were several structural difficulties. Even when officer recruiting had been resumed before the Second World War and the concept of Indian - rather than European - officers accepted, the policy was still to accept two Europeans for every Indian by race.\(^12\) This approach was at first carried over into reserve recruiting but, by the beginning of 1944, a combination of political realism and a recognition on the part of the RIN's administration that suitable Europeans were simply not available in sufficient numbers had forced the decision to confine officer entries to Indians.\(^13\)

Numbers were still limited and the depth of available experience inadequate. Only two Indian officers had reached the rank of Commander by 1945.\(^14\) At that time, the Flag Officer Commanding the RIN (FOCRIN), Admiral J.A. Godfrey, who had a shrewd approach to the prospects of independence, noted that the most promising Indian officers were "keen and highly intelligent men about thirty years old but so far untried in the more responsible posts".\(^15\) By 1947 only a handful had command experience of the larger units of the RIN and Godfrey's earlier assessment that true "Indianisation" without a reduction in efficiency would take ten to fifteen years was still valid.\(^16\) Transfers from the reserves had helped fill out the junior ranks, but the quality of the wartime service officers in a position to apply for permanent commissions was not always very high.\(^17\)
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Few of the British officers of the old RIN could be expected to stay on. The future of those who decided to throw in their lot with the two new nations was dubious in the prevailing circumstances. In addition, many of the best officers shared the British tendency to have India as a career but the United Kingdom as a life.\textsuperscript{19} Whether or not the Indian government liked it, a truly efficient navy could not be brought into being without considerable external assistance.

Early Planning

The challenge facing the renascent Indian Navy was therefore considerable. The administrative elements of the RIN had done their best to plan and to ease the division within the bare two months which had been allowed. The material aspects were accomplished successfully, albeit after temporary confusion over the allocation of a pair of frigates.\textsuperscript{19} Despite the bitterness resulting from the inter-racial murders and rapine which followed independence, at least one mixed training cruise was carried to a successful conclusion after the separation of the two navies.\textsuperscript{20}

Before the end of the war, the RIN had been planning to commission three cruisers, if they could be supplied from Britain at a reasonable price. Admiral Godfrey had argued that such ships were a logical progression in Indian development, allowing India to contribute to the final operations planned against Japan and constituting excellent training platforms. FOCRIN was, however, not content with deploying his thesis in the joint-service planning process. Godfrey employed what was to become a standard, although not always successful tactic of his British and Indian successors by cultivating Indian politicians and emphasising the prestige and connotations of mature and independent national power which were attached to large warships.\textsuperscript{21}

In the 1944 Report by the Chiefs of Staff (chaired by the Commander-in-Chief of the Indian Army), Godfrey succeeded in including recommendations which would lay the foundation of a substantial navy centred around three cruisers and a flotilla of nine destroyers.\textsuperscript{22} Remarkably, despite the Indian Finance Department's insistence on a reduction in costs by nearly 50\%, the destroyers were the only major casualties of the RIN's "Lowest Limit" plan for a post-war force structure.\textsuperscript{23} The Indian Fleet would include three operational cruisers and nine sloops and frigates in full commission, as well as a range of support ships.
"LOWEST LIMIT" NAVAL FORCE STRUCTURE (12 June 1945)

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Despite the rapid demobilisation which followed the end of the war and the confusion and disarray which resulted in the near-disastrous mutinies of February 1946, the plans for expansion were persevered with. By the end of 1947, Naval Plan Number One had been drafted in Indian Naval Headquarters and a delegation was in London to seek the advice of the Admiralty on the cost and personnel requirements. In addition to restoring the projected destroyer flotilla, the force structure proposals now included a pair of light fleet carriers. The new FOCRIN, Admiral Sir Geoffrey Miles, had left the United Kingdom aware of the Admiralty’s encouragement of schemes in both Australia and Canada for Fleet Air Arms based around a pair of Colossus/Majestic class light fleet carriers. In the context of "Empire naval defence" it seemed appropriate to Miles that India should follow suit.24

Before his relief by Rear Admiral J.T.S. Hall in August 1947, Miles succeeded in enlisting the support of Patel, India’s Minister of Defence, who spoke in favour of the carrier concept in discussions with the Admiralty later that year. The response reflected the dichotomy which was to confuse relations for the next decade. Patel’s enthusiasm derived from the prospect of possessing a credible naval force to assert India’s rights in the region. The Admiralty wanted a navy which would assist in serving the wider Allied cause, not one for independent power projection. But the Sea Lords could not help advocating naval development for its own sake. Vice Admiral Sir George Creasy was to note later that "he had, perhaps injudiciously, suggested that the ultimate aim of India should be to have a 'balanced naval force', which would naturally contain an Aviation element."25 On this hopeful note the discussions concluded, with the British promising to cost out the package put together by Indian Naval Headquarters.
Admiralty documents indicate that the Royal Navy went to much trouble to provide India with the necessary information. There was on reflection, however, scepticism about the practicalities of Naval Plan Number One - and the benefits to Britain. The Admiralty, in the case of the Canadian, Australian and New Zealand Navies, was prepared to "carry" developments in these services to a great extent because of their integration into the overall British and Allied concepts of naval defence, particularly in the protection of shipping. India, by pursuing a policy of non-alignment with the Western Alliance, was not committed to these arrangements.

The Admiralty was prepared to support the limited acquisitions already in train. The cruiser Achilles was being refitted for transfer to India at the cost of 736,500 pounds including spares and ammunition - something of a bargain, despite the ship's age. If India could afford them (something which the Admiralty doubted), more of the class such as the Leander could be made available on similar terms. Three of the long range R class destroyers were also allocated for refit and transfer at the cost of 1,045,000 pounds all found. Finally, a Tank Landing Ship Tank and a squadron of Tank Landing Craft would be transferred as the core of a future amphibious capability.

Further Britain would not go, particularly in the acquisition of aircraft carriers. The British desire was to support the development of a primarily trade protection and local defence force, together with improved facilities in India itself for the repair and refit of Allied forces in wartime. India, on the other hand, while subscribing to the general desirability of trade protection, continued to declare that her need was for "a preponderance of naval power vis-a-vis her Asiatic neighbours", as opposed to the specifically anti-Soviet doctrine being evolved in London. India would pursue a neutralist policy and was determined to remain within the British Commonwealth only on the understanding that this did not involve commitment to any collective defence arrangements with other members of the organisation. The British had grasped the significance of Nehru's remarks of 4 December 1947, when he said that India was not "going to join a war if we can help it; and we are going to join the side which is to our interest when the time comes to make the choices."

The British view was that the cruiser and destroyers would provide an adequate nucleus for the Indian Navy's development in the short and medium terms. The Admiralty was acutely conscious of the need to maintain an even handed approach to India and Pakistan if both were to be kept within the Commonwealth. While three O class destroyers were being handed over to Pakistan, further large scale transfers to either country could only have a mischievous effect. So long as India was determined to pursue totally independent strategic policies, Britain could not be expected to subsidise the development of forces which might well be employed against what she saw as her interests.
Furthermore, the Admiralty could not supply the expert technical personnel which it knew would be necessary in large numbers if the Indians were to proceed immediately with significant expansion. Conscious of both India's financial limitations and the difficulties of operating ships with inadequate support, the Admiralty would not even recommend sales on a purely commercial basis, despite Britain's own need of foreign exchange. This approach smacks of paternalism, but it was also realistic. What the Admiralty could manage was a small naval mission and it was only too pleased to supply the Indian Navy with flag officers for so long as it should be required. In the aftermath of war, energetic Admirals with a distinguished service record were, unlike the junior ranks, in plentiful supply and the existence of extra active flag appointments would greatly assist the flow of promotions from the Captains' List.

Second Round

Vice Admiral W.E. Parry, who had commanded the Achilles at the Battle of the River Plate in 1939, took over in India as Commander-in-Chief in August 1948. With him came a small cadre of senior staff officers and technical personnel. Most of the Captains and Commanders were retired officers who had been re-employed, but they lacked neither talent nor enthusiasm. They also knew where their allegiance lay - which was not to the Admiralty. The loan officers were well aware that it was impossible to serve two masters and they did not attempt to do so. In consequence, the Admiralty would frequently be irritated to find that these British personnel were espousing a specifically Indian strategic line while relying upon their personal contacts with the Royal Navy to derive what advantages they could for India.

Since Admiral Parry was "convinced of the need" for carriers in the Indian Navy when he left the United Kingdom in 1948, the limited political interest which he detected in India was sufficient for him to plan for a Fleet Air Arm. The intention was to form the nucleus of a naval air wing in preparation for acquiring carriers in 1955 and 1957. The extent of the Indian Navy's ambitions at this time is indicated by the projected fleet strengths of 1960 and 1968. Significantly, however, there was little indication of serious attempts at costing out the creation of such fleets. Naval Headquarters was content to prepare only the budgetary requests immediately required and even these were on a scale sufficient to give the Indian government pause for thought.
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INDIAN FORCE STRUCTURE PREDICTIONS - 1950

YEAR: 1960 1968

TYPE

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<td>Fleet Minesweepers:</td>
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The Admiralty was not impressed by Admiral Parry's requests for assistance. The suggestion within the Naval Staff that the proposed force levels were "grandiose" had a point and there had been some alarm at Admiral Parry's declaration during a 1949 visit to Whitehall that "Pakistan is the Enemy". With experience of negotiations with Canada and Australia, the Admiralty was well aware that co-operation in the creation of a naval air arm required government-to-government agreement. This would be impossible without the formal defence talks with India, about which Nehru had already indicated that "he would be embarrassed if (Britain) initiated proposals to hold them".

More to the point, Britain could not physically support such a programme and sustain the activity planned for both the Royal Navy and the RAN and RCN. The dockyards were suffering from shortages of skilled labour and material and even the highest priority ships were experiencing extensive delays. The understrength corps of naval aviation experts was overstretched meeting the needs of the RN, RAN and RCN, all of which were expanding their naval aviation considerably. India would have to take her place in the queue.

In the event, Britain's predictions of the future fleet strengths in the Sub-Continent proved much more realistic than the Indian Navy's. The drain of the conflict over Kashmir, continuing internal difficulties and less sanguine attitudes as to India's economic strength forced restraints on defence spending. Although Admiral Parry was "warned off" the Fleet Air Arm concept, at least for the immediate future, by the First Sea Lord, the C-in-C had already realised that the financial situation did not permit the expansion he wanted.
ADMIRALTY FORCE STRUCTURE PREDICTIONS - 1950

Period 1960-65

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<tr>
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<th>INDIA</th>
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<tr>
<td>Frigates:</td>
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<tr>
<td>Minesweepers:</td>
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For the Navy, this financial stringency had other implications. While the restrictions on spending were a disappointment to the ambitions of Indian Naval Headquarters, the government was now much more comfortable with the concept of the navy as a partner - albeit totally informally and without committing India to any kind of joint action under any circumstances - with the Royal Navy in the protection of trade. The threat from Pakistan aside, the Indian Navy would be configured primarily as an anti-submarine force.

The Interim Fleet

Admiral Parry embarked upon a revised expansion programme, one which both the Indian government and the British were able to support. This was promulgated as part of the 1951 first Five Year Plan for India. The prospective naval aviation component was reduced to one light fleet carrier and its air group, as the core of a "hunter killer" ASW group which would include three light cruisers and a flotilla of destroyers. The carrier would wait upon the availability of a British hull and Indian funds - both unlikely until the mid-1950s; the second cruiser would be obtained "within three years". In the meantime, the Indian Flotilla would consolidate around the Delhi, the newly acquired destroyers (which arrived in 1950) and the sloops. The poor condition of many of the war-built minesweepers forced the disposal of six in 1950 but their lack of modern mine countermeasure equipment and steel hulls made them dubious assets in any case.

Nuts and Bolts

Parry was relieved to discover that one of Godfrey’s principal points for developing the navy, that of allowing the most senior Indian officers time to acquire experience as Commanders and Captains before placing them in flag appointments, had been accepted by the Congress(I) government. One officer, Commander R.D. Katari, had already been tentatively noted as the first prospective flag officer, and appointed as Executive Officer of the Delhi on her
commissioning. With the required range of appointments, he was likely to be ready for his flag in 1956-57. This decision had been made after a strenuous holding action by Admiral Miles in 1946. He succeeded in convincing the Defence Advisory Committee that too rapid nationalisation would mean that the Indian Navy would not be able to man even a single cruiser. 46

The training problem required urgent action since, with the loss of the major schools, most training had to be done with the Royal Navy, which was neither cost-effective nor timely. Using temporary facilities left over from the war, the executive specialist schools (seamanship, gunnery, communications, torpedo anti-submarine and navigation) were established at Cochin, together with that for supply and secretariat, while electrical, mechanical and boys' training schools were commissioned at other ports. Parry achieved sufficient provision in the facilities vote to allow these schools to be rebuilt between 1949 and 1955, with a Tactical Trainer being included in the package. Junior officers received their initial training at the Joint Services Wing at Dehra Dun before moving on to Dartmouth. By 1956, however, training had been patriated to the extent that all early officer training, including Sub Lieutenants' technical courses, was being conducted in India. The "Long" specialist courses started in India a few years after. 47

While work began on the training facilities, approval was given for the first substantial work on Bombay Dockyard since the war, necessary if any new construction ships were to be acquired and supported.

Operations

The British Commander-in-Chief East Indies in 1946-48, Admiral Palliser, began a routine assembly of the local Commonwealth forces (Britain, India, Pakistan and Ceylon) in Trincomalee in August each year. This quickly became the principal operational event in the Indian Squadron's calendar (and established an "annual" approach to training and operations cycles which has lasted to this day) because it allowed the Indian ships to have the benefit of larger scale fleet operations, submarines for ASW exercises and aircraft for anti-aircraft tracking and firing practices. 48 These exercises and other activities with the RN effectively maintained the umbilical cord between the two services, particularly because they acted as a reinforcement of the training that Indian personnel undertook in the United Kingdom.

Overseas deployments were encouraged, within a limited fuel budget. Delhi conveyed Prime Minister Nehru to Indonesia in 1950 on the occasion of his first state visit to that country. Nehru was accompanied by his daughter and her two sons 49 and the trip seems to have been a success as Mrs Gandhi later recalled it with some affection.
Nevertheless, several problems became evident in the first years of operations. The first was that there were not enough ships to allow sea training and command experience for sufficient personnel. The second was that the general lack of fleet requirements aircraft and target submarines for the majority of the year kept efficiency levels well below those expected. More capital expenditure was required.

Second Interim Programme

Indian expansion was predicated on the transfer of a second cruiser from the United Kingdom and arrangements were completed early in 1950 for the transfer of the cruiser Jamaica the following year. A recruiting campaign was started to provide the additional personnel required but, to the Indian Navy's mortification, the outbreak of the Korean War resulted in such calls on the Royal Navy's resources that the sale was cancelled. As a stop-gap measure, largely to provide employment for the personnel intended for the cruiser, the British agreed to bring forward three Hunt class destroyers from reserve and lend them to India on a three year renewable basis. Since these ships were surplus to British requirements there would be no expectation of their return. Although the Hunt class were of relatively little military value, they were fast and handy ships with systems already in service with the Indian Navy which would fit in well to the existing flotilla.

The cancellation did not mean the end of negotiations for an additional, which were resumed in 1953 at the end of the conflict in Korea. By now, the best of the Colony class which was not in the Royal Navy's programme for retention and refit was the Nigeria and this ship was designated for sale at scrap value. An agreement was signed in April 1954 after which Nigeria, to be renamed Mysore, went into extended refit. The work was not completed until 1957, largely because it was at minimal cost and therefore took second place to British priority tasks, but by that time Mysore had been rebuilt to the extent that she was good for "a minimum life of sixteen years".

The Indian Naval Staff continued to press for a fleet air arm but the Government procrastinated. Britain did not have any suitable hulls surplus to requirements and India did not yet have the money. With the prospects of a carrier continuing to recede year by year, the need for fleet requirements aircraft was answered by a graphic demonstration to members of the Lok Sabha during a "Shop Window" day of the inadequacies of AA practice without towed targets. Approval was given for the acquisition of ten Short Sealand aircraft in 1952 and the first naval air station, INS Garuda, was commissioned at Cochin the next year. Apart from the AA efficiency of the flotilla going up "about three or four hundred per cent", these aircraft constituted a nucleus for expansion. Ten target towing Fireflies were purchased in 1955 and, significantly, jet Vampire trainers and HT-2 aircraft were added after 1958.
Replacements Programme

Both the Indian Navy and the Air Force began considerable acquisition programmes in the mid 1950s. Although the latter's 150% increase in its overall vote overshadowed the Navy's activities (maintaining a ratio of 5 to 2 in spending for the four years from 1955 to 1959), the government allowed the Navy to propose a large scale programme of replacement units. Some of the credit for this must go to the influence of Earl Mountbatten, recently installed as First Sea Lord, who pressed the Navy's case in his dealings with Nehru, but the average age of the flotilla's ships was such that action had to be taken.

British shipyards were eager for the work. The Royal Navy's ambitious expansion plans were foundering through lack of funds. The shipyards, however, had geared up for large scale naval construction. If India wanted frigates, they could be made available from the current production lines. Agreement was reached for the construction of twelve frigates, four each of the Type 12 (First Rate ASW), Type 41 (AAW) and Type 14 (Second Rate ASW), together with up to eight coastal minesweepers and a number of inshore minesweepers. The first batch of orders, placed in 1955, was for three Type 41 (one, ex-HMS Panther, was from the British run) and Three Type 14, while four Ton class minesweepers and two Ham class were to be transferred immediately from the Royal Navy.

There were two notable features about this programme. First, it continued the scheme of creating an anti-submarine task force to meet what was effectively a theatre role in western anti-Soviet submarine defence. Second, because of the naval co-operation with the West which was implicit in such a force structure, Britain was willing to make available its latest ships and systems, together with the necessary training and (crucially) operational doctrine.

Plans for an aircraft carrier also made progress. By late 1955, both Australia and Canada had indicated that they would not make use of either of the incomplete Majestic class hulls which remained in British hands. Since Melbourne had completed in 1955 and HMCS Powerful was due to commission in 1957, yard capacity now existed for completing another ship, together with at least one catapult - that intended for the refit of the Australian carrier Sydney. The British dealt severely with proposals to refit a ship in a Dutch yard, noting that the Netherlands had required UK assistance with work on their own carrier and that the Dutch estimate (nearly 50% cheaper than the British) was wholly unrealistic. The Indian naval staff agreed with this assessment, but strenuous politicking by Mountbatten with the Secretary of the Ministry of Defence, Vellodi, and with the Indian Cabinet was required to keep the Dutch out.

Hercules, the better of the pair, was purchased in 1957. To save on time and cost, and on drawing office personnel, her modified design was based as closely as possible upon that of the Melbourne, with the exception that she was given a 2 degree increase on her angled deck.
## INDIAN NAVY FORCE LEVELS

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** SOURCES: JANE'S FIGHTING SHIPS/COMBAT FLEETS OF THE WORLD/MISCELLANEOUS. **
and her fittings were strengthened to operate the Sea Hawk fighter. Renamed Vikrant, the ship was scheduled to complete in 1961. An augury for the future was the Indian Navy’s selection of the French Breguet Alize ASW aircraft instead of the British Fairey Gannet.

The long desired indigenous construction programme started in a small way with plans for the construction of a survey ship, harbour defence motor launches and additional inshore minesweepers. An order for the former, together with a mooring vessel, was placed with the Hindustan Shipyard in Calcutta in 1955.

Setbacks - in a Crowded Ocean

Not carried into execution were proposals to establish a submarine arm, initially for ASW training but with the long term objective of operating a force capable of offensive operations. The British proved less than enthusiastic about the proposal, which had obvious ramifications for Pakistan, and their warnings about the resource implications proved sufficient to kill the idea, at least for the time being.

Nor was the building programme accomplished in full. Execution of the second part of the package, the purchase of four Type 12 and the remaining single Type 41 and Type 14 units, in 1956 coincided with increasing balance of payments difficulties. Despite preferential credits from Britain, the frigates represented a substantial commitment. With the carrier purchase under consideration - and the Navy’s highest priority - there would be a mismatch between 1957 and 1961 between commitments and available funds. In consequence, the Type 12 buy was cut to two and that for the other types canceled outright. The second quartet of Ton class minesweepers were not purchased, while the order for Indian built harbour defence motor launches was deferred for two years.

The immediate effect was to ensure the retention of the R and Hunt class destroyers in the fleet indefinitely. The twelve frigates had been conceived as their replacements, as well as those of the sloops, but eight ASW/AA ships were not considered enough in the increasingly complex environment which the Indian Navy faced.

While relations at an operational level with the Pakistan Navy remained generally good, there had been much concern in India over the increasing evidence of Pakistan’s attempts to achieve formal alliance with and thus protection from the West. In 1954, this activity bore fruit as Pakistan signed in rapid succession a mutual assistance pact with the United States (19 May), the South East Asia Collective Defence Treaty in Manila (8 September) and the Baghdad Pact (23 September).
Possession of the Delhi had long conferred clear tactical superiority on the Indian Navy in the event of a clash. But, by 1955, it became clear that considerable United States funds were being directed to Pakistan. That year the first of 5 coastal minesweepers arrived from America and, on 29 February 1956, an extensive package of acquisitions from the United Kingdom was announced. One Modified Dido class anti-aircraft cruiser and four destroyers were to be transferred after refitting in Britain with US funding. Two more Pakistani destroyers (of the O class) were to receive refits as Type 16 ASW frigates. In fact, this scheme was well orchestrated by the British to minimise Indo-Pakistan concerns. The cruiser Babur was not commissioned until a month before the Mysore while the Pakistan Flotilla was not up to its full strength until well after the arrival of the first new Indian frigates. Nevertheless, Pakistan now possessed some capable surface combatants and there was the prospect of more transfers to aid "mutual defence". India initially sought two Battle class destroyers from the United Kingdom to counter the Pakistani acquisitions, but the British could not spare them. By the time that earlier units of the class finally became surplus to the Royal Navy in 1958, the Indian Navy's CNS, Vice Admiral Carll, preferred to hold out for approval from the Indian government for the construction of three new destroyers, modifications of the larger Daring class.

To the east, Indonesia was developing increasingly close links with the USSR. For the Navy, these would manifest themselves in a series of transfers of destroyers and submarines which would culminate in 1962 in the handover of the modern cruiser Ordznikidzke. From 1959 onwards, the Indian Navy faced the prospect of no longer being the dominant non-aligned naval power in the region as President Soeharto of Indonesia talked bombastically of an "Indonesian Ocean". The acquisition of the Vikrant acquired a new importance for the ship might be required not as an ASW carrier but in the anti-ship strike role.

These developments coincided with the accession of Vice Admiral R.D. Katari to the office of Chief of Naval Staff in April 1958, who found that he had a complexity of strategic and political problems to face in working as one of the combined Chiefs of Staff. China was increasingly active in India's northern approaches and there were concerns over the security of the protectorate states and over the vexed issue of the McMahon line border between India and China. In consequence, the Army, long restricted in capital funding, was forced to begin a re-equipment programme and devote much more attention to its northern dispositions. At the same time, the eclectic Minister of Defence. Krishna Menon, appointed in 1957, while adopting what many senior officers considered too passive an attitude to China, was politicising the Army through favouritism in appointments.

Matters came to a head in the wake of the Tibetan revolt of 1959. The Chief of the Army Staff threatened resignation in July and August 1959 and was only dissuaded by the intervention of Nehru. Both the other service Chiefs took a much more restrained attitude, which did not help inter-service relations during the critical period of the next two years. Spending on defence
as a whole was ill co-ordinated; although the Navy had clearly the lowest priority in the overall vote, even the Air Force and Army suffered through false economies and a lack of urgency, despite an increasingly aggressive attitude to the Himalayan problem on the part of Nehru and his ministers.

Concerned by the condition of the older escorts and dubious about the chances of securing government approval for expensive new construction, Katari persuaded the Defence Minister to ask the British for 3 destroyers. But the latter could not spare the Daring or improved Battles that the Indian Navy wanted and were in any case unwilling to allow easy credit, in view of the foreign debt with which India was struggling.71

The occupation of Goa in 1961, in which the Navy took a leading role, proved a boost to India’s confidence but revealed considerable problems in the navy’s own planning72 and in joint service operations which were not properly addressed.73 When hostilities commenced between India and China in October 1962, there was little for the Navy to do. Pakistan’s sympathies were, at this stage, with India and there was no indication that Chinese naval activity could be expected in the Indian Ocean. In that event, substantial British and American reaction would be likely, since a Chinese incursion into the Indian Ocean would constitute a direct challenge to the maritime regime which had prevailed since the war.

What was significant for the Navy was that the deficiencies in both the Army and the Air Force and the urgent measures required to rectify them forced a rapid shift in the defence vote away from the maritime sphere. Budgetary allocations for running expenses (as opposed to capital allocations) dropped by 20% between the 1961-62 and 1962-63 financial years.74 This yet again deferred the prospect of obtaining extra destroyers. With Vikrant and so many other new ships in service, it also had a dramatic effect on the operational cycle. The restrictions on logistic spending were such that the Type 41 frigates were at one stage immobilised with faulty engine clutches, spares for which could not be obtained from the United Kingdom because of the tight restrictions on foreign spending.75

After the Sino-Indian War

The dubious performance of the Army in the Sino-Indian war and the clear weaknesses revealed in both it and the Air Force meant that the government’s initiatives for a new Five Year Plan would concentrate upon those services. Nevertheless, some attention was given the navy’s assessments as to the increasing maritime threat, particularly as China, Indonesia and Pakistan now all possessed submarines, the latter’s first, Ghazi, having arrived from the United States.
in 1964. Since both Britain and the United States had indicated their willingness to provide arms and defence credits for future purchases, India should be able to afford new ships and submarines.\textsuperscript{76}

In the meantime, the Navy obtained approval for a number of measures to improve its ability to defend both the mainland and India's offlying islands. Ten more \textit{Sea Hawk} fighters were purchased and a second naval air station, INS \textit{Hansa}, established at Goa. The Navy would take over responsibility for coast artillery from the Army in 1964 and base facilities were to be expanded at Port Blair (INS \textit{Jarawa}) in the Andaman Islands.\textsuperscript{77}

\textbf{Bargaining with the West}

The negotiations which occupied 1963 to 1965 were tortuous. Indian interest in submarines was first admitted in public in April 1963, with a statement by the Minister of Defence to the Lok Sabha. For the next eighteen months, various discussions were held with the United States and the United Kingdom over a large scale package of transfers. There was, however, a new actor in the form of the USSR, already deeply involved in the sale of military aircraft to India and eager to make naval sales.

Y.B. Chavan, the Minister, found little joy in the United States over his requests. While the Americans were not in principle opposed to supporting India at this stage, they were unhappy with the lack of any mutual defence agreements and also unwilling to interfere with the United Kingdom's historical role as a supplier of warships.\textsuperscript{78} Britain, on the other hand, was willing to go only so far to meet the Indian requests, despite the sympathy of Earl Mountbatten, now Chief of Defence Staff. The British felt that their defence forces no longer had sufficient "fat" to support Indian requests at their own expense.

Chavan put several specific requests to the British. First, the Navy wanted three \textit{Daring} class destroyers and three modern frigates transferred on a three year renewable loan as replacements for the increasingly decrepit R and \textit{Hunt} classes. Second, the Indians requested the transfer of a modern submarine as a prelude to a building programme with the long term intention of construction in country. The Indian Navy now planned an initial force of three submarines as the nucleus of further expansion.\textsuperscript{79} Third, similar arrangements were requested for the construction of \textit{Leander} class frigates in India.\textsuperscript{80}

The British were aware of Soviet interest in naval sales and of the fact that India had been discussing collaborative shipbuilding ventures with both the Swedes and the Japanese. While involvement with either of the latter had the clear element of "kite flying", Mountbatten was anxious that Britain not lose the dominant position she occupied, but the Royal Navy could not spare any of its seven \textit{Daring} class or the modern frigates that India wanted. Nor was a
modern submarine available on preferential terms since the Royal Navy had all too few new conventional submarines for its own tasking. A counter offer of Weapon class air direction destroyers was made as alternatives to the Darings. This was tempting to the Indian Navy but the age, material condition and military capabilities of the ships were such that there would be little advance on the R class destroyers - and no political sympathy for the replacements which would be required in only a few years time.  

Mountbatten sought to defer the submarine proposals as he had in 1955 by emphasising the expense associated with creating a submarine arm. He proposed that, in the meantime, Britain would continue to assist with Indian training by providing a submarine on an annual basis from the Far East Fleet. The Leander class project did, however, have much more potential. By the end of 1964 a firm offer had been made for a defence credit of 4,700,000 pounds sterling to cover the cost of three frigates to be built in India with the prospect of follow on units.

Enter the Soviets

In the meantime, Chavan had also visited the Soviet Union where his delegation was "given a good look at the Soviet fleet", including a sea day in a Foxtrot class submarine. The Russians were prepared to offer a package of surface combatants and submarines, together with spares, training and assistance with the creation of support facilities. Most importantly, there was the prospect that prices would not only be much less than those of the West but that the Russians would be prepared to accept payment in rupees rather than hard currency.

The Indian Navy agonised over the decision for some time. Creating close links with the Soviets would endanger the informal connections which existed with the Royal Navy while switching to Soviet equipment would create a host of logistic difficulties only compounded by the language issue. The Indian Navy remained pro-Western and anti-Soviet in general outlook. Indeed, Admiral Katari clashed with Marshal Zhukov over the question of British naval assistance during the latter’s visit to India in 1957. To select Soviet ships would inevitably alter the structure of the navy from its current theatre trade defence role and reduce the prospects of creating a multi-carrier fleet. Although a naval mission was despatched to the Soviet Union in August 1965 to negotiate a package, even at this stage the Indian Navy had yet to commit itself finally to the concept.
Navies in Asia

The 1965 War

The debate over the Soviet proposals was interrupted by the three week war with Pakistan in September 1965. Tension over Kashmir and the disputed Rann of Kachchh had been building over the past year and armed clashes had occurred in April and May between the two armies. When the activities of Pakistani sponsored "freedom fighters" resulted in Indian action in Kashmir and later against Pakistani border outposts, a pre-emptive land attack was launched by the Pakistani Army on 1 September.

This attack was marked by a lack of co-ordination between the services in both countries. The Pakistan Army’s plans for an assault on India had not apparently been conveyed to either the Air Force or the Navy until hours before the event, while the Indian fleet was operating in the Bay of Bengal, on the opposite side of the sub-continent to the main Pakistani naval force based at Karachi. The Indian government immediately placed tight restrictions on the use of the Indian fleet. The Chief of Naval Staff, Vice Admiral B.S. Soman was instructed that he was "not to initiate any offensive action against Pakistan at sea" and that Indian ships were not to operate in latitudes north of India’s coastal border with Pakistan. Despite his protests, the Prime Minister refused to alter the decision.

In consequence, the only notable activity was a bombardment raid on the Indian west coast port of Dwarka by a Pakistani task group which included the light cruiser Babur. This achieved a considerable psychological effect, although the military results were limited. Apart from sequestration of Indian shipping in their ports, the Pakistanis pursued the strategy of the "fleet in being" since the Indian fleet lacked the assets to attack Karachi in the face of Pakistani local air superiority. The offensive role was conferred on the Ghazi which deployed to the Bombay area in the hope of intercepting Vikrant. The latter, however, was in refit and unavailable for short notice operations.

Ghazi’s whereabouts remained the principal concern of the Indians in their operations in the Arabian Sea. Claim and counter claim followed a number of encounters, the Pakistanis at one stage claiming to have sunk the frigate Brahmaputra but neither side suffered loss. An early cease fire brought a halt to operations. One complication for the Indians was the promised deployment of Indonesian submarines and missile craft to Karachi which would have considerably increased Pakistani offensive capabilities. This did not take place before the end of hostilities but it gave the Indian navy much food for thought.
Apart from the question of operational readiness and "warning time", the real lessons of the war were the utility of submarines - and the difficulty of dealing with them - and the problem of relying on a single carrier for the navy's offensive capabilities when continuous availability could not be guaranteed. In addition, the general serviceability of the ageing fleet had been unsatisfactory. New escorts were clearly required.

The Turn to the Soviets

The signing of an agreement with the USSR was announced in the Lok Sabha on 7 September 1965; the timing probably resulted from the need to boost national morale in the face of international disapproval of the conflict - which included a total ban by the United States on all arms sales to the region. Details were not given but this initial package included four submarines and their depot ship, ASW light frigates and medium landing ships, the latter to replace the increasingly decrepit LST and LCTs.

This decision marked the beginning of an increasingly active naval expansion programme, activity which was reflected in the publicity sought by and conferred on the Navy. The first review of the Indian Fleet since 1953 was held off Bombay in a blaze of publicity. Both the outgoing CNS (Vice Admiral Soman) and his relief (Vice Admiral Chatterji) spoke during the same year of plans for naval expansion and the long term intention to have fleets for both the East and West coasts.

The decision to "Go Soviet" and Vice Admiral Chatterji's accession marked the point at which the Indian Navy began to develop wholly indigenous concepts for naval development. This attitude was forced to some extent by the requirement to operate the Soviet built ships and deal with the Soviets themselves. While the Russians were friendly enough on a personal level, they were loath to provide more than technical training for the commissioning crews and the most basic of acceptance trials. India was given little or no access to operational doctrine. That of the West was clearly inappropriate and, in any case, the Indian Navy had calmed the concerns of the British (and possibly the Russians as well) by emphasising that Western and Soviet information would be "compartmented" through the creation of the separate fleets in the East (Soviet) and West (Western).

The theatre ASW role was now out of date. India's interests continued to diverge from the West with the debate over America's role in Vietnam and the prospect, from 1966, of the progressive British withdrawal from commitments East of Suez. Since this had to be considered in the context of a region in which there were now substantial local navies apart from India's, the Navy required to define a new place for itself in the scheme of defence. The 1965 war only reinforced this message. To deal with the threat from Pakistan, the Navy needed to re-orient its
doctrine to the specifics of operations against the "natural" enemy.

In addition, within the navy itself a generation of officers who had received their training wholly within India was now coming to maturity. The fact that these officers were not inculcated in Royal Navy concepts meant that they sought their own. The impetus for the development of independent rather than received operational doctrine at both strategic and tactical levels was thus increasing rapidly.

This was matched by an increase in naval visibility in the public arena through a much more aggressive assertion of the navy's roles and interests. Whether deliberately structured or not, the campaign to develop a naval "case" in public took three approaches. The first was to emphasise the need to protect India's coasts and outlying islands, particularly the Andamans and Nicobars in the face of indeterminate but nevertheless critical threats. The second approach was historical. India's maritime history was emphasised and the consequences of India's later neglect of maritime activities emphasised. The last successful invaders of India, so ran this argument, came by sea. The third was to make much of India's maritime interests in its increasing merchant and fishing fleets, as well as the need to encourage maritime industry through a government sponsored naval-mercantile programme of shipbuilding.

The fourth argument, and probably the most telling, was to argue that the creation of a strong navy would allow India to maintain a maritime balance of power to her satisfaction in the wake of the British departure, whatever the ambitions of other regional powers such as Pakistan, Indonesia or China. This thesis was strengthened by the British moves to hasten the withdrawal and advance their departure from the Far East to 1971. A few days after his promotion to full Admiral (which put him on a par with the other Chiefs of Staff), Chatterji went so far as to declare that the departure of the British from the Indian Ocean would leave the Indian Navy in complete charge.

Despite the flamboyance of this statement, events in 1968 backed up some of Chatterji's claims. The first Russian built submarine Kalveri arrived at Vishakapatnam in July. In October Prime Minister Gandhi launched the Nilgiri, first Indian built Leander, at Mazagon Dock in Bombay. Admiral Gorshkov, C-in-C of the Soviet Navy, paid an official visit to India in February and preliminary agreement was made for more Soviet built ships.

Equally to the point, a naval study group attempted to determine naval roles and requirements for the next two decades and, by 1969, several features of future development were clear. The fleet was to have as its primary roles the protection of India's coastline and offshore territories and the defence of her maritime trade. This required continuation of the two fleet concept, with extensive development of bases and support facilities at strategic locations.
The Indian Navy - I

The replacement carrier programme was placed in abeyance. India had no prospect of obtaining new fixed wing aircraft carriers at practicable prices and even the question of replacements for Vikrant's obsolete Sea Hawks was proving difficult enough with the Americans unwilling to supply the A4 Sky Hawk. V/STOL aircraft such as the Harrier had some potential but would require further development for maritime operations - and reductions in price. Furthermore, the Indian Navy had been profoundly affected by the success of the Styx (SS-N-2, Russian designation P 15) missile attack on the Israeli destroyer Eilath by Egyptian Komar class fast attack craft of Soviet construction. Such craft had not been included in India's earlier negotiations with the Soviets but their military potential, particularly in relation to the Pakistani threat, was obvious. The second Soviet package included Osa class fast attack craft, as well as more submarines and frigates.

Preparations for War

The late 1960s were marked by increasing preparations for what was viewed as an inevitable war with Pakistan. Possession of new systems such as the submarines and attack craft acted as a catalyst for the evolution of doctrine. The annual exercise programme was re-organised to create a coherent progression through basic procedural serials to more complex tactical exercises and thence to the major "fleet problem" of several weeks length which would be analysed by the tactical school. The preliminary analysis was accompanied by extensive "wash ups" to impress the lessons learned upon the protagonists.

Vikrant's role began to evolve. Her strike capacity was increased through the progressive allocation of additional Sea Hawk aircraft and the reduction of Alize ASW aircraft to the minimum (4) needed for ASW protection of the force. Meanwhile, the newly arrived Osa class were exercised with live Styx firings. The Indian submarines began operational deployments as surveillance platforms, while both surface and submarine ASW were practised to develop tactics against Pakistani submarines. Ghazi was to be joined by three French built Daphne class boats before the end of 1971 and it was clear that these would present a considerable threat to the Indian Navy's surface forces.

There remained gaps in the Indian preparations. Amphibious techniques were not practised on any scale, despite the arrival of the Polnochny class landing ships. India was vulnerable to a mining campaign, which the now elderly Ton class coastal minesweepers and the handful of Ham Class would be unable to cope with. Nevertheless, the Indian Navy could be confident that it was far better placed to play a part in India's strategy than it had ever been before. The events of 1971 would serve to confirm that confidence.
Considerations on an Era

The first twenty five years of the Indian Navy’s real existence reflected many of what can be described as the typical problems of naval services in the Third World. The high cost, high technology, training intensive requirements of maritime operations are difficult to fit within the framework of national development because they so clearly drain the resources necessary for industrialisation with little obvious return. Unlike armies, navies cannot easily serve as mass employers and educators, nor do they efficiently constitute a reserve for internal security.

The creation and progress of a navy so clearly depend upon external support that the service rarely matches the concepts of national identity generally espoused by the political sphere at independence. Furthermore, the continuing exposure of navies to each other and thus to "alien" concepts tends to exacerbate the division between the "national" view and the "naval" scheme of things. Only when a navy can manage in-country training of its own personnel at the highest levels can a truly national approach begin to emerge and this can take a great deal of time because the necessary infrastructure is so considerable. When governments jibe at purchasing warships, by far the most attractive element of naval power, finance is unlikely to be available for the training elements, stores and support resources needed to operate a navy which does not operate simply as a component of a larger service.

The process of alienation from the nation can thus become self perpetuating. The navy’s views remain skewed because of its interaction with the establishing service on which it depends. Because of this skew, the government - and the other defence forces - fail to appreciate the role of the navy and thus will not allow it the funds to make the transition.

The Indian Navy emerged from this dilemma through a combination of circumstances, by no means all intended or expected. The critical point seems to have been in the mid 1960s, when the government’s willingness to spend more on defence generally was matched by an increasingly complex local maritime situation and the passage to maturity of wholly Indian trained officers. Finally, a radical rethinking was demanded with the acquisition of the first Soviet ships, built with wholly unknown systems, to totally novel concepts and handed over without the benefit of operational doctrine. The success of this process would make a new place for the navy in the defence of India.


11. Ibid. p.318.


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16. Ibid. p.293.


24. Interview with Captain G.A. French RN dated 24 June 1984. French was in command of HMS Norfolk on the East Indies Station when Miles was FOCRIN and himself later served on loan to the IN as Deputy Chief of Staff in Indian Naval Headquarters.


26. ADM 116/5852 provides details. See especially: "Appreciation of Future Naval Requirements for India and Pakistan" and "India Naval Plan No. 1 - Costs of New and Second Hand Ships".


30. Ibid. p.175.


33. ADM 116/5852 "Appreciation of Future Naval Requirements for India and Pakistan" Memorandum dated 15 April 1948.

34. ADM 116/5852 "Indian Naval Aviation" Minutes of a meeting held on 8 September 1949 and chaired by the Fifth Sea Lord.

35. See The Navy List of the Royal Navy (HMSO, London) from September 1945 for the overloaded flag and captains' lists.


40. ADM 116/5852 "Appreciation of Future Naval Requirements for India and Pakistan" Memorandum dated 15 April 1948.


43. Ibid. The C-in-C RIN's letter and its contents are referred to in the First Sea Lord's letter above but a copy of Admiral Parry's letter could not be found in ADM 116/5852.


48. Ibid, p.46. See also Commodore N. Krishnan IN "Strategic Concepts of Indian Naval Expansion" *Journal of the United Services Institute of India* July-September 1958. p.217 for a description of one such joint exercise in the late 1950s.


50. ADM 1/26646: Secretary of State for Commonwealth Affairs Letter to High Commissioner for the United Kingdom in New Delhi D3420/33 dated 9 November 1951.


52. Ibid, p.48.


56. First Naval Member RAN (Vice Admiral Sir John Collins) Letter to First Sea Lord (Admiral of the Fleet Sir Rhoderick McGrigor) dated 27 May 1953. Papers of Captain(S) J.B. Foley CBE, RAN.


59. Lieutenant Commander Ravi Kaul in "India’s Russian Navy" *USNI Proceedings* Vol. 96, No. 8, August 1970. p.40, complains at some length about British unwillingness to modify Vikrant to take French *Etendard IV* fighters in lieu of the *Sea Hawk*. The British certainly wanted to sell their own products to the Indians, but the modifications to give the Majestics a
longer steam catapult were extensive and expensive - even if a more powerful model was available from the limited British production facilities. The Indian buy was a "cut price" deal and has to be considered in that light. Furthermore, the operational margin for a Majestic class carrier was always very tight. With the heavier A4 Skyhawks and S2 Trackers, HMAS Melbourne was forced to operate routinely with boiler pressures at 15 psi above the designed levels in order to provide catapult steam. See Undated draft (probably December 1956) of a letter from the Admiralty to Captain Kohli (Indian Naval Adviser in London) replying to his 11 September 1956 request for a "long catapult" ship (known as "Scheme B"). This indicates that the Admiralty simply did not possess the personnel required to do the redesign. Mountbatten Papers.

60. Lorne J. Javic India’s Quest for Security Op. Cit. p.120.

61. ADM 205/173 "Sale of Warships to Pakistan and India" Meeting held on 2 January 1958. Cites First Sea Lord (Admiral the Earl Mountbatten of Burma) Letter to CNS India (Vice Admiral Stephen Carlill) dated 23 July 1957. See also: Memorandum First Sea Lord to Vice Chief of Naval Staff dated 28 May 1957 concerning Krishna Menon’s personal request to Mountbatten for the loan of "one or two" submarines and an undated letter from Mountbatten to Menon explaining the technical difficulties. Mountbatten Papers.

62. Ibid. pp.119-120.


64. See Jane’s Fighting Ships 1959-60 Sampson Low, Marston & Co. London 1959, and succeeding editions.


66. ADM 205/173: CNS India (Carlill) to First Sea Lord Admiral of the Fleet the Earl Mountbatten of Burma, 28 January 1958. An incomplete version of the letter appears as a quotation within the file.


68. For an interesting commentary on Indian-Indonesian relations in this era see Ide Anak Agung Gde Agung Twenty Years of Indonesian Foreign Policy Mouton, Hague, 1973. Chapter 16.
Navies in Asia


71. ADM 205/173. Admiralty to RN Liaison Officer UK Joint Services Liaison Staff Melbourne, 191515Z September 1958.


75. Ibid. p.124.


81. Both the *Daring* and *Weapon* classes were World War II designs, the *Darings* having been completed in 1952-53 and the *Weapon* class in 1947-48. The latter had been modernised as aircraft direction ships with operations rooms and Type 965 radar and, as such, would have been useful complements to *Vikrant*. On the other hand, they possessed only four 4" guns as opposed to the six 4.5" of the *Darings* and were inferior surface combatants compared to the majority of the Pakistani ships. In reality, both classes were in poor condition and even the *Darings* would not be retained in operational service after 1969-70.


86. Ibid. p.41. Admiral A.K. Chatterji in *Indian Navy's Submarine Arm* Op. Cit. reports that the price of each submarine was in the region of 3 crores of rupees for each unit, with repayments spread over ten years at 2% annual interest. p.44.


89. See Admiral Soman’s account in Admiral S.N. Kohli *We Dared* Lancer Publications, New Delhi, 1979. p.2.


93. *Keesings Contemporary Archives 1965-66*, 20136C.


100. The Times (London) 4 March 1968. This statement was made before a naval parade in Bombay. While significant, the nature of the speech - exhorting the officers and men of the Indian Navy to greater efforts - should not be ignored.


102. Ibid. p.332.


104. Ibid. pp.350-351.


108. See Commodore Ranjit Rai A Nation and its Navy at War Lancer International Publications, New Delhi, 1987, for a description of the preparations of the Indian Navy for war, especially p.46 and pp.84-89. Sureshwar D. Sinha Sailing and Soldiering in Defence of India gives a more jaundiced view, see Chapter 8.
The naval element of the Indo-Pakistan War of 1971 is a campaign of considerable interest to the historian with equal relevance to the contemporary analyst. The conflict included the first use of surface to surface missiles from ships at sea and gave early indication of the problems which rules of engagement and the presence of "innocent" shipping entail in the operation of modern long range weapons. It also saw the first successful submarine attack on a surface ship since the Second World War. The employment of the Indian Navy in the Bay of Bengal provided a text book example of how a clear superiority in both technology and numbers - however limited the capability when considered in other contexts - can allow the effective use of naval forces in support of a land campaign. Because the Pakistan Navy possessed no missiles or adequate air support, it had to rely upon an overstretched submarine force which had little hope of preventing Indian domination of the Arabian Sea. Similarly, the loss of the submarine Ghazi off Vishakapatnam meant that the Pakistanis had nothing with which to impede the activities of the light carrier Vikrant in the Bay of Bengal, despite that ship's operational limitations.

Conversely, the deployment of the American battle group centred around the Enterprise is a demonstration of the very real limits of naval power when it attempts to influence a state which does not have to rely upon the sea to achieve its strategic aims. The despatch of the Enterprise to the Bay of Bengal came too late to deter India from successfully invading East Pakistan and it is doubtful whether even a USN battle group could have materially affected the outcome, considering the numbers of aircraft which the Indian Air Force could deploy. Certainly destruction of the Indian Navy in the Bay would not have brought about an Indian withdrawal. The Indians were well aware that the political and military difficulties of the Vietnam War meant that the Enterprise's aircraft were not the forerunners of American power. Rather, the presence of the battle group was its ultimate practical expression and it was Indian awareness of this fact that so limited its value.

BUILD UP TO WAR

The Indo-Pakistan War in 1971 was the climax of deep political and ethnic problems which had their roots in the partition of India and Pakistan in 1947. The two wings of Pakistan, separated by the land mass of India, differed in almost every facet of human existence apart from their shared Muslim religion. The East, although much smaller than the West, contained more than half the population of Pakistan, while the machinery of government and administration
was centred in the West. That machinery came to be dominated by West Pakistan, which accorded itself the lion’s share of the limited resources available. As the years progressed, the disparity in the treatment meted out to the two wings of the country resulted in deepening resentment in the East and ever more strident calls for regional autonomy and even outright independence.

By 1971, events had reached crisis point. The election of a parliamentary majority of the East Pakistan Awami League, with its agenda to redress the balance, had been met by the Pakistan Government with the proscription of the League and martial law in East Pakistan, together with attempts to suppress outright any attempt at political activity in favour of the East. Inevitably, an insurgent movement developed within East Pakistan. By April 1971 the country was in a state of civil war.

This progressive deterioration in the situation in East Pakistan brought with it the increasing prospect of Indian intervention on the side of the insurgent movement. India’s motives in this situation were three-fold. In the first place, the instability resulting from the conflict between the East Pakistanis and Pakistan government forces threatened India’s eastern flank. Secondly, in the short term, Pakistani repression was producing the greatest flow of refugees seen on the sub-continent since partition itself - a flow into India which that country’s government labelled "demographic aggression". Thirdly, and in the long term most significant, separation of the two "wings" of Pakistan into separate political entities would reduce forever the strategic threat which India believed to have been posed against itself since 1947.

Indian planning matured throughout 1971 as it become obvious that the only solution to the problem of East Pakistan was independence. Covert planning for outright war seems to have begun around March 1971, although measures were already in hand to assist the East Pakistani insurgents (the Mukti Bahini) and gain international support to force Pakistan into accepting its division. The military problem was complicated by the threat of Chinese intervention on Pakistan’s side and Indian efforts to enlist Soviet support as a counter-balance reached fruition in a Treaty of Peace and Friendship in August 1971. Although the terms of the treaty were vague in regard to military commitments, the Indians could be confident that the USSR would not permit China to act without thought for a Russian reaction. The United States was also a source of concern but American options were drastically limited by the Vietnam commitment.

The point at which the Indian Government finally committed itself to military action is unknown but the more determined approach apparent in India’s diplomatic activity from August onwards suggests that the Indo-Soviet treaty acted as the catalyst. The Indian Chiefs of Staff could not, however, afford to disregard China as a military threat in choosing their moment. There were thus four preconditions set for Indian action by the Chiefs of Staff. The first two included the timing of any offensive against Pakistan for winter to ensure the closure of the Himalayan passes against large scale Chinese incursions and adequate preparation of the armed forces through work-up, logistic support and pre-positioning to allow the aim to be achieved in the minimum time (an important consideration in view of the expected international pressures).
The 1971 Indo-Pakistan War

Thirdly, the Chiefs insisted upon developing of East Pakistan insurgent forces to the extent that they could provide effective support to Indian activity and constitute a credible source of "independent" strength in the international arena. Finally, but most importantly, they sought a clear definition by the Government of its aims in any actions against Pakistan.

The latter's delineation of its requirements was both logical and simple, basing itself on the premise that India had to be seen not as an aggressor but as a liberator and that Pakistan had thus to fire the first shot. Military action was to have two goals, the immediate liberation of East Pakistan and the achievement of limited territorial gains in the West which could be employed as bargaining counters in any subsequent negotiations.

The performance of the Chiefs of Staff committee was critical in this process. It was naturally dominated by the Chairman and Chief of the Army Staff, General S.H.F.J. "Sam" Manekshaw, who combined an outspoken and determined approach to military questions with shrewd political judgement. His calm exercise of the threat of resignation dissuaded the Indian Government from embarking on military action before the forces were ready and he was to "assume [a] role as the spokesman for the Navy and the Air Force during the higher level briefings [that] was an action almost like a Chief of Defence Staff." Neither the Chief of Air Staff nor Admiral Nanda, Chief of the Naval Staff, disagreed with Manekshaw's assumption of leadership within the committee. The Chiefs of Staff conjointly "for the first time ever...examined in the minutest detail the plans of the various Commands of the three services." The result was the production of a series of plans which were well co-ordinated in strategic intent, even if - as events were to prove in the maritime sphere - not truly "joint" in their execution. Nevertheless, this system of planning marked a considerable step forward in the growing sophistication of India's defence thinking.

THE INDIAN NAVY

The Indian Navy developed four aims:

a. The protection of Indian ports and shipping;

b. Neutralisation of Pakistani forces in East Pakistan;

c. Disruption of sea-borne communications to and from both wings of Pakistan; and

d. The containment and, if possible, the destruction of the Pakistan Navy.

Unlike the Army and Air Force, the Navy had little to worry about in regard to the Chinese threat. Despite its large submarine force, the latter had shown no tendency to attempt the long range deployments which activity against India involved and Chinese submarines would,
in any case, have the Soviets to consider both in the South China Sea and the Indian Ocean. The naval commander in the east noted "from the naval point of view, therefore, we decided not to concern ourselves one way or another." The Indian Navy could concentrate on operations against Pakistan and it rapidly assumed a new importance amongst the services in that role. In joint terms, the key naval mission would be support of the campaign in East Pakistan through interdiction of all shipping, both riverine and ocean going, and destruction of local facilities by means of the Seahawks and Alizes from the aircraft carrier Vikrant.

Command

In 1968, the decision had been made to form separate Western, Eastern and Southern Naval Commands. A primary motivation was the increasing size of the seagoing fleet, tied in as this was with the acquisition of submarines and missile craft and the development of first class base facilities on the East Coast. Eastern Naval Command remained in skeleton form until the commissioning of the submarine base, INS Virbahu at Vishakapatnam in May 1971, and the formal activation of an Eastern Fleet in November 1971.

While the Southern Command was in the charge of a Rear Admiral, both Eastern and Western Commands were three star billets. The latter had been occupied from 1970 by Vice Admiral N. Krishnan, formerly Vice Chief of Naval Staff and an ebullient and highly intelligent officer. Krishnan's expectations of being in the forefront of the battle were rudely demolished, however, by his supersession by Vice Admiral S.N. Kohli and transfer to the Eastern Command. Kohli, who was Krishnan's senior, had insisted on receiving the premier appointment on his return to the navy from the joint-service post commanding the National Defence College. Although relations remained cordial, there was a manifest rivalry between the two officers, exacerbated by the prospect of a new Chief of Naval Staff being required in early 1973. This rivalry was to be reflected in the efforts of each command to secure the most resources and to achieve the more prominent successes in operations.

Preparations

Early Indian measures included support for the creation of a maritime arm of the Mukti Bahini. The formation of this insurgent force (the "liberation brigades") had been announced on 11 April 1971 by the Prime Minister of the self proclaimed provisional Bangladesh government which had set itself up in Calcutta. The Indian government approved covert measures to increase the pressure on East Pakistan and the Director of Naval Intelligence, himself a Bengali, assigned Bengali officers under Commander M.N. Samant to supervise the training of recruits from the refugees pouring into India, including a few defectors from the Pakistan Navy itself. Samant's team was soon joined by Indian naval clearance divers. The night of 15/16 August saw the initial attacks on ships and facilities in the ports of East Pakistan and the sinking or damaging of nine freighters.
This effort and other raids which followed were highly successful in dislocating the progress of commercial traffic and absorbing Pakistani resources in patrols, ship and area searches and anti-swimmer operations. The Mukti Bahini suffered casualties, but their activities provided a considerable fillip to the cause of Bangladesh.

The Indian Navy's next step was to lend the Mukti Bahini several river craft armed with 40/60mm guns which "made forays up the Chalna River and carried out sporadic shelling of ships going up to Chittagong and Chalna." These operations were followed by the successful mining of the port of Chalna in November which claimed a Pakistani patrol vessel and two foreign merchant ships. Indian naval personnel certainly operated with the Mukti Bahini, although "the Government of India...does not specifically indicate any naval activity prior to the war." It is most likely that such operations were primarily to provide expert technical assistance for specific missions (such as the mine lay) and to gather information on the state of affairs within East Pakistan.

For the fleet proper, the primary threat posed by the Pakistan Navy was in its newly expanded submarine force. Three brand new French built Daphne class had only just arrived at Karachi. As worked up reinforcements to the older American built Ghazi, they posed a formidable proposition to Indian surface forces in the Arabian Sea and even to the less sophisticated and noisier Indian Kalveri (Foxtrot) class submarines if the latter were not handled with discretion.

There was no such worry over the Pakistan surface fleet, whose development had stagnated since the American supported acquisitions of the late 1950s. Several units were in very poor condition and Pakistan had yet to receive any surface to surface missile equipped units from any source. Without credible anti-surface or anti-air capabilities, it could be expected that the Pakistani surface fleet, which remained concentrated on Karachi in the west, would act simply as a "force in being". The three Daphnes, which were relatively short ranged, would be employed in the Arabian Sea in the "trip wire" role, while Ghazi would deploy to the Bay of Bengal to operate against Indian surface forces in the east.

Two important decisions were made by the Indian Navy in June over the distribution of forces between the Western and newly created Eastern Fleet. The carrier Vikrant was transferred to the east while the Qsa class missile boats were concentrated in the west. The logic behind Vice Admiral Krishnan's arguments for Vikrant's movement was simple. Keeping her away from Karachi maximised the problem of finding her for the Pakistani submarines, while her power projection capabilities would be much more useful in the benign operational environment of the east where the Pakistan Air Force posed only a minimal threat. Kohli "at the time...felt that this depletion in the Western Command's Fleet strength and fire power was not justified and I vehemently protested in writing to my Chief of the Naval Staff."
Admiral Nanda was inclined in favour of deployment to the east, but Naval Headquarters at first took a more relaxed view of the situation than Krishnan, who was convinced of the need for the carrier to work up before a Pakistani attack. New Delhi ordered Vikrant to Bombay in October to conduct trials of the new Sea King helicopters and an assisted maintenance period. Krishnan's protests were such that the Chief of Naval Staff eventually allowed Vikrant to remain in the East and continue her work up.\(^{15}\)

For their part, the Osas could be employed in hit and run attacks against Pakistani units, while their presence would reduce the chances of any Pakistani attempts to repeat the raid on the Indian coast which Pakistani destroyers had staged during the 1965 war. In addition to constituting such a menace - effectively insuperable - to Pakistan's surface forces, the Osas' size and speed made them very difficult targets for the submarines.

The Indians found that their use of the Osas as seagoing units rather than confining them to port defence "brought out many weaknesses in the engines and auxiliaries".\(^{16}\) These machinery deficiencies remained a continual problem and forced the development of high speed towing techniques, whereby the Osas could be towed to the scene of action by the Western Fleet's frigates. To convince the dubious that this technique would work, the Western Fleet's seagoing Commander, Rear Admiral Kuruvilla, arranged the dramatic demonstration of an 18 knot tow of an Os ofa by a frigate over a 24 hour period. Conversely to the state of propulsion systems, the missiles were a source of confidence, having been comprehensively proved by firings in the USSR before delivery and then in Indian waters in the presence of the Chief of Naval Staff.\(^{17}\)

While the situation deteriorated in East Pakistan, the Indian Navy concentrated on achieving a very high level of availability for the coming war. By December only the old cruiser Delhi, one submarine, a single frigate and a destroyer would be non-operational amongst the major units and the opening of the Pakistani offensive in early December actually found most ships and two submarines already at sea.\(^{18}\)

Availability was, however, secured at the price of individual unit serviceability and required acceptance of temporary repairs and operational limitations. At least one of Vikrant's four boilers was inoperable, limiting the ship to "16 knots".\(^{19}\) This had ramifications in two ways because shortage of stream also affected the steam catapult's capacity. Within the Indian Navy "there was an overwhelming body of professional opinion that considered that steaming the Vikrant in her current state was not a risk worth taking". Vice Admiral Krishnan's confidence that "carrier operations can always be carried out if there was sufficient wind and enough sea room" eventually gained Admiral Nanda’s approval\(^{20}\), but lack of wind would have a material effect on Vikrant's operations on more than one occasion.\(^{21}\) The older frigates, well into their second decade of life, would also prove to have problems as a result of the
# Indian Naval Forces - 1971

## Eastern Command

### Task Group
- **Name**: Vikrant  
  **Type**: CVL  
  **Main Armament**: Sea Hawk/Alize Aircraft
- **Name**: Beas  
  **Type**: FF  
  **Main Armament**: 4.5" Guns
- **Name**: Brahmaputra  
  **Type**: FF  
  **Main Armament**: 4.5" Guns
- **Name**: Kamorta  
  **Type**: FFL  
  **Main Armament**: 76mm Guns/21" Torpedoes
- **Name**: Kavaratti  
  **Type**: FFL  
  **Main Armament**: 76mm Guns/21" Torpedoes

### Amphibious Group
- **Name**: Magyar  
  **Type**: LST
- **Name**: Gharial  
  **Type**: LST
- **Name**: Vishwa Viyaja  
  **Type**: Transport

### Local Defence
- **Name**: Rajput  
  **Type**: DD  
  **Main Armament**: 4.7" Guns/21" Torpedoes
- **Name**: Kalvari  
  **Type**: SSK  
  **Main Armament**: 21" Torpedoes

### Independent
- **Name**: Khanderi  
  **Type**: SSK  
  **Main Armament**: 21" Torpedoes

## Western Command

### Task Group
- **Name**: Mysore  
  **Type**: CL  
  **Main Armament**: 6" Guns
- **Name**: Ranjit  
  **Type**: DD  
  **Main Armament**: 4.7" Guns/21" Torpedoes
- **Name**: Talwar  
  **Type**: FF  
  **Main Armament**: 4.5" Guns/ASW Mortars
- **Name**: Trishul  
  **Type**: FF  
  **Main Armament**: 4.5" Guns/ASW Mortars
- **Name**: Khukri  
  **Type**: FFL  
  **Main Armament**: ASW Mortars
- **Name**: Kirpan  
  **Type**: FFL  
  **Main Armament**: ASW Mortars
- **Name**: Kuthar  
  **Type**: FFL  
  **Main Armament**: ASW Mortars
- **Name**: Kadamatt  
  **Type**: FFL  
  **Main Armament**: 76mm Guns/21" Torpedoes
- **Name**: Vinashh  
  **Type**: FAC-M  
  **Main Armament**: STYX Missiles (4)
- **Name**: Vujeta  
  **Type**: FAC-M  
  **Main Armament**: STYX Missiles (4)
- **Name**: Deepak  
  **Type**: AO

### Western Command (Cont.)

### Special Group
- **Name**: Kiltan  
  **Type**: FFL  
  **Main Armament**: 76mm Guns/21" Torpedoes
- **Name**: Kadmat  
  **Type**: FAC-M  
  **Main Armament**: STYX Missiles (4)
- **Name**: Nashak  
  **Type**: FAC-M  
  **Main Armament**: STYX Missiles (4)
- **Name**: Nirpat  
  **Type**: FAC-M  
  **Main Armament**: STYX Missiles (4)
- **Name**: Nirghat  
  **Type**: FAC-M  
  **Main Armament**: STYX Missiles (4)
- **Name**: Nirlhik  
  **Type**: FAC-M  
  **Main Armament**: STYX Missiles (4)
- **Name**: Veer  
  **Type**: FAC-M  
  **Main Armament**: STYX Missiles (4)
- **Name**: Vidyut  
  **Type**: FAC-M  
  **Main Armament**: STYX Missiles (4)

### Local Defence
- **Name**: Cauvery  
  **Type**: FF  
  **Main Armament**: 4" Guns
- **Name**: Kistna  
  **Type**: FF  
  **Main Armament**: 4" Guns
- **Name**: Tir  
  **Type**: FF  
  **Main Armament**: 4" Guns

### Southerm Command

### Patrol Force
- **Name**: Amba  
  **Type**: AS  
  **Main Armament**: 76mm Guns
- **Name**: Godavari  
  **Type**: DDE  
  **Main Armament**: 4" Guns
- **Name**: Gang  
  **Type**: DDE  
  **Main Armament**: 4" Guns

### Non-Operational (Refit)
- **Name**: Bombay  
  **Type**: Delhi  
  **Main Armament**: 6" Guns
- **Name**: Rana  
  **Type**: DD  
  **Main Armament**: 4.7" Guns
- **Name**: Betawa  
  **Type**: FF  
  **Main Armament**: 4.5" Guns
- **Name**: Gomati  
  **Type**: DDE  
  **Main Armament**: 4" Guns

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combination of old age and a rigorous operational schedule while the new Petras and Osas were subject to considerable teething troubles. Admiral Kohli later wrote "the material state of Mysore, the flagship, and other units was a source of constant concern to the Fleet Commander and to all of us."22

As part of its preparations, the Indian Navy created an organisation for the control of shipping (NCS) and succeeded in persuading the Government to pass legislation in November. This gave the Navy compulsory powers to direct the movement of shipping in and out of Indian ports and further powers over the operations of Indian flag vessels. The lack of resources for ASW dictated that evasive routing, particularly in the West, would be the primary strategy to minimise losses to Pakistan submarines while such ASW assets as were available to the Indians would be concentrated in focal areas, notably the approaches to Bombay.

Both countries were dependent upon external sources of petroleum and lubricants and possessed only limited reserves. In its protective role, the Indian NCS effort was therefore primarily aimed at ensuring the safe passage of inbound tankers to its ports. The Indians also feared Pakistani attempts at sabotage in harbour. The Pakistanis were known to possess "chariots" of the pattern which had been employed with effect by the Italians and British in World War II; it was believed that they also possessed midget submarines.23 Both types could be brought into Indian ports by merchant ships and the Indians therefore kept a watch for vessels which had any association with Pakistan. On the outbreak of war, merchant shipping was warned not to approach within 40 miles of Bombay or other defended harbours by day or night without prior permission from the port control. Initial Indian plans for the declaration of a total blockade of Pakistan would also be implemented at the beginning of hostilities but discretion soon forced a modification of this policy to one of control of contraband. This was to avoid giving undue offence to neutral countries by excessive use of the "stop and search" requirement of blockade.

Port defences were improved. The Indian Navy had taken over responsibility for coastal batteries as far back as 1964 and additional surface and AA installations were set up at the major ports. Plans for defensive mine laying were made and channels swept outside the major naval ports of Bombay and Vishakapatnam. Lighthouse keepers were briefed and equipped with telephones to local headquarters while local fishermen and traders were also encouraged to assist with coastwatching through a programme of lectures, supplemented by the promise of cash rewards.

A signals intelligence (SIGINT) organisation was activated, targeted against the Pakistan submarine communications system. In addition to attempts to intercept and decipher Pakistani messages, the Indians intended to interfere with the submarine broadcast in order to force the Pakistani units to break HF radio silence to request retransmission of incomplete traffic.24 This method of obtaining Direction Finding (DF) information was to prove a useful technique in following the movements of the Ghazi into the Bay of Bengal.
Shore Based Air

In the absence of the carrier from the West, it was clear that the Indian Air Force (IAF) elements available for maritime operations would be important. In addition to the maritime reconnaissance squadron of three serviceable Super Constellations, the Canberra bomber wing operating out of Pune was ordered to provide "a strike force of interdictor aircraft to assist the Navy in dealing with enemy shipping". Unfortunately, the Super Constellations were only makeshift maritime patrol aircraft and the expertise of their crews had not been improved by the fact that their primary pre-war tasking had been personnel transport. Kohli remarked of the manoeuvres held in October and November "to exercise the Maritime Reconnaissance Super Constellations and the Canberras to home on to the ship picked up by the Super Connies [that] it must be admitted that these exercises rarely succeeded."

Coastal surveillance would be supplemented by IL-14 aircraft together with two disembarked naval Breguet Alize ASW aircraft which would also provide ASW support for the fleet. The Bombay defences were supplemented by two Alouette helicopters as well as a quartet of the newly arrived Mark 42 Sea King helicopters. The latter had yet to undertake their operational work up or even weapon certification trials but they were nevertheless given depth charges and flown on ASW patrols.

Although the Super Constellations were to play a useful role in the ASW war, their reconnaissance performance would leave much to be desired. Confusion of Indian forces with Pakistani was not uncommon and resulted from poor training and less than ideal inter-service communications. The experience of the war was reflected in the subsequent decision to transfer the fixed wing long range maritime patrol role to the Indian Navy.

THE PAKISTAN NAVY

Indian assessments of the state of Pakistan's maritime capability and the Pakistan Navy's intentions were substantially correct. The Pakistan Navy was in no condition to fight an offensive war at sea. Still considered insignificant by the Pakistan Army, the Navy's leadership was rarely included in such high level planning as did take place. Furthermore, with considerable geographic separation between the headquarters of all three services, co-ordination was almost non-existent and personal relations were generally poor. This applied equally to the Eastern Command, under Lieutenant General A.K.K. Niazi, despite the "joint" title of his post.

The Navy had not been privy to the Army's decision to begin military operations in East Pakistan, although the desperate need for security forces in the region soon embroiled the local naval elements in patrol and protection duties. In addition, the Navy recommissioned Army landing craft as well as tugs and other riverine vessels in an attempt to keep running the internal water transport system. These requirements soon began to drain resources from West Pakistan.
The 1971 Indo-Pakistan War

Although there were very few Bengalis amongst the officers and executive senior sailors, the Navy had always recruited a substantial proportion of its personnel from East Pakistan - at 3,000 strong they constituted more than a third of the service’s effective manpower. After the military intervention in the East, these men - if not already deserters or imprisoned - were ineffectives. This created critical shortages in many branches; even the submarine service and the Special Service Unit (SSU) of midget submarines and swimmers suffered their share of desertions.28 Ironically, the manpower problem was partially simplified by the poor condition of the surface fleet. The destroyer Tughril was awaiting disposal while Alamgir was in dockyard hands with structural and mechanical defects. The Navy was paying the price of a decade of neglect.29

The Pakistanis took what measures they could. The overall Pakistani strategy was to put such pressure on India’s western flank that operations in the East would be impossible. In reality, this concept depended for its success upon the prospect of Chinese military intervention or India succumbing to whatever pressure could be applied by Pakistan and its friends in the United Nations. The weather and political developments combined to make them forlorn hopes.

The destroyer and the fleet tanker which were based in East Pakistan were recalled and the fleet concentrated on Karachi. In the absence of significant air support, surface to surface missiles or adequate countermeasures against the Indians’ newly acquired Styx missiles, the surface fleet would have to play a purely defensive role. The missions of the Pakistan Navy were formally defined as defence of the ports of Karachi, Chittagong and Chalna and limited protection of shipping - notably oil tankers - moving between the Persian Gulf and Karachi.30 The highest priority was given to the defence of Karachi and to this end the operational surface units were allotted to inner and outer patrols. A small task group centred on the light cruiser Babur would patrol 70 miles to the west of Karachi, clear of any possible Indian air attacks and in a position to intercept Indian attempts to approach the weakly defended Pakistani coast in that vicinity or interfere with merchant ships moving in from the West. An inner patrol, at 40 miles radius from Karachi, would consist of at least one destroyer, as well as several minesweepers and fast patrol craft.

In the East, under the direction of Rear Admiral Mohammad Sharif, a motley collection of patrol vessels and riverine craft was to assist the Army as best it could. Given the likelihood of early Indian air superiority, this might not be much. Few air assets were available to the Navy. The Air Force had never agreed to take on a maritime reconnaissance or dedicated maritime strike role and the makeshift solution of requisitioning Pakistan Airways Fokker Friendships as patrol aircraft was less than ideal.
### WEST PAKISTAN

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Navies in Asia

What hope the Pakistanis possessed was fixed on the submarine force. All four submarines were fully operational. The Daphnes had proved to have much less endurance than promised by their French builders and lacked the range to operate in the east. Instead, they were deployed to patrol stations off Bombay and in the vicinity of the junction of the coastal borders of India and Pakistan. Ghazi, the older, American built long range boat was despatched to operate in the Bay of Bengal in the hope that she could catch Vikrant.

THE OUTBREAK OF WAR

By the middle of October, the Indians were ready to put pressure on Pakistan and this was achieved by making an aggressive response to any actual or perceived Pakistani incursions into Indian territory. Artillery fire was exchanged at intervals between 17 October and 12 November and this was succeeded by infantry battles which culminated in Indian brigade level operations in East Pakistan on 23/24 November. These were repeated at intervals over the next few days.

As the Indians had hoped, the Pakistanis opened formal hostilities with strikes against Indian airfields in the Weston 3 December. This was in accordance with the Pakistan Army’s doctrine that the East could only be defended by action in the West but it represented a miscalculation in two ways. The Pakistanis failed to perceive that India was interested, not in permanent territorial gains for herself in the East, but liberation of East Pakistan as a whole. They also did not understand that the Indian Army had been deployed away from the North and was positioned to fight a two front war in the East and West.

Pakistan’s concentration on fortified positions across the presumed Indian lines of advance in the East proved a complete failure. The Indian Army was able to by-pass these cities, which were in any case beset by the Mukti Bahini, and deploy armoured columns for an assault on the capital at Dacca. The Indian achievement of effective air superiority by 5 December sealed the fate of the Pakistan Army which could neither move nor fight effectively. By 16 December the Pakistanis had been forced to surrender Dacca and agree to a cease fire.

In the West, Pakistani thrusts into Indian territory were met with fierce resistance and thrown back. With heavy casualties in men and material on both sides, the Indians made slow but substantial inroads into Pakistan’s territory around Rajasthan and the Rann of Kachchh. The ability of their opponents to wage offensive war on two fronts meant the failure of any Pakistani prospects of success, the more so as their hopes of Chinese military intervention faded away.
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Eastern and Southern Theatres

Under his command, Krishnan had a small task group of four frigates centred on the carrier *Vikrant*. *Magyar*, an old tank landing ship and two *Polnocny* class medium landing ships were standing by at Vishakapatnam with the merchant ship *Vishwa Vijaya* as a makeshift amphibious force, together with the old destroyer *Raiput* which was intended for local defence.

To keep her away from Pakistan's submarines, *Vikrant* conducted her air group work up in the seclusion of the Andaman and Nicobar Island groups. Meanwhile, a campaign of disinformation was mounted to give the impression to Pakistan that the carrier was undertaking her annual autumn operations in the Madras-Vishakapatnam area. This was successful to the extent that *Ghazi* was informed by her operational authority in late November that *Vikrant* was still in port. This made the submarine's first priority the establishment of a mine field outside the East Coast base.

Thus, despite *Vikrant*'s task group being at sea at the outbreak of war on 3 December, it was the local defence forces at Vishakapatnam which had the first excitement. INS *Raiput* conducted an urgent depth charge attack on a possible periscope sighting just before midnight on the evening of 3/4 December as the ship cleared Vishakapatnam Harbour. Shortly afterwards, a very loud underwater explosion was heard. *Raiput* at no time had a sonar contact and eventually gave up the search to continue on patrol, but some days later lifejackets and other debris were found by local fishermen. Diving operations revealed the wreck of the *Ghazi* and evidence of an internal explosion forward, probably caused by the detonation of a mine. The most likely explanations are that *Ghazi* passed over one of her own fields in evading *Raiput* or that a mine exploded prematurely during the course of the lay.

Admiral Nanda insisted on obtaining material evidence before the sinking of *Ghazi* could be claimed and this was secured by 8 December. In addition to charts and records from the submarine, it is likely that the Indians also recovered *Ghazi*’s cryptographic material. The Pakistani communications system was not sophisticated and there is some evidence that limited penetration had already been achieved by the SIGINT organisation with the successful campaign of disinformation about the *Vikrant*.

The destruction of *Ghazi* removed what had been the primary source of concern for India in the East. Krishnan had noted "*Vikrant*'s approximate position would become known once she commenced operating aircraft in the vicinity of the East Bengal coast. Of the four [frigates] available one had no sonar and unless the other three were continually in close company with *Vikrant*...the carrier would be completely vulnerable to attack from the *Ghazi* [for] we had decided to commit the entire striking power of *Vikrant*'s aircraft to offensive operations and could not, therefore, afford the luxury of aerial surveillance." Krishnan's gamble had thus
already paid off.

Vikrant’s first action came with a morning Seahawk raid on Cox’s Bazar airfield on 4 December. This was followed by a daylight raid on Chittagong and a succession of attacks on other locations. On 6 December, Mongla and Khulna were struck. Several Pakistani small craft were destroyed and the merchant ship Ondarda, which the Indians claimed was equipped with AA weapons, sunk. The Seahawks continued with daylight raids while the Alizes conducted night sorties against targets such as Chittagong Airport. By the same night, the Indians enjoyed complete air superiority over East Pakistan although, in response to Indian Air Force fears of a Pakistani recovery, Vikrant’s air group continued to attack air strips and flight facilities, leaving the more attractive target of Pakistani troop and vehicle concentrations to the Indian Air Force. Although he acceded to the air commander’s requests, Vice Admiral Krishnan felt strongly that Pakistan’s ground forces were now the primary target, particularly as he believed that Pakistani troops considered that the war in the east was lost and were attempting to flee. From 8 December, Vikrant’s air group turned to troop targets, this time against Barisal in the south.

By 9 December, both aircraft and surface forces were busy intercepting merchant ships and fishing vessels in the approaches to the Ganges. India was intent on achieving a total blockade of East Pakistan to break Pakistani morale and hasten the now inevitable surrender. A four ship raiding force, consisting of two Indian and two Mukti Bahini gunboats planned to attack Mongla, Chalna and Khulna on the night of 9/10 December but found Mongla already in the hands of insurgent forces. Shortly afterwards, the small force was unfortunately mistaken for the enemy by Vikrant’s aircraft, which had not been informed of the sortie, and in the confused exchange of fire which followed one of the Indian craft was sunk. After picking up survivors, the remaining units continued to Khulna which they shot up the next morning before withdrawing.

Calm conditions on 10 and 11 December found Vikrant searching in vain for a wind and no Seahawk strikes were flown on either day. As Vikrant’s Captain complained "...we had to make do with Alizes only. One could do no more than resort to gnashing teeth and pray for a little wind in the near future." The real danger was that the slow Alizes would be vulnerable even to hand held weapons. Nevertheless, they scored a success on the morning of 11 December with the location and damaging of the Pakistani patrol boat Jessore which had been making for Chittagong, possibly to embark senior personnel for a break out. Jessore was finished off by a mine which the patrol craft detonated as she attempted to berth at Chittagong.

With windy conditions at last and despite suffering at least one steam failure, Vikrant conducted flying operations against shipping and shore targets throughout 12 December. 28 Seahawk sorties were flown and, the task group commander, Rear Admiral Sarma reported "Cox’s Bazar and Chittagong Airfield have been rendered inoperative [sic] in the near future."
The 1971 Indo-Pakistan War

There is no merchant ship of any size in the Chittagong harbour or approaches which has not been struck and incapacitated." The air group would continue their operations until 14 December when Vikrant finally withdrew to Paradip to refuel.

Krishnan had sailed his little amphibious force on 5 December, as soon as it was clear that they would not be at risk from submarines. The group had a battalion of Ghurkas embarked, although these troops had received little training in amphibious work and there had been no opportunity to rehearse them with the ships. In order to seal off Chittagong from the south, the Indians planned a bombardment of Cox’s Bazar followed by a landing to link up with the Mukti Bahini. Beas and Brahmaputra conducted the shoot successfully on the afternoon of 14 December, but the attempt at landing went badly awry. No beach survey had been made and the unexpected shallow gradient forced the landing ships to ground hundreds of yards from the shore with their bow doors still in several feet of water. In the ensuing confusion with over eager troops, most of whom could not swim, at least two soldiers drowned. Commandeered small craft eventually got some personnel ashore, but the insertion was only completed at the wharf at Cox’s Bazar the next day.

For operations in the South, Rear Admiral V.A. Kamath had been assigned the submarine tender Amba and the old escort destroyers Ganga and Godavari. The prime function of Southern Command was interruption of any Pakistan sea traffic between East and West and the imposition of contraband controls generally. Although the ships saw no action, a number of successful interceptions were conducted with little fuss.

Western Theatre

Kohli divided his surface forces in two. The Western Fleet under Rear Admiral Kuruvilla formed a surface action group (SAG) consisting of the cruiser Mysore, the two Type 12 and three Type 14 frigates, the Petya Class frigate Khadmatt and the old destroyer Ranjit. In addition, Kuruvilla had under his operational command the frigates Cauvery and Kistna and the training frigate Tir. These older ships were of little military value and would be primarily employed on local patrols around Bombay but they could be useful for towing the Osas to their operation areas. The remainder of the ships in the West were retained by Kohli. Aside from two submarines, two Petya class frigates and four Osas were designated as a "Special C-in-C's Task Force" in order to "undertake the first attack on Karachi and any subsequent attacks which during the course of the war became possible and desirable." Kohli’s division of his ships was justified by the need to maintain close control of the attack on Karachi, which had yet to be approved in principle by the Chiefs of Staff, and his declaration of specific operating areas for the Special Task Force and Kuruvilla’s SAG was a sensible solution to the problem of misidentification and "blue on blue" engagements between the two forces. The split was not made with the agreement of Rear Admiral Kuruvilla, however,
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and there were some hard feelings within the Mysore group on the subject.\textsuperscript{38}

Unless the Pakistani units were to pursue an offensive role, it was likely that the SAG’s duties would be secondary until the completion of the first planned attack on Karachi. Kuruvilla was instructed to seek out and destroy enemy ships within his assigned area but he viewed his primary function as being interruption of the flow of sea traffic into Karachi and between East and West Pakistan. Only after the initial Qsa raid would the SAG be allowed to attack the coast of Pakistan.

\textbf{Mysore} and her task group sailed for exercises on 2 December and was at sea off Bombay when the Pakistani land offensive began. The fleet’s material problems were soon manifest. On 3 December, \textit{Vijeta}, one of the two Osas, broke down and was towed back to harbour. Shortly afterwards, the frigate \textit{Kuthar} suffered a boiler fire and had to be detached to Bombay under tow by \textit{Kirpan} and escorted by \textit{Khukri}. These were only the most significant in a series of breakdowns which worried Kuruvilla greatly.

In the meantime, Kohli had received permission to attack Karachi. Since there was insufficient time remaining to organise the raid for 3 December, it was set for the next day. The two \textit{Petyas}, \textit{Kiltan} and \textit{Katchall}, with the \textit{Osa}, \textit{Vinash}, sailed from Bombay at 2000 on 3 December to rendezvous with the \textit{Nipat}, \textit{Nirgar} and \textit{Veer} off Diu, where a small tanker had been stationed for the Osas to top up with fuel. By sunset on 4 December, the force was off the mouth of the Gulf of Kachchh and approximately 150 miles from Karachi. At this point, \textit{Vinash} was detached to remain on patrol as a reserve and to cover the eventual retreat of the Indian force. Shortly afterwards, \textit{Kiltan} and \textit{Veer} began to suffer engine problems which caused them to lag behind the remainder.\textsuperscript{39}

On the outbreak of hostilities - of which the Pakistan Navy did not learn until several hours after the Army and Air Force began operations - the minesweepers were sailed from Karachi to conduct check sweeps of the approaches to the harbour and take station on the inner patrol line. A report from \textit{Hangor} on 3 December indicated that the Indian Western Fleet had already sailed; this suggested that an attack on the Pakistan coast might be in preparation. The destroyers \textit{Khaibar}, \textit{Jahangir} and \textit{Tippu Sultan} at sea, searching for a Pakistani merchant ship which required escort into Karachi, but the submarine’s report suggested to \textit{Khaibar}’s Captain that concentration on Babur would be the wisest course and he accordingly abandoned the search and moved to join the task group.

The task group commander believed for his part that the patrols around Karachi should be strengthened. Shortly after the three destroyers joined Babur at dawn on 4 December, \textit{Khaibar} and \textit{Shah Jahan} were despatched to join the outer patrol and by sunset they were in station. The
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first indications to the Pakistanis that all was not well came at 1905 when Khaibar intercepted an HF radio transmission to the south east. At 2010, anomalous propagation conditions allowed a shore radar station to detect fast moving contacts to the south. Further detections were made at 2040, but it took Pakistan Maritime Headquarters in Karachi time to digest the implications. Not until 2158 was a signal issued warning the patrols of the presence of enemy surface forces. For Khaibar it would come too late.40

At 2200, some 50 miles south of Karachi, Nipat made radar detection on two contacts and she and her sister Nirghat were assigned to prosecute them. Nirghat fired one Styx just after 2300 and followed this with a second missile three minutes later. Her target proved to be Khaibar. The destroyer had detected the Osas on radar as they approached and reported the presence of surface ships to Headquarters in Karachi, seeking permission to attack the unidentified contacts. The two missiles came as a complete surprise, however, and were initially thought to be an air attack. The first exploded in Khaibar's boiler rooms, resulting in progressive loss of steam and power, although not before she was able to report herself as hit by a bomb. The second Styx struck the superstructure at the break of the forecastle and sealed the destroyer's fate. She sank within minutes. Her damage report later proved to have been transmitted with an incorrect position, which would greatly hinder attempts the next day to search for survivors. The minesweeper Muhafiz realised Khaibar's plight and closed to assist, only to be struck by one of two Styx fired from Nirghat. The minesweeper practically disintegrated with the missile's explosion.

One other surface contact was engaged shortly afterwards, probably by Veer and in a position 25 south west of Karachi. This later proved to be not a military target but the Liberian freighter Venus Challenger with a Chinese crew which was sunk with all hands. Little was to be heard of this error. Although the Indians were clearly treating all radar contacts as hostile, the Pakistani warning to all merchant ships to remain at least 75 miles clear of Karachi in the hours of darkness was some justification for the Osas' assumptions.

The force continued to close Karachi and its remaining missiles were expended on "targets of opportunity" ashore. At least one struck the oil farm at Karachi (the metal tanks being a conspicuous target for the Styx missile head seeker) and started a disastrous fire. Ashore in Karachi, all was confusion. The port had been subjected to repeated Indian air attacks during the course of the day. The ambiguous report from Khaibar suggested that an air raid might be in progress. In their uncertainty, the local AA batteries give a spectacular but ineffective display of barrage fire while the Indians withdrew unscathed. Only when the survivors of Muhafiz were picked up by a patrol boat in the early hours of 5 December did Pakistan Naval Headquarters learn that she had been struck by a missile and that Indian surface forces had indeed been in the vicinity. Khaibar's survivors confirmed the story when they were finally rescued the next afternoon.
The Pakistan Navy's requests for a strike against the retreating Indian ships were rebuffed, even when taken by the Commander in Chief of the Navy, Vice Admiral Muzaffar Khan, to his opposite number in the Air Force. The latter replied "Well, old boy, this happens in war. I am sorry your ships have been sunk. We shall try to do something in the future." The opportunity missed was greater than the Pakistanis imagined. Maintaining radar and HF radio silence and with less than reliable VHF communications, the Indians could not concentrate again as the force withdrew to the fueling point at Mangrol. Veer suffered a total machinery failure, while Nirpat lost the lubricating oil pump on one of her four engines. Nirpat was able to make contact with Katchall after daylight but Veer did not rejoin the force until the next evening after it had anchored off Mangrol. It was not until a day after the Indian withdrawal from the advanced base that strikes were mounted by the Pakistan Air Force (PAF).

Pakistani confusion continued the next day with at least one mistaken attack by the PAF on patrol craft around Karachi. Babur and Jahangir were recalled and the other ships brought in from the patrol lines. By 8 December all major units with the exception of the tanker Dacca had secured inside Karachi harbour. Pakistan's reasoning was simple. Lacking any defences against the Styx missile, the ships would be safer in Karachi harbour and more useful there as additions to the local AA defences. Dacca, full of fuel, would have to take her chance at anchor in the midst of the merchant shipping outside the harbour.

In the meantime, a "Fleet Air Arm" consisting of "...the Governor of the Punjab's Cessna...an old DC3 Dakota, some Aero Club Austers and two armed Cessnas...two Fokkers and two Otters fitted with radar" was hurriedly set up at Karachi airport. Manned by volunteers supplemented by naval observers, these aircraft would attempt to provide some measure of day and night surveillance of the approaches to Karachi while the existing PAF manned Fokkers maintained their long range patrols.

Indian plans to repeat the attack were hampered by poor co-ordination of command. Kuruvilla's primary concerns were the submarine threat and the repeated detection of his force by Pakistani patrol aircraft which led him to expect air attacks from Pakistan. Given the improving, albeit still rudimentary co-operation between the Indian Navy and Air Force, there was a natural tendency to assume that the Pakistanis had made much more progress in joint work than was the case. Kuruvilla divided his force in two and turned south on the evening of 4/5 December before regrouping his ships to replenish from the tanker Deepak in preparation for an attack on Karachi the following night. At this point, Naval Headquarters in New Delhi intervened to order Kuruvilla to rendezvous with Tir to collect a second Osa, Vidyut. This forced him to break off his approach to Karachi. Although the Vidyut was successfully handed over to Mysore's task group, the attack would have to be deferred at least 24 hours.

Kuruvilla wanted to occupy the interim period searching for a Pakistani merchant ship, last seen on 4 December, but Kohli, who was unsure of his command status until New Delhi
formally "reinstated control of maritime operations" to him late on 7 December, insisted that the attack on Karachi remain paramount. Despite the urgency, worsening weather, which limited the Osas' speed, forced a further 24 hour deferral.

Kohli now intended a two pronged attack on the Pakistan coast. He left, however, the allocation of forces to Kuruvilla and in so doing seems to have allowed the latter to take a more cautious approach than his C-in-C intended. The Type 12 frigates Talwar and Trishul were assigned to the attack on Karachi, along with the Osa, Vinash, and began their approach on the evening of 8 December. Contrary to Kohli's expectation that Mysore would bombard the port of Gwadar on the Makran coast, Kuruvilla, concerned with the risks of being caught in daylight within range of Pakistani aircraft, remained to seaward. Kohli commented later that this "denied me the satisfaction of avenging the bombardment of Dwarka in 1965 by the Pakistani Task Force."

Coinciding as it did with further IAF attacks on Karachi, the second raid was a moderate success. Talwar sank a small craft which she mistook for a patrol boat, while Vinash’s missiles resulted in the sinking of a Panamanian merchant ship, the Gulf Star, and in severe damage to Dacca and a British flag merchant vessel, the Harmattan. A fourth missile struck the shore. The interaction between the Navy and the IAF was another example of the coincidence of operational goals which was not fully reflected in co-ordination at the tactical level. Neither the Air Force nor the Navy was privy to the other's activities. As Air Chief Marshal Lal later declared of the Air Commodore leading the IAF strikes against Karachi: He "did not know that our Navy was taking part - he had not been briefed about it."

The MYSORE task group's operations against merchant shipping included the seizure of the Pakistani merchant ship Madhumati and a dhow carrying gold. The vessel in which Kuruvilla was most interested, Maqbool Baksh, was never found.

The emphasis in the West now shifted to anti-submarine operations. There had been at least one encounter between the Mysore task group and a patrolling Pakistani submarine (Hangor) in the hours leading up to the opening of hostilities but in the following days the Indians had remained well clear of the expected Pakistani submarine operating areas outside Bombay. On the evening of 7 December, the Indians obtained an accurate HF direction finding fix on a submarine off Diu Head. With three Type 14 frigates including the newly repaired Kuthar available in Bombay, Western Naval Command ordered out a search and attack unit at 0500 on 8 December. Unfortunately, Kuthar suffered renewed boiler problems which prevented her sailing and it was not until 0700 that the remaining pair got away. On arrival in the area of probability, the frigates began a search which they sustained for the next 24 hours. Perhaps inevitably, in the absence of early detections, attention to material and tactical countermeasures...
3 DECEMBER
SUBMARINE OPERATING AREAS - WEST

AFGHANISTAN

PAKISTAN

MAKRAN

Gwadar

Ormara

C. Monze

Karachi

INDIA

RAJASTHAN

GULF OF KACHCHH

RANN OF KACHCHH

GULF OF KHABAT

PORT OKRA

Dwarka

Mangrol

Diu

GULF OF KACHCHH

"PAPA"

INDIAN PATROL AREAS

1 2 3 4

5 6 7 8

PAKISTAN PATROL AREAS

"BRAVO"

0 100 200 300
NAUTICAL MILES

Bombay
Navies in Asia

lapsed and the ships were not conducting evasive steering. In addition, Khukri was experimenting with an indigenously designed solid state display which had been mated to the transducer of her search sonar. The designer of the equipment, a young Electrical Lieutenant, had persuaded the Captain that slow speed would increase detection ranges considerably.

Consequently, when the frigates finally arrived in the vicinity of the submarine HANGOR, after the latter had tried for twelve hours to get "in the grain", she was presented with easy targets, steaming a steady course at 12 knots. At 1930, the submarine used her radar to obtain a range of 10,000 yards on the nearest frigate and the Captain then took Hangor deep to conduct the attack on sonar. A first torpedo fired fine on the bow at 1957 missed, but a second from broad on the Indians' beam at 2014 struck home on Khukri. As Kirpan appeared to be turning towards Hangor, the submarine fired a third weapon - which also struck Khukri - before taking evasive action. Khukri sank within minutes with the loss of 18 officers and 176 sailors.

With no more than the flaming datum of her sister ship to give her an indication of the submarine's whereabouts, Kirpan very properly left the area, signalling Western Command to report the sinking and seek assistance. Her Captain employed Kiran's Mark 10 mortars in a barrage mode down the threat bearing as he withdrew, a primitive but effective countermeasure in the circumstances. Kadmatt was detached by Mysore to join Kirpan and the two frigates were able to pick up 69 survivors the next day. In the meantime, Kohli cancelled the planned third attack on Karachi in favour of a co-ordinated hunt for the Hangor. The four days which followed saw Hangor repeatedly engaged. She suffered slight damage from the 156 depth charges which the Pakistanis were able to count in use against them and was repeatedly forced to interrupt her battery charging by maritime reconnaissance and Alize ASW aircraft. Matters were not improved by the Captain's decision to report his success to headquarters, since this allowed the Indians to get a new HF fix and localise the search. Nevertheless, the Indians were forced to draw back when Hangor finally got within range of air cover from Karachi on the evening of 13 December. The submarine entered harbour five days later.

The sinking had its benefits for the Indian Navy. It brought about an immediate improvement in damage control drills and ASW procedures and also caused an abrupt end to the over-confidence which had been developing in the wake of the early victories over the Pakistanis.

Indian Submarine Operations

Two submarines, Kursura and Karanj, were assigned to the Western Command. Kursura conducted a submerged patrol from 13 November well to the seaward of Karachi but was on her way back to Bombay when war broke out. She made a rendezvous with her relief, Karanj, on
2 December to hand over what information and local knowledge she had gained and was able to enter harbour on 4 December. Although Kohli intended to employ Kursura on a mine-laying operation against the Pakistani ports, a rapid turn around could not be achieved and the submarine had yet to deploy two weeks later. The Foxtrots had proved to be a robust and reasonably reliable type, but it is significant that Kohli’s account of their operations dwells on the poor conditions (even for diesel-electric submarines) experienced by their personnel and that Karanj’s 22 day submerged patrol, by no means remarkable by modern submarine standards, was then a record for the Indian Navy. No Indian officer of the day denied the general superiority of the Pakistan submarine force and the need to avoid submarine on submarine encounters constituted a significant limitation.

More restrictive still was the Government’s insistence on the submarines making positive identification of their targets before attacking. In the Foxtrots this required visual confirmation by periscope which markedly increased the possibilities of detection and thus the submarines’ vulnerability to attack. Although it was in keeping with the Government’s political aim to be seen internationally as using minimum force to achieve liberation of East Pakistan, the decision came as a surprise to the lower levels of the navy and stands in marked contrast to the freewheeling approach of the missile craft.

Karanj sailed on patrol on 30 November and was in her waiting station when war broke out. She closed into her patrol sector to the west of Karachi on 6 December and remained there until 14 December. She found no naval targets, although on four occasions she broke off attacks after identifying neutral merchant ships. Her presence, however, forced the Pakistanis to hug the coast inside the 15 fathom line and acted as a further restriction on the movements of the Pakistani surface fleet.

The operational submarine in the East, Khandari, drew a similar blank in her patrol off Chittagong between 28 November and 14 December. The fourth and last submarine, Kalveri, was in deep maintenance at Vishakapatnam but she was hastily reassembled and sent to patrol to the north west of the base as a defensive measure in the absence of the Eastern Fleet’s surface forces.

The limited results achieved by the submarines were a disappointment to some but the conflict was to prove valuable in giving the new force operational experience and in making clear what would be their most effective usage in future. As Kohli was to observe, the declaration of an exclusion zone (as the Pakistanis had done for the area around Karachi in the hours of darkness) would have satisfied the need for warning off neutrals and would have allowed the submarines free rein against the Pakistani navy and merchant fleet, even if the latter attempted to disguise themselves as neutrals.

THE DIPLOMATIC WAR AND THE ENTERPRISE
India's treaty with the USSR soon proved effective as the Soviets consistently vetoed American attempts to pass resolutions which called for a cease fire and complete Indian withdrawal from East Pakistan. Indian determination to force the outcome was demonstrated by formal recognition of Bangladesh as a nation on 6 December and statements that Indian military withdrawal would be absolutely conditional on the previous removal of all Pakistani forces from the East. Confident in the prospect of a fait accompli, India was able to let matters hang within the United Nations' Assembly while its troops advanced on Dacca.

The only direct attempt at external military influence on the war was the deployment by the United States of a carrier battle group centred on the Enterprise together with elements of an amphibious group under the designation Task Force 74. The American position in the war was generally pro-Pakistan, although its courses of action were very limited and there was uncertainty within the administration as to the approach the US should take. Brought down from the South China Sea on the specific orders of President Nixon, Task Force 74 operated in the vicinity of Singapore until 14 December, when it entered the Bay of Bengal. Since all foreign nationals had already been evacuated from East Pakistan, a show of strength this late in the conflict was ambiguous in the extreme. It could be construed as a warning to India not to tamper with West Pakistan, because events in the East had already passed the stage where intervention to prevent the independence of Bangladesh would be realistic and this has been suggested by Dr Kissinger as the prime motivation. As a signal, however, the deployment lacked utility because the Americans failed to find "a line of action that might make America a factor in the ever more turbulent situation on the subcontinent." India denied at the time that it had any permanent territorial ambitions in relation to West Pakistan and no information has emerged in the two decades since to suggest otherwise. There is, however, the possibility that the movement of the Enterprise was ordered more as an outlet for the frustrations of the American Administration after months of dealing with the implacable Mrs Gandhi than for a specific mission.

Suspecting that the Americans were attempting to force an easing of the pressure on East Pakistan to permit the escape of Pakistani forces, the Indians determined to ignore Task Force 74. They did not possess the assets to challenge Enterprise, despite the presence of the submarine Khandheri and some loose Air Force talk of strikes against the task force, but Krishnan was right to suggest that "It was unthinkable that they [the Americans] would commit their aircraft on a ground support role against our army or air force or wantonly attack our naval forces at sea." United States forces in the Pacific were already fully committed to the war in Vietnam; the Sixth Fleet would have been hard pressed to provide further resources to support the Enterprise task group and resources available from the Atlantic Fleet would be equally limited, even aside from the time required for deployment. The single carrier and its accompanying escorts and amphibious ships represented the maximum practical commitment the United States could make.
The Task Force itself turned away from the Bay of Bengal on 17 December after the cease fire in East Pakistan and operated in the Indian Ocean until its withdrawal was announced on 10 January 1972. While the Enterprise group failed to achieve any material results in the short term, the deployment had profound implications for the long term because it provided a clear indication to the Indian Government that the Indian Ocean was no longer a lake under the control of forces wholly benevolent to India. This lesson would be used to good political effect by the Indian Navy in the years ahead. Then, too, the counter deployment by the Soviets of a guided missile cruiser and a submarine to join their small task group already in the Indian Ocean had its own significance. The Soviets were equally capable of making their own demonstration on behalf of India and they were now willing to extend their naval forces into the Indian Ocean.

CEASE FIRE

The collapse of Pakistani resistance in the East was followed by rapid negotiations for a cease fire. In the confusion of these final days, only one Pakistan Navy unit, the patrol boat Rajshah, was able to escape from Chittagong and make her way to the West by way of Malaysia. Lieutenant General Niazi signed the surrender instrument in the presence of the Indian Eastern sector commanders of the three services on the afternoon of 16 December. Fighting shortly afterwards ceased on all fronts.

RESULTS OF THE WAR

The achievements of the war - and the failures - set the pattern for naval development in both countries. At the material level, the expansion of the Indian fleet had been justified, as had the acquisition of Soviet equipment and the creation of indigenous tactics and procedures. The concept of fixed wing naval aviation had received a considerable boost, not only through the successful deployment of the Vikrant but with the benefits of naval control of long range maritime patrol aircraft now obvious at the highest levels. Enterprise’s incursion emphasised the requirement to possess a credible sea denial capability and foreshadowed the continuing development of the submarine arm. The possession of relatively sophisticated missiles had given the Indian Navy an absolute tactical advantage which it would be necessary to retain through further acquisitions - and technical development - in the face of Pakistani countermeasures. Much more attention would have to be devoted to amphibious operations to avoid debacles such as that at Cox’s Bazar.

The amphibious question also highlighted the need for continuing improvement of procedures for joint planning and operations, something also obvious in the less than perfect interaction with the Indian Air Force. Any coherent maritime strategy for Indian defence required the close involvement of maritime strike aircraft. While the Air Force had formally dedicated assets to this role, their integration into maritime operations required further time and practice.
Navies in Asia

At the political level, the Indian Navy had demonstrated its utility, assisted in the removal of a considerable strategic problem in the form of East Pakistan and wiped away the doubts caused by its poor performance in the 1965 war. In arguing for continuing development and expansion, the Navy now had the advantage not only of a creditable record but the intervention of the Enterprise as a justification for continuing strength at sea.

The Pakistan Navy could console itself with a respectable performance in the face of insuperable strategic difficulties and an overwhelming technological inferiority in surface warfare. Despite Ghazi's loss, the submarines had proved their worth. In the wake of partition, the Navy's task had actually become much simpler. To provide for the defence of Pakistan and its littoral zones, more submarines, better surface weaponry and ASW equipment and, above all, improved maritime air and some real degree of co-ordination between Air Force and Navy would be required. Pakistan's financial situation was such that any substantial reconstruction programme would have to wait on foreign aid, but, with Bangladesh no longer an issue, that might soon be forthcoming from China and the United States. What remained the real challenge was to modify the continental mind set of the still dominant Pakistan Army towards considering the maritime sphere; this would prove the most difficult task of all.
The 1971 Indo-Pakistan War

1. The destruction of the Israeli destroyer Eilath in 1967 had been accomplished with Styx missiles fired from Egyptian Komar class missile boats in harbour.


8. Ibid. p.78.


11. Ibid. p.55.

12. Ibid. p.78.

13. See Major General Fazal Maqueem Khan "Pakistan Navy in the War" in Ranjit Rai A Nation and its Navy at War Op. Cit. pp.171-172. See also The Story of the Pakistan Navy Op. Cit. Chapters 10 to 12 (pp. 227 to 328) for a systematic account of the Pakistan Navy’s problems in the years before the war.


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28. Pran Chopra *India's Second Liberation* Vikas, New Delhi, 1973. See also *The Story of the Pakistan Navy* Op. Cit. p.352. I am indebted to Rear Admiral M.H. Khan, Bangladesh Navy (Retired), the senior Bengali officer in the PN in 1971, for his recollections of this period and to Captain A.R. Peters, RN for establishing contact with Admiral Khan.


32. Ibid. p.24.

33. Ibid. p.61.

34. Ibid. p.63.
The 1971 Indo-Pakistan War


37. Ibid. p.38.


44. Ibid. p.63.


50. Ibid. pp.902-903.


52. See Michael Walter "The U.S. Naval Demonstration in the Bay of Bengal During the 1971 India-Pakistan War" World Affairs Spring 1979. p.299.

Navies in Asia

54. Ibid. p.302.
Chapter Three

THE INDIAN NAVY 1972-1992

The twenty years which followed the end of the 1971 war with Pakistan were the most prosperous the Indian Navy had yet enjoyed. Within these two decades, the Navy acquired a second carrier, new guided missile destroyers and modern submarines. It experimented with a nuclear submarine and built its own frigates and corvettes. The Fleet Air Arm received an influx of new fighters and helicopters, while the Navy's basing and refit facilities were extended and improved. In the course of all these acquisitions, the Indian Navy became a more prominent instrument of government strategic policy than it had been before; equally, it became more significant within the strategic calculations of the other nations with interests in the Indian Ocean.

The story of the Indian Navy's recent development is more complex than is often perceived. Despite its improved status, the Indian Navy is still the smallest Indian service. It does not enjoy unchallenged access to funds, particularly foreign exchange and it has been frequently reminded of the truism that sophisticated navies cannot easily be constructed or maintained with "soft" financing. The Indian Navy's ambitions have been consistent in regard to force structure1 but the limitations of its political and financial situation have forced it to pursue an opportunist approach, both in the process of arguing its case for expansion and towards the systems which it has selected to achieve what development is allowed. This method has achieved much, but it has also, directly and indirectly, caused great confusion amongst external observers as to the true purposes of the Navy.

One criticism is that the Indian Navy decided what force structure it wanted before determining its operational requirements. This was partially a result of the essentially fragmented system of force development, by which each service justified its element of the five year plans to the Cabinet committees in relative isolation from the other armed services. But the inverse nature of the planning process should not disguise the fact that there was a valid Indian case for a strong maritime defence element - or the equally important reality that the nature of the Indian system of government forces any interest group to pursue a tortuous path in achieving its aims.
Any consideration of the Indian Navy’s capabilities must be made while recognising that the fundamental assumption underlying the Navy’s justification for its force structure is that limited capability is far better than no capability at all. This is particularly true, in Indian eyes, when the potential opposition is also limited. The point has been noted by commentators in relation to India’s determination to possess the ability to limit and influence super power naval activities in the Indian Ocean. The truth is that the point also applies to the fleet in other missions and it is especially relevant to any consideration of the Indian aircraft carrier force.

It is relatively easy, based upon the arithmetic of operating cycles and weapon capabilities, to construct a strong case against the retention of these ships for any "hot" war which India is likely to fight, but this ignores the extent to which the Navy’s capabilities have evolved in the directions of presence, influence and power projection - where such projection is viewed as practicable. In other words, what is important for India is not the fact that a small carrier such as Vikrant or Viraat performs its many tasks rather inefficiently but that it can perform such tasks at all. This is a theme which may be foreign to the United States Navy and the major European powers, but it will be very familiar to smaller nations who would wish to employ their navies as effective instruments of policy.

The Strategic Setting - 1972

The Indian Navy’s successes in the 1971 war with Pakistan created a new confidence within the Service and gave it a more prominent status within the structures of Indian defence. Yet the victories which had been achieved did not result in any significant reduction in India’s strategic problems in the maritime arena. East Pakistan was now independent Bangladesh and presently a friendly nation. Its military capabilities were negligible and it would be unlikely ever to make common cause with Pakistan, but there was no guarantee that Bangladesh would adopt a consistently sympathetic policy towards its great neighbour, India. Before long the two countries would be in dispute over illegal immigration and territorial seas.

Sri Lanka in the south was beginning to show signs of internal unrest which possessed grave implications for India. Although the early 1970s saw only the beginning of a campaign of civil disobedience by the (Indian) Tamil minority on the island, the likelihood that the Tamils on the mainland would make common cause with their brethren against the Sinhalese majority meant an inevitable problems for Indian security by the end of the decade.

To the west, Pakistan remained an unfriendly power, with continuing rivalries over Kashmir and the Rann of Kachchh. It had suffered the loss of its eastern wing, but Pakistan’s long term strategic situation had thereby been both simplified and strengthened. This was particularly true for maritime operations. The long and vulnerable sea passage between Karachi and Chittagong no longer required attention and the Pakistan Navy could concentrate on defending its country’s short and well protected coastline while strengthening the offensive
INDIAN AND PAKISTANI PERSONNEL - 1948 TO 1992

NOTE:
1. ABRUPT INCREASES TEND TO INDICATE ENLARGEMENT OF AUTHORIZED STRENGTH RATHER THAN ACTUAL NUMBERS.
2. SOURCES: COLLATED FROM THE MILITARY BALANCE, JANE'S FIGHTING SHIPS AND INDIAN/PAKISTANI SOURCES.
The capabilities of its efficient submarine service. While the Pakistanis had suffered heavy losses during the war, three modern submarines and the bulk of the escort force remained unscathed. The losses of personnel to Bangladesh would take time to remedy, but the nucleus of an effective fleet remained.

The Indian Ocean itself was now of much more interest to the great powers than it had been in previous decades. Although Britain was reducing its commitments as fast as possible, both the United States and the USSR were increasing the frequency of their task group deployments. While the intent of this activity was clearly to be seen - at least in 1972 - in the context of great power rivalry and the need on the part of the West to protect its oil supplies in the Middle East, the operations of the Enterprise task group in 1971 had provided India with an object lesson in the ability of such naval forces to be employed in opposition to Indian interests. In consequence, India steadily opposed American efforts to deploy and sustain its forces within the region because of the possibilities for interference with India's area of direct interest.

Long term American intentions had been indicated by the lease to the USA by the United Kingdom of the island of Diego Garcia as a "communications facility" in December 1966 (notably, before the first overt Russian naval deployment to the Indian Ocean in 1967) and the start of construction in 1972. While the timing of these moves hardly indicated urgency on the part of the Americans, Indian suspicions could be justified by the fact that the treaty specifications of the fifty year lease included an airfield and anchorage as part of the communications station. American large scale deployments were difficult and highly resort intensive unless they could gain access to a local base facility. As a result, until the late 1970s, the permanent presence in the Indian Ocean amounted to only three ships, with carrier battle groups making appearances three times a year.

Despite the coincidence of many interests, particularly in relation to the reduction of American influence, India could be under no illusion that it possessed any control over the USSR. This was amply demonstrated by the USSR's willingness to engage in Naval Arms Limitation Talks with the USA in 1977-78 which effectively excluded other powers and which, in India's eyes, had the dangerous implication of treating permanent great power naval and military presence as an accepted fact on both sides. The 1979 Soviet intervention in Afghanistan would complicate matters for India even further.

It was the Indian Navy's view that China, too, was resurgent and was increasing its pace of naval development, particularly in submarines and large surface combatants. It had yet to enter the Indian Ocean in strength but the Indians believed that achievement of the ability to do so might not be far distant and that preparation should be made against this event.
Navies in Asia

The decade of the 1970s would thus see a duality within Indian government policy. On one hand, the tradition of Nehru was continued in the espousal of the "Indian Ocean Zone of Peace" (IOZOP) concept, by which "great power rivalries...as well as bases...either army, navy or air force, would be excluded" from the region. On the other, progressive naval development would continue "despite the constraints of resources" for a Navy which would be - because of the requirements of non-alignment - an organisation wholly independent of alliances with other nations. India's approach to the IOZOP maintained these themes as the decade wore on, emphasising the need for the great powers to disarm in the Indian Ocean without accepting any concomitant requirement for littoral state arms reductions. In this, India was probably reflecting only the reality of the increasing conflicts of interests apparent amongst the nations of the littoral which had been demonstrated in the 1971 Indo-Pakistani war and which would be magnified by events such as the 1973 oil embargo, India's own "peaceful nuclear test" in 1974 and recurrent armed disputes in both Africa and Indo-China.

The Oil Crisis

The events of 1973 created a host of new strategic problems for India which directly affected the future of the Navy. Apart from the economic impact of the effective quadrupling of oil prices, which had an immediate effect in reducing the Navy's operational activities, the price war showed just how dependent India was upon oil imports. There was one immediate result and several more gradual but equally significant developments. First, India sought to accommodate the oil producers, aligning herself informally with the anti-Israeli movement, so as to achieve access to guaranteed supplies of cheap oil. This was achieved through agreements with both Iran and Iraq.

In the longer term, impetus was given to the moves to exploit the seabed around India for petroleum products. Discoveries made in 1974 in the Bombay High Basin, to the north west of Bombay, showed considerable potential for further development. By 1975 three wells were in operation and by 1981 the fields were providing more than 20% of India's total petroleum requirements. With increasing fishing activity and clear interest in the potential for seabed mining, India was quick to adopt the concept of the Exclusive Economic Zone. A Maritime Zones Act was passed by the Lok Sabha in 1976 and the 200 mile Exclusive Economic Zone formally declared in 1977. This gave India approximately 2.1 million square kilometers within its EEZ. Nearly a third of this area was centred upon the Andaman and Nicobar Islands. While India soon established a separate coast guard force, the implications for the Navy's responsibilities were obvious.

The oil crisis also made the Gulf states and Indonesia wealthy to an extent previously undreamed of. Not only did this result in the progressive armament of states such as Iran, which openly espoused ambitions to be the dominant power in the north west Indian Ocean, but it raised concerns that Muslim solidarity would see Pakistan enjoying an inrush of arms and funds.
The overt American support of Iran's intentions and willingness to supply the most sophisticated equipment in existence added fuel to such suppositions. It was true, however, that pundits tended to emphasise the sophistication and expense of the new weapons Iran had obtained rather than offer any direct evidence that they either could or would be used in direct opposition to Indian interests. All these developments amounted to uncertainties for Indian strategic planners rather than outright or immediate threats, but they did point to a much more active and important role for maritime forces within the scheme of defence.

Service Priorities - 1972

The end of the 1971 war saw the Services taking stock of their situation and future. Despite the many strategic problems of the region, the situation of the Army and Air Force was simplified. The military threat had disappeared on the eastern flank; the Pakistan Army would require years to rebuild its equipment and more importantly - its personnel structures and morale. China remained to the north but its failure to assist Pakistan provided clear indication of Chinese limitations, particularly with the uncertain factor of the Indian treaty with the USSR. In these circumstances, there could be arguments for the Navy taking the lead in capital expenditure.

Despite some discontent within the Army at the Navy's "blue water" ambitions which were to manifest themselves at intervals in the public domain, the other Services were generally content with the Navy's case for re-development. It was accepted that the situation which had prevailed in the wake of the Sino-Indian War of 1962 had now changed and that the Army could afford to surrender a share of funds to maritime operations in what was, in any case, a progressively increasing defence budget. The improvement in the Navy's position after the 1971 war was seen immediately in the rapid increase in its share of capital expenditure (by 1974 nearly 50% of the total) and by its accompanying steady increase in its percentage of the entire budget. There were claims made by proponents of the naval case that the eventual naval share, which had exceeded 10% by 1975, should be 20% of the total but this was never achieved. It has been suggested that the "accepted" goal for the navy within the joint service planning organisation is in the order of 13%.

The real possibility for inter-service dispute lay in the question of long range maritime patrol aircraft (LRMPA). In the event, this was settled with relatively little acrimony. The Navy was careful not to suggest that it possessed any long term ambitions to assume the maritime strike function from the Air Force squadrons dedicated to the role. The performance of the LRMPA in the 1971 war had been manifestly inadequate and the Navy's assumption of control would allow the Air Force to avoid devoting resources to the expensive but increasingly urgent need for replacements for the aged and ineffective Super Constellations. In 1976 the latter were transferred to the Navy and approval given for the acquisition of the first three of six IL 38 May maritime patrol aircraft from the USSR.
The 1971 war had vindicated the principal features of the Navy's development in the previous decade. The determination to maintain a "balanced" fleet centred upon an aircraft carrier, however relatively limited her capabilities, with adequate surface and sub-surface elements had borne fruit. So too had the decision to adopt Soviet naval technology, although it was also clear that there would be dangers in allowing the USSR to become the "sole source" for equipment. Finally, the adoption of the separate Eastern, Western and Southern Commands had created command and control arrangements which reflected the vast scale of India's area of direct maritime interest.

What had proved less satisfactory was the serviceability of much of the fleet. This was largely a function of age. Delhi and Mysore were both in their fourth decade of operation; the R class destroyers and the sloops were no younger. The new Soviet ships were still suffering teething troubles and possessed systems that were not well suited to tropical or sub-tropical conditions.

The future force structure therefore required attention. In dealing with its requirements, the Indian Naval Staff was subject to a variety of conflicting demands and desires. The political position of the service, while much improved, was not good enough to allow it to spend all it wanted on equipment from overseas. Exposed to both Soviet and Western naval thought, the Indians were continually torn between the natural professional desire for the best and the realities of financial and political limitations. India's "non-aligned" status limited the assistance which could be derived from the Western alliance, both directly and indirectly, to that which could be paid for in hard cash, while the Indian Navy was also concerned to keep the Soviets at arm's length in order to minimise the extent of its dependence upon the USSR.

It is also true that the rash of acquisitions in the 1980s should not disguise the reality that the programmes of the 1970s were essentially ones of replacement. In the 1971 war, even the newest UK built units (the Type 12/41/14 frigates) had an average age of 11 years and had not undergone half life modernisation. The cruisers, destroyers and old AA frigates were in an even worse situation - their average age was more than 29, well past the expected effective lives of such ships.17

The status of the Fleet Air Arm was an obvious indication that not all problems could be resolved immediately or easily. Vikrant's Sea Hawks and Alizes were ageing but there were no replacements, particularly for the fighters, in immediate prospect. Her near sister, HMAS Melbourne, had proved the capacity of the class to operate the A4 Skyhawk attack fighter and the S2 Tracker ASW aircraft but the continuing arms embargo imposed by the United States precluded the acquisition of either type. The Soviets and the British were both developing VTOL/VSTOL aircraft in the shape of the Yak 38 and the Harrier, but the Russian aircraft
would soon prove less than impressive, while the whole issue of British VSTOL aviation and its future in naval operations remained in doubt, despite the order for the first British through deck cruiser in 1973. In the meantime, Indian fixed wing aviation would continue with the judicious limitation of flying hours and juggling of airframes.

The clear advance for the Vikrant was the arrival of the first Mark 42 Sea King ASW helicopters. The dipping sonars of these machines gave the carrier credible protection against modern conventional submarines, something which had not been the case in the 1971 war. The Fleet Air Arm saw a general emphasis on rotary wing aviation at this time with the introduction of the Alouette II helicopter in the ASW torpedo carrier role for operation from the new Leanders.

Progress was more certain in the escort force. Five more Petya II class light frigates were due for delivery in 1972-74. These would give the Indian Navy the advantages of numbers in coastal operations. Three Leander class frigates were in various stages of construction at Mazagon Dock in Bombay, with the first, Nilgiri, to complete in June 1972. It was significant that while Nilgiri was a "standard" British Leander with UK radars and fire control systems, the succeeding units carried Dutch designed (and increasingly Indian manufactured) systems in their stead. With a new order for a second batch of three in train, the Indians were embarked upon a programme of increased Indian content and progressive modification to suit local requirements.

The long term goal was the construction of an Indian designed destroyer and detailed planning began for this in 1972. Limited experience and lack of drawing office staff dictated that the design would have to be based closely on the Leander, using expanded dimensions to provide for the additional capabilities wanted, and the final design represented the absolute maximum that could be put to sea with a Leander's scantlings. Proponents of the indigenous destroyer project had to overcome the objections of other elements within the naval Staff who pointed to the serious deficiencies which had been experienced with the Indian designed Darshak but an in-country building programme with a minimum of western (and thus hard currency) assistance offered the only prospect for achieving sufficient numbers of modern major surface combatants. The lesson was pushed home by the need to cancel the corvette programme which had been the centre of the Indian Navy's expansion plans in the wake of the 1971 war. The scheme for two overseas built vessels (to either a French or British design) with a follow on of ten Indian built units foundered in the foreign exchange crisis of 1973-74.

The challenge was not in the area of ship design but in weapon and sensor system selection. The relationship with the Soviets had proved reasonably successful but the Indians believed that much of the equipment with which they were provided was capable of improvement. India was prepared to meet Soviet concerns about security by developing its concept of separate Eastern (Russian type) and Western (British/European type) fleets to the extent that officers from the Western Fleet required permission from Naval Headquarters to visit...
Navies in Asia

ships of the Eastern Fleet - a compartmentation which had obvious disadvantages for a small
navy and which was to have unfortunate results in later years, even after it had been
abandoned. But the Indian Navy was also determined to press ahead with system
improvements, despite the concerns of the General Equipment Directorate in the USSR.

The Soviets were soon content to share weapon/sensor improvements with the Indians,
who were able to make good use of the country's pool of electronic engineers with their
exposure to advanced western techniques. Where the Soviets objected was in the Indian
attempts to mate their equipment with Western ships. The Indian argument was simple. The
Western ships were generally more satisfactory as units and more suited to Indian conditions
than the Soviet vessels but Western weapons were either too expensive or else unavailable. The
only solution would be to match the equipment they could obtain to the ships they preferred. The
initial venture was the removal of Styx missiles from Osa class fast attack craft and their
installation in the Type 12 frigates Talwar and Trishul in place of the 4.5" mounting. Apart from
the increase in the frigates' offensive power, this relatively simple modification would
demonstrate whether it was possible to fit the ship's British electrical systems to cope with the
wholly different power requirements of the missile launchers and their radar and control
systems.

The refit proved a definite success and the Indians were able to proceed with plans for
installing a mix of Western and Soviet origin equipment in their new expanded Leander type,
which would be known as the Godavari class. Bitter Soviet objections to the Talwar/Trishul
conversion were met with a firm reminder that expiration of the twelve month warranty period
on the Osa class and their systems gave the Indians absolute rights to their employment,
provided that no third party was involved. Soviet disquiet over the Godavari concept took longer
to allay but the Indians had the advantage that they were in the market for an AAW destroyer,
which would have to be Soviet. After some discussions over modifications (forward facing Styx
launchers and an embarked helicopter) to the Kashin class, agreement was reached in 1975 for
the supply of at least three new construction units.

The Indian Navy also sought further fast attack craft, which arrived in the shape of eight
Osa II in 1976-77 and three Nanuchka class in 1976-78. After the failure of the Western-type
corvette project, there was much interest in the potential of the Nanuchkas for oceanic operations
but they proved something of a disappointment, both in seakeeping and serviceability - despite,
it might be noted, the one-for-one replacement of a Nanuchka by the Soviets with a new ship
of the same class after the former had developed a shaft alignment problem on trials.

The position with submarines was more confused. The second quartet of Foxtrots arrived
in Indian waters between 1973 and 1975. They were satisfactory enough boats in the training
role but they were unsophisticated by comparison with the Pakistani Daphne class and carried
only basic sensor and fire control systems and torpedoes. Since submarine construction in
Europe would be too expensive, collaborative projects for building in India were proposed. A variety of schemes foundered, however, probably because India as yet lacked the funds to achieve the very considerable capital investment for infrastructure. Money was still required to bring the surface ship yards up to modern standards and this had proved a considerable drain on resources from 1966 onwards.

The Indian Coast Guard

After several years of planning and debate, an Indian Coast Guard came into formal existence on 19 August 1978. Initially equipped with only a pair of the old Type 14 frigates and some patrol vessels, this force was intended to take on the increasingly complex surveillance and law enforcement role within India’s territorial seas and exclusive economic zone. At first progress was slow but an ambitious building programme of offshore patrol vessels and light patrol craft was underway by the end of the decade. Relations between the Coast Guard and the Navy would be generally close, helped by the fact that the core of the new organisation was made up of ex-naval personnel. The Coast Guard’s existence did not, however, entirely supersede the Navy’s responsibilities for offshore surveillance and patrol, as was to be demonstrated by the construction of the first of a new class of patrol ships in South Korea in 1989.

Operational Concepts

Direct evidence of the development of Indian naval operational concepts is limited but the thrust of Indian activity in the 1970s is apparent in retrospect and was reflected by both the direction of the building programmes - as well as the funds expended upon facilities - and in the operational cycles of the fleet. The Indian Navy’s tasking came to be, in an order which loosely reflects the priority given:

a. Protection of the Indian coast, offshore facilities and merchant shipping in the event of renewed conflict with Pakistan;

b. Neutralisation and, if possible, the destruction of the Pakistan fleet in the same event, in order to establish a blockade of Pakistan and allow free action against the country’s coastline and economic zone assets;

c. Protection of the Andaman and Nicobar Islands against incursions, both by purely naval action and through the insertion of troops and equipment over the shore;

d. Denial to any foreign naval force of the ability to operate effectively against Indian interests within the approaches to India and its exclusive economic zone; and
Demonstration and enforcement of Indian interests within the country's area of strategic interest.

Three features are evident from any consideration of this tasking. The first point is that it mixes the classical roles of "sea control" and "sea denial", sometimes within the single task. The second is that not all these duties, particularly the fourth and fifth, could be described necessarily as "absolutes". The concept of denying a hostile force the ability to operate effectively modified classical deterrence doctrine in that the Indian Navy would be attempting to create a level of threat which would at the least force any battle group to expend all its energies upon self defence. Force levels, as Admiral Kohli (Chief of Naval Staff 1973-76) has remarked "should be so determined as to provide a credible threshold of deterrence to any belligerent country."²⁸

The aim is to have the ability to influence the likely outcome of a conflict in the Indian Ocean.²⁹ Pending the development of sufficiently capable forces to meet all threats, the Indian Navy would be at least partially fulfilling its purpose by demonstrating Indian interests through presence - maritime air reconnaissance surveillance being particularly effective, as one commentator has observed.³⁰ The third feature is that this wide variety of tasks both forced and justified the continuing attempts to create a "balanced fleet" outlined above and provided some sort of case for the sustenance of a carrier capability, even if only in the "holding" mode which was apparent in the 1970s.

The Indian Navy's ambitious objectives were displayed in the increasing degree of sophistication apparent in naval exercises as the 1970s wore on, with an annual programme that allowed progression from single-ship procedural to multi-ship tactical to fleet exercises to perfect "the coordination and teamwork required in individual units as well as groups".³¹ Amphibious exercises began in the Andamans in the early 1970s and were the precursor of greater things. The plans to create the joint force command in the Andamans and develop Port Blair as a forward base, announced in 1972, foreshadowed a much improved co-operative approach to the problem of defending the islands and one which would involved elements of all three services.³²

The Indian Navy also emphasised shore training and simulation. This was partly a result of the increasing potential (and cost saving implications) of simulators but it was also due to the influence of the Tactical School which had to achieve indigenous developments in tactics in the absence of any available foreign doctrine.³³ The link with the British had for long effectively ended; the Russians gave comprehensive guidance in basic operations but they allowed little access to tactical thinking as such.
The Indian Navy in 1979

The end of the decade found that the Indian Navy had achieved some progress, but not as much as it had intended, despite a continuing lion's share of the capital equipment vote. The abiding problems were the future of the aircraft carrier and the new submarine. The escort force was in reasonable order, with commissioning of the first Soviet built Kashin II destroyer expected in 1980. This would give the fleet for the first time a fairly capable surface to air missile with a limited area defence capability. There were four Leanders in commission with two more to complete by 1981 - more significant was the fact that the first Indian designed Godavari would be launched in May 1980.

Vikrant’s hull life would be extended by a two year refit which began in 1979 but there were increasing problems in maintaining her catapult system and even more difficulties with the Sea Hawk aircraft. Fortunately for the Indians, who had set their faces firmly against the inadequate Yak 38, the British had decided to give their carriers a fighter capability and in 1975 determined to go ahead with the Sea Harrier. Since the British were also keen to achieve export orders, there was little difficulty in making the Sea Harrier available to India, albeit in a form with simplified weapon and sensor avionics. An additional batch of attrition Sea Kings was also ordered, despite some unhappiness with the high loss rate of the earlier Westland aircraft due to gear box defects.

The submarine problem was exacerbated by Pakistan’s continuing emphasis on its own submarine fleet. A fourth Daphne had been obtained second hand from Portugal in 1975; to this quartet were added two brand new French Agosta class submarines in 1979 and 1980. This had been a surprise purchase by Pakistan in the wake of France’s acceptance of the United Nations’ embargo on arms sales to South Africa. The Agostas were much better boats than the Daphnes and far superior to anything that India possessed. The need was for a sophisticated European design but negotiations with shipbuilders dragged on for five years.

1979 - The Year of Complications

The end of the decade saw two developments which gave new impetus to Indian efforts to strengthen the country’s military position. Neither the continuing revolution in Iran nor the Soviet invasion of Afghanistan posed a direct threat to India but the implications of a "zone of crisis" existing in South West Asia had obvious maritime aspects.

Both the Soviet and the American naval presence increased markedly. The Russians now sustained an average of over ten combatant units in the region, while the American deployments more than doubled, reaching a peak in 1980 with the Iranian hostage crisis. The greater US presence was made a much more simple proposition through the improving capabilities of the base on Diego Garcia and the American determination to protect the Middle
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East - and thus the oil supplies of the West - from what it viewed as the direct Soviet threat had already been signalled by the establishment of the Rapid Deployment Force and its concept of "pre-positioned" equipment and stores. The significance for India was thus that the American presence would be permanent and that it would be obvious.

The Indian diplomatic offensive against US activities was steady, principally manifested in the convenient forum of the United Nations and within the IOZOP negotiations. The challenge for the Indian Navy more complex because there were two aspects to the new situation in the Indian Ocean. First, the Americans were now present in much greater numbers than ever before; in the event of a clash with India the deterrent value of Indian maritime forces was thus reduced. In the second place, the Indians were acutely aware of the quantum leaps in capability which Western maritime forces were making in this period in which the Americans were the leaders. If the Indian Navy could not participate in this revolution - one in which the Soviets appeared to be lagging well behind - it risked further devaluation of its military capabilities. If Pakistan should receive access to the new technology, the consequences would be serious.

The concerns about the United States and the increasingly complexity of the strategic situation in the Indian Ocean lent urgency to the Indian Government's definition of its role as the major littoral power within the region. While the opportunity for overt display of this role would not manifest itself for some years yet, it was clear that the Indian Government would not allow developments within neighbouring countries which had an anti-Indian bias, or which involved military involvement on the part of external powers. There was an obvious case for naval involvement in the execution of this policy, even if the distinction between the likelihood of forces being involved in actual power projection in the face of external activity or simply as demonstrations of Indian interest through "presence" was not yet clear.

Difficulties on the Sub-Continent

The developments in the Gulf were near-contemporary with increasing difficulties in relations with both Bangladesh and Sri Lanka. From 1978 onwards, India was in dispute with Bangladesh over the ownership of the newly formed New Moore (South Talpatty Island). Both countries claimed this deposit of silt, not for its own potential but because of the increased Exclusive Economic Zone which possession accorded. The naval confrontations which ensued in 1981 did not lead to fighting but India's insistence on possession and its demonstration of its naval superiority led to an intense reaction in Bangladesh and marked increases in military and naval spending. Bangladesh could never pose a serious threat at sea to Indian interests, but it now had to be a factor in the Indian Navy's strategic considerations.
The continuing disputes in Sri Lanka between the Tamils and Sinhalese were also drawing India closer towards direct military involvement. From 1981 onwards, there were Tamil insurgents operating their base camps from Indian territory, using the sea passage across Palk Strait to insert supplies and personnel into Sri Lanka. It was inevitable that the Sri Lanka Navy should attempt to halt this traffic and, given the geographic situation, the effect on local Indian fishermen and merchant vessels and India’s own ambiguous position, it was equally inevitable that an increasingly effective blockade would bring the Sri Lankans into conflict with the Indian Navy. By 1984 this was the case.

The New Round of Acquisitions

1980-81 saw the achievement of two important goals of the Indian Navy. The order for six Sea Harriers and two trainer aircraft marked the victory of the carrier lobby (led by the energetic Vice Admiral Tahiliani, soon to become Chief of Naval Staff) and allowed the life extension of Vikrant to proceed on a credible basis. The problem of a replacement or supplementary ship (and the ambition for a multi-carrier force was still nursed) continued. Preliminary design studies had indicated the magnitude of the problem in creating a wholly new ship specifically for the Indian Navy; external evidence was indicating that the cost would be prohibitive. The only feasible interim solution seemed to lie in an opportunity purchase and it was no surprise that the Indian Navy displayed considerable interest in the British plans to dispose of an Invincible class carrier as surplus to Australia and would have been willing to take up the offer itself. The vexed submarine question was also solved - for the moment - by an agreement with the West Germans for the production of two Type 209 diesel-electric submarines in that country, together with the licensed production of at least two and possibly six more in Mazagon Dock, Bombay. The Indian Navy was not wholly pleased with this selection. It had preferred a Swedish design because the Swedes "...were in fact bending over backwards to please us and the aspect of transfer of technology was presented to us very clearly." The Type 209 won out because it was, ostensibly, cheaper.

These orders did not meet all of the Indian requirements, although they exhausted for the time the Navy’s allocation of hard currency. The slack was taken up by the Soviets, anxious not to lose their Indian customer for weapons and systems. By this stage, the USSR was willing to accord India a much higher priority in access to new and sophisticated systems and this was manifested in an order for six of the latest Kilo type diesel-electric submarines in 1983. Although these boats were not necessarily fitted with exactly the same systems as the Soviet Navy’s units, they proved highly satisfactory in service.

The original order for three Kashins was supplemented by another for at least two more. Negotiations for larger and more capable surface units which were started at this time proved to be more difficult. Although the Russians were happy enough to provide cruiser size units (the Kresta II being most frequently suggested) modified to Indian requirements, there were
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considerable concerns within the Indian Navy that the compartmented systems for command, sensor and weapon control system within Soviet ships of this era were incapable of adaptation in vessels of such size to the Indian centralised approach which had been derived from the Royal Navy. The newest Soviet types, the *Sovremennys* and the *Udaloijs*, did not have this deficiency but there were questions about their capabilities in relation to Western developments and a much higher price tag that forced the Indians to defer the matter.

That there was some over-confidence within the naval staff on the general question of new surface combatants was indicated by the order to halt the *Godavari* programme at three in favour of a much larger Indian designed general purpose destroyer. The problem was that this effectively created a three to four year "holiday" in the building line at Bombay and at a time when there was no guarantee that there would be follow-ons to the *Kashin II* class.

More Uncertainty in the Indian Ocean

The start and continuation of the protracted Iran-Iraq war sustained arguments for a strengthened Indian Navy, particularly as the protagonists began their campaign against the tanker traffic in the Gulf. The substantial American presence in the Indian Ocean - as well as the Soviet naval commitment to the area - now seemed permanent. So, too, did the rapprochement between the United States and Pakistan which resulted in large scale arms transfers, including the *Harpoon* surface to surface missile, a system which the Indian Navy believed would go far to redressing the naval balance around the sub-continent in Pakistan's favour. Furthermore, Pakistan's relationships with the Arab world were also warm, and the military dimension of this relationship was demonstrated in 1985 with joint naval exercises. Matters were not improved for the Indians by the 1985-86 deployment into the Indian Ocean by a small task group of the Chinese Navy. This had no effective operational dimension but the series of port visits around the littoral did not allay Indian fears about China's long term intentions in the region and its relationship with Bangladesh and Pakistan.44

Further Acquisitions

The uncertainty of India's strategic situation provided a general case for the further development of the armed forces and the Navy was able to claim its share, spurred particularly by the lessons of the Falklands which had at least partially vindicated its approach to the defence of the Andaman and Nicobar islands. Given the events in the South Atlantic, particularly the sinking of the *General Belgrano* and the performance of British naval aviation, it was no coincidence that two ambitions were to be realised in the years ahead - an additional carrier and a nuclear submarine.
Any examination of Naval development in this era has, however, to be clear as to the existence of the continuing dichotomy between the long range plans - or more properly hopes - of the Navy and between the means which it chose to execute them. The mid-1980s saw a new emphasis on Southern Command, hitherto the least well equipped of the three regional commands, with the clear intent that it assume principal responsibility for dealing with "extra regional" threats. The corollary of this was that a Southern Fleet would come into being based on a carrier task group - the long term intention being the creation of a carrier group for each fleet. It was not enough, however, to start the construction of base facilities, as was the case at Karwar on the south western coast of India in 1986. Some practical means had to be found for increasing the carrier force itself.

The Indian Navy was monitoring the situation in the United Kingdom and had become aware that the aircraft carrier Hermes, surplus to British requirements, would not be taken up by Australia in the wake of the latter's 1983 decision not to replace its carrier Melbourne. Because India was a good customer for British aircraft, the United Kingdom was prepared to make the Hermes available as part of a package deal which would include new Sea Harriers and Sea Kings. This had obvious attractions for the Indians because the six Sea Harriers purchased so far would require supplements if they were to constitute an effective force operating even from a single deck. Furthermore, the increasing number of Sea King capable units dictated that the options which existed for further machines would have to be taken up.

But the real point, as Admiral Tahiliani insisted when the age of the Hermes (which had been laid down in 1944 and launched in 1953) was offered as an objection, was that acquisition of a second ship at this point offered the only practicable chance of continuing the fixed wing Fleet Air Arm on a scale which gave it a significant military capability in relation to the investment. If the Hermes option were not taken up, the possibilities for a new construction replacement for Vikrant were almost non-existent.

This "minimalist" approach reflected the difficulties which the Indian Navy faced over aircraft carriers. It did not possess the capability to design or build a new ship without extensive foreign assistance; it did not have confidence in its access to the funding that would be required to gain such help from overseas. A new carrier would only be a practicable proposition in political terms if the Fleet Air Arm represented an undeniable military asset. Buying Hermes would give the Navy the "round-the-clock blue water capability" it required for credibility. Despite the rhetoric that surrounded the Hermes acquisition, the accompanying purchases of aircraft represented the minimum which could be described as effective. Even when deliveries were completed in 1989, the total Indian Sea Harrier force only amounted to 23 with four trainers, while the modern general purpose Mark 42B Sea King fleet included but 20 aircraft. Allowing for training and attrition, these were not large numbers to divide between two aircraft carriers and at least five Sea King capable frigates.
The same case applied to the nuclear submarine project. Despite the establishment of a design group as far back as 1971, the efforts of the Bhabha Atomic Research Centre had served principally to indicate both the difficulty of creating a wholly indigenous design and bringing it into service and the drain on India's limited technical and financial resources which would ensue. Russian willingness to provide an older unit on loan allowed the whole process to be short-circuited. India's interest in a possible overseas acquisition was first mentioned officially in the Lok Sabha at the end of 1983. Such a submarine would not only provide the Indians with practical experience (particularly in engineering design and maintenance) but it would permit the Navy to gauge the operational value of the type to its own satisfaction. And an SSN would also, of course, provide a decisive military advantage against Pakistan, while constituting a strong signal to the United States of India's determination to be master in its own waters.

Ambiguous Success

These acquisitions meant that 1987-88 saw a rash of arrivals of new Indian combatants in the Indian Ocean. Apart from Viraat (ex-Hermes) and the Charlie I type SSGN, Chakra, five submarines (two Type 209 and three Kilos), a Kashin II destroyer and the third Indian built Godavari completed trials and joined the operational fleet. What caused particular foreign interest was the arrival of the first Tu-142M (Bear F) LRMPA, whose range and capabilities added a new dimension to India's ability to monitor activities in the Indian Ocean.

This period also saw the neatly conducted intervention by India to prevent a coup against the government of the Maldives. Warmly applauded by both the United States and the United Kingdom as a responsible reaction to a difficult problem, this exercise in gunboat diplomacy represented a vindication of the Indian Navy's development of amphibious/power projection assets and techniques which, however limited they might be in United States and Western eyes, represented a sufficient capability in this situation.

But the drawbacks of an interventionist policy were being demonstrated elsewhere. Although the Indian Navy was not suffering the casualties or the morale problems of the Indian Army which resulted from the less than successful intervention by Indian ground forces into Sri Lanka in 1987, the requirements for patrols around the coast soon proved a drain on resources. Sri Lanka's resentment also produced an unwelcome by-product for the Indian strategy of preventing foreign intervention when the island's government "made it very clear that port visits by NATO combatants (including nuclear aircraft carriers) were very welcome."

The naval development programme was also not proceeding smoothly or politically unscathed. The rejection of practically all the initial attempts at welding the hulls of the first Indian built Type 209s damaged the credibility of Mazagon Dock and the whole indigenous construction programme, apart from the immediate effect of delaying both vessels by more than two years and forcing the cancellation of the follow-on quartet. Although the Russians were
The Indian Navy - II

willing to extend the order for Kilos indefinitely and were prepared to consider the question of an Indian in-country programme, there were also increasing indications that the benefits of the Soviet-Indian arms relationship were disappearing. While the gaps between Western and Soviet naval technology continued to widen, the Soviets were now asking for payments in hard currency and at prices which diminished the attractiveness of their products.

It is possible that a sixth Kashin II was cancelled because of the price increases which had occurred between the second and fifth units of the class; it is certain that Russian major surface combatants were no longer a practical option in the late 1980s. A project to equip a Sovremenny hull with Kresta-type equipment was abandoned on the slip. With continuing problems in India’s balance of payments, the Navy would have to find its future surface combatants in collaborative projects such as the Project 16 destroyer, the first of which was laid down in 1987. Recognition of the reality of the situation came finally with the resumption of the Godavari building programme in 1989 with the first of a new, somewhat modified batch of three. Foreign exchange problems (and software troubles) delayed the completion of the new Mark 42B Sea King buy and the majority did not arrive in country until 1989.

Chakra proved less than successful. The ship was soon plagued by rumours as to her serviceability and the possibility or radiation leaks. These stories, together with local agitation in Vishakhapatnam brought the Chakra and the Navy into the sights of the powerful Indian environmental lobby. By December 1988 the Indian Defence Secretary was denying that there were plans to acquire or build more SSNs in the immediate future.

Accepted Roles?

The debate which ensued mirrored the controversies which were developing internationally over the roles and intentions of the Indian Navy. Perhaps the root of the problem was summed up within the pages of the Journal of the United Service Institution of India by a retired Army officer questioning the acquisition of Hermes, "...in our country, everything and anything concerning defence is 'top secret'". The external perception was that India and the Indian Navy had failed to justify the recent acquisitions as legitimate additions to the country’s security stance. Overseas comments ranged from alarmist to the more detached position of Australia’s then-Defence Minister who noted in 1988 that, although he in no way regarded India as a threat to Australia, he found that "its present stance is 'intriguing'".

Of particular concern to the Indian government was the unanimity of opinion displayed by the Association of South East Asian Nations. Indonesia announced in 1989 that it would improve its naval facilities in Sumatra to protect the Malacca Straits, while at the same time it took the opportunity of the New Delhi visit of the Indonesian Chief of Naval Staff to convey formally its government’s concern over India’s naval expansion. The Prime Minister of Singapore went even further and suggested that India and China both represented sources of
potential trouble for ASEAN, but Malaysia put the matter most concisely. Its former Minister for Defence remarked: "I think India must show to its neighbours, including Malaysia and other countries in Southeast Asia, that it does not have any ambitions to interfere in regional affairs."

There was equal disquiet within India. The Left in politics viewed the possession of power projection capabilities as being out of keeping with the doctrines of non-alignment developed by Nehru and the expenditure of funds in such directions as contrary to the needs of national development. There were also suggestions that the Army and Air Force were unwilling to countenance indefinite increases in Naval expenditure, especially at a time when the expansion of the defence budget was coming to an end. This attitude would have particular implications for the new aircraft carrier project and for the purchase of nuclear submarines.

The Navy had become the victim of its own reticence in one direction and its rhetoric in another. It is significant that public statements in recent years have downplayed the role of the Navy in enforcing India's interests within its area of strategic interests and made much more of the need to protect India's considerable coastline, exclusive economic zone and physical maritime assets. In force structure terms, the need for replacing the oldest hulls provided the justification for continuing construction programmes and, so far as the surface combatant force was concerned, the reality was that the numbers largely justified this argument. By 1990, the fleet still included some 13 units in the second decade of their life.

The implication was that the expansion would not continue unabated, as proved to be the case when a second SSGN failed to appear in Indian service and Chakra was returned to Vladivostock for scrapping in January 1991. Once more the 'minimalist' approach came into play. Development of an advanced technology submarine with an Indian designed nuclear reactor would continue at a slow pace within India. In the meantime, the nuclear submarine project was in abeyance.

The aircraft carrier project went the same way in the face of both political and financial pressures and some profound technological problems. The Indian Navy had settled upon a conventional version derived from the French Charles de Gaulle type aircraft carrier which, at 28,000 tons and 30 knots represented the smallest size ship capable of effective operation of conventional take off and landing aircraft. The intention had been that construction of this ambitious ship, which would free the Navy from its dependence upon V/STOL fighters, would start at Cochin in 1992/93. The increasing financial crisis which forced India to seek assistance from the International Monetary Fund in 1991 spelled the doom of this project. Funding did not exist and the Indian Navy was forced to return to the scheme of a smaller V/STOL ship. It was apparent, too, that the terminology underwent a change at this time as what had been freely termed the "third aircraft carrier" was emphasised as being simply the long due replacement for the Vikrant and not an addition to the Indian Navy's force levels. The hope of an opportunity
The Indian Navy - II

buy had not disappeared, despite the problems of foreign exchange and it was not surprising that the Western press in early 1992 was rife with reports of Indian interest in purchasing the bare hull of the newly launched aircraft carrier Varyag from the Ukraine. What is most significant about these reports, which postulated various alternatives for completion, is that their credibility relied upon the perception that the Indian Navy must remain fundamentally opportunistic if it is to maintain credible force levels and that this assumption continues to exist despite the recent insistence by the Indian Chief of Naval Staff that "we are going to build our own [carrier]." The true way ahead had probably already been indicated by the Defence Secretary: "...the cost of aircraft carriers has become prohibitive. We have, therefore, to look at all possible cost-effective options."

One new structural problem which faced the Navy in 1992 was the problem of spares supply resulting from the break up of the USSR. Since so many of the now separated republics had been involved in the production chain, all the Indian armed services faced the prospect of grave difficulties in maintaining their stocks of spare parts. While there had been some stock-piling, the situation had obvious implications at a time when the Indian defence budget (partially as a result of pressure from the International Monetary Fund) fell in real terms in 1992-93 for the first time in two decades.

Towards 2000

All these restraints on the Navy helped in reducing the temperature of the strategic debate over its roles. But there were other factors at work. The end of the Cold War had seen progressive Soviet withdrawal from the Indian Ocean and this allowed a concomitant lowering of the American profile. Even the Gulf War of 1991 did not arrest the American interest in 'drawing down' its forces in the region and in seeking a better relationship with India. For its part, the latter was less inclined to adopt so determined a position of non-alignment as had once been the case. It was, as one distinguished Indian diplomat noted, "...a good time to deepen Indo-American understanding and friendship. It is time for our two navies to get better acquainted with each other and join hands for peace and tranquillity in the Indian Ocean."

India was eager to emphasise the defensive nature of its fleet in order to reassure other littoral countries of its good intentions: "India's maritime priority would thus be peace in the Indian Ocean region so that she can pursue developments. While ensuring [the] security of India's maritime interests, the Indian Navy would like to contribute to...regional peace and [the] co-operation of maritime nations." Such statements mirrored a generally more gentle approach to naval questions within India and were well received elsewhere. By April 1992, the Indian Minister for Defence was openly discussing the plans for joint exercises with the United States Navy, to take place later in the year. The wheel had turned very far from the 1971 incursion of Task Force 74; it was now likely to turn further still.
The Indians did not abandon all hope of working with the Russians. When the latter returned in desperation to the international arms market in mid-1992 because of their inability to convert their industries to non-military uses, this raised the possibility of a resumption of transfers through soft currency or barter arrangements. In this case, the Indian Navy could once more contemplate a nuclear submarine and inquiries were opened when the Indian Defence Minister visited Moscow in August 1991.70

1992 sees the Indian Navy at a crossroads in the determination of its roles and status. The fragile economic situation of the country has placed obvious breaks upon physical expansion but the Indian Navy will find itself quite busy enough in meeting its current commitments. The way in which the development of India's maritime interests has now reached an extent which has exceeded even the most optimistic predictions of three decades ago, when the Indian Navy was first agitating for re-equipment and a more active role, suggests that it will become busier still.

The real challenge, particularly with continuing financial restraints, will be to determine the shape of the future force structure in relation to India's needs and not primarily in response to what equipment acquisitions are viewed as achievable in the short term. For the Indian Navy, the age of experiment is over. Some hard decisions must be made in the next decade as to the level of capabilities which will be retained and they can no longer be made in isolation from the overall Indian security scheme or without thought to their impact upon the Indian Ocean region as a whole. If being a great maritime power means that a nation's actions matter to other states, India has very clearly achieved such a status.
The Indian Navy - II


19. It is no coincidence that the dimensions of the Godavari and the British Type 42 destroyer, also derived from the Leander hull, are practically identical.


21. Ibid. p.182.

22. See the Far Eastern Economic Review 10 October 1991 for a dispute between flag officers ostensibly originating in this separation.

23. See Anthony de Sam Lazaro Soviet Electronic Warfare Delphic Associates, Falls Church, Virginia, 1991, for an exposition of some of the early modifications made by the Indians to the Styx missile and its associated systems.

24. See Admiral A.K. Chatterji Indian Navy's Submarine Arm Birla Institute of Scientific Research, New Delhi, 1982. pp.46-47 for a description of the shortcomings of the Foxtrot. But, as Chatterji notes, "It was to be the F class or nothing."


29. Gordon Jacobs "India's Changing Naval Forces" Navy International February 1986. p.120.


33. See Sureshwar D. Sinha Sailing and Soldiering in Defence of India pp.102-104 for a discussion of the early role of the Tactical School.


41. See the chapter on Bangladesh later in this study. Jane's Fighting Ships 1982-83, 1983-84 and 1984-85, Jane's, London, 1982, 1983 & 1984 have descriptions of the build up, which included a second hand frigate from the United Kingdom and light attack and patrol craft from China.


Navies in Asia


46. The Hindu 7 December 1983.


55. M. Richardson "East Asia and Western Pacific Brace for an Ascendant India" International Herald Tribune 4 October 1989.


The Navy of Pakistan has endured a difficult history since foundation in 1947. It has combined the perennial problems suffered by third world navies operating from inadequate bases of financial, technological and personnel resources with the presence of a continuing and generally overweening threat enjoying advantages of geography and scale. Such obstacles have, in the long term, proved almost insuperable, involving as they do highly complex issues of force structure and operational doctrine.

The Pakistan Navy (PN)’s situation has not been helped by the country’s mixed relationship with the United States. Repeated disagreements over fundamental issues have served to interrupt and often negate the aid programmes upon which the Navy has placed its hopes of achieving adequate force levels. This has at times led to the PN operating units which were not wholly suited to its real requirements, having been obtained to fit the needs of the alliance roles envisaged by America. The interruptions have also magnified the tendency, inevitable with limited resources, to concentrate all funding upon systems which meet the immediate threat of India, rather than protecting Pakistan’s more general maritime interests. Submarine forces could not protect East Pakistan in the period before 1971. In 1992 they are of little use in Exclusive Economic Zone (EEZ) patrols or trade protection, or in low level contingencies. There is evidence that the belated development of Pakistan’s maritime resources is having its effects upon thinking within the PN and the Ministry of Defence, but solutions are not obvious in the absence of a settlement with India.

Beginnings

When Pakistan came to independence on 15 August 1947, the problems which faced the new country were reflected in miniature in those which were apparent in creating, almost from scratch, the new Royal Pakistan Navy (RPN). Unlike many new navies, however, the initial difficulties did not lie with the seagoing strength of the service. The RPN had inherited its share of the old Royal Indian Navy on a one for two division with India, accepting a force of two sloops, two frigates and four ocean minesweepers, as well as a variety of smaller craft. Although some of these ships had seen arduous war service, all were in fair condition and they would be useful as training platforms and the basis for later expansion.
Fundamental obstacles to the smooth development of the RPN derived from four causes. The first was geography. The division of the nation into Eastern and Western components separated by Indian territory created appalling difficulties of communications and defence that would particularly concern the RPN. Inevitably, with the tyranny of distance between the two wings, it would prove difficult to sustain a united approach to their treatment. The second obstacle, which would prove of increasing importance, was institutional. The Army in Pakistan was the dominant service in size and influence to such an extent that all defence problems would come to be treated from a wholly Army viewpoint. This was not immediately apparent, since control of Pakistan's armed forces was largely in the hands of retained British officers for the first four to five years after independence, but it would eventually prove critical. No joint command or staff machinery was created in the early years. Although the Navy and Air Force had reason to fear that such organisations would be dominated by the Army there were repeated suggestions from both services in the early years of independence for improved joint planning mechanisms but they fell on deaf ears. Neither Army nor the Government was at all enthusiastic and the result was that land, air and sea problems were approached in isolation by the individual services.

The third problem was the RPN's lack of facilities and maintenance machinery. The only first class naval dockyard in the sub-continent was at Bombay. Although the transfer of spares and stores between the RIN and RPN was conducted with greater success than was the case for the two armies, the Indians would hardly strip their own dockyard to help Pakistan. The political environment would not permit RPN ships to refit in Bombay, so Pakistan would have to look even further afield for such assistance. Bar a small operational base at Karachi, the RPN's physical infrastructure was limited to the complex of gunnery, radar and boys' training establishments at the same port. There was no base at all in East Pakistan.

Fourth was the shortage of trained personnel. Approximately 200 officers and 3,000 sailors were available to form the new navy. Of the 200 officers only nine had regular commissions and of these only six were in the Executive branch. There were only six Marine Engineer officers and none from the Electrical specialisation, while there was a considerable overbearing in both commissions and warrants in the Education branch. The senior Pakistani officer, M.S. Choudri, was only an Acting Captain. His fourteen years of service reflected the maximum. Of the rest, "only six had done more than eight years and very few had any experience at sea." The situation with ratings was more encouraging, since the old recruiting programmes of the RIN resulted in the majority of the technical ratings and the more highly skilled executive sailors being made up of Punjabi Moslems. Since the allowed establishment of the RPN was only a little over 2,800, it was likely that some wastage would be required to reach the permitted level.
Navies in Asia

First Measures

Commodore J.W. Jefford of the old RIN was appointed as Flag Officer Commanding the RPN from its establishment in the rank of Acting Rear Admiral. Jefford’s selection was part of a conscious policy by the new Government to retain British officers in key billets to manage the development of the armed forces while Pakistanis were trained to relieve them. He was to prove a competent steward in the five and a half years during which he ran the RPN. Jefford’s immediate priorities were three: to develop a credible force structure to meet Pakistan’s defence requirements; to produce a workable recruiting and training programme both for the short and long term; and to create a naval dockyard in Karachi capable of providing for all the Navy’s maintenance needs.

His immediate dilemma was that the conflict with India over Kashmir combined with the dislocation caused by the mass movement of refugees between India and Pakistan to occupy much of the RPN’s energies in assisting with the movement of stores and personnel and, on occasion, the evacuation of Pakistani nationals from disputed territories. The first twelve months of the RPN were largely a hand to mouth existence, with the sloops and frigates kept running at the expense of most of the minesweepers and trawlers, which were relegated to a low category reserve. By the middle of 1948, concerns over Indian intentions and the deterioration in the RPN’s operational readiness had reached the point that Jefford was forced to initiate a "Short Term Emergency Plan" to work up both ships and coastal defences. It was not until a ceasefire in Kashmir at the beginning of 1949 that the RPN was allowed a real "breathing space to evolve a long term plan for the build up of the Navy."10

Acquisitions and Refits

Jefford was able to turn a component of the pre-independence plans for the expansion of the RIN to Pakistan’s advantage, particularly since India was still intent on acquiring the cruiser and the destroyer flotilla which had been foreshadowed under the scheme. A cruiser was an impracticable proposition for Pakistan, but destroyers would provide a substantial improvement in offensive and defensive powers over the sloops and frigates and were within the RPN’s capacity. Furthermore, Britain’s determination to be even handed meant that Pakistan’s request for destroyers had been anticipated and met a sympathetic reception.11 Two O class destroyers were made available at minimal cost in 1948, with the expectation that they would be followed by a third.

The lack of naval facilities at Karachi was partially remedied by the purchase in May 1949 of an old Royal Fleet Auxiliary, Empire Taj, to act as a station ship and fuel store. Towed from Abadan, the ship brought with her 2,500 tons of furnace fuel. "The saving thus made against the landed cost of oil fuel in Karachi, paid for the ship and the cost of the tow with a substantial sum over."12 Naval Headquarters’ ability to engage in such lateral thinking was
The Pakistan Navy

important considering the limitations under which the RPN was operating.

The major operational units were sent to Singapore or to the United Kingdom for refit in 1949. Their run down condition made the step essential and Jefford had to deal with criticism over "the drain on foreign exchange this caused." His point that the absence of repair facilities in Pakistan made the policy unavoidable could not be denied and there was one by-product which the Admiral knew to be highly useful, since there was also pressure on the RPN to reduce costs by restraining steaming time. Refits overseas meant lengthy passages and allowed interaction with the British, thus providing excellent training opportunities.

Roles and Force Structure

The exact purposes of the Fleet remained confused. It was clear that the RPN shared the national perception that India was the primary threat (a view which was heartily reciprocated) but the navy’s capabilities were at this stage so limited that the presumption that East Pakistan was indefensible had to be accepted, at least in the short term. A station ship was allocated to Chittagong and surveying efforts to establish navigable channels to a possible naval base at Chalna were started as early as December 1948. Nevertheless, operational plans were effectively confined to providing for the seaward defence of Karachi in conjunction with coastal batteries and air support. Given India’s possession of a cruiser, the wartime role of the RPN could not easily stretch to more.

This dichotomy was manifest in the RPN’s first formal attempts to define its force structure for the long term. Although the Pakistan Defence Council had "accepted that the object of the RPN was to provide a balanced task force which included cruisers"14, this did not amount to approval for acquisitions on any scale. It even took a further meeting in November for the Navy to proceed with obtaining destroyers from the RN. The next iteration, in the form of an initial "Five Year Plan" was completed in early 1949 and presented to the Government. This proposed the acquisition of four more destroyers as well as the O class trio and, significantly, a submarine as well as minesweepers and seaward defence and patrol craft by 1954. The Government, however, apparently felt that the scheme lacked strategic justification and asked for a new plan which would "indicate" the minimum fleet which Pakistan had to maintain to meet the requirements of her seaward defence.15
Navies in Asia

INITIAL FIVE YEAR PLAN - ESTIMATED FORCE IN 1953

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<th>Class</th>
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<tr>
<td>Destroyers</td>
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The revised study was completed in July 1950. To some extent, it reflected the emphasis which the Royal Navy and the other Commonwealth services were now placing upon anti-submarine warfare and trade defence in response to the threat posed by the growing Soviet submarine forces. This was inevitable, given the RPN's continuing links with the RN and the tendency of Pakistan to align with the Western alliance. But, in emphasising the need to provide for the defence of East Pakistan and sea communications between the two wings of the nation, the paper indicated the RPN's own legitimate concerns for defence against India.

The Government did not reject outright the Navy's proposals for a force based around two escort groups, as well as local defence forces for both East and West, but it did take them under "consideration" for a lengthy period. Even when acquisitions were finally approved in principle, the plea was that the financial situation made it impossible to sanction actual expenditure. Because of these discouragements, the RPN looked to the Admiralty in the hope that ships could be obtained on loan. Jefford even made approaches in 1950 and 1951 for the possible transfer of a training submarine. Concerned by the implications of the RPN's possession of submarines for the strategic balance in the sub-continent - and by the knowledge that Pakistan was in no position to afford a submarine branch - the Admiralty was polite but firm in its refusal.

Manpower

The outlook for the force structure was gloomy enough, but it was in personnel that the RPN soon encountered real difficulties. Jefford was initially reluctant to admit many expatriate officers, however expert, because of the need to nationalise the service as quickly as possible in accord with the Government's policies. Nevertheless, it soon proved necessary to create a core of such people on loan from either the RN or the Royal Australian Navy or on short service commissions. In addition, a number of civilian staff expert in ordnance or supply were retained from the old RIN or lent by the Admiralty. These stopgaps proved essential in maintaining expertise and continuity while the RPN's training system was sorted out. Jefford
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SOURCES: JANE’S FIGHTING SHIPS/COMBAT FLEETS OF THE WORLD/MISCELLANEOUS.
sanctioned a "crash" programme of officer recruiting and of promotions from the lower deck, while taking a flexible line with inter-branch transfers. He was acutely conscious of the fact that much fundamental experience was lacking and that the seagoing training programme would have to emphasise the basics. Furthermore "it was not overlooked that the Navy would soon be acquiring faster ships (destroyers) and that therefore there would certainly be bumps at sea."

More worrying than the discontinuities amongst the officer ranks was the difficulty in recruiting cadets in sufficient numbers and of the right quality. In six examinations for "normal entry" cadets (who were intended as career officers) in the two years to June 1950, only 22 applicants made the grade and more than 20% of these failed their officer training in the United Kingdom. Similar problems were encountered with the lower deck. The surplus of ratings in 1948 was rapidly succeeded by a shortfall, even as the RPN obtained sanction to increase the manning to 490 officers and 5018 sailors. Jefford bitterly ascribed the disenchantment apparent at all levels inside and out of the Navy to the Government's parsimonious attitude to pay and allowances (particularly in expensive foreign ports) and, especially for the lower deck, "the long and continued delay in the issuing of their pension code." As he noted, "satisfied personnel are our best recruiting propaganda when they visit their homes on leave, so are dissatisfied personnel equally bad recruiters." Consistent pressure finally produced the necessary improvements in 1951.

Consolidation 1950 - 1953

The second three years of the RPN's existence saw Jefford emphasise seagoing training in an effort to lift the Navy's standards. Poor results achieved by the RPN in a combined exercise with the British cruiser Mauritius in October 1949 convinced him that the Navy had a long way to go. Matters were made more urgent by a fresh deterioration in relations with India, which at least forced the Government to adopt a more liberal attitude to expenditure. In consequence, 1950 marked the beginning of a period of intensive activity for the RPN, with several group deployments and an increasingly sophisticated training programme. There was continuing interaction with the British and even a tour of Australia and New Zealand but Pakistan was also beginning to look in other directions. In November 1950 an Iranian destroyer called in at Karachi and the next month the destroyer Tippu Sultan conducted a highly successful visit to Turkey. Of more operational value was the first of the British Joint Exercise Trincomalee (JET) series in March 1951.

Towards a More National Navy

The timing and selection of Jefford's successor gave some indication of the problems which lay ahead. Jefford had performed well as head of the new Navy and was greatly respected by the Government. He was aware that his effectiveness would decline as his technical knowledge aged but he also had some doubts as to the readiness of Commodore Choudri to
follow him as Commander-in-Chief. These doubts were shared by the British Admiralty and by Choudri himself, who was aware of his youth and lack of experience. General Ayub Khan, however, the Army Commander-in-Chief from 1951, favoured Choudri’s early appointment. This was possibly, as one observer noted, “because he believes that Choudri would be easier to handle and more subservient to his wishes.”24 Ayub Khan was to be disappointed, not only in the plans for Choudri’s short term future but in his estimate of the officer’s character. The Prime Minister, Liaquat Ali Khan, settled matters by directing that Choudri should spend twelve months in command of Pakistan’s seagoing forces on his return from the Imperial Defence College, followed by a six month stint in Naval Headquarters as Deputy C-in-C. This programme was clearly in the best interests of both the Navy and Choudri. Despite Jefford’s desire to complete his term of office, he eventually agreed to extend his contract by twelve months until the end of January 1953.25 Jefford’s gesture was recognised by the Government with promotion to Vice Admiral and the eventual award of a Companionship of the Bath.

1953 - 1959: The RPN and the Western Alliance

Choudri assumed the post of C-in-C with a clear personal agenda for the expansion of the Navy. He was willing to exploit whatever opportunities offered to achieve such progress. His initial attempts, however, produced mixed results. Both Britain and the United States refused to entertain any suggestion that they assist in creating a submarine arm, but the Admiralty did agree to the loan (on a three year renewable contract) of a relatively modern CH class destroyer, Chivalrous, which was to commission as Taimur in 1954.

It soon became clear that even the increasing engagement of Pakistan in the web of US inspired mutual security agreements between 1952 and 1954 did not offer the RPN the prospects for expansion which it had expected. The arguments offered outside the RPN against the case being put by the navy were two-fold. If Pakistan had to fight India on its own, then the country could afford only the naval forces sufficient to defend the West coast. If the nation was fighting a war in alliance with the USA and the United Kingdom, then the latter would provide the naval forces needed to protect Pakistan’s sea communications.

The free availability of American aid after 1954, however, at last brought Choudri the opportunity he sought. The Navy provided a means to demonstrate Pakistan’s commitment “to the defence of an area that extended from Turkey to the Philippines”26 without weakening the land and air forces required to stand against India. General Ayub Khan was pressing the Americans hard for whatever increases in support he could get. With the US emphasis on the Soviet submarine threat, it was inevitable that this should have a maritime dimension.
The Pakistan Navy

The Americans accepted the requirement for Pakistani escort groups and a modern mine countermeasure force to replace the obsolete Bangors. They agreed in an aide-memoire of October 1954 to provide up to 12 escorts and minesweepers over a three and a half year period. The details of where the larger ships would be obtained were deliberately vague. For reasons of economy and logistic support, Choudri wanted to maintain the link with the Royal Navy. Pakistan proposed to the USA that the aid funds be expended on refitting the O class destroyers as ASW frigates and in purchasing two additional CH class destroyers. This would give the RPN a flotilla of six units in addition to the new minesweepers which started to arrive from America in early 1955. But Choudri had another item on his agenda - the possibility of obtaining a cruiser. India’s purchase of the British Nigeria in 1954 meant that from the time of her commissioning in 1957, Pakistan would be completely outmatched by the Indian Navy. In late 1955, Choudri visited the United Kingdom, specifically "to ask for the loan of a small cruiser".

His timing proved particularly apt. Not only was Britain still committed to maintaining a balance of forces in the sub-continent but Admiral the Earl Mountbatten was now First Sea Lord and eager to demonstrate that he was as much a friend of Pakistan as of India. Choudri’s plans succeeded to an unexpected extent. Under MAP arrangements, the Admiralty agreed to sell four destroyers, including two of the relatively modern Battle class, which would refit in the United Kingdom before sailing for Pakistan. This arrangements permitted the RN-RPN links to continue and was wholly acceptable to the Americans because it allowed the expenditure of sterling to reduce the US-UK financial imbalance.

The cruiser, Diadem, was in a rather different case. Choudri asked for her as a training ship, to be given the minimum refit to get her out of reserve and into steaming condition. She was to be paid for wholly by Pakistan and to save money - since only 400,000 pounds could be made available for refit - Mountbatten agreed to do the work in a naval dockyard. It is likely that Choudri was attempting something of a finesse from the outset, relying on Mountbatten’s good will to get extra work done on the ship. Captain Syed Mohammad Ahsan, who had been Mountbatten’s naval ADC in India before independence and a great favourite, was appointed Commanding Officer designate. He was soon importuning the Admiralty for extra assistance. The First Sea Lord ensured that it came, even at the expense of the British refit programme. Diadem was renamed Babur and finally recommissioned in July 1957, arriving in Pakistan two months later.

Continuing availability of US MAP funds allowed the negotiation of conversion programmes for the O class destroyers into ASW frigates, together with the purchase of a second CH class destroyer. Choudri was also able to organise a complex international exercise, code named Crescent, in November/December 1957. This involved ships and aircraft from the United Kingdom, the USA, Turkey and Iran. At British insistence, it was not conducted under the auspices of the Baghdad Pact or SEATO and a formal invitation was even extended to India. The
latter's Navy refused on the convenient grounds that its fleet programme was already set. The exercise proved a definite success but neither the Americans nor the British were happy about the implications of its repetition on an annual basis. The latter did not have the assets to support Crescent in addition to JET and other standing commitments and was not willing to risk alienating India, already alarmed by the rapid expansion of the RPN.

Pakistan's continuing interest in submarines was also causing concern. While Choudri emphasised to Mountbatten that the requirement was for "a submarine of our own to train anti-submarine surface forces", in the same month Pakistan's representatives at the regular Baghdad Pact meeting signalled that they saw "the need for the addition of 6 submarines and 3 cruisers." The truth was that submarines represented a much more attractive avenue for naval expansion to the Government and the other armed services than did surface ships. They would be an effective counter to whatever forces the Indians could muster - even if the latter got around to creating their own submarine arm.

The Royal Navy possessed a clearer view of the limits on Pakistani resources than did Choudri. The purchase of Babur had come under fire from the outset. Choudri had even to deal with the Government's decision to renege on the whole scheme and he was able to continue with the transfer only by assuring the Government that expenditure would be tightly limited. His considerable political credit, however, could not survive against the realities of burgeoning costs. Despite the best efforts of the Admiralty, Babur was not cheap. By April 1958, the British Commander-in-Chief in the East Indies was commenting, "...Choudri will need all his political ability and pull to get out of the hole that he has dug for himself. Choudri has known that Babur was going to cost a lot more than the voted sum for a long time and never told the Finance Ministry. When the bill from the Admiralty for the Babur comes in and is found to be considerably in excess of the money voted, there is bound to be a very considerable row."

Inevitably, 1958 proved a confused year for the RPN. While Choudri attempted to hold the line by instituting a series of economies in the Navy's operations, planning for a submarine force continued. In February, the Prime Minister remarked on the need for submarines in discussions with the British Foreign Secretary, making "no bones about admitting that they want submarines for the war they all seem to feel is likely to come with India." The British firmly downplayed the benefits of submarines and quickly ensured that the Americans were in concord with them over the need for Pakistan to concentrate on providing surface ASW forces for the alliance. Their suggestion was that both Pakistani and Indian ships should come to the Mediterranean for ASW training with British submarines at Malta.
The Pakistan Navy

The Pakistan Navy (PN)\textsuperscript{1} was not defeated and at this point opened negotiations in secret with Sweden. The latter showed "a keen interest".\textsuperscript{37} Pakistan envisaged a total buy of six to eight boats in the long run, with the possibility of some being built in country. As a first component, Sweden proposed to transfer a submarine after refit for 600,000 pounds sterling as a preliminary to building at least two new construction variants of the Draken class.\textsuperscript{38} Already a proponent of a submarine navy, General Ayub Khan enthusiastically endorsed the proposal on his accession to the Presidency in October 1958, despite the objections of the Finance Ministry. The project had been kept under tight security and the Royal Navy officers on the naval staff did not have any inkling until "Commodore I.W.T. Beloe picked up the scent (some suspect because of an indiscretion by [the] Defence Secretary's household and immediately contacted the First Sea Lord."\textsuperscript{39} Mountbatten summed up the British intent in a letter to the American Chief of Naval Operations: "to put the Pakistanis off going to Sweden without committing ourselves to selling them British submarines."\textsuperscript{40} The Admiralty, knowing that it had American support, managed to halt the Swedish deal by intimating that it could make a submarine available on loan. This was enough for the Finance Ministry, which prevailed on Ayub Khan to place negotiations in abeyance while clarification of this much cheaper British offer was sought.

Ayub Khan's prevarication probably came as the last straw to Choudri who saw all the Navy's gains of the previous three years put in jeopardy. Even though the submarine programme was not being pursued, Ayub insisted that Babur should be paid off and he refused to sanction a budget sufficient to allow operation of the entire fleet which had been assembled since 1956. After a stormy interview with the President, Choudri submitted his resignation on 26 January 1959, citing the Government's "major decisions [which] have been taken in disagreement with the technical advice I have consistently tendered...concerning the concept of our defence, the apportionment of our available defence budget and the size and shape of our Navy."\textsuperscript{41}

In the event, Choudri's successor, A.R. Khan, exploited his own good relations with the President to retain Babur in alongside commission as a training ship, while making limited economies elsewhere. She would be fully operational again by 1963.\textsuperscript{42} The escort force remained relatively unscathed, although Tariq was not converted to an ASW frigate because of cost over-runs on her sister ships.\textsuperscript{43} In poor condition, she was returned to Britain in 1959 and scrapped, as was the Taimur which had been badly damaged in a collision in Karachi Harbour. The Navy retained its hopes of a submarine force but the financial situation was such that the British "were able to prevail upon Pakistan to accept a regular visit by a Royal Navy submarine to work with and train [the] Pakistan Navy in anti-submarine warfare."\textsuperscript{44}

\textsuperscript{1} Pakistan became a Republic on 23 March 1956.
Consolidation: 1959-1965

Despite the disappointment over Babur, the lull in acquisitions which followed was not wholly a bad thing for the Pakistan Navy. The service required time and much more training in order to improve its standards and develop a solid foundation of expertise. British observers at joint exercises noted the generally high standards achieved by individual PN units but the polish was still lacking in squadron and fleet work. Repeated participation in the Allied naval exercise *Midlink* and the *Jet* series not only allowed the Pakistanis to gain real experience in fleet work - especially ASW warfare - but also improved the Navy's credibility as the country's standing contribution to the Western Alliance, both with Pakistan's allies and within the country itself. While Ayub Khan was reluctant to increase the Navy's budget from Pakistan's resources, he did not object to American contributions which were not made at the expense of improvements to the Army or Air Force.

The thrust of US effort was initially on improving the support force. A salvage tug was handed over in 1959 and a new harbour tanker of 6,500 barrel capacity was built in Italy in 1960. Even more useful in its implications for the PN's ability to operate at long range, a fleet tanker was leased and commissioned as *Dacca* in January 1963. It was in an atmosphere sweetened by the continuing success of MAP and the alliance arrangements that Pakistan was able to raise the submarine project with the USA once more. The response was more favourable because the Navy couched the request in terms of the ASW training requirement, a commitment which both the USN and the RN were finding increasingly difficult to meet. The "balance of power" objection no longer applied, since Britain and India were already involved in protracted negotiations for a submarine buy, with the Soviet Union waiting in the wings.

Initial training of submarine personnel began in the United Kingdom in 1962 and, 1 June 1964, the streamlined but otherwise unmodernised *Tench* class submarine *Diablo* was commissioned into the Pakistan Navy as the *Ghazi*. Ostensibly an unarmed "clockwork mouse", the Pakistanis soon made their submarine fully operational and Ghazi's presence was to be of critical importance in the months ahead. The Indians immediately assumed that *Ghazi* had been militarised and redoubled their efforts to acquire their own submarines.

**Command and Control**

The Navy's steady improvement in general capability was not matched by the development of any coordinated system of joint service command or doctrine. Ayub Khan "did not appreciate [that] the two wings of the country were physically separated by over a thousand miles of hostile territory [and that] the sea provided the only reliable link between them." Rather than encouraging a "joint" approach, Khan even attempted to merge the Navy and the Air Force into the Army by changing their ranks and uniforms to match the latter. The Chief of Naval Staff was relatively complaisant, preferring to fight his battles on budgetary matters,
but Khan was stoutly (and successfully) resisted by the Chief of Air Staff, Asghar Khan because the Air Marshal felt that this "would eventually lead to the development of an Air Force exclusively as a support arm of the Army with all the attendant consequences."**48**

What Khan did not address was the question of staff integration - or even of the highly unsatisfactory geographical separation of all three service headquarters. Each continued to function independently of the others. Thus, when the Army began to plan the insertion of "volunteers" to encourage a rebellion in Kashmir in the form of "Operation Gibraltar", neither of the other services was privy to the scheme. Even though the Army did not apparently expect an armed Indian response, this lack of co-ordination precluded serious contingency planning until the rapid deterioration of relations between the two countries in late August 1965.

The 1965 War

Despite its lack of "a defined place in Ayub Khan's overall strategic plans for the defence of Pakistan"**49**, the Pakistan Navy was relatively well prepared when the first clashes of the two Armies began on 6 September. All operational units based on Karachi sailed that morning to take up defensive positions off the coast. Neither time nor resources permitted any activity in the Bay of Bengal but Pakistan did have the advantage that the Indian Navy had been caught wholly by surprise by the outbreak of hostilities. The aircraft carrier *Vikrant* and other major units were in long refit and the bulk of the escort force was in the Bay of Bengal after ASW exercises with a British submarine. Combined with the presence of *Ghazi* in the Arabian Sea, these weaknesses in the Indian situation dictated a very cautious response, the more cautious because the Indian Government had placed its Navy under strictly defensive rules of engagement.**50**

Constrained to the defence of the western ports, this was not immediately apparent to the Pakistanis. Confident of their ground, the flotilla attempted to draw an Indian response by bombarding the port of Dwarka, some 250 miles east of Karachi, on the night of 8/9 September. The attack did not cause much material damage but it had a considerable moral effect on both sides. No encounter with the Indian Navy followed and the Indian response was confined to harassing attacks by Indian Air Force aircraft as Pakistani units withdrew into their own waters the next morning. The flotilla remained at sea, but a few days later *Badr* and *Tippe Sultan* collided, sustaining damage which forced their return to Karachi.

With no naval forces of any capability in the East and India adopting a "hands off" policy in that theatre, military activity was confined to the seizure of all Indian river craft still in country, more than one hundred strong, at the orders of Rear Admiral Ahsan, Chairman of the Inland Water Transport Authority.**51** The Navy's plans to intercept Indian merchant shipping on the high seas were over-ruled by the Foreign Office "for fear of international opinion."**52** The diplomats had a point but the truth was that Pakistan was much more vulnerable to such tactics than India. The latter had yet to take any action against Pakistani merchant traffic, but
Navies in Asia

this would soon change if the Pakistan Navy mounted a campaign against trade.

As with the land battle, Pakistan's maritime situation could only deteriorate in the course of a protracted war of attrition. It soon became clear that the country had few international friends in its dispute with India and America's disapproval and its imposition of a total arms embargo came as an especially heavy blow. Although American military support for Pakistan was eventually to resume, the embargo marked the end of any real commitment by the Pakistan Navy to the general defence of the West and the oceanic ASW role involved. This would have implications for the Navy's force structure.

In the meantime, Pakistan sought aid where it could and secured promises from China and Indonesia. While promising to put pressure on India's eastern flank by threatening the Andamans, the Indonesians immediately despatched two Whiskey class submarines, two Komar class missile craft and two Jaguar class torpedo boats to Chittagong. Their instructions were unspecified and it is uncertain whether Indonesia intended to hand them directly over to the PN or to employ them operationally in support of Pakistan. The little force did not arrive in Chittagong until after an Indo-Pakistan ceasefire had been agreed on 23 September. Thus, although the Indonesian ships proceeded to Karachi and remained in Pakistan waters until the risk of the resumption of hostilities had ceased, all remained in Indonesian hands.

Pakistan Looks to the USSR: 1965-1969

This did not prevent the Pakistan Navy conducting extensive inspections of the submarines and attack craft before they returned to Indonesia in 1966. The PN is unlikely to have been impressed by the Whiskey class, which were manifestly inferior in design and construction to the older Ghazi, but the missile craft had obvious potential for Pakistan's situation. After the USSR indicated potential willingness to allow arms purchases in 1965, negotiations began on a package to include four submarines, fast attack craft, maritime patrol aircraft, mines and torpedoes. These continued at intervals until 1968, including a visit that year to Karachi by Soviet warships which was followed by a high level Pakistani delegation's arrival in Moscow in June. While the Russians were prepared to offer six Osa class fast attack craft and their missiles, the PN was much more ambitious, since it saw the Soviet channel as the only practical option for maintaining a surface fleet of any size. Initial proposals to modify Babur and the destroyers to carry Styx missiles were replaced by a comprehensive request for a range of ships and weapons, shown below:
The Pakistan Navy

PAKISTANI REQUIREMENTS FROM THE USSR - 1968

Submarines: 4
Kynda Class Destroyers: 5
Osa Class FAC(M): 8
Shershen Class MTB: 8
Maritime Patrol Aircraft: 4

The Russians would agree only to the Osas and would not consent to the fitting of Styx missiles to larger units. The PN did not believe the Osas were big enough to meet Pakistani requirements and continued to push the case for conversions or larger Soviet built ships. Negotiations had got no further, despite the visit of Marshal Grechko to Pakistan in March 1969, when the Soviets determined that their strategic interests lay with India and allowed the developing relationship with Pakistan to wither. 53

Towards a Submarine Arm: 1966-1971

Against the background of these abortive negotiations, the lack of co-ordination between the services continued and the Army maintained its fixation that the only defence of Pakistan lay on the ground and in the West. The Navy’s pleas for the protection of East Pakistan and its sea communications were ignored, the more easily because the PN had played by far the least conspicuous role of the three services in the war of 1965. Since the USA would transfer no weaponry or ships and Britain would do so only on a commercial basis, the PN found itself in increasing difficulties. The Russian episode was followed by a project for three UK built Type 21 frigates, but this was immediately rejected by President Ayub Khan who would allow expenditure only on submarines or light attack craft. 54 Inevitably, the Navy’s focus came to concentrate almost exclusively on the submarine force.

Despite the increasing age and obsolescence of the fleet, a problem magnified by the shortage of spares resulting from the US embargo, the Navy would not receive any significant increases in its share of the Budget. When the Americans did finally come to lift the embargo, matters were not helped by the fact that the USA "shifted its policy from giving outright grants and making loans to one where arms sales were made strictly on a cash-and-carry basis." 55 The Navy enjoyed no sort of priority. While the Government was willing to approve the purchase of submarines and the creation of a Special Service Group to operate midget submarines and chariots, it would go no further.

As emphasis shifted to the creation of a submarine arm with the 1966 order from France of three new build Daphne class boats, the surface fleet stagnated. The disparity between these components of the Indian and Pakistan Navies became even more marked. The PN had long been aware of its requirement for a maritime air wing to sustain even the purely defensive
strategy in the West, but this was an impossible goal in the absence of support from outside sources. Funds were lacking and the Air Force, loath to risk its precious aircraft in over-the-water operations, was positively hostile to the concept of a fleet air arm. By the time that the American attitude to Pakistan moderated sufficiently to allow serious discussion of the transfer of 3 to 4 P3B or P3C Orion aircraft, Pakistani energies and resources were so engaged in East Pakistan that it would be too late to effect any transfers before the war. Without effective air and surface support, even the trio of Daphnes and the Ghazi were unlikely to be sufficient to contain the rapidly expanding Indian Navy which by 1971 possessed its own missile craft and a quartet of Soviet built submarines.

The Navy's situation was not improved by the steady deterioration of relations between East and West Pakistan. Efforts had been made since the early 1950s to create base facilities in the East and these had included a system of coastal defence batteries and the start of the construction of a training battery but the work had been hindered by the chronic shortage of funds. The Navy had begun to base the fleet tanker and a destroyer on Chittagong and this improved naval presence resulted in a steady increase in the numbers of East Bengalis recruited into the PN, although they remained under-represented amongst the executive branch officers. The drawback was that the increasing disaffection in East Pakistan had its counterpart in the Navy. Although the Service played little active part in the Army directed attempts at suppression of the liberation movement under Sheikh Mujibur Rahman in 1971, some desertions followed, including several from the newly commissioned Daphnes. Despite the loyalty to the existing regime on the part of the great majority, by the middle of that year, the Navy's East Pakistani officers and some 3,000 sailors had either escaped to India, joined the insurgent movement or were confined in internment camps.

The induction of the Daphnes proved a considerable challenge to the PN. The training effort required was only sustained with the extensive assistance of the Turkish Navy, which made a submarine available for training Pakistani personnel, as well as access to its schools and other facilities. This followed equally valuable stores and maintenance assistance with the Ghazi in the wake of the US arms embargo and it is fair to say that the Turkish link did much to sustain the PN's efficiency in this period. The Daphnes themselves proved to be reasonably satisfactory boats but there were repeated language and contractual difficulties. The three proved to have much less endurance than the French had implied and the E15 torpedoes with which they were supplied proved highly temperamental. Similar problems were encountered in setting up the Special Service Group, which had to be done through non-government mechanisms. When Italian midget submarines were finally obtained, they proved incapable of launching torpedoes and thus of dubious use in the Pakistan Navy's war plans.
Accepting the inevitable collapse of resistance in East Pakistan and the loss of a
destroyer and a minesweeper which came as the direct result of Pakistani technological
inferiority, the Navy had little to be ashamed of in its performance in the 1971 war. The one
clear national military success of the war had been the sinking of the frigate Khukri by the
submarine Hangor and the Navy’s inability to deal with the Indians was directly attributable to
the known inadequacies in the Pakistani forces. These included the absence of co-ordination
between the services, notably in maritime air operations, the lack of emphasis on the protection
of sea communications and the failure to develop either a surface fleet or light units capable of
complementing the submarines in a multi-dimensional scheme of defence.

It was ironic that the after-effects of the war combined to improve the Navy’s situation
for the long term. The removal of the albatross of East Pakistan meant that neither its maritime
defence nor the vulnerable sea routes to the West were issues in strategic planning. The Navy
could now concentrate on tasks which were much more in keeping with its capabilities, present
and potential. The Indian attacks on Karachi had confirmed that the threat to Pakistan was not
purely over land and that coastal defences had to be strengthened. The vulnerability of Pakistan’s
international commerce, some 95% of which was seaborne, to interdiction was now proven. The
clear failure of the Pakistan Air Force in the maritime support role also gave the Navy
justification for developing its own air wing, if only for maritime reconnaissance.

Pakistan’s access to cheap sources of arms was much clearer, not yet to the United States
but certainly to China. Negotiations had started before the 1971 war for the transfer of warships
and the offer remained open. This would allow the Pakistan Navy to purchase large numbers of
the cheap but effective Chinese attack and patrol craft, while reserving the greater part of its
funding for more sophisticated Western combatants. The dislocation of the economy in the
immediate aftermath of the war would not allow any immediate large scale reconstruction or
expansion, although the PN did continue invest Italian built midget submarines to supplement
the existing Special Service Group units as a "cheap" deterrent.

The Navy also began to develop plans for helicopter carrying escorts equipped with
surface to surface missiles as a reply to the evolving Indian SSM capability. The Indians
remained vulnerable to sophisticated weaponry and the ability to deploy SSM at long range,
especially in concert with helicopters which could provide remote targeting or themselves act
as firing platforms, would complicate the problem enormously. Purchase of a handful of
Alouette III light helicopters marked the first step towards this goal and the order which
followed for six new Sea Kings from Britain gave the Pakistan Navy the missile carriers it
wanted, even if the seagoing platforms to take the aircraft did not yet exist.
Navies in Asia

The return of civilian rule under Zulfikar Ali Bhutto found that the military enjoying less influence in the government of Pakistan. In practical terms, this meant more for the Army than the Navy but Bhutto did put pressure on the services which was manifested in a 1976 White Paper on Higher Defence Organisation. This created a joint chiefs of staff organisation with subordinate joint plans and logistics divisions. The joint machinery did not interfere with the "gentlemen’s agreement" by which financial allocations were made, but it gave the prospect of co-ordinated planning for contingencies, which had been conspicuously absent in 1965 and 1971.

The obstacle for the Pakistan Navy was that it lacked the steady flow of funds required to reconstruct the fleet. It could not afford new construction without preferential credit terms and older second hand units in adequate condition were few. The surface fleet was increasingly decrepit, with breakdowns "not only affecting the Fleet’s operational efficiency and the morale of personnel (and their families) but the very seagoing expertise, which takes years and years to acquire, was gradually being lost." Although transfers of Chinese built major units were considered, the PN believed that it would be better served by purchases of surplus ships from the West. A similar approach to the maritime patrol aircraft requirement saw Pakistan to obtain three Atlantic maritime patrol aircraft from France in 1973, which at last gave the Navy credible surveillance and targeting capability. The drawbacks of the concept were sharply demonstrated in Pakistan’s attempt to purchase ships from Britain after France had indicated that it would provide only new construction units. Two Type 12 ASW frigates, Tenby and Scarborough were acquired in 1975 with the idea of modifying them to carry helicopters. Their condition was so poor, however, that the cost of the refit became prohibitive. To Pakistan’s extreme irritation - and Britain’s embarrassment - both had to be sold for scrap. The Navy had more luck with the United States in 1977 when two modernised Gearing class destroyers were made available. Although elderly, their better condition and equipment made them vastly superior to the British built ships. Despite a temporary renewal of the US arms embargo in 1979, two more were obtained in 1980 and further units in 1982 and 1983. This allowed the progressive disposal of the moribund O and C class destroyers, all of which had gone by 1982. The real value of the Gearnings, however, lay in their compatibility with and their ability to take new US equipment as it came available.

Plans to use the US credits to provide equipment for an indigenous ship construction programme fell through, largely because the cost of establishing the construction facilities required was too much for the Government. The PN continued to plan for domestic shipbuilding but restraints of this nature forced it to maintain a necessarily opportunist approach in other areas. Portugal’s financial difficulties in 1975 allowed the purchase into the PN of a fourth Daphne. In 1977, the French decision to comply with the United Nations arms embargo on South Africa made available two Agosta class submarines then under construction in Nantes. A considerable improvement in size, speed and endurance over the Daphnes, the Agostas represented a quantum leap in the capabilities of the submarine arm.
A further "chance buy" came in 1981 when the British disposed of the large guided missile destroyer (DLG) London. Although the latter's Sea Slug I missile system was never a working proposition, the London provided a cheap means of maintaining the training capability which Babur had represented for the previous two decades. She was refitted in the United Kingdom and commissioned into the PN in 1982. Removal of Sea Slug in 1984 was followed by a refit of the newly renamed Babur to take Sea King helicopters, thus giving the potential to take the large helicopters and their AM 39 Exocet missiles to sea. This meant that the PN had at last some capability to operate its surface forces outside the surrounds of Karachi. Plans to acquire a second County class DLG (Fife) were thwarted by Chile's ability to give the British a better price.

Aftermath of Afghanistan

The Soviet occupation of Afghanistan caused a sea change in the hitherto cautious US approach to Pakistan. With the revolution in Iran and the continuing semi-alignment of India with the USSR, Pakistan was seen as a lynchpin in American efforts to maintain the security of the oil producing states in the Middle East and prevent further Soviet expansion. Not only was the US Administration eager to help Pakistan, the latter was to some extent allowed to specify specific systems - something which had never been the case before. Thus, within a $3.2 billion economic and military aid programme which was rammed through Congress (in the teeth of opposition from the Indian lobby), the Pakistan Navy was able to include an order for RGM 84 Harpoon missiles and their associated systems.

The implications of the Harpoon missiles for Pakistan's offensive potential at sea were profound. The Indian Navy remained weak in anti-missile systems and had no immediate prospect of creating effective defenses against Harpoon. The Americans were aware of the likely Indian reaction and "it is interesting to note that the sale of Harpoon to Pakistan was not officially admitted until September 1983, and no mention of Harpoon was made public during the 1981-82 Congressional arms transfer package hearings."66

Acquisition of Harpoon represented another step in the maturing of the "defensive zone" concept which the Pakistan Navy had been evolving over the previous decade.67 By combining missile equipped ships and aircraft with the surveillance capabilities of the maritime patrol aircraft (a fourth of which was to be purchased from the Netherlands in 198668), the PN intended to maintain a barrier around the Pakistani coast which would prevent any intrusion by the Indian Navy. Improved joint planning found the Air Force more willing to assume a maritime strike role and twelve Mirage 50 fighter bombers delivered in 1983 were modified to carry the AM 39 Exocet. Harpoon would provide the surface ships with a weapon which outranged the SS-N-2 Styx of the Indians. Perhaps even more significant was the fact that the PN was able to modify the older submarines in 1985 to fire Harpoon in its submarine launched form. This vastly increased the Indian ASW problem. While the Daphnes now had a substantial
long range anti-ship capability, the Agostas possessed the endurance to operate at any point around the Indian Ocean, preventing the Indian Navy from having any confidence that the PN could be contained within its defensive zone while Indian operations proceeded uninterrupted elsewhere. The PN lacked the resources to conduct such deployments on a regular basis in peace time and its submarines tended to remain within the Arabian Sea, but the wartime threat they constituted was manifest.

Towards a Maritime Outlook?

The development of law of the sea concepts encompassing the 200 mile exclusive economic zone were some time taking effect in Pakistan. Discoveries of natural gas reserves were made inland but Pakistan had nothing to match India’s Bombay High Basin with its massive oil deposits. Furthermore, fisheries were not a major activity; even after significant increases in fishing activity between 1970 and 1982 they constituted only 1% of the total earned by primary industry. On the other hand, estimates by the National Institute of Oceanography indicated that the potential annual catch was in the order of ten million tons. Although this was a grossly over optimistic estimate, it did serve to indicate the potential for markedly increasing Pakistan’s export earnings. Concern over the need to demonstrate control over Pakistan’s Exclusive Economic Zone (EEZ) and increasing evidence of poaching by foreign fishing vessels crystalised in 1985 with the formation of a Maritime Security Agency under the Ministry of Defence. The old destroyer Badr was transferred as a headquarters ship, together with four Shanghai II class gunboats. Three years later the Ministry of Defence created a Maritime Affairs Wing in order to co-ordinate the activities of the various arms of government involved in ocean management and this soon began to play a leading part in "the delineation of maritime boundaries with India and Iran."

Struggles for a Modern Navy

Plans for further naval expansion continued to suffer from an abiding shortage of capital. There were lengthy negotiations between Britain and Pakistan over a project to acquire three modified Type 21 frigates, two to be built in the United Kingdom and one in Pakistan. Matters got as far as a letter of intent, signed in 1985. Two years of haggling over system minutiae followed, most probably in an attempt to gain time while favourable financial terms were arranged but both this scheme and a later similar offer involving Type 23 frigates had fallen through by the end of 1987. Negotiations in 1983 to acquire further Agosta class submarines from Spain met a similar fate. Pakistan’s only practical means of acquiring additional units was demonstrated in 1988 with the purchase of two relatively new (but unmodernised) British Leander class frigates and in 1988-89 with the mass leasing of eight Brooke and Garcia class frigates from the United States.
The Pakistan Navy

The sudden influx of so many ships and totally new systems obviously had an temporary effect on readiness but their arrival in Pakistan not only gave the fleet new capabilities (including its first area defence missile system in the form of SM 1) but obviated the need for new construction or further acquisitions for the next half decade. This allowed more emphasis on the air arm, with orders in the United States for the first three of a planned six P3C Orion aircraft and six LAMPS I helicopters for operation from the American built frigates. A cheap but capable Fuqing class fleet tanker was bought from China in 1987 and the United States transferred a repair ship in 1989.

The problem now lay in maintaining the strength of the submarine force. Pakistan naval plans envisaged the acquisition of four new conventional submarines to replace the Daphnes, together with a possible nuclear submarine. The latter project acquired new urgency after it became clear that the Indians had obtained a Charlie I type SSGN on lease from the Soviet Union but the PN came up against the fact that it could not afford a Western built unit (even if a willing vendor existed, which was unlikely, given Pakistan’s interest in obtaining nuclear weapons), a Soviet type was unavailable and a Chinese boat would be less than satisfactory. Pakistan did look long and hard at the possibility of purchasing hulls from China. The latter was willing enough but, to a service accustomed to the Daphnes and the Agst., the inadequacies of even the latest Chinese new construction were manifest. The failure of the Indian experiment with the Charlie I also provided a useful object lesson in the difficulties of applying such technology and removed much of the heat from the Pakistani effort.

Any hope of balanced fleet development was dashed in the middle of 1990 when the United States imposed a fresh arms embargo, intended to force Pakistan to end its nuclear weapon development effort. Both maritime patrol aircraft and helicopters were caught up in this row, together with the prospect of additional purchases of Harpoon missiles or anti-missile defence systems - or of the SM 1 missiles required for the guided missile equipped frigates. Since Pakistan was determined to match the Indian nuclear programme, there could be no possibility of an end to the embargo in the near future. In such circumstances it was small comfort that the Indian Navy was now suffering its own funding problems. The only real progress made was in an agreement with France which achieved the rapid transfer of a nearly new Tripartite minehunter and orders for the construction of two more.

The way ahead was shown when Pakistan and France agreed on the sale of three new construction Agosta 90 class submarines.74 Second hand boats had been considered, since they would allow speedy replacement of the elderly Daphnes75, but new ships were a much more attractive proposition. The reduction in European defence spending had produced a buyer’s market and Pakistan was able to take advantage of generous French financial credits provided to keep the under-employed shipyards in work.
Towards 2000

The Pakistan Navy entered the 1990s dogged by much the same problems which it had endured since its foundation. The very limited financial resources of the state and the continuing concentration upon the defence of the land border with India meant that it was practically impossible to create or maintain an adequate force structure without consistently high levels of great power support. Pakistan's own view of its strategic priorities, especially its goal to acquire nuclear weapons, meant that support from the only conceivable source, the United States, would be fitful at best even in a polarised world. Within the "New World Order", such support was unlikely to manifest itself at all.

The physical form of the Navy reflected the insufficiency of resources. Despite valiant efforts to improve the support infrastructure over previous decades, both base and training facilities remained inadequate. In Karachi, the PN had to compete for space with the commerce of a busy port; its ancillary bases were unsophisticated and inadequate for the needs of large units. With the exception of the Agostas, which had just entered the second half of their lives, not one major combatant was less than twenty years old; most were nearer thirty and the Gearings were approaching their half century. The equipment was modern enough but the best was of US origin and vulnerable to the embargo. For the remainder, an inadequately capitalised stores system had to cope with maintaining "at least five diverse inventories from five different countries." 76

PN's return to a policy of concentrating on the submarines at the expense of its other components was probably the only viable option. The major units were both more expensive and more difficult to operate than their predecessors. Some could be maintained through cannibalisation of the remainder but the long term effectiveness of the surface combatant force was a dubious proposition, particularly when matched against the threat of the Indian Navy.

The whole question of the exploitation of Pakistan's maritime resources lay under the same shadow. The Pakistanis were convinced that undersea oil resources lay within their EEZ but no comprehensive oil exploration programme was underway in 1992. Despite the fact that 93% of Pakistan's trade went by sea in 1991, "the merchant fleet is woefully inadequate, [consisting of] only 26 vessels including one tanker, which lift less than 10% of the cargo [in and out of the country] instead of the recommended 44%." 77 Fisheries were expanding but too slowly.
The defence of Pakistan against India thus provides the Pakistan Navy with an unassailable, if limited reason for being. As with so many of Pakistan's activities, the scale of resources devoted to the land campaign has served to atrophy most areas of development while forcing the PN to concentrate too closely on submarines. These are highly effective in a shooting war but of little use throughout the range of contingencies with which all modern navies must deal. The inevitable conclusion is that Pakistan's true maritime interests - and its security interests in general - must lie in the achievement of some lasting rapprochement with India or at least an agreement to differ in peace over the whole range of disputes which have soured relations in the last forty five years.
Navies in Asia


4. Vice Admiral Iqbal F. Qadir PN(Retd.) Letter to the Author dated 23 April 1992: Summary entitled "Initial Manning Problems".

5. This was probably an inevitable result of the fact that the old RIN's training effort had been concentrated in Karachi.


7. Vice Admiral Iqbal F. Qadir "Initial Manning Problems".


13. Ibid. "Preface".


The Pakistan Navy


27. Rear Admiral M.S. Choudri Letter to Admiral the Earl Mountbatten of Burma (First Sea Lord) dated 20 September 1955. Mountbatten Papers, University of Southampton.


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36. ADM 205/173 "Sale of Warships to Pakistan and India" Minutes of a Meeting held on 2 January 1958. Public Record Office, UK.


38. The type of submarine selected for transfer is uncertain. Since one of "sixteen years" age was mentioned, it was probably either a Najen class boat (completed in 1943) or one of the slightly older and larger U1 class.

39. Ibid.


43. ADM 205/173.

44. Vice Admiral Iqbal F. Qadir Letter to the Author Dated 29 April 1992.

45. This is evident in the commentaries on successive JET exercises in correspondence between Mountbatten and successive Commanders-in-Chief East Indies and between the former and the Chief of Naval Staff of the Indian Navy. See the Mountbatten Papers.


48. Ibid. p. 5.

49. Ibid. p. 33.


52. Ibid. p. 34.


59. Rear Admiral M.H. Khan is "forceful in saying that there was no disaffection in the PN" before the outbreak of the troubles. M.H. Khan, who became commander of the Bangladesh Navy, was the senior Bengali officer in the Executive branch of the PN and had been in command of PNS Khaibar. Captain A.R. Peters, RN Letter to the Author Dated 31 August 1992.


In the course of its twenty year history, the Bangladesh Navy (BN) has had to fight a constant battle to sustain an efficient maritime defence force in an underdeveloped country with little access to hard currency or to large scale external military aid. Inevitably, the Navy's force structure is the result of a series of compromises and make-shift solutions, while its operational capabilities are limited by the lack of sophisticated ships and weaponry and perennial constraints on operating funds.

Yet the BN demonstrates what can be achieved with very little to combine the primary requirements of maritime surveillance and patrol in support of economic and domestic security concerns with a limited but effective deterrent capability. While the Navy possesses no potential for power projection, its missile forces must be enough to make any foreign attempts at incursion into Bangladesh waters no easy option.

Beginnings

In December 1971, the maritime forces of Bangladesh consisted only of a handful of small boats and riverine craft, manned by the Mukti Bahini (Liberation Brigades). These irregular forces had been created and trained with the assistance of the Indian Navy as part of India's campaign to bring about the separation of East and West Pakistan. While their performance had been both gallant and effective in interrupting Pakistani efforts to use the inland waterways, the Mukti Bahini had never at any stage attempted to operate offshore.¹

All the Pakistan naval craft present in the area at the beginning of the 1971 had been sunk or had fled. The limited base facilities which existed at Chittagong and at Khulna had been badly damaged and stripped of equipment. The major ports of Bangladesh were littered with wrecks and had been mined by both sides in the recent conflict. In a country with almost no industrial base, a crippled transportation system and an inefficient and over-stressed rural sector, the prospects for creating a navy of any significance did not appear good.

Nevertheless, Bangladesh's maritime interests, particularly in fisheries and contraband control, dictated that some sort of maritime force would be required to execute national policy. The Awami League Government of Sheikh Mujibur Rahman soon agreed to the formation of a wholly new Bangladesh Navy. On 16 December 1971, Captain M.K.I. Choudhury, an Army
Navies in Asia

officer, was ordered to take charge of the small contingent of personnel who had remained with the naval base at Chittagong. In March 1972, Lieutenant Commander Nurul Huq, an engineer officer who had escaped from Pakistan, was appointed temporary Chief of Naval Staff and promoted to Commander to take over from Choudhury.

Huq’s instructions were vague. In effect, he had been told to create a navy, but he was given little guidance as to the possible roles of such a service or the force structure which was envisaged. He was soon to find that the real problem the Navy faced was in receiving sufficient funds. This stemmed from two causes. In the early years of Bangladesh, there was a dichotomy between the revolutionary Mukti Bahini and the professional ethos of the personnel who had served in Pakistan’s military forces. The latter, labelled “repatriates” had generally not been involved in the war of liberation, spending the conflict in Pakistan’s detention camps. The Government sought to play one group off against the other, forming many ex-Mukti Bahini fighters into a para-military force called the Jatiyo Rakhi Bahini (National Defence Force) and providing it with funds and new recruits at the expense of the professional Army. The Bangladesh Navy did not become directly involved in the struggle that followed, although it suffered from the diversion of money to the Jatiyo Rakhi Bahini. But the Navy was almost wholly made up of repatriates, whose sympathies were with the Army. Not until the assassination of Mujibur Rahman and a series of bloody coups and counter-coups in 1975-77 would the situation be finally resolved in favour of the professional military.

The second problem for the Navy was that the Bangladesh Army sustained its dominant position in relation to the other services which had been a feature of Pakistan. Although the Chief of Naval Staff was given theoretical equivalent status (but not equal military rank) to the Army Chief of Staff, the Army had twenty times more personnel and the lion’s share of the budget. It would sustain these relative positions for the next twenty years.

Getting Started

Nurul Huq’s position was not completely gloomy. Bengalis had always comprised a substantial proportion of the old Pakistan Navy and, although under-represented amongst the officers, many of the latter were technical or supply specialists, who would be very helpful in setting the Navy to work. A similar loading of branches applied amongst the ratings. In early 1972, there were approximately 100 personnel in Bangladesh, while 30 officers and 2,670 men were waiting to return from Pakistan. Their repatriation was not completed until November 1973, the month in which Huq was appointed to chair the Bangladesh Inland Water Transport authority after his relief as CNS by Captain Mosharraf Hossain Khan who had been the senior executive branch East Bengali officer in the Pakistan Navy. Promoted Commodore in 1974 and Rear Admiral in 1975, M.H. Khan was a highly competent and energetic officer who became the effective founder of the Bangladesh Navy and was to remain Chief of Naval Staff until 1980. He had developed close personal connections within the Government and his talent for
BANGLADESH NAVY - COMMAND STRUCTURE

CHIEF OF NAVAL STAFF

ASSISTANT CNS (OPERATIONS)  ASSISTANT CNS (PERSONNEL)  ASSISTANT CNS (MATERIAL)  ASSISTANT CNS (LOGISTICS)

NAVAL ADMINISTRATIVE AUTHORITY DHAKA  COMMANDER COMMANDING CHITTAGONG  COMMANDER COMMANDING FLOTILLA  COMMANDER COMMANDING KHULNA  COMMANDER SUPERINTENDENT DOCKYARD

DRAFTING AUTHORITY  NAVAL DISTRIBUTING AUTHORITY  JUDGE ADVOCATE GENERAL (NAVY)  NAVAL SECRETARY
The Bangladesh Navy

Help was available. The Indian Navy was prepared to transfer a patrol craft and train Bangladesh personnel in Indian establishments. Britain, too, agreed to provide limited aid and training facilities. Less welcome were approaches from the USSR and the question of Soviet naval activities in Bangladesh was to be an awkward one for the Navy over the next two years. Although Mujibur Rahman was apparently sympathetic to the USSR and had agreed to a large scale Soviet salvage and minesweeping effort in the ports of Bangladesh, the Bangladesh Navy (BN) was more suspicious and unreceptive to apparently heavy handed Soviet efforts to achieve a position of influence.

Force Structure and Roles

Despite Mujibur Rahman's bellicose declaration of 1974 that the BN would "be developed as a formidable sea power", M.H. Khan's early plans for a force centred around frigates and minesweepers were soon dashed by the lack of available funds, although the acquisition of frigates in particular remained a long term goal. The only assets immediately ready for service were half a dozen small craft but the BN was able to take over a trio of 70 ton river vessels which were under construction at Dhaka (formerly Dacca). The first of these, armed with a single 40mm gun, was commissioned in June 1972. Other measures of improvisation followed. Late in the same year, India lent a Poluchat class patrol vessel as an interim measure until a pair of FORD class seaward defence boats could be made available in 1973 and 1974. In 1975, Yugoslavia transferred two Kraljevica class small submarine chasers which, although elderly, proved robust and useful. The Bangladesh Government handed over a 700 ton Canadian coaster which was soon converted to a training ship and renamed Shaheed Ruhul Amin. Meanwhile, the BN started a salvage and repair programme to restore the sunken Pakistani patrol craft JESSORE to service.

These efforts marked the beginning of a deliberate policy of improvisation which continues to this day. Short of sophisticated assets and hard currency, the BN has been forced to content itself with units which represent the bare essentials of capability. It has kept such vessels running through a self repair and maintenance programme which has employed a pool of cheap labour to manufacture in country replacements for spares which are no longer available or which the BN cannot afford to obtain overseas. While not ideal, this approach gives the Navy the ability to operate ships which would otherwise be too old to be considered effective but which confer on the BN a level of capability which would otherwise be impossible for it to sustain.
The early definitions of the principal roles of the BN reflected the extent to which military ambitions had been restrained in the face of funding problems. The Navy’s principal duties lay in two main areas: a general police function for customs, fishery protection and search and rescue, and a military transport function in co-operation with the Army for disaster relief. These roles indicated the reality of the Navy’s employment as a coast guard. In fact, its efforts against smuggling were barely effective and it still lacked the seagoing units to supervise off-shore fishing.

Further Developments

To economise on administrative effort, M.H. Khan deliberately based the BN as closely as possible upon the structures of the Pakistan Navy, retaining the same Royal Navy derived rank and administrative systems and the Pakistan Naval disciplinary code. Chittagong and Khulna were re-developed as naval bases while Mongla was established as the centre for riverine patrol operations. Recruiting proved no difficulty. High levels of unemployment and the security of a job in the armed forces meant that there was considerable competition for appointments for both officers and ratings. The Navy was also able to set higher standards for its sailors than could the Army for prospective jawans (privates) and confined its entries to fully literate personnel. Junior officers and technical personnel initially received their training in India, although there M.H. Khan soon put in place plans for a naval academy and other schools.

The events of 1975-77 had mixed results for the Bangladesh Navy. Although the accession of General Ziaur Rahman (Zia) to power confirmed the continuation of the services on a professional basis and allowed the allocation of extra funds to them, much energy was consumed by the need to assist with the administration of martial law and even the Navy did not wholly escape the purges of senior officers which Zia conducted to strengthen his position.

The period did, however, include two events which prevented the BN from becoming wholly pre-occupied with domestic affairs. First, the death of Mujibur Rahman marked the end of the period of rapprochement with India. From this time on, disputes over border issues and maritime zones would recur at frequent intervals. The second point was that the improvement in the BN’s financial position allowed it to realise its ambition of frigates.

M.H. Khan regarded frigates as an essential element of his programme to establish a firm foundation of seagoing expertise within the BN. Training on the scale required could not be adequately conducted in smaller units, despite the success of the first overseas cruise conducted by the Shaheed Ruhul Amin. The Chief of Naval Staff persuaded Mujibur Rahman to take advantage of a Commonwealth Heads of Government Meeting in 1975 to ask for a training frigate from the United Kingdom. After some discussion, Britain was prepared to make available a Type 61 Air Direction frigate at scrap value and the eighteen year old Llandaff was refitted and transferred to Bangladesh in London in December 1976. This elderly vessel was the...
BANGLADESH NAVY - FLOTILLA COMMAND

COMMODORE COMMANDING BN FLOTILLA

COMMANDER PATROL SQUADRONS

- 822ND TORPEDO BOAT SQUADRON
- 811TH MISSILE BOAT SQUADRON
- 61ST PATROL CRAFT SQUADRON
- 81ST PATROL CRAFT SQUADRON
- 21ST PATROL CRAFT SQUADRON

7TH FRIGATE SQUADRON
minimum cost option for the BN. The newly renamed *Umar Farooq* was in essence a large gunboat, whose sonars and air defence radars would not be maintained in Bangladesh service. But she had the assets of a reliable main armament of two 4.5" guns, twin screw diesel machinery which (with eight engines in the system) possessed a considerable measure of redundancy and, above all, the ability to operate in the Bay of Bengal in the monsoon season. For the first time, the BN had achieved some measure of oceangoing capability for law enforcement and surveillance.

What had yet to be achieved was any degree of military capability. The government did not accept the requirement for sophisticated weaponry because of the drain such acquisitions would make on foreign exchange holdings. Development would have to proceed on a basis of low-cost, low technology ships aimed at fulfilling purely coast guard functions. The BN could, however, console itself with the fact that this policy, stimulated as it was by President Zia's sympathetic attitude to military spending, did allow some expansion. *Umar Farooq* was followed by a second frigate, her near-sister, the type 41 *Ali Haider* (ex-*Jaguar*) in 1978 and the Navy was able to make a number of other conversions and purchases, including a floating dock from Yugoslavia in 1980.

**China and India**

A new source of support now appeared in the form of China. Relations with the People's Republic had blossomed rapidly after the 1974 recognition of Bangladesh by Pakistan allowed China to follow suit. For China, Bangladesh appeared a useful counterweight to India on the latter's eastern flank. For Bangladesh - and for the Navy in particular - the PRC offered the prospect of weapons and supplies at a price even the poorest country could afford and of a sophistication which would not over burden limited in-country support facilities. The first naval transfers, a quartet of *Shanghai II* fast patrol vessels, were made as early as 1980 as part of the policy of developing coastal surveillance forces. But events in the Bay of Bengal soon dictated an increase in the numbers of transfers and a change in their nature.

By the end of the 1970s, relations between India and Bangladesh were increasingly strained. This resulted from a number of factors, most inevitable because of the length of the two countries' mutual borders and the extreme difficulty of policing them. Smuggling, illegal immigrants, boundary disputes and "water politics" over the use of the Ganges and Brahmaputra Rivers all contributed to a state of increasing tension and low level hostility that was manifested in increasing numbers of armed clashes between border troops and progressively more bitter diplomatic exchanges.
Before 1980, naval involvement in this rivalry had been limited, despite increasing irritation in both countries over seaborne smugglers and in Bangladesh over what was perceived to be an increasing level of poaching by Indian fishermen in Bangladeshi waters. There was, however, one maturing cause for conflict in the shape of Moore (the Indian designation) or South Talpatty (that of Bangladesh) Island, to seaward of the mouth of the Hariabhanga River in the Bay of Bengal. This island was a "char", a body of land formed by new silt deposits in the wake of a 1970 cyclone.

Such a birth of new land was not unusual in the deltas of the rivers of East Bengal but South Talpatty was to assume extreme importance because it lay on the boundaries of the Indian and Bangladesh economic zones and its possession would alter the shape of the area which each country could claim in relation to the other. Both nations had quickly grasped the significance of the island and negotiations had continued throughout the late 1970s, each asserting its right to possession.13

The Indian Janata government adopted a conciliatory tone in 1978 and agreed to a joint survey and assessment of the problem but the return of Mrs Gandhi’s Congress (I) party to power meant a harder line and looming confrontation. In May 1981, Bangladesh patrol vessels attempted to interfere with the activities of an Indian naval survey ship in the vicinity of the island but had to leave after the arrival of a small Indian frigate. India then ensured her possession of South Talpatty by placing troops ashore.14

Despite furious Bangladesh protests and continuing demonstrations by what units the Navy could deploy, it was apparent that India held the whip hand. The incident, requiring as it had only a very limited diversion of Indian strength, demonstrated all too clearly the weaknesses of the Bangladesh Navy and its lack of credibility as a deterrent force or as one for the assertion of national interests against opposition.

Redevelopment of the Bangladesh Navy

The return of martial law (1982-1986) under the regime of Major General Ershad meant that the BN had a receptive audience for its arguments for an increase in spending. The Bangladesh government now formally accepted the Navy’s military roles and its need for accompanying capability. The Navy itself now made much of the requirement for the capacity to carry out defensive operations against armed forces making incursions into the country’s sovereign waters and economic zones and this became the immediate priority for force development. But the Bangladesh Navy did not figure prominently in the organisation of the military regime and the martial law administration. The Army, in conjunction with the Air Force, remained predominant. Most increases in naval expenditure, therefore, occurred in the context of a continuing general emphasis on the military, rather than a change of spending priorities between the Services.15
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SOURCES: JANE'S FIGHTING SHIPS/COMBAT FLEETS OF THE WORLD.
The Bangladesh Navy

The limited availability of funds and the equally limited ability to plan spending patterns dictated something of a "shot gun" approach. A third frigate (Abu Bakr) was obtained from the United Kingdom in 1982 as part of the Navy's long term plan to build up its major combatant force. She shared, however, the deficiencies of her sisters, in that her main armament did not include missiles. The Bangladesh Navy would have to secure its offensive capability from China and this was achieved in 1983 when four Hegu class missile attack craft were commissioned. Although the Hegu's pair of Chinese variant SS-N-2 Styx missiles represented the minimum in missile technology, they would serve to increase considerably the risks for any Indian force attempting incursions into Bangladesh waters. The Hegus joined what was a much increased patrol force as four more Shanghai II and two of the larger Hainan variant had already entered service with the BN in 1982.16

The Navy did not realise all its desires in the short term. The core of ex-Pakistan Navy personnel who had joined the BN included in their number many ex-submariners and possession of one or two submersibles had long seemed an attractive option for achieving a credible sea denial capability. Discussions focused on the transfer of two ex-Chinese Romeos to Bangladesh but the primitive nature of this design and the formidable technical problems associated with operating any submarine probably combined to make the proposal impracticable. Nothing more was heard of the idea after 1985, although this did not mean that the BN had entirely abandoned its submarine aspirations.17

The new military capability also dictated more sophisticated, albeit still relatively uncomplicated, training patterns. The BN attempted joint amphibious exercises with the Army and the Air Force in 1982 and began to stage annual fleet concentration periods each winter.18 The difficulty for the BN in improving its standards beyond this point derived not only from the perennial shortage of operating funds and the limited assets which it possessed but its lack of access to the doctrines of the major navies. While BN personnel could undertake courses in other countries, Bangladesh as a non-aligned nation did not enjoy any privileged window on modern thinking nor any ready-made operational procedures.

China was of some help, but Bangladesh had to conduct its relations with the PRC with an eye to Indian reactions. The chiefs of the two navies exchanged visits in 1983, two Chinese warships visited Chittagong in 1986 and the new Bangladesh CNS, Rear Admiral Sultan Ahmad went to China in 1987.19 But the rhetoric of mutual interest was not accompanied by formal alliance or naval co-operation beyond that required for further acquisitions by Bangladesh and the necessary training of personnel. The truth was that China did not possess any decisive edge in seagoing expertise or war fighting by comparison with the standards of the Bangladesh Navy.
Navies in Asia

One capability of the larger units which the Navy was quick to utilise was their potential for foreign deployments. Foreign exchange restrictions had to limit their frequency, but BN units were occasional visitors to Indian Ocean and South East Asian ports, culminating in the participation in the 1990 Malaysian Naval Review in Penang by two frigates. In this way, the Navy was able to pride itself on transmitting a more positive idea of the state and progress of Bangladesh than usually appeared in world news.

Towards 2000

Indian possession of South Talpatty was to remain a fait accompli. Although direct confrontation on the subject died as the 1980s wore on, the Navy was able to argue for a continuing share of development funds on the basis of the increasing economic importance - actual and potential - of the maritime sphere. By 1987, seafood had become the second biggest export earner for Bangladesh and was likely to become even more important in the years ahead. Offshore natural gas reserves had been discovered, although not yet in economic quantities, and the prognosis for offshore oil seemed very favourable. The merchant marine, whilst the majority of its ships were elderly and unsophisticated, was increasing in both numbers and tonnage.

Naval doctrine now turned upon the requirement to monitor, police and protect the economic zone and the government's recognition of the validity of this concept allowed further acquisitions from China, aimed at improving the offshore war fighting capabilities of the Navy in order to complicate the problems of any potential aggressor. Thus, the first of two missile armed frigates was purchased from China in 1989, with a view to obtaining a second unit two years later. Coastal attack forces were strengthened by four Huangfen class fast attack craft and four Huchuan class missile hydrofoils in 1988.20

The Navy continued to nurse plans for a small submarine arm, together with the acquisition of light helicopters. To take the latter, it was intended to convert some or all of the frigates to take a flight deck and maintenance facilities while there was some prospect of the ex-British frigates also being converted to take surface to surface missiles. With the Royal Navy reducing its frigate force, inquiries were made as to the availability of Leander class or Type 21 frigates. Other ambitions included a mine countermeasure force, landing ships and at least one maritime patrol aircraft.

All these proposals were sensible enough in the context of the size and nature of Bangladesh's defence requirements. But the scale on which they were being considered tended to ignore the reality of a budget which showed no sign of expansion in an era of restricted national growth. Indeed, the Bangladesh Navy was meeting difficulties in maintaining its capabilities, let alone expanding them. Repeated national disasters such as the floods of 1988 strained military resources in assisting with relief and reconstruction, while the cyclone of 1991 saw Naval units suffer considerable damage - including some sinkings amongst the patrol and
attack craft. By late 1992, the planned second Chinese frigate had not manifested itself and the BN’s budget was fully occupied with the repairs necessary to existing ships.

Considering what the Navy has achieved in its first two decades, Bangladesh has some cause for self-congratulation. Nevertheless, in 1992, the Bangladesh Navy faces an uncertain future. Its national security roles are now clearly understood within Bangladesh and their importance can only increase as the country turns more to maritime zone resources. But any development programme will have to be mounted with a clear understanding that practical limitations remain. Improvisation will continue to be the key to sustaining capability and the BN must restrain its ambitions for improved weapons and platforms in favour of non-military specification vessels which can adequately perform the patrol and surveillance functions. The challenge will be to determine the minimum resources must be devoted to deterrence for Bangladesh to be able to retain some control over any future conflicts at sea.
Navies in Asia


Navies in Asia

Chapter Six

THE SRI LANKA NAVY

The Sri Lanka Navy is a resource limited navy whose recent development has been determined by the existence of a single threat and it is unique in South Asia in that it possesses no effective offshore capabilities. The Navy’s force structure is based wholly upon the need to defeat the Tamil insurgents. Thus, while navies elsewhere in the region look to monitoring their 200 mile exclusive economic zones, the SLN must concentrate on inshore patrols and counter-terrorist operations. Navies tend to be mirrors of the nations they serve. The constraints which the Tamil emergency has placed upon the pace of national development have had similar effects upon the SLN.

Beginnings

The passage of the Ceylon Independence Act by the British Parliament in 1947 brought self government to Ceylon as a Dominion within the British Commonwealth on 4 February 1948. Although the new nation emerged into a relatively benign environment, still dominated by the United Kingdom, the rapid deterioration of relations between India and Pakistan had already indicated that Ceylon would have to possess some capacity to defend her interests.

For their part, the British had moved quickly to secure defence agreements with the newly elected government of Ceylon. The key requirement of these arrangements was control of the naval base at Trincomalee. This had been extensively developed during the war with Japan and, as the headquarters of the East Indies Station, constituted the centre of British naval activity in the Indian Ocean. In return, Britain agreed to provide limited support for the development of Ceylonese defence forces. They also provided an unspecific guarantee that they would give "such military assistance for...defence against external aggression and for the protection of essential communications as it may be in their mutual interests to provide." This continuing defence relationship profoundly influenced both the structure and the functions of the Royal Ceylon Navy (RCyN) from the time that it was established.

It was not necessary to create a naval service wholly from scratch. Volunteer reserve forces which had served during the Second World War had functioned as useful adjuncts to the British local defence forces, so much so that in 1943 the British took over administration of the Ceylon Volunteer Naval Force. The latter's 926 personnel and ten minesweeping and patrol craft were incorporated as the Ceylon Royal Volunteer Naval Reserve (CRVNR). Accepting that a
The Sri Lanka Navy

naval force should continue to exist after the Japanese surrender, 100 officers and ratings, albeit without a ship, were kept on active duty in the CRVNR in 1946 as the nucleus of later expansion.³

Scotland was keen to encourage emphasis upon local defence, which would contribute to the security of Trincomalee without raising the awkward issue of India's likely reaction to the development of powerful Ceylonese forces. As for the Ceylon government, "it was a matter of some doubt whether the founders had a clear concept of [the Navy's] future role other than that it should maintain a degree of surveillance over the waters surrounding the island."⁴ The Ceylonese politicians and administrators were principally eager to restrain defence expenditure, but the expectation that Britain would cover the costs was shattered by the latter's insistence that military aid was dependent upon matching indigenous spending.⁵

The issue was not resolved when the Ceylon Navy Act was passed and the RCyN finally inaugurated in December 1950, but the British had transferred an Algerine class minesweeper⁶, together with some smaller craft, and installed a Royal Navy officer as "Captain of the Navy". The senior Ceylonese officer, Commander Royce de Mel, was despatched to the United Kingdom for training. Captain William Banks RN achieved mixed results during his two years in Ceylon. Whilst recruiting progressed relatively well and with it arrangements for training both in country and in the United Kingdom, most plans for further expansion foundered on the government's continuing refusal to expand the defence budget and a lack of a coherent conception of Ceylon's overall defence strategy.

The first roles designated for the RCyN were the defence of the port of Colombo and inshore and coastal mine clearance. To this scheme was quickly added a patrol and surveillance role in the Palk Strait which divides India and Ceylon. The narrow and island strewn strait was a haven for smugglers and illegal migrants and the Ceylon Customs Service was soon overwhelmed. The Navy gave what assistance it could and achieved some small successes⁷ but it could not stop the traffic outright. In time, Palk Strait would come to dominate the Navy's planning but, with RN officers continuing to supervise the service until 1955, the focus initially remained on mine clearance and seaward defence.

Banks secured formal RN agreement for the RCyN to take over the seaward defence of Colombo in late 1951. Ceylon's initial plans for the Navy in 1951 envisaged the creation of a force including three frigates, twelve coastal minesweepers and six seaward defence boats as a long term objective.⁸ This was clearly too ambitious and Banks lowered the RCyN's sights to the creation of a minesweeping flotilla of up to six Algerine class. He also worked to obtain a Hunt class light destroyer as a training platform.⁹ His successor, Captain J.R.S. Brown, RN, continued the same policies but these ambitious acquisitions eventually proved impossible. The government would not pay for expansion on such a scale and, without some real proof of commitment from Ceylon, the Admiralty would not act.
The more likely future of the RCyN was demonstrated by its involvement in attempts to put a stop to what were becoming dangerously high levels of illegal immigration from India. The Navy joined the Army in Operation "Wetback" in late 1952, with HMCyS VIJAYA conducting patrols in the Palk Strait. The minesweeper proved too large to be ideal in the role and she was supplemented by light craft taken over from the Customs and Fisheries services.10 Although the patrols succeeded in intercepting only a fraction of the illegal immigrants, they constituted excellent training for junior personnel and provided the RCyN with its first experience of joint service operations.

The effective abandonment of the minesweeping flotilla scheme was followed by renewed interest in seaward defence and the creation of an inter-service committee to plan the defence of Colombo. The very moderate requirements of this task were acceptable to the Government, which allowed an increase in permanent manning to 600 personnel and agreed to obtain seaward defence craft with British assistance.

In 1955, the last British officer to head the RCyN, Commodore P.M.B. Chavasse, was relieved by the newly promoted Captain Royce de Mel. The new Captain of the Navy nursed ambitions to expand the RCyN and he was quick to seek British support for the loan of another Algerine class minesweeper.11 The Royal Navy’s response was cautious, since the British Treasury took a dim view of the costs involved, but indicated that the British would be prepared to do something if "official (author’s italics) application" were made.12

De Mel’s ambitions were soon caught up in other events. The sea change in Ceylonese politics which took place with the election of the government of S.W.R.D. Bandaranaike in 1956 brought about equally profound developments for the country’s defence. Bandaranaike espoused a policy of non-alignment and he viewed Britain’s retention of bases on the island as being incompatible with his aims. The first warning of the change came when the Ceylonese Prime Minister insisted that the bases in Ceylon not be employed "for purposes connected with military action which might arise in the event of hostilities with Egypt."13 Negotiations followed but neither side had much interest in continuing with the base arrangements. All the facilities in Ceylon could be transferred elsewhere14 and the British services were in any case embarked upon a world wide policy of reducing and rationalising their commitments. The Indian Ocean could well be supervised from Singapore which would be the centre of a new Far East Command.15 Notably, despite Bandaranaike’s rhetoric of non-alignment, the 1947 agreement with Britain was not abrogated and relations between Britain and Ceylon remained amiable, with the Royal Navy still prepared to assist with the development of the RCyN. The facilities at Trincomalee were handed over to Ceylon largely complete and the RCyN was able to establish itself there in 1957.
Towards an Oceangoing Navy?

The key result of the withdrawal and the general reduction in the British Indian Ocean presence was that de Mel, now a Commodore, possessed greatly strengthened arguments to put to the government for increasing the size and capabilities of the RCyN. Without the British units formerly based at Trincomalee to secure Ceylon’s offshore interests, the RCyN had a clear requirement for additional oceangoing units.

The government was prepared to accept the concept, but the resources did not exist to revive the earlier ideas of a flotilla of large minesweepers. All that the RCyN could extend to in the immediate future was the second Algerine, which the British indicated their willingness to provide in 1957\textsuperscript{16} and the existing minesweeper, Vijaya, was in poor condition with a dubious future.\textsuperscript{17} De Mel found himself caught by a continuing inadequacy of resources that manifested itself not only in the lack of essentials such as fuel and spare parts but, more seriously, through the absence of trained and experienced technical personnel. De Mel’s appeals for assistance to foreign services, particularly the Royal Navy, did not fall on deaf ears but their own shortages would not permit the loan of the experts which the RCyN so much needed.

The situation was exacerbated by the policies which the government pursued in its attempts to change the ethnic make up of the services in favour of the Sinhalese. By their nature, the armed forces had tended to draw their recruits largely from the more highly educated minorities and this was not viewed with favour by the government. The Navy did not suffer the perturbations experienced by the Army, which was repeatedly reorganised at government dikta\textsuperscript{18} but it was under pressure to admit more Sinhalese.

De Mel was generally successful in keeping the Navy divorced from communal issues, making the point that the RCyN’s exposure to the outside world had generated an ethos which made it one of the “few groups with true national pride and patriotism”.\textsuperscript{19} This argument proved attractive to the government but it was undeniable that non-Sinhalese personnel began to fear for their future and there were inevitable retention problems which were to cause considerable difficulties in the years ahead.

The limitations of funding forced the RCyN to adopt a “bargain basement” approach to further acquisitions for the oceangoing force. Negotiations were opened with Israel for the transfer of two elderly Canadian-built River class frigates. The agreement was satisfactory as regards price but the RCyN developed mixed feelings as to the quality of its purchases. The first, Mahasena, accepted in July 1959, suffered a difficult passage out from Israel because of repeated machinery defects and there was no expectation that the second, Gajabahu, would be in any better condition when she commissioned in April 1960.\textsuperscript{20}

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Nevertheless, the RCyN was able to give both ships lengthy refits in Ceylon to fit them out for patrol work. The heavy gun armament (three 4.7") was retained, although all ASW weaponry had been removed before delivery. The work was successful and the high water of the RCyN’s oceanic ambitions came in 1960 when de Mel despatched the *Mahasena* and *Parakrama* on a training and flag showing cruise to South East Asia and Japan. This proved a definite success but the aftermath was unfortunate. Allegations of liquor smuggling on the task unit’s return resulted in a judicial enquiry which found deficiencies in the Navy’s administration and discipline. Rear Admiral de Mel was unwillingly retired as Commander of the Navy and succeeded by his Chief of Staff, Commodore Rajanathan Kadirigamar.21

De Mel returned briefly to prominence in 1962 as an alleged associate of an abortive conspiracy within the Army and the police force to overthrow the government. It was notable that no one in the active RCyN was involved in the plot and that the conspirators “carefully shadowed” Commodore Kadirigamar. The RCyN remained loyal to the legal regime when the conspiracy became known and personnel of its security forces were employed to protect the government.22

A Small Ship Navy

As the 1960s drew on, the RCyN began to question the value of its larger units. Under continuing budgetary pressure from a government keen on restraining defence spending and which was preoccupied with the internal security issue, the Navy was finding difficulty in manning the frigates and minesweepers and maintaining them in service. Illegal immigration and smuggling across Palk Strait continued and their suppression clearly had to be the RCyN’s first priority. Palk Strait was shallow and poorly charted and the nature of the board and search task amongst the "high density" fishing fleets in the strait meant that the real requirement was for large numbers of small craft.

The decisive change in emphasis came in 1964. *Mahasena* and the two *Algerine* class were sold for scrap (*Vijaya* being returned to the Royal Navy for that purpose after being severely damaged in a cyclone in December the same year23) and only *Gajabahu* was retained as a headquarters and training vessel with a reduced armament taken from *Parakrama*. A programme of more than twenty light fast patrol craft of a British Thornycroft design was put in hand and the RCyN even began to experiment with hydrofoils. For the next ten years, the RCyN would be exclusively a small ship navy.
The First Tamil Insurgency

The emergent Tamil problem found the RCyN increasingly involved in internal security work. Units of the reserves were temporarily mobilised as early as 25 April 1961 to assist in suppressing Tamil protests but the Navy’s principal role remained that of controlling traffic across Palk Strait. The task was made no easier by a dispute with India over possession of the island of Kachativu in the strait. Although this was eventually resolved amicably enough after discussions in November 1966 between the Prime Ministers of India and Ceylon, the fact that "the British colonial heritage had allowed India a twelve mile territorial limit, but Ceylon only 6 miles" was a source of continuing dissatisfaction to Ceylon. More to the point, the demarcation restricted the ability of the RCyN to interfere with illegal traffic.

Despite increasing difficulties with the Tamils, the Navy received no further accessions to its strength once the Thorneycroft programme had been completed. The stumbling block to expansion was not that the Navy and the government saw no requirement but that Ceylon’s increasingly difficult economic situation did not allow the expenditure of the foreign exchange which would be needed. The 45’ patrol boats represented the most of which Ceylonese shipyards were capable without prohibitive development of infrastructure. It was not until the return to power of the leftist SLFP coalition under Mrs S.R.D. Bandaranaike in May 1970 that new opportunities offered. Mrs Bandaranaike was determined to pursue an active policy of non-alignment, which proved to be even handed to the extent that the government was willing to accept help from any quarter. Her hand was soon forced by the 1971 uprising of the Tamil Janatha Vimukhi Peramuna (JVP), during which Indian help had to be sought to supplement the SLN’s too limited capacity to prevent arms and supplies being brought into Sri Lanka.

In 1972, the newly renamed Sri Lanka Navy (1972) accepted six Shanghai II class fast patrol boats from China. With a fair turn of speed and a heavy gun armament, the new Sooraya class were well suited for the northern patrols but they were too small to give the SLN any real offshore capability or to provide the command and control facilities which the SLN lacked in its operations. The Chinese transfer at “friendship prices” was followed in 1975 by one from the USSR of a somewhat larger and more sophisticated Mol class fast patrol vessel. These acquisitions, and the limited programme of small craft building begun at Colombo Dockyard in 1976, allowed the SLN to maintain its strength as Gajabahu and some of the older patrol boats were disposed of. They were not, however, enough for the new challenges emerging and the Navy found it increasingly difficult to sustain the surveillance effort required in the north.
The Tamil Problem Deepens

To the intensifying Tamil insurgency was added the requirement to monitor Sri Lanka's increased territorial sea and economic zones. Agreements with India in 1974 and 1976 saw formal agreement to the demarcation of the countries' adjoining claims. Sri Lanka already derived much of its gross national product from fisheries; the government nursed hopes of offshore oil and gas discoveries. The oceanic and monsoonal conditions around Sri Lanka dictated that the SLN would now have to look to acquiring much larger and more capable craft but, at "friendship prices", such vessels were still too much for the government's budget.

The Tamil problem continued to fester as the 1970s wore on. By the end of the decade it was clear that the insurgent movement was received direct assistance from the Indian provincial administration of Tamil Nadu and at least the tacit support of the national government. By 1981 the situation was passing out of control. The Sri Lankan government reacted in June 1981 with the declaration of the first of what would be a series of states of emergency in the northern areas. (By 1983 the state of emergency was effectively continuous.)

The fundamental challenge to the Sri Lankan security forces was that the insurgents were able to operate from permanent bases in the "safe haven" of Tamil Nadu on the sub-continent. Despite bitter protests to the Indian national government, the latter would take no action because of its dependence upon the good will of the predominantly Tamil provincial government. The only way to prevent the insurgents using the Indian bases would be through the interception of their traffic across Palk Strait.

The Navy's response to this tasking required progressive improvements in its capability. Although the government was prepared to allow considerable increases in the defence vote, this did not mean that the services had free rein and the SLN's approach was essentially utilitarian. A small programme of 66' coastal patrol craft had been started in 1976 and this was extended with further buys in 1978 and 1980. A pair of larger 130' boats was ordered from Colombo Dockyard in 1981 and construction of a quartet of smaller craft started soon after. All these vessels were as cheap and as unsophisticated as could be compatible with their employment.

The SLN attempted to solve the problems of command and control of such small craft by a piece of lateral thinking. Since little infrastructure to support fixed bases existed on the north coast in what was essentially a hostile security environment, the SLN purchased or leased six merchant vessels - three general cargo and three small roll on-roll off units - and commissioned them as "Command and HQ Ships" in 1984. Unless the Tamils developed their own seagoing units, such vessels were hardly vulnerable to terrorist activity. This was, of course, a makeshift solution, since the patrol requirements were vast and the Tamils themselves were employing increasingly fast small craft. The SLN would be dogged by poor command and surveillance equipment and a lack of fast patrol boats for the next decade.
The Sri Lanka Navy

The SLN's accession of strength became effective in late 1984 and this allowed the extension southwards of the Sri Lanka government's formal declaration of a 140 mile surveillance zone off the northern coastline in which SLN units were given considerable powers of examination and seizure over all vessels. The SLN's patrols proved reasonably effective in daylight but the continuing presence of literally hundreds of small fishing vessels in the Palk Strait made night or low visibility operations an impossibility. A curfew was declared in October 1984 and in the following month the government took the drastic step of banning outright fishing in the north. Intensive patrols then began to take effect and the government authorised the SLN to adopt stern measures with suspicious craft. "Encounters were usually brief and bloody, with the patrol boat bringing its heavy automatic weapons to bear on the insurgent boat or boats, often killing most of the Tamil guerillas outright...Sri Lankan naval patrols interdicted approximately 1-3 boats per month, killing between 4 and 60 insurgents with each attack."34

India's response was unsurprising. Indian fishermen objected to the SLN's interference with their livelihood and insisted on receiving naval protection. Since the IN would take no part in stopping the passage of the insurgents, its presence served only to hinder the SLN's attempts to achieve systematic coverage. Although large numbers of insurgent craft were taken or destroyed, the SLN did not succeed in its fundamental aim of crippling the support system which the Tamils had developed.

The Indian Stalemate

The Indo-Sri Lankan stand off continued throughout 1984, with Indian naval demonstrations and increasingly aggressive patrols to protect small craft in Indian waters (of which a very liberal view was taken by the IN) from Sri Lankan interference. This culminated in the seizure on 11 January 1985 of an SLN patrol vessel which the Indians "alleged was firing on Indian fishing vessels in Indian territorial waters".35 The Indians had made their point and soon released the patrol vessel but the incident was an indication of India's refusal to interfere with the insurgent operations.

Sri Lanka had no prospects of producing a counter to Indian naval activity and the SLN command sensibly did not attempt to equip the Navy with the weapons and sensors which would be needed to create any kind of deterrent capability. It supported the Sri Lankan government's forlorn suggestions to India for a joint patrol in the Palk Strait, suggestions which were finally taken up by the Indians. After meetings between the naval staffs, a system of patrols was brought into being. The venture was not a success. Indian units were ill suited to the Palk Strait and co-operation was hamstrung by the slow and fitful exchange of information.36 The SLN eventually concentrated its own efforts on improving its operational methods against the Tamils.
Reforms in the command structure produced a division of the coastline into three command areas (see chart) and preparations were made for the construction of a new base and training facilities in the south. This would relieve the increasing pressure on Colombo and Trincomalee. The SLN emphasised better "training methods to achieve higher standards of professionalism" and the activation of a Basic Training Establishment was achieved in 1989. Further buys of fast patrol boats were made, some of 34' and 44' types which could operate directly from the command ships and the remainder of the larger (70') Israeli Dvora type.

These improvements in capability were accompanied by more emphasis on joint-service co-operation. The Navy became adept at close support of ground operations along the coast and the insertion and extraction of commando units into Tamil territory. A Joint Operations Command (JOC) now held responsibility for conducting operations against the Tamil insurgents and it was under its supervision that the SLN took part in operations in 1986 and the May 1987 drive against the Tamils, code named Operation Liberation. While the campaign proved only a limited success, the SLN's small craft had been more than useful.

India's "Humanitarian Relief"

India's response to Operation Liberation was to promise aid and supplies for "humanitarian" purposes. The Sri Lanka government naturally viewed the despatch of unsolicited succour for the Tamils as an expression of solidarity with the insurgents and warned India that any attempt to bring the supplies across Palk Strait would be turned back. 19 fishing vessels left Ramaswaram on 3 June, loaded with food and medicine. The Indians were careful not to enlist the Indian Navy as protection for the convoy, relying instead upon the presence of Red Cross officials. The Sri Lankan gunboats which intercepted the fishing vessels were equally circumspect, relying upon verbal warnings to achieve the turn around of the Indians.

Although India soon switched to aircraft to get its supplies into Sri Lanka, the incident provided a short lived boost to both national and naval morale. The Indians, however, eventually insisted on a compromise which saw Indian relief vessels enter Sri Lankan waters under SLN escort and and their supplies at Kankesanthurai. In the meantime, the limited results achieved in Operation Liberation had forced the Sri Lanka JOC to the conclusion that "it would take at least three years before enlarged, re-equipped and retrained armed forces would be capable of undertaking the task with any chance of success."
## Sri Lanka Navy Operational Strength

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**Notes:** Standard displacement rated as tons, age in years.
Indian Intervention

For its part, India was concerned to protect the interests of the Tamils and minimise the disruption now becoming apparent in Tamil Nadu. The increased pressure for a compromise brought about an Indian engineered Peace Accord, signed by the President of Sri Lanka and Indian Prime Minister Rajiv Gandhi. To the SLN’s embarrassment, it achieved world notoriety when an SLN rating assaulted Gandhi with his rifle during the inspection of a guard of honour. The Accord involved the insertion of Indian forces into Sri Lanka to keep the peace and this resulted in the effective withdrawal of Sri Lankan ground forces from the north of the country. The SLN continued its patrols in conjunction with the Indian Navy. The latter interpreted the Peace Accord somewhat liberally. There were soon not only units in both Palk Strait and the Gulf of Manar but off Colombo and Trincomalee in a show of strength designed to remind the Sri Lankan government of its vulnerabilities.

The Sri Lankan armed forces did not enjoy much of a breathing space. Sinhalese extremists of the JVP had been infuriated by the accord and now begun their own campaign of terrorism. The lack of external support for the JVP limited the terrorists’ access to weapons and supplies and thus the requirement for the SLN to maintain anti-smuggling patrols. Naval craft supported army operations in the south of Sri Lanka while SLN security units assisted with the protection of fixed assets.

While the Indians embroiled themselves in an increasingly bloody campaign to suppress the Tamil insurgents after the latter had effectively rejected the Peace Accord, the SLN continued to expand. Between 1986 and 1991, active personnel strength doubled. The new C-in-C, Admiral H.A. Silva, secured government approval "for a 5 year development plan to ensure the planned growth of the Navy". After a new entry training programme and new facilities had been put in hand, the SLN’s major priority was to overcome its deficiencies in logistic support, which had "primarily been centred on problems of insufficient maintenance training for personnel, cumbersome material procurement procedures, poor administrative support, and the requirement to obtain electronic and gun equipment abroad and resultant spare parts replacement difficulties." The SLN achieved some success, despite the continuing need to purchase equipment offshore and from multiple sources. The Israeli link was renewed with the purchase of six additional Super Dvora class fast patrol craft with upgraded engines and a trio of 75’ Killer class boats were ordered from South Korea. The SLN wanted larger vessels, ideally "a small corvette with the fire power to take on bigger vessels" and was well aware of the potential of shipborne helicopters. But the progressive increases in spending still did not allow such ambitions. The SLN would remain a small ship navy and this was confirmed when in 1991 three improved Shanghai II class gunboats arrived from China as the first replacements for their twenty year old sisters. The drawbacks to this return to a low technology approach were rapidly
obvious with reports that the three boats were suffering "chronic engine trouble"\(^4\), although this was eventually rectified under warranty by the Chinese. The only real improvement in long range patrol was achieved by the Sri Lanka Air Force, which in 1986 acquired a single Beech Super King Air specifically for "maritime surveillance".\(^5\)

### The Indians Depart

Dissatisfaction with the Indian presence in Sri Lanka reached such a point in April 1989 that the government and the Tamil insurgents agreed to a truce. Although concessions were made on both sides, this did not resolve the fundamental issues and the Sri Lankan forces were aware that hostilities would resume as soon as the Indians had left. Having suffered heavy losses and made little headway against the Tamils, the Indians finally pulled out in March 1990. In June of that year the Tamil Tigers once more turned on the government security units.\(^5\) The Sri Lankan forces were soon convinced that "a political solution is the only way out"\(^5\) but the SLN’s task at least was easier because the Indian government was no longer providing much support to the Tamils. Monitoring traffic across Palk Strait remained intensely difficult, it was no longer impossible.

The fighting continued into 1991 and by May of that year had claimed another 5,000 lives.\(^5\) At the time of writing there is no end in sight and the assassination of the Chief of Naval Staff, Vice Admiral Clancy Fernando was indicative of the difficulties to be faced in finding a solution to the Tamil question.\(^5\) The part which the SLN will play will continue to be one of close support for operations ashore combined with intensive patrols of Palk Strait. In 1992, the forces available are adequate for these tasks and the government’s difficulties with funding both the expenses of the emergency and its own running costs mean that little cash will be available to allow further expansion.

### Towards 2000

The Sri Lanka Navy had risen to the challenge of counter-insurgency operations in the last decade and now constitutes an effective inshore patrol force. However, at a time when other navies have been extending their reach to cover their countries’ exclusive economic zones, the SLN has had too many calls on its slender resources to follow suit. Even if the Tamil problem finds a peaceful solution, the SLN is unlikely to receive the additional funds it needs. The expansion of the armed services has seen the Army become even more predominant and the government will be eager to reduce the standing forces by as much as possible. The challenge for the SLN will be to convince the government that ocean going capabilities are not a luxury but a necessity for the country’s success in exploiting its maritime resources. Despite the potential of fisheries and offshore petroleum, this will not be easy.
The Sri Lanka Navy


6. ADM 1/21127. The announcement of the transfer came as early as May 1949. See The Times of Ceylon 5 May 1949 for the report of a statement by Mr Senanayake.


14. Ibid.


25. Ibid. p. 16.


36. Ibid. p. 521.

The Sri Lanka Navy


Navies in Asia

Chapter Seven

THE ROYAL THAI NAVY

The Royal Thai Navy (RTN) shares with the Indonesian Navy the peculiarity of being a service developed with relatively little outside influence. Thai culture and the evolution of Thai politics mean that the RTN is much more closely involved with and influential in domestic affairs than the navies of most other Asian states. It is not an easy organisation to analyse. Many planning processes bear little resemblance to western methods, the budgetary system is a labyrinth to the outsider and threat perceptions include a much greater internal security component than is generally the case for navies. Nevertheless, the RTN is a service which is developing rapidly and improving in many areas, particularly logistics and maintenance, in which it has historically been weak. It possesses increasingly sophisticated ships and weapons and is working towards much higher operational standards than have ever before been possible.

The danger for the RTN is that it may be attempting to do too much, both in the sense of what the service is capable of in the short and medium term and in what are seen as less than legitimate roles by other Thais and by other countries. The most recent source of controversy has been the order for a 12,000 ton helicopter carrier, a unit widely viewed as being outside both the requirements and the capabilities of the RTN. The acquisition of a ship with the capacity to operate V/STOL aircraft marks a departure for ASEAN navies welcomed by few in the region. At the same time, the RTN’s patrol and surveillance capabilities remain less than adequate and the draw-off of funding to the helicopter carrier will be unlikely to improve the situation.

Background: 1865-1932

The modern Royal Thai Navy traces its start to the purchase of a corvette and four gunboats in France in 1865. These were the first steam powered warships to serve in the RTN and they would enjoy long, if somewhat erratic careers. It was a feature of the Thai approach to modernisation that, while it was willing to accept European advisers, actual control of the Navy remained firmly in Thai hands. The lack of nationals with adequate technical grounding severely restricted the service’s pace of development but, at a time when the nation was under considerable pressure from the colonising western powers, political reliability was more important than sophisticated capability. It was also notable, even in the late nineteenth century, that Thailand looked to the smaller “non-imperial” European states such as Denmark and Sweden for assistance rather than the United Kingdom or France.
The Royal Thai Navy

Although Thailand purchased more modern warships as surplus from the United Kingdom in the 1920s, following this with orders for two small coast defence vessels in 1924 and 1928, the RTN did not begin any co-ordinated modernisation until after the Revolution of 1932. This "constitutional" coup was motivated by military officers and civil servants who sought to replace the centralisation of power in the hands of the King and royal families with a constitutional monarchy and limited parliamentary government. Many of the best intentions of those behind the 1932 coup would founder in the bitter factionalism and political conflicts of the next two decades, which also saw the Royal Thai Army and the RTN play greater roles in government, roles that reflected increasingly conflicting political stances on the part of the two services. This rivalry would come to a head after the end of the Second World War.

Modernisation in the 1930s

In the meantime, the RTN was able to secure funds for a considerable expansion between 1934 and 1938. Purchases from Italy and Japan included two large coast defence vessels, nine large torpedo boats, four sloops and minelayers and four submarines. Construction of a new naval base was started at Sattahip, south south east of Bangkok on the Gulf of Siam in 1937. This was a significant step because it meant that the RTN was looking towards the creation of a true sea going fleet to protect the eastern seaboard. While the operational capacity of many of the new ships would remain limited through shortages of trained personnel and operating funds, by 1939 the RTN possessed a credible coastal defence force and it was entertaining greater ambitions. Two small cruisers had been ordered from Italy and a start was made, with Japanese assistance, on a naval air arm, primarily for reconnaissance and gunnery spotting.

These improvements in capability reflected the general tenor of Thai policy at the outset of the Second World War. Although Japan was never wholly trusted, the increasing weakness of Britain and France suggested that the time was right to secure the return of territories which had been ceded to the western powers over the preceding ninety years. Thai attempts to annex provinces from French Indo-China brought about sporadic fighting in late 1940 and RTN forces were deployed to protect the eastern coasts. These ships maintained an essentially defensive posture, remaining in anchorages at Sattahip and Ko Chang but the French viewed their presence with increasing concern. On 17 January 1941, a French task group consisting of the light cruiser La Motte-Picquet and four sloops descended on Ko Chang. The action which followed was a tactical success for France. Although French ships sustained some damage, they sank two torpedo boats, forced the coast defence ship Sri Ayuthia ashore and so damaged her sister ship Dhonburi that the latter eventually capsized while under tow. The strategic victory, however, went to Thailand. Japan intervened to order a truce and soon settled the dispute largely in favour of the Thai claims. In such an atmosphere, it was inevitable that Thailand would enter the war on Japan's side after the attack on Pearl Harbour.
Japan was able to provide the RTN with some assistance in salvaging both Sri Ayuthia and Dhonburi, although the latter ship was never again fully operational. But the progress of the war very quickly had its effect on the Navy’s efficiency. The Italian Government requisitioned both the cruisers under construction in 1941, by which time the flow of spare parts from Italy had already dried up. Similar problems were soon evident with the Japanese. A project for four more coastal submarines was cancelled and the informal assistance programmes which had developed between the RTN and the Imperial Japanese Navy ground to a halt. The low priority which Thailand was accorded in the allocation of increasingly scarce oil supplies further restricted the activities of the Thai Fleet to the point that, by early 1944, it had become moribund. Despite their inactivity, Thai forces were not spared from the air attacks mounted against the Japanese in South East Asia in late 1944 and 1945. The sloop Tachin was rendered a constructive total loss by an Allied air strike on Bangkok on 1 June 1945 and other units were damaged.

Recovering From the War

Thus, in late 1945, the RTN was in poor condition and faced an uncertain future. Thailand’s prospects for rehabilitation with the western powers were unclear, there was little or no foreign exchange and the Allies were unlikely to look on any attempts to modernise the Thai armed forces with sympathy. Neither Italy nor Japan was capable of supplying parts for the RTN’s ships, even if the money existed to pay for them. The political credit of the Navy was not high; some factions openly lamented the fact that Allied forces had not destroyed the entire fleet to save the cost of its upkeep. Nevertheless, the RTN soon opened cautious negotiations with the British for the supply of replacement ships. The visit to Bangkok in January 1946 of the Supreme Allied Commander, Admiral Lord Louis Mountbatten, indicated that the British regarded Thailand’s defensive requirements as being legitimate, albeit restricted and that some assistance might be available. For the RTN’s part, its goals were considerably more moderate than those of 1938. The Navy was eager to sustain a submarine force but it gave a higher priority to small escorts and light craft suitable for riverine and inshore work. Thus, when the British, concerned by both the financial implications and the possibility of giving "the Americans an opportunity of saying we were substantially re-arming the Siamese", chose to ignore the initial Thai request for two S class submarines, the RTN quickly took the hint. After some haggling over terms, an Algerine class minesweeper and two ex-Indian Navy Flower class corvettes were transferred in April 1947. However limited their capabilities, these ships allowed the RTN to resume at least occasional sorties into the Gulf of Thailand. The parlous state to which the Navy had been reduced was indicated by the fact that when the Commander-in-Chief ordered the Fleet to leave Bangkok in early 1947 to avoid its being embroiled in the political situation, only twelve ships - less than half the “effective” strength - were able to get under way in what was the first group movement since the war.
The Royal Thai Navy

The British need not have been concerned about the American attitude to Thai rearmament. United States links with the anti-Japanese movement which had developed in Thailand during the war were already strong. America was certainly more comfortable associating with an independent South East Asian state than it was with the local colonial powers. Although the United States had yet to develop its specifically anti-communist agenda, by late 1946 the Americans were beginning to give limited amounts of military and economic aid. The former, as remained the case for the next twenty years, was directed principally at the Army and the Royal Thai Air Force (RTAF), but the RTN was able to secure the transfer of a number of landing craft. This was followed by the donation from March 1947 onwards of three coastal minesweepers and the first of eleven submarine chasers which would be used in the patrol force.

These vessels allowed the RTN to fulfill the coastal and riverine patrol and transport tasks which constituted the Navy’s main contributions to internal security. As the situation in China and in Indo-China deteriorated, the defence concerns of Thailand turned inland and with them went the RTN’s priorities. In the absence of a naval threat, it was difficult to argue for expenditure on ocean going units when there were pressing requirements for both riverine and inshore forces to assist the Army. The corvettes and minesweeper could be maintained in reasonable condition but it was not until 1950 that the RTN attempted to conduct group training on any scale with a five ship cruise in the Gulf of Thailand.

1949-50 proved something of a renaissance for the RTN. Increasing prosperity and the government’s need to placate all sections of the military meant much improved budgetary allocations. The naval air wing was regenerated, first through the purchase of ten Firefly FR1 reconnaissance fighters and two trainers from the United Kingdom and then by the transfer of Helldiver bombers from the United States. The RTN also seriously contemplated refitting the four old submarines with new batteries, principally for training but with a view to retaining some level of expertise within the Navy for a time when Thailand could afford new construction.

The RTN also found itself embroiled in an increasingly bitter dispute with the Police, who coveted the Navy’s coast guard role and the control it conferred over smuggling and illegal immigration. Attempts to secure the RTN’s budget for coastal operations by transferring it to the Ministry of the Interior in November 1950 failed after strenuous resistance by the Navy but the Police were able to secure a compromise in which they took responsibility for inshore and coastal anti-smuggling work while the RTN was confined to deep water operations. This was clearly unsatisfactory and it laid the seeds for further conflict with the Police and their increasingly influential commander, General Phao Siyanon.
The RTN in Politics

The coast guard dispute was a symptom of the instability of the Thai government between 1948 and 1951. Coup was followed by attempt at counter coup and the RTN and the Marine Corps found themselves on the side of the conservative Democrat Party Group which had been ousted by elements of the Army in April 1948. The Marines were deeply involved in a revolt in Bangkok in February 1949 and both they and the RTN suffered in the purge that followed, although the Navy retained sufficient political strength to ensure that the effects were limited. As the months passed, the probability of a renewed showdown between the RTN and the government of Field Marshal Phibunsongkram increased steadily.\(^\text{13}\)

The Navy's concerns were not wholly domestic. What did offer potential for a wider role for the RTN was the increasing emphasis which the Western Alliance was placing on naval co-operation against the emerging Soviet threat. In view of Thailand's eagerness to support the anti-communist policies of the United States, it was inevitable that it would provide forces to take part in the United Nations "police action" in Korea in 1950, particularly as Thailand had signed a military accord with the United States the same year. The Korean war gave the RTN its opportunity and both Flower class corvettes and a support ship were rapidly despatched to the theatre of operations. The Americans appreciated the "magnitude" of the Thai contribution but soon realised that the two corvettes required refit, re-armament (the 100 rounds of 4" ammunition carried by each ship represented the entire reserve of the RTN of that type of shell) and training before they could deploy.\(^\text{14}\)

Conditions in Korea posed a considerable challenge to the Thai ships and their crews. On 7 January 1951, Prasae became separated from her task unit in a snowstorm and went aground on the Korean coast just north of the 38th parallel and in hostile territory. Despite heroic efforts to refloat her, Prasae could not be salvaged and she was destroyed by Allied forces on 13 January after her crew had been evacuated by helicopters.\(^\text{15}\) As it was in the interests of both the RTN and the United States that the Thai presence in Korea should be maintained, negotiations were immediately opened for the transfer of more modern and better equipped escorts.

These discussions were still in train when, on 29 June 1951, elements of the RTN and the Marines abducted the Prime Minister, Marshal Phibunsongkram and imprisoned him aboard the fleet flagship, Sri Ayuthia. The conspirators intended to install the Democrat Party of Khwang Aphiawong as the government but the reaction of the Army, Police and the RTAF was drastic and decisive. The combined services proved too much for the Marines ashore and, on 30 June, combined air attacks and shelling sank the Sri Ayuthia and the patrol vessel Khamrosin at their moorings and damaged two torpedo boats. With the escape of the Prime Minister from the sinking Sri Ayuthia, the rebellion collapsed and all resistance had ended by the following day.\(^\text{16}\)
The RTN in Retreat

The other services were determined to break the power of the RTN and the Marines. Had it not been for the commitment to Korea it is possible that the Navy would have ceased to exist at this point. Most of the surviving surface ships were disarmed through the removal of their breech blocks, the RTN’s budget was cut drastically and the officer corps purged of all elements not known to be loyal to the regime in power. The remaining senior officers were supplemented by appointments from outside the Navy of loyal civil servants or army officers. The authorised strength of the RTN was reduced dramatically through the wholesale discharge of two thirds of the enlisted personnel and the halting of new entries.17

The Fleet Air Arm was handed over to the RTAF and the submarines placed in unmaintained reserve, since the other services determined that the RTN’s future roles should be confined to coastal defence, minesweeping and anti-submarine warfare. The Police were allowed control of anti-smuggling and operations against illegal immigration and immediately set about establishing their own marine wing.18 The Marine Corps did not survive unscathed. It was reduced to a security battalion of only 1,000 men, reincorporated as a “naval” rather than a marine unit and moved away from the capital to the naval base at Sattahip.19 Not until 1952 would the breech blocks be returned to the RTN or any new entry sailors inducted.20

The long term consequences of these measures against the RTN were profound. The Navy had lost most of its political influence. Although individual naval officers would achieve high government rank at intervals in the years ahead, the RTN was no longer a substantial political force. It would only begin to regain ground in relation to the Army and the RTAF in the 1980s, as a wholly new generation of "post 1951" officers achieved high rank. The consequence of this situation was that the RTN’s funding remained tightly restricted. This not only limited both operations and acquisitions but forced the Navy to turn more openly towards commercial operations to support service expenditure, particularly in salaries.21 Such institutional "moonlighting" was a common activity in Thailand and one in which the other services themselves would become increasingly involved, but in the early 1950s it was a matter of survival for the RTN.

Another result was to strengthen the Navy’s links with the Americans and reinforce RTN enthusiasm for involvement in the western alliance as a means by which the RTN could find credible roles and access to cheap equipment. It was significant that the suppressive measures after the coup did not interfere with the negotiations with the USN for escorts to operate off Korea or the continuing transfers of smaller craft. On the condition that the RTN continued its deployments to Korea, two American Tacoma class frigates were transferred in October 1951 and commissioned as Prasae and Tachin. This allowed the remaining corvette, Bangpakong, to return to Thailand.22
The Navy and the Maritime Western Alliance

Thailand itself was ripe for closer association with the United States. Initial concerns over the advent of the Communist regime in China were heightened by the active role which China was pursuing in Korea and its support of insurgent movements in Vietnam. Thailand had always feared the prospect of a united and expansionist China. With communist activity in Malaya, the implication that the Chinese community in Thailand might act as a "fifth column" and the deteriorating situation in Indo-China, Thailand felt that it needed friends. In the wake of the French withdrawal and the partition of Vietnam, Thailand signed the Manila Pact in September 1954, by which the Southeast Asia Treaty Organisation (SEATO) came into being as a collective security arrangement between the western powers and the anti-communist independent South Asian states. Thailand's principal concerns in acceding to SEATO were to secure guarantees for the defense of its territorial integrity but the maritime nature of the alliance and of the South East Asian environment dictated a naval element, spurred by the increasing western fears of an increasing Soviet submarine fleet and a resurgent Communist Chinese navy.

In this atmosphere, the RTN was able to take some measures to regain the ground lost in 1951. The service began to build up to its full authorised strength and group exercises were resumed in the Gulf of Thailand. The reactivation of the Marine Corps was agreed in 1954 and given royal approval in February 1955. It was clear that the Navy required the Corps for both riverine work and to provide an amphibious capability within the Gulf and the proposal to reform the force around six battalions was not disputed by the Army, increasingly concerned with the external threat to Thailand. That the Navy was regarded with more favour became clear in November 1954 with a successful Fleet Review before the King of Thailand and a demonstration amphibious assault by the existing marine battalion. What was notable about both events was that, for the first time, they included significant contributions from other services.

From 1956 onwards, the RTN participated regularly in SEATO exercises and in bilateral work with the USN, which provided submarines for ASW training and continued to station a Military Assistance Group in country. Nevertheless, the RTN did not achieve the expansion that it wanted in the 1950s. Most of its limited share of United States military assistance was in the form of small patrol craft, landing craft and river gunboats for the Mekong River and other internal or inshore work. Repeated efforts to have the Italian built torpedo boats and the old submarines refitted for ASW training foundered through a lack of foreign exchange and the poor condition of most of the ships concerned. The RTN even briefly considered refitting Dhonburi and the old Tachin in Japan, despite the two ships' age and decrepitude and the damage which they had sustained during the war. The Navy remained hampered by an inadequate support infrastructure and the hideous stores and compatibility problems which were an inevitable result of its multiple sources of ships and its tendency to retain units on the active list well past the end of their effective service lives.
The quandary for the RTN was that it retained a residual belief in the requirement for a fully seagoing fleet for the defence of the country at a time when there was neither the domestic support nor the domestic capability to maintain such an organisation and when the United States, the major source of assistance for the Thai armed forces, did not perceive such a need as a priority. The small RTN commitments to SEATO naval exercises were warmly welcomed for the political signal which they made, but there were seen to be greater threats to Thai security than in the maritime environment.

Additions to the RTN in the late 1950s and in the Vietnam war era reflected this judgement. Some relief was given to the escort force, whose contributions to SEATO activities were hampered by the age and obsolescence of its ships, through the transfer of a single destroyer escort from the USN, commissioned as the Pinklao in 1959. The Americans were more willing to supplement the mine warfare, river patrol and amphibious forces because of their obvious utility in the Indo-China conflict and such ships constituted a significant proportion of the increasing American military assistance given to Thailand in the 1960s as a component of the intense US effort in the region. Thus, four coastal minesweepers were transferred between 1962 and 1965 and large numbers of small patrol vessels and landing craft from 1962 onwards. The RTN was also able to begin the resuscitation of its naval air wing, when ten S2 Tracker ASW aircraft were transferred by the US in 1967-68.

Such assets were needed. In addition to Chinese and Vietnamese backed insurgency in the East and North, there was an active rebel movement near the Malay-Thai border, legacy of the "Emergency" in Malaya in the 1950s combined with local Muslims' enthusiasm for separation from Buddhist Thailand. These drained the resources of the Thai armed forces. Inevitably, border and river patrol continued to occupy much of the RTN's energies as the Vietnam War went on and this brought about progressive increases in the strength of the Marine Corps, which expanded its six battalions into six regimental units, and in the numbers of naval personnel employed inland. In May 1966, the RTN also matched the Royal Thai Army's deployment of troops to Vietnam with the despatch of two landing vessels.

Realignement and the "Guam Doctrine"

When the implications of American withdrawal from Indo-China became clear with the enunciation of the "Nixon Doctrine" in 1969, there were immediate results for the Navy. The Thais could not be sanguine as to the long term chances for the survival of the anti-communist regime in South Vietnam. This raised the prospect not only of a united Vietnam and the resumption of historical Thai-Viet rivalries but a redoubled Communist insurgent effort against Thailand itself. With Laos and Cambodia also in Communist hands, the northern and eastern borders would be completely exposed. Thailand would seek peaceful coexistence with its neighbours, but strong armed forces would be essential in ensuring the country's survival untouched.
Navies in Asia

The first priority for the RTN was obviously to strengthen the riverine effort and American transfers of equipment and small craft continued, many being handed over directly from US forces leaving Vietnam. But Thailand had also to look to the Gulf of Thailand, which would no longer be dominated by the American Seventh Fleet. Modest efforts were made to rebuild the seagoing fleet, at first with American help through refits of the older frigates and orders in 1969 and 1971 for US built light frigates. But the Thais were not content to rely wholly upon America. Improved financial conditions allowed the RTN to order a new construction frigate from the United Kingdom in August 1969. Makut Rajakumarn would mark the beginning of the creation of a credible surface warfare capability for the Gulf.

The need for such a capability became more obvious as the 1970s progressed. Thailand’s maritime security was under pressure from several directions. With the fall of South Vietnam in 1975 came a flow of refugees by land and sea. These refugees required close supervision, not only to prevent disruption within Thailand itself but, in the case of the seaborne escapers, for their own protection. The over crowded and unprotected refugee boats proved easy targets for "pirates of opportunity" within the Gulf of Thailand. When raids on refugees spilled over into attacks on Thai fishermen, policing these waters rapidly became a primary task of the Navy.

Maritime Boundaries

The development of the law of the sea created new boundary disputes for Thailand at a time when over-fishing within the Gulf was becoming of increasing concern. Both Cambodia and Burma declared 200 mile Exclusive Economic Zones (EEZ), the interpretation of which was not agreed by Thailand and which affected areas of both traditional and recent Thai fishing activity. Thai fishermen were themselves ranging further afield as fisheries became an increasingly important export industry. At the same time, discoveries within the Gulf of Thailand indicated that there were considerable natural gas resources capable of commercial exploitation and, by the late 1970s, negotiations were under way with the World Bank to secure a loan to cover the costs of the venture. Apart from adding another dimension to the problem of delineating Thailand’s own EEZ, the prospect of commercial gas facilities within the Gulf also raised the requirement for their physical protection.

Furthermore, the Vietnamese Navy was being progressively strengthened by the Soviets, while the latter began to conduct operations from Camh Ranh Bay. While little naval equipment of much use had been left by the previous South Vietnamese regime, the RTN was now facing the reality of a developing naval capability superior in numbers and, in reality, technology, to anything the Navy possessed.
The RTN’s solution was to turn to missile armed fast attack craft and three were ordered from Singapore in 1973 for delivery in 1976-77, armed with the Israeli Gabriel missile.\textsuperscript{34} Not until after the fall of Saigon in 1975, however, did the Government allow further capital expenditure. Some funds were made available to take over the American facilities at Sattahip but, more importantly, as part of a general development of the Armed Forces, the Government agreed to seek 20 billion baht in foreign loans to purchase new equipment. Just under a quarter of these funds, when available, would be allocated to the Navy.\textsuperscript{35} The major immediate benefit for the RTN was to allow the order of three more missile craft, this time from Italy and armed with the longer ranged Exocet missile.\textsuperscript{36} With the commissioning of Makut Rajakumarn in 1973, the RTN was developing the nucleus of a capable surface action group.

To some extent, the Navy was enjoying the "benefits" of an improved domestic political position and the emergence of a real external threat. In 1977, when another coup was in train to bring a new military government to power, its leaders (including the next Prime Minister, General Kriangsak Chommanand) sought to broaden their power base by allowing services other than the Army a share in senior positions.\textsuperscript{37} This created a favourable climate for the RTN to attempt to move in new directions and matched the new government’s intentions to modernise the armed forces with the idea of improving military "self reliance".\textsuperscript{38} The critical element in policy development in this period for the armed forces as a whole was that they were "compelled for the first time in the twentieth century to take [their] external defence role seriously."\textsuperscript{39} It was obvious that any coherent defence policy for Thailand had to have a maritime element and this greatly strengthened the Navy’s position, at least in long term planning.

In 1977, a five year programme to develop a naval base at Phang Nga on the West Coast was announced, partly with the assistance of US funds. This would give the RTN some capacity to patrol Thailand’s disputed maritime boundaries with Burma and watch the entrance to the Malacca Straits.\textsuperscript{40} The next year, the RTN declared its intention to expand its repair facilities and develop the country’s ability to build warships. Ship construction had occurred at intermittent intervals since the 1950s but it had hitherto largely concentrated upon patrol craft of varying sizes, without attempts at fitting sophisticated sensors or weapon systems. The first step in this direction was marked by an order for a mine countermeasure support ship from Bangkok Dock.

The Threat from Vietnam

This relatively moderate staged expansion programme was overtaken by the events of 1978 and 1979. The Vietnamese invasion of Cambodia and subsequent massing of Vietnamese divisions at the border with Thailand constituted an obvious and urgent threat. Not only were there armed clashes between the Thais and the Vietnamese in June 1980, but the Soviets heightened the tension by passing a battle group centred on the aircraft carrier Minsk through the Gulf of Thailand in October-November 1980.\textsuperscript{41} The immediate response by the Navy was
THAI NAVAL AND MARINE PERSONNEL

SOURCE: COLLATED FROM THE MILITARY BALANCE, JANE'S FIGHTING SHIPS AND COMBAT FleETS OF THE WORLD. INFORMATION ON PERSONNEL STRENGTHS IS UNRELIABLE AND OFTEN CONTRADICTORY. THIS GRAPH IS AN INDICATION OF TRENDS RATHER THAN EXACT FIGURES.
limited. The nature of the threat was such that most funds, particularly the emergency assistance given by the United States, was directed to the reorganisation of the the Army towards fighting large scale conventional land battles rather than the counter-insurgency operations with which it had been primarily concerned over the preceding three decades.\

Significantly, however, Thailand's first attempts at joint military planning in a civil-military environment were made at this time under the auspices of the National Economic and Social Development Board, which set up a permanent sub-committee for Economic and Security Co-ordination at the end of 1980. This sub-committee, which included military membership, developed a threat appreciation as a basis for its forward planning which included the "worst case" contingency of an attack on Thailand by Vietnam with limited support from Laos and Cambodia. The air and naval elements of such an attack included "300 combat aircraft, 6 frigates and some 50 attack naval craft." While Thailand would clearly require external help to deal with a threat of this nature, the assessment did indicate the growing strength of maritime forces within the region and the need for Thailand to be responding to such development.

What then occurred within the RTN was the production of an increasingly sophisticated and ambitious programme for the "defence in depth" of the Gulf of Thailand. This considered the Gulf, with the increasing commitment to natural gas production and other marine activities, to require protection in all three dimensions. Planning was started for the creation of a submarine force, expansion of the naval air wing to include more modern maritime patrol and fighter/strike aircraft, doubling the number of effective surface combatants and their equipment with more sophisticated weaponry and the production of indigenous amphibious ships to replace the elderly US built units. Base and support facilities were to be modernised, as was the RTN's antiquated logistic system, and more money allocated towards improving local ship construction facilities.

This was an ambitious programme and it was, over the next decade, subject to a number of interruptions, largely through increasing costs and restrictions on funding. The idea of the Navy expanding its naval air wing to include a fighter element was not looked on with favour by the RTAF, despite the latter's reluctance to operate such aircraft over water. Within the Navy itself, there developed factions seeking to give priority to one or other component of the expansion plan. Due to the limited funding and the annual reallocation of command positions which took place within the Thai armed forces, this tended to delay commitments. The "Eastward look" of the defence in depth concept also reflected the way in which the RTN was concerned much more with the Gulf of Thailand and the South China Sea than it was with the Indian Ocean and the Malacca Straits.
## ROYAL THAI NAVY FORCE LEVELS

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**KEY:** 2 = EFFECTIVE  (2) = INEFFECTIVE

**SOURCES:** JANE'S FIGHTING SHIPS/COMBAT FLEETS OF THE WORLD/MISCELLANEOUS.
The Royal Thai Navy

The Navy had some excuse for this fixation. The 1982 Law of the Sea Convention (UNCLOS) confirmed the concept of the Exclusive Economic Zone and, while Thailand benefited to the extent of gaining an EEZ of nearly 95,000 square miles, it also lost direct access to the open sea in both the east and the west. UNCLOS magnified the existing problems of fisheries; the increasingly active Thai industry found itself becoming the source of tension between Thailand and other littoral states in the Gulf "and was the foremost bilateral problem with Malaysia." Such difficulties were never likely to escalate to outright hostilities, but they did require much greater presence and surveillance activity to protect Thai interests.

The Limits on Expansion

The limits of the Navy's political strength were demonstrated by the progress of its expansion plans between 1982 and 1984. Projects to purchase a Spanish Descubierta class light frigate and South Korean missile craft were abandoned in favour of an order in the United States for two large and highly sophisticated missile corvettes. Apart from Harpoon missiles from the United States, the RTN purchased highly capable (and very expensive) light weight torpedoes from the United Kingdom for these ships and its patrol aircraft. Three Fokker F27 Maritime aircraft were purchased from the Netherlands in 1984. In the same year, two mine hunters were ordered from West Germany, with an option for up to four more of the same class, possibly to be built in Thailand. A 3,500 ton landing ship was also ordered for construction in Thailand, while the large and small patrol built building programmes continued. These indigenous orders represented an investment in Thai development by the RTN in the face of far cheaper (and probably more timely) tenders for construction overseas.

The RTN was also pursuing closer links with other regional navies. Since SEATO had lapsed in the early 1970s, this represented an important opportunity for the Navy to compare its standards with other services than the USN, with which bi-lateral Sea Cobra exercises had continued. Thus, between 1980 and 1983, exercises began with the Royal Malaysian Navy (Thalay) and the Republic of Singapore Navy (Thai-Sing) and increased in frequency with the Indonesian Navy (Sea Garuda). Even the Republic of the Philippines Navy, which did not exercise with other ASEAN navies, occasionally operated with the RTN (Sea Philtha). There were regular passage exercises with visiting ships of the Royal Australian Navy. Cautious attempts were made at co-operation with the Malaysians over the continuing problem of piracy within the Gulf of Thailand and the two countries worked towards creating a joint approach to the refugees who continued to leave Indo-China by sea. The Training Squadron was despatched on cruises as far afield as Australia; while it continued to include aged and obsolete units (such as the Maeklong, 47 years old in 1984), the squadron gave a clear indication of the RTN's ambitions.
Navies in Asia

These activities were progress indeed but their sum amounted to greater spending than the RTN had ever been allowed before and meant that the Navy would very soon be more than fully occupied in training personnel to operate and maintain the new systems. Thus, the announcement in 1983 of the RTN's intention to buy two patrol submarines "by 1985 at a projected cost of $US 95 million each and that thereafter Thailand would build its own submarines, was greeted with considerable scepticism and disbelief". The submarine project came up against the Air Force's intent to purchase F16 fighter aircraft from the United States, a project that enjoyed considerably greater political support within Thailand. It was also being pressed at a time when the Thai government was coming to the realisation that "parity" with Vietnam in armaments was impossible and that defence spending for the "strategic defence" element, that is the active armed forces, had to be restrained in order to allow economic development. Taking a leaf from Indonesia's book, the Thai government declared that "national stability" had to be the first priority of its security doctrine.

Easing Tensions

Vietnam's difficulties within Cambodia also eased fears of outright invasion of Thailand. Security problems on the borders remained, but the country's progressive rapprochement with China acted as a counterweight to Vietnam and meant the end of active Chinese support for Communist insurgency within Thailand. Combined with continuing and strong United States support and the generally more active role of the Association of South East Asian Nations in regional affairs, Thailand's relationship with China allowed it to view the future with more confidence.

It also allowed the government to hold defence spending within reasonable limits. There was little real growth for three years after 1985 and the Thai Armed Forces would argue in 1988 that they had suffered, in reality, a drop in spending. The RTN's allocation was only just over 20% of the total defence vote and this gave it very little room to manoeuvre, considering the extent of its existing commitments. Apart from a second Thai built landing ship, there was a three year holiday in new orders. When a small increase was foreshadowed in the 1988 budget, the Naval C-in-C had to admit that "The allocation for weapons and equipment will remain unchanged as the increase will be used to provide welfare such as housing for personnel...the Navy now has to decide between a submarine and other equipment."

That choice came in September 1987 when the RTN opted for an order for three Khamrosin class 62 metre ASW corvettes to be built in Thailand with assistance from Vosper Thornycroft. Apart from the improved capabilities which these ships would bring to the surface combatant force, they were also a project much more within the range of existing Thai shipbuilding facilities than submarines of any kind. Even the Police would eventually follow the RTN's example with an order for a simplified version of the class in 1989.
The Royal Thai Navy

The RTN began to feel that there were other ways around its problems of achieving the force levels it required on a limited budget. At the same time, the "defence in depth" concept was taken a step further. The Navy argued that it should assume entire responsibility for protection of the Eastern Seaboard from seaborne attack and sought assistance from overseas firms to develop an integrated defence system. Given the reduced insurgency problem, this would provide a new and challenging role for the Marine Corps in both fixed defence duties and amphibious warfare and a justification for the fighter/strike force which the Navy still wanted. Cabinet gave the RTN agreement in principle for the concept in April 1988, although this did not amount to approval for any expenditure.\(^5\)

High-Low

The RTN viewed the scheme as its justification for the "high" element of what was coming to be a "high-low" approach to force structure planning. The key to the "low" component would be China. The Thai Army had been quick to use China as a source of cheap arms purchases and both RTN and RTAF were now looking at the possibilities. The Air Force, accustomed to Western equipment, soon turned away from such proposals but the RTN decided that China's offer of cheap frigates offered an opportunity - at something like a sixth of the cost of Western combatants - to secure sufficient numbers of patrol and training frigates to replace the aged Japanese and American built units which remained in service.\(^6\)

It is likely that the RTN envisaged these four ships as only the first of a wide range of purchases from China. Dissatisfaction with the German built minehunters brought interest in Chinese minesweepers\(^6\) and there were indications that the Chinese were prepared to make Romeo class submarines available.\(^6\) In 1989 the RTN went a step further, ordering two frigates to be built in China but which would be fitted with Western sensors and weapons on arrival in Thailand.\(^6\)

Thailand's economy was booming and its gross national product growing rapidly. The armed services, believing that they had hitherto been restrained in their spending in the national interest, were determined to secure their share and 1989-91 saw the RTN propose several other ambitious projects, most connected with the coastal defence conception. A Coast Guard Squadron was set up in April 1989 as an experiment and allocated a frigate, as well as smaller patrol vessels and surveillance aircraft. The RTN had intended to update its small fleet of Tracker maritime patrol aircraft, but this proved impracticable due to their age and the Navy then sought P3 Orion aircraft from the United States.\(^6\) The difficulty, as ever, was funding and this also affected the RTN's schemes for integrated defences on the Eastern Seaboard\(^6\) which were now coming into direct competition with an equally ambitious RTAF programme for an integrated air defence system in the south.\(^6\)
Uncertain Priorities

By this point, some confusion was evident in the RTN and its planning processes, probably the result of continuing factionalism. While the submarine project remained a vague long term commitment, the RTN was pressing for the creation of a fighter wing based around up to 30 A7 Corsair II aircraft and inquiring about the possibilities of securing surplus frigates and guided missile destroyers from the USN. Other projects included proposals for three enlarged Thai-built corvettes and even the possibility of destroyer or frigate construction in country. The cost and personnel implications of all these schemes remained unstated. Furthermore, the Eastern Seaboard programme included a large component of equipment, such as light tanks and mobile artillery, required for the Marines as they integrated their existing regimental organisation into an "all arms" division.

Creating concerns outside the RTN was yet another project, that for an amphibious unit which mutated by stages from a landing platform dock with a helicopter capability to a German "helicopter support ship" of 7,800 tons and thence to an order in Spain for a 12,000 ton straight deck helicopter carrier with obvious potential for V/STOL aircraft. By 1992 it was clear that this project has assumed the highest priority within the Navy but what was less obvious was the RTN's justification for the ship. It had outgrown not only the initial conception of an amphibious vessel for Marine Corps operations - smaller units would be more useful in the operating environment - but also the suggestions that it would be a useful vessel for disaster relief operations in the south of Thailand. These had some merit in the wake of a 1989 typhoon in the area but the same arguments of scale applied. That the Navy might have another agenda was indicated by repeated comments about the need for naval aircraft for operations, obvious interest in the Harrier and the size of the design finally settled upon.

Apart from the obvious unhappiness of the RTAF at the prospects of the Navy acquiring organic fixed wing aircraft - at unit prices which rivalled those of their own F16 - other nations in the region were concerned at the acquisition by Thailand of a ship which represented the first maritime "power projection" unit to be operated by a member of ASEAN. It was difficult to place the carrier in a sensible operational context for either the East or West coast.

Towards 2000

The uncertainties over the helicopter carrier project reflected the uncertainty with which the RTN faced the future in 1992. While it had not been directly involved in the suppression of the popular movement in Bangkok, the reaction to which brought about a return to civilian government and new elections, it did share some of the oprobrium which now attached to the military. While the armed forces would be treated very gently by the new government, it was clear that there would be restraints on the budget for the immediate future.
The Royal Thai Navy

Such restraints accentuated the problem of force structure distortion in which the RTN was in danger of entangling itself. The helicopter carrier and its airborne assets had to come at the expense of other arms of the Navy. Despite the requirements for maritime patrol aircraft, an agreement had yet to be secured for the transfer of Orions and the three Fokker F27 maritime aircraft represented the core of the effective surveillance force. The Chinese frigates had proved much less than satisfactory in practice, largely due to the very poor quality of their construction, and there were doubts as to their utility even as simple patrol craft. Although a building programme of coastal patrol craft was still underway, it was doubtful as to whether the RTN possessed sufficient offshore patrol vessels. New boundary and joint exploitation agreements with Malaysia and Vietnam in 1990 offer the prospect of even greater activity in the Gulf of Thailand.

The Eastern Seaboard concept had the risk of drawing the RTN away from its proper concerns with protecting assets in the Gulf of Thailand and in the Andaman Sea and neglecting the question of commerce protection. Despite the oil and gas reserves within the Gulf and the oil deposits in the north of Thailand, the country imports more than 70% of its energy requirements and the oil required has to come through the Malacca Straits and the South China Sea. The subject of its protection has yet to receive comprehensive treatment.

The achievements of the RTN in the last fifteen years are considerable. It has created a capable surface combatant force and a fast developing indigenous shipbuilding capability. Serviceability and operational standards have improved by orders of magnitude. The challenge now for the Royal Thai Navy is to focus its planning efforts on the production of a force structure which not only meets Thailand’s perceived security needs but is seen as a contributing to the security of the region as a whole.
Navies in Asia


2. "Visit of USS Petrel to Bangkok, February 1892" US National Archives. Office of Naval Intelligence. RG 38 Entry 98, Box 1274 - Register 6765.


7. See ADM 116/5557 in the Public Record Office, Kew for the lengthy discussions in 1946-1947 on transfers to Thailand.


12. ONI Review Vol.6, No. 4, April 1951. p.159.


33. Ibid. p. 179.


35. Ibid. p. 238.

36. The order was for 12 Exocets. Ibid.


40. There were accusations that this base was intended more as a US naval facility for the Indian Ocean than for Thai use, although this ignores the obvious Thai requirement for a West Coast presence. See Malcolm Caldwell "Foreword" in David Elliott *Thailand: Origins of Military Rule* Zed Press, London, 1978.


44. Stuart Slade "Thailand's Push to Blue Water" *Naval Forces* June 1990. p.76.


51. The Training Squadron visited Fremantle in Western Australia in 1984.


54. International Institute for Strategic Studies The Military Balance See 1986 to 1988 editions. Note, however, that the nature of the Thai budgetary process and the existence of "Secret" funds make it difficult to assess such figures correctly.


Navies in Asia


The Royal Malaysian Navy (RMN) is a service under strain. While it has developed an increasingly comprehensive view of its roles and functions, it has struggled in the last decade to overcome a mismatch between the resources devoted to it and the tasks it is required to do. The Navy has long sought to acquire multi-dimensional capabilities, combining sub-surface, surface and helicopter forces into a force structure designed for its archipelagic environment. To these assets must be added a considerable coastal and offshore patrol force. With presence and surveillance as the first priorities, the RMN has had to accept that at least one leg of its warfare "tripod", the sub-surface capability, remains outside its capacity.

It is an exaggeration to state that the RMN must choose between its war fighting role and the requirement to patrol a large exclusive economic zone but it is no exaggeration that Malaysia faces some hard choices in allocating its resources to meet its security needs, both internal and external. With diminishing insurgency and a reducing perception of a threat "down the Malay peninsula", Malaysian defence planning is likely to see a progressive shift in emphasis towards the maritime sphere. The RMN will face the challenge of managing this shift in such a way that it enjoys sustained development, rather than the somewhat fitful expansions which it has experienced to date.

Beginnings

The Royal Malaysian Navy traces its origin from the "Straits Settlements Royal Naval Volunteer Reserve (SSRNVR) which was established in Singapore on 27 April 1934. This small force was intended to assist the Royal Navy with the local defence of Singapore. From 1936 the SSRNVR had its own headquarters ship, HMS Laburnum. The last few years before the outbreak of war in 1939 saw the SSRNVR expand to more than 800 personnel, comprising a balance of Malay and Chinese ratings with British officers.\(^1\) With the diversion of Britain's naval and military to resources to face Germany, the SSRNVR offered obvious local potential and this was recognised on 4 September 1939 through the establishment of the Royal Navy (Malay Section) [RN(MS)] using a nucleus of volunteers from the SSRNVR. At the same time, the roles of the reserve force were expanded to include protection of the entire peninsula. A second unit was established in Penang and the SSRNVR was renamed the Malayan Royal Naval Volunteer Reserve (MRNVR).\(^2\)

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Navies in Asia

By December 1941 there were more than 1400 personnel in the RN(MS) and MRNVR and they played a gallant role in the defence against the Japanese, suffering more than 200 casualties. Although many personnel remained in country after the fall of Singapore (some in resistance and "clandestine" units) about 150 officers and men escaped to Ceylon and were employed on duties around the Indian Ocean until the Japanese surrender in 1945. By 1946 more than 600 "had reported back". Shortsighted economic measures forced the disbandment of both RN(MS) and MRNVR in April 1947 but, within twelve months, the Admiralty and the Colonial Office had agreed to the reactivation of a naval organisation in Malaya. This was the most appropriate means by which Singapore could contribute to the general defence of the peninsula without arousing Malay sensitivities through the creation of large non-Malay ground forces.

The new navy again comprised two separate but interdependent units, the Malayan Naval Force (MNF) and the MRNVR. The Malayan Naval Force Barracks was established at Woodlands on Singapore Island and the Royal Navy handed over on indefinite loan a small force of ships comprising a maintenance landing craft, a landing craft (gun), a small minelayer and seven seaward defence motor launches. The latter would be the backbone of the service’s patrol forces for the next decade. The RMN’s first commander, Captain G.H. Nicholls had the foresight to plan for a navy far bigger than the initial target of 750, considering that 3,000 officers and men was a more likely force for the naval defence of Malaya and he planned the development of base facilities and training programmes on that basis. When rapid expansion was required in the 1960s, this approach greatly simplified the associated problems.

Recruiting for ratings began in 1949 but it was not until 1953 that the first two "local" officers were commissioned and only in 1954 were cadets sent for training in the United Kingdom. By this time, the MNF had been redesignated the Royal Malayan Navy, flying the white ensign. A modest local building programme began in 1954 with the laying down of a modified FORD class seaward defence vessel, which was completed in 1956. Named PANGILIMA, this ship served as an ASW and seamanship training platform for many years. A women’s division (the Singapore Women’s Auxiliary Naval Service or SWANS) was formed in 1956.

The RMN’s small craft proved a useful supplement to the British and Commonwealth naval forces during the Emergency operations against Communist insurgents, although their role was necessarily a small one. What was important for the future of the Navy was that a deliberate policy of cross training was adopted, with officers and ratings being lent to major RN, RAN and Royal New Zealand Navy units during local operations and major exercises. This allowed RMN personnel to become at least superficially accustomed to larger ships than the force then possessed.
The Royal Malaysian Navy

The Admiralty's intention was that the RMN would become the naval service of the federation of the states of Malaya which was under consideration in the 1950s. It was obvious that such a federation would be dominated socially and politically by the Malays. Although the latter had developed considerable pride in the all-Malay, Royal Malay Regiment, the RMN was seen as a wholly Singaporean organisation and was thus viewed with suspicion. To the alarm of the British, the Prime Minister of Malaya, Tunku Abdul Rahman, who would hold the same office after independence, indicated that the new nation would want nothing to do with the RMN, preferring to form its own service from scratch with a base at Port Swettenham. The inefficiencies and divisiveness implicit in such an arrangement were clear and the local British flag officers waged a firm and eventually successful campaign to ensure that "this splendid little force" would form the nucleus of any future "Malaysian" service.\(^8\)

The Royal Malayan Navy

That came on 12 July 1958 when the personnel and assets of the RMN were transferred to Malaya and the Federation assumed full financial control from Singapore on 1 January 1959. Despite the RMN's new existence as the navy of a sovereign nation, its links to the Royal Navy remained strong. As part of the package, the British provided a grant in aid of four million pounds, including a modern coastal minesweeper and four inshore minesweepers, permitting the retirement of some of the old SDMLs. In addition, British and Australian naval officers and technical personnel were seconded to the RMN to provide a core of expertise while RMN personnel were selected and trained.\(^9\) Until 1967 command of the RMN would be vested in either an officer from the RN (the first) or the RAN (his successors).

Administrative arrangements were initially simple. The Commander of the RMN, a title which was redesignated "Captain of the RMN" in 1960 with the arrival of Captain W.J. Dovers, RAN, also functioned as Deputy Chief of Staff (Navy) within the Malaysian Defence Establishment. Dovers abandoned the practice of exercising command of the RMN from Woodlands and joined the existing nucleus staff in the capital in Kuala Lumpur.\(^10\) This made obvious sense for the Navy's long range planning and liaison with the government. The Singapore connection was kept through the MRNVR maintaining a separate local division, a force which was to assume new importance after the later separation of Singapore from the Federation of Malaysia.

The future roles and structure of the RMN were subjected to close examination as the likelihood of a successful Federation of the various extra-peninsular states increased. Given the long coastline involved, and the difficulties of communications over land, it was clear that the RMN would, for the immediate future, concentrate on coastal defence, anti-smuggling and anti-insurgent operations. The considerable British naval presence in the region meant that there was no urgent need for larger ships. The government's thinking had initially moved in this direction. Even in 1964, after the start of Confrontation, the then Minister of Defence, Tun Abdul Razak,
declared that the Malayan defence task was "to help our Police in the maintenance of law and order inside our country and inside our territorial waters and to undertake close defence of our country should there be any minor (italics supplied) aggression against us."  

The prospect of having Singapore, Sabah and Sarawak added to the armed forces' defence responsibilities indicated that the RMN's goals must become more ambitious. Apart from the increased coastal defence requirement (the coastline to defend would double), there was now the need for the protection of sea communications between the dispersed states. Tun Razak's belief that the new Federation should possess the forces to deal with minor aggression lent credence to the possibility of the Navy acquiring an ocean going capability for trade defence. Thus, when Federation came on 16 September 1963, the new political entity required not only a change in the name of the RMN to the "Royal Malaysian Navy" but redefinition of its future.

Federation and Confrontation

As Captain of the Navy from 1960-62, Dovers produced a scheme in the form of Plan "Maiden". Although rapidly overtaken by events after Indonesia had declared her opposition to federation and her intent to "Crush Malaysia" by armed action, this plan envisaged a progressive expansion of the RMN based around a force of 1500 men and a fleet consisting of two squadrons of fast patrol boats, a squadron of fast attack craft and extra minesweepers. Execution of the plan was divided into two phases, with the patrol craft to be acquired first and the attack craft later. In due course, the RMN would move up to a light frigate. The assumption underlying the plan was that "Malayanisation" should take place as soon as possible, with the minimum use of expatriate contract personnel, and it was intended that an RMN officer should be commander of the Navy by 1970. Under the pressure of Confrontation, "Maiden" mutated into Plan "Dynamo", which was completed in 1963 and itself underwent a series of revisions in 1964 and 1965. The effect of these revisions was to speed up the planned expansion in small craft and add amphibious vessels for co-operation with the Army but the acquisition of larger units would still be limited to those required for training.

The RMN was able to secure the transfer of a Loch class frigate from the Royal Navy in 1964. This ship, renamed Hang Tuah, was refitted with a helicopter deck and VIP accommodation for use by the King of Malaysia and the Cabinet. Its real purpose for the RMN was to provide a platform for training but possession of the Hang Tuah and her facilities had an undeniable appeal to the government, Tun Razak remarking that a frigate was necessary "for the sake of dignity and also for the sake of our country". Purchase of new construction units had a lower priority, particularly as it became apparent that contemporary RN frigates were too large and expensive for the RMN. Negotiations were opened with British shipbuilders for alternative, more economical designs.
In the meantime, the RMN's heavy commitment to Confrontation patrols was recognised by further transfers of coastal minesweepers in 1964 and by successive buys of fast patrol craft. Six *Kedah* class boats had been ordered in September 1961 and in 1963, as these vessels were entering service, four more were ordered. Until this point, the RMN's acquisitions had been confined to vessels configured for surveillance but, in November 1964, four fast attack craft were ordered from the United Kingdom. Since these very fast vessels could be configured to carry torpedoes or mines (as well as small numbers of personnel for clandestine operations) they marked the beginning of an offensive capability in the RMN.

The Separation of Singapore

Singapore had proved the wildcard within the Federation and deteriorating political relations between the Malays and the Singaporean Chinese soon reached the point that their leaders agreed that the secession of the island from the Federation was the only solution. Separation was not such a simple matter for the RMN. Apart from the need to allot ships, personnel and facilities to the newly independent state, the RMN had to face the prospect of losing its major operational base. In a compromise between the governments, it was agreed that Woodlands would remain an enclave within Singapore, with Malaysia paying Singapore a nominal rent. Although the Singapore division of the Reserve was immediately incorporated into Singapore's embryo defence forces, the RMN was naturally reluctant to release active personnel and patrol vessels until Confrontation had ended. Not until May 1967 was the separation of naval forces finally completed with the transfer of the patrol vessel *Panglima*.

Further Expansion

The *Kedah* type of fast patrol boats proved so useful in Confrontation operations and in general work around the coasts that the RMN ordered fourteen more, slightly improved *Kris* class units in 1965. Two more *Ton* class coastal minesweepers and two *Ham* class inshore minesweepers were transferred in 1966 to offset the disposal of the original four *Hams*, whose wooden hulls had deteriorated beyond economical repair. Less satisfactory was the progress achieved with larger ships. The RMN proposed to develop a force of three frigates primarily configured for anti-surface ship operations as the basis for the defence of communications between east and west Malaysia. Despite the naval staff's "strongest representations", the Government would allow only the order for a single 1600 ton frigate from the United Kingdom in 1966. This was a relatively advanced design, in which the Yarrows, the shipbuilders, were attempting to produce a general purpose frigate within a small hull, incorporating modern weapon systems such as the *Secat* missile and combined diesel and gas propulsion. At four million pounds, the new *Hang Jebat* seemed the answer to the RMN's requirements and limited budget. The venture was not, however, an immediate success. *Hang Jebat* was the first of her kind, Yarrows had no previous experience with the design and neither the shipbuilder nor the RMN could rely upon the existence of RN expertise in problem solving. Construction should
have taken little more than two and a half years; the ship was not completed until the middle of 1971, by which time her name had been altered to Rahmat in an attempt to change her luck. The affair was the cause "of many harsh words and bitter relations" and it was to colour the RMN’s attitude to Britain as a source of new construction ships for years to come.22

After Confrontation

The effective end of the conflict with Indonesia in August 1966 provided a much needed breathing space for the RMN, which had expanded rapidly in the previous few years. Continuing problems with Communist insurgents in north Malaya and unrest elsewhere within the Federation imposed a steady patrol requirement but the RMN could now plan for a navy which was not completely committed to anti-infiltration work. It was appropriate that the first Malaysian Chief of Naval Staff, Commodore Karalasingam Thanabalasingam took office on 1 January 1967.

The uncertainty was the future role of the British. The Malaysian government did not seriously expect a continuing large scale British presence to continue for more than a decade after the end of Confrontation23 but the sudden British announcement of complete withdrawal in July 1967 came as a shock. In the complex negotiations that followed between the Malaysian and Singaporean governments and the British, Australians and New Zealanders which finally produced the 1971 Five Power Defence Arrangement it was fundamental that, whatever the outcome, the RMN would be required to play a much more active role in external defence.

Thanabalasingam appreciated that the RMN’s capacity for rapid expansion was limited. Furthermore, despite any requirement for self reliance in defence policy, continuing internal security problems dictated that the government would have the Army as its first priority and that the RMN would be required to maintain a substantial inshore and riverine patrol capability.24 He realised, however, that Malaysia’s operational environment was suitable for small craft and that contemporary developments in surface to surface missile technology would allow the RMN to create a cheap but capable force of attack craft as a "coastal defence" capability.25

The RMN would also require new mine warfare units but, most important, it needed a new fleet base away from Singapore which would be capable of supporting the future expansion of the Navy. The facilities problem would be partially solved by the creation of a shipyard capable of building and repairing warships and a joint venture was begun at Sunei Nyior near Penang, involving the West German firm of Lurssen. Although this made an uncertain start, the RMN agreed to commit itself to using the facility in the long term. In 1971 initial entry officer training, which had largely been conducted in the United Kingdom, was patriated. Officer and sailor training was combined in the Cadet and Recruit Training Establishment and commissioned as KD Pelandok in August 1971.
ROYAL MALAYSIAN NAVY FORCE LEVELS

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<tbody>
<tr>
<td>FRIGATES</td>
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</tr>
<tr>
<td>ATTACK CRAFT</td>
<td>-</td>
<td>4</td>
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<td>14</td>
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<tr>
<td>PATROL CRAFT</td>
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<tr>
<td>OPV</td>
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<tr>
<td>SUPPORT</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>5</td>
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SOURCE: JANE'S FIGHTING SHIPS
What had not been decided was the location of the fleet base itself. The RMN favoured a site on the west coast of Malaya at Lumut, but there was political pressure in favour of a site on the Johore Straits. Apart from the proximity to Singapore, this would mean that the Malaysians would have no case for retaining Woodlands once the fleet base was complete. In these circumstances it made more sense to create a wholly separate facility.

Thanabalasingam's initial plans were largely overtaken by the government's reaction to the serious internal disturbances and riots which took place in May 1969. Malaysia embarked upon a large scale expansion of its armed forces, not confined to the Army. Rather to his surprise, Thanabalasingam was directed to increase the strength of the RMN by 30% over the next three to four years, but the most significant development was that the purchase of missile armed attack craft was authorised. The RMN had been closely interested in the development of the Exocet missile in France and it adopted a two stage approach. Six Exocet armed La Combattante IID were ordered in August 1970 while a programme was started to equip the four Perkasa class fast attack craft with the SS-12 missile as an interim capability. The RMN began to practice anti-surface ship tactics and was able to attempt this in the sophisticated environment of the massive five power exercise Bersatu Padu in June 1970.

The problem of the future fleet base was resolved in 1971 by commissioning a firm of consultants from West Germany to produce an independent study and this found firmly in favour of Lumut. Detailed planning began in 1972 and construction started in 1973. The 1800 acre development was planned as a total package for the RMN, combining fleet base, training establishments and naval dockyard. Work was sufficiently advanced for the schools to open at Lumut in 1979. They were to be followed by the Fleet Commander and the Fleet Operations Centre in 1983 and the entire facility was operational by 1986. In 1972 plans were also made for the construction of an advanced base at Kuantan to cover the South China Sea and this was completed in 1981.

Towards a Concept of Regional Defence

The next decade saw two related developments as the RMN found its place in Malaysia's strategic framework. The first was the achievement of closer military relations with some of the country's neighbours. Seven RMN units under the command of (now) Rear Admiral Thanabalasingam visited Indonesia in 1970 and this venture was followed in 1971 by proposals from the Indonesian Chief of Naval Staff for "a joint naval exercise in the Malacca Straits to foster better relations and co-operation". The first of what became the annual Maliindo series of exercises was held in 1972 and they provided the basis for the progressive development of joint procedures and further co-operation. Indonesia and Malaysia began to negotiate a series of arrangements for co-operative anti-piracy and anti-smuggling patrols, which notably came to include provision for the hot pursuit of suspect vessels into each other's territorial waters. Although relationships with the Royal Thai Navy (RTN) took longer to mature (the first formal
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bi-lateral exercise was not held until 1979)\(^{34}\), they were nonetheless cordial. The exception to this process was the Philippines. Incidents in 1968 and Filipino claims on Sabah created tensions between the two countries which took time to resolve.\(^{35}\)

The pace of progress with Indonesia may have been driven by the perception of the two countries' mutual interests in the Malacca Straits. The busy waterway was assuming greater strategic significance as the amount of traffic increased year by year and this was recognised by the establishment of the Malacca Straits Council in 1968, comprising the littoral states and Japan. In 1969, Malaysia extended its territorial sea from three miles to twelve. A small hydrographic service was already in being and this received a considerable boost in 1969 when the RMN purchased from the Royal Navy a Ton class minesweeper adapted for surveying duties. The advantage for the RMN was that there were funds available from the Straits Council to conduct surveys in the Malacca Straits and the Navy's control of Malaysian hydrography and oceanography was formally recognised by the cabinet in 1972.\(^{36}\)

Further Expansion - More Demands

A second, much enlarged survey vessel was ordered in early 1975 from Hong Leong Lurssen in Butterworth. It was indicative of the increasing sophistication of Malaysia's nascent shipbuilding capability that this ship took less than three years to complete. Naval use of the consortium's facilities had been set in motion in 1972 when the RMN ordered six fast patrol craft. In the same year, and after further disputes between the RMN and the shipbuilders, the frigate Rahmat finally arrived in country.

The RMN in the mid 1970s had achieved considerable progress but it was not without its problems. Recruiting and retention of sufficiently skilled technical personnel remained a constant difficulty. Rahmat's late arrival had limited the Navy's practical training effort and expertise in offshore operations remained low. The Navy was also becoming aware of a block obsolescence problem. Both Hang Tuah and the Ton class minesweepers were ageing and would require replacement in the near future but the process was unlikely to be cheap, particularly for mine countermeasures vessels.

At the same time, the operational demands on the Navy were increasing. After the occupation of South Vietnam in 1975, a stream of refugees began to make their way south from Indo China. Apart from the "multifarious problems" which the arrival of these boat people caused Malaysia, monitoring their passage, rendering assistance and - above all - preventing fishing craft from turning into 'pirates of opportunity' within Malaysian waters "placed a heavy burden" on the RMN.\(^{37}\) The long term consequence for the Navy was that it delayed the reduction of the patrol boat force in favour of the larger combatants and offshore patrol vessels which the RMN now required.
# ROYAL MALAYSIAN NAVY - ACQUISITIONS

<table>
<thead>
<tr>
<th>FIVE YEAR PLAN</th>
<th>DATE</th>
<th>TYPE</th>
<th>FRIGATE</th>
<th>OPV</th>
<th>SUBMARINE</th>
<th>ATTACK CRAFT</th>
<th>PATROL CRAFT</th>
<th>SUPPORT</th>
<th>MCM HELICOPTER</th>
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<tr>
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<tr>
<td>2</td>
<td>1971-75</td>
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<td>4</td>
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<td>1976-80</td>
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<tr>
<td>4</td>
<td>1981-85</td>
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<td>2(2*)</td>
<td>2(1*)</td>
<td></td>
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<td>1</td>
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<td>4</td>
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<tr>
<td>5</td>
<td>1986-90</td>
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<tr>
<td>6</td>
<td>1991-95</td>
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<td>2</td>
<td>(6)</td>
<td>(4*)</td>
<td>(6)?</td>
<td>-</td>
<td></td>
<td>6</td>
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<tr>
<td>7</td>
<td>1996-2000</td>
<td></td>
<td>(6)</td>
<td></td>
<td>(4*)</td>
<td>(6)?</td>
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<td></td>
<td>(4) (18)?</td>
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<tr>
<td>8</td>
<td>2001-05</td>
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<td>(6)</td>
<td></td>
<td></td>
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<td>(18)?</td>
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<td>9</td>
<td>2006-10</td>
<td></td>
<td>(6)</td>
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<td>(4)?</td>
<td>(12)?</td>
<td>-</td>
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</table>

**KEY:** 2 = COMPLETED  (2) = PROJECTED  (2*) = PROJECTED BUT CANCELLED
Some acquisitions were, however, possible. Two tank landing ships were transferred from the United States in 1974 to act as support ships for light forces. A further four Exocet armed fast attack craft were ordered in 1976, this time from Sweden. The order was the subject of some controversy, largely because of political feeling that the ordering process had been shrouded in secrecy, but the government dealt harshly with such criticism. The Leader of the Opposition was tried and convicted under the Official Secrets Act in 1978 for "the receipt and communication of information about the official specifications" of the four ships.\(^3\)

In 1977, the United Kingdom offered Malaysia an "opportunity buy" of a small frigate, originally built for Ghana. This very simple ship, while adding little to the fleet’s combatant capabilities, was a useful training platform and it was quickly purchased, taking the name of the old Hang Tuah which was sold for scrap.

Uncertainty in Indo China

The defeat of South Vietnam had been accompanied by other disturbing developments, particularly China’s assertion of its claims to islands in the South China Sea. China’s willingness to employ force in territorial issues was of considerable concern to the RMN. Malaysia was developing a case for claims in the Spratlys which she was determined to assert. Although the government adopted a policy of rapprochement with China, becoming the first ASEAN state to recognise the People’s Republic in 1974, the People’s Republic remained a factor in Malaysia’s threat assessments. In December 1978 a new element was added to the equation with the Vietnamese invasion of Cambodia. This raised the prospect of Vietnam as the regional hegemon and Malaysia began to fear that Thailand would be the next to fall, followed by an overland invasion of the Malayan peninsula.\(^3\)

In 1979, the Deputy Defence Minister announced a new long term plan (PERISTA) for the expansion of all the armed forces which would be incorporated within the regular series of Five Year Plans, the fourth of which would begin in 1981. PERISTA gave obvious priority to the Army for the defence of Malaya but it recognised the maritime element and contemporary developments in the law of the sea. The Malaysian Armed Forces were to acquire capabilities which would include:

a. a nucleus conventional capability to defeat limited external aggression and act as a holding force in the event of major aggression until external assistance could be obtained;

b. conducting simultaneous operations in Malaya, Sabah and Sarawak;

c. securing the lines of communications between the states of Malaysia; and

d. Protection of Malaysia’s offshore interests.\(^4\)
Navies in Asia

New Capabilities for the Navy

The declaration of the Armed Forces' capabilities marked the recognition of the new approach which was being taken by Thanabalasingam's relief as Chief of the Navy, Rear Admiral Mohammed Zain bin Mohammed Saleh who declared in 1980 that "the Navy must change its present operational concept from that of coastal patrolling to that of ocean surveillance." In the same year, Malaysia formally declared its claim to a two hundred mile exclusive economic zone, a claim which encompassed much of the disputed Spratlys and covered a zone of nearly 600,000 square kilometres in size. The RMN was able to acquire responsibility for the zone outside the 12 mile limit and prevent the creation of a separate coast guard, despite the existence of capable and growing Police and Customs forces (the Police marine force included fast patrol boats up to 39 metres in length). The rationale was simple. Many of the RMN's assets (OPVs and fast patrol craft) were distinctly "coast guard" in their operational roles and would be transferred with their crews and support services to any new service, reducing the Navy's strength markedly. While there could be advantages in losing the demanding and resource intensive surveillance role, the loss of personnel and assets could have very traumatic results, reducing the RMN's capacity to train and expand.

Zain's concept of an oceanic RMN centred around a plan for the acquisition of two logistic support ships, four corvettes, new mine countermeasure vessels to replace the aged Ton class and, in the long term, submarines. Orders for the support ships were placed in 1979 and 1981. In February 1981, the RMN arranged for the construction of two corvettes in Germany and four minehunters in Italy. All three projects proceeded smoothly, with the corvettes entering service in 1984 and the minehunters in 1985.

Five Power Co-operation

1981 saw the revitalisation of the Five Power Defence Arrangement (FPDA), partially at the instigation of the Australian government which saw an increasing need for solidarity in regional defence as a response to the adventurism which was then being displayed by the USSR in South Asia. From this year onwards, the Starfish series of exercises was conducted, generally involving all the FPDA states. Starfish exhibited a progressive increase in size and sophistication and soon became an important exercise for all players.

Arrested Development?

The difficulty for the RMN was that further implementation of Perista proved impossible because of a recession which Malaysia experienced in the 1980s and which took progressive effect as the decade went on. There were insufficient funds to purchase the planned additional pair of corvettes or a second batch of mine countermeasure vessels. The RMN exhibited some lateral thinking in the diversion of lead items which had been pre-ordered for the cancelled
The Royal Malaysian Navy

corvettes to a pair of much cheaper offshore patrol vessels and this eased the shortage of ocean
going surveillance units. But these two units proved to be the only new construction ordered for
the RMN until 1992. Much was said about prospects for the expansion of the RMN but the
reality was otherwise.

The result was a problem of block obsolescence of increasing proportions which
continues to bedevil RMN planning. A half life programme for the fast patrol craft could not
disguise their increasing age or the need for their replacement. Other arms of the RMN were
also ageing. The way in which the problem developed between 1981 and 1991 is indicated
below:

<table>
<thead>
<tr>
<th></th>
<th>Average Age 1981</th>
<th>1991</th>
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<tbody>
<tr>
<td>Frigates/Corvettes</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td>Fast Attack Craft</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Fast Patrol Craft</td>
<td>15</td>
<td>25</td>
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It was this issue which was to determine the direction which the RMN eventually took
in 1991 but the process was not easy. Faced with the reality that most other maritime powers
within the region were modernising their naval forces, the RMN appreciated that its maritime
warfare capabilities were fundamentally "one legged". The Naval Staff generated two
requirements, first for a submarine force of (in the long term) eight units, initially based at
Labuan with direct access to the South China Sea. The second was for a two squadron force of
medium anti-submarine warfare (ASW) helicopters.

The difficulty was fitting both requirements within very limited budgets. The government
signalled its assessment that the geo-strategic situation had improved and that Malaysia's first
concerns should be internal security and development by sharply restricting the growth of the
armed forces allowed within the 1986-90 Five Year Plan. The RMN itself was hit by "swingeing
cutbacks" in the 1986 defence vote which limited its options even further.

The South China Sea Factor

Nevertheless, the Chief of Navy from 1986, Vice Admiral Abdul Wahab bin Haji Nawi,
pressed the RMN's requirements to prepare for contingencies within the South China Sea,
formulating a concept of "forward defence" which had as its key element a submarine force
"since surface ships will find it difficult to survive in the face of enemy air superiority." He
had considerable evidence to back the RMN's case that the situation of the Spratlys was
becoming more uncertain and increasingly complicated. Malaysia itself had begun to place troops

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Navies in Asia

on islands within its claim in 1983 (Layang Layang Reef) and followed this with amphibious exercises. Further commando units would be placed on other islands in 1986 (Ubi and Mantanani Reefs) to strengthen Malaysia’s position.

The key element within the RMN’s calculations was initially China, whose possession of large scale but unsophisticated forces made the "high technology" solution of a small deterrent force of submarines all the more attractive to a Navy which had no hope of ever matching Chinese numbers. The progressive rapprochement of China and the USSR raised the prospect of China diverting resources to its Navy (PLA-N) to secure its southern waters. As the 1980s wore on, more evidence emerged to support this view, both in the form of Chinese rhetoric and the PLA-N’s activities. In February and March 1988 there were exchanges of fire between Chinese and Vietnamese ships in the vicinity of the Spratlys. Malaysia “announced that it would intensify patrols” in response and soon after was involved in its own dispute, albeit diplomatic, with the Philippines over fishing rights.

These exchanges came when Malaysia was facing the prospects of a United States’ "draw down" in the Western Pacific and the consequent removal of the de facto “umbrella” of maritime security which had been provided by the American Seventh Fleet. The maritime balance was changing, not necessarily in Malaysia’s favour. To the west, India was pursuing a more active security role within the Indian Ocean; this posed no direct threat to Malaysia but it did add further uncertainty to the future.

Fighting for a Submarine Force

The route which the RMN chose in attempting to create new capabilities was to seek second hand transfers from friendly powers as a prelude to purchasing new construction. The merits of this method were obvious; the RMN would not have to deal with prohibitive capital expenditures and it would “ensure that we will have trained personnel to operate new ones to be purchased in the future, and also to train technical and base staff to provide support services.” And any capability in the air and under water would be better than none. So eager was the RMN to start the process that it admitted that it was “willing to trade any number of future surface combatants for just one submarine... a submarine arm will introduce a strategic dimension to the RMN’s role. The deterrent effect of just one torpedo-armed submarine is incalculable and far exceeds that highly-visible surface combatants.”

There were two problems with this approach. While willingness to forego surface ship acquisition was a powerful factor in impressing the Navy’s desire for submarines on the government, if no submarines were purchased, the RMN would receive nothing at all. The second drawback was that the "friendly powers" such as Britain or France which were capable of providing rehabilitated submarines and aircraft and their associated training and support packages, were likely to do so only if Malaysia were fully committed to buying new
construction. Finding sufficient funds to allow that commitment remained the RMN's difficulty.

The acquisition of WASP helicopters as the nucleus of a Fleet Air Arm succeeded in the atmosphere of a 1988 Memorandum of Understanding between Malaysia and the United Kingdom which postulated a large scale purchase of arms, notably the Tornado fighter ground attack aircraft. Britain did not secure a contract for helicopters but the Wasp transfer of six aircraft, with an option for six more, was cheap in relation to the other purchases being arranged. It was also likely that the RMN would eventually go for the British Lynx helicopter when funds permitted and the limited life of the Wasps expired.

The submarine project proved more awkward. Packages involving the transfer of one or two rehabilitated boats as training units with follow on new construction of up to eight hulls ("...up to four...were more generally spoken of as the likely buy" were offered by the British, the French, the Germans, the Dutch and the Swedes. Both the British and the Swedes got almost to the point of agreeing contracts with the Malaysians, but none succeeded. Malaysia's hesitation was indicated in July 1989 by the Chief of Defence Force, General Tan Sri Hashim bin Mohamed Ali who emphasised that Malaysia "cannot rush into making a decision now. We will make it at the appropriate time." What was becoming clear was that any attempt at creating a submarine force would be very expensive and such a commitment had to be made within the provenance of the Sixth Five Year Plan (1991-1996) against the requirements of the other services.

And it had to be made against the other requirements of the RMN. The need for replacements for the two old frigates and the patrol boats was now urgent and could not be deferred if the RMN was to maintain the force levels required. The RMN was developing a twenty year programme which made provision for the surface combatant, patrol and submarine forces and negotiations had been opened with the British for the purchase of light frigates under the Memorandum of Understanding arrangements. In addition, there were plans for a naval base at Kota Kinabalu in Sabah.

The Surface Navy Returns

Malaysia finally cut the Gordian knot in 1991. It was admitted that a submarine force was beyond the country's means, the Minister for Defence noting in August that "We cannot afford submarines at present" and that such a buy was "some 15 years away", which translated to deferral of the project until at least the Ninth (2006-2010) Five Year Plan. This would allow the Navy to purchase two light frigates from the United Kingdom to replace Rahmat and Hang Tuah, and begin an offshore patrol vessel building programme within Malaysia. Six OPVs were to be built within every Five Year Plan for a total of 18 by 2005 - and with the probability that there would be six more units to follow.
There were two notable elements about these programmes. The OPV commitment practically acknowledged the RMN’s progressive withdrawal from the coastal/inshore patrol function, a logical step in view of the increasing size and expertise of the Royal Malaysian Police and the Customs and Excise force. The effective end of insurgency throughout most of the Federation meant in any case that the patrol task was losing its military element in favour of police work.

The reconstruction of the RMN into a balanced force would not be completed unless other elements were added to the Five Year Plans. Up to 34 fast attack craft were acknowledged as being necessary elements within the future fleet, but there was no approved provision for these expensive vessels, despite the age of the existing force. Nor had commitment yet been made to additional mine countermeasure vessels or to the medium helicopters which would be such an important part of any surface combatant force and which were required to replace the Wasp. The RMN had succeeded in obtaining a third package of six Wasp from the British but this could only be an interim solution.

Enough for the Future?

Despite these gaps in the future force structure, the shape of the RMN and thus its capability to meet its roles have been fixed by the decision to abandon the submarine arm. The RMN is aware of its deficiencies in ASW and in AAW and can be expected to work at improving these areas, notably through the integration of helicopters into the frigates and Offshore Patrol Vessels and through improved co-operation with the Royal Malaysian Air Force.

The RMN will focus on the need to defend and to police the Malacca Straits, co-operating with the Malaysian Police. Tripartite discussions have been held between the three littoral countries on improving security measures and the interest of countries such as Britain in improving the safety of merchant ships on passage suggests that multi-lateral naval patrol arrangements may eventually be put in place. Certainly, despite occasional disputes between Malaysia and its neighbours over maritime boundary, border and airspace matters, the links between the regional navies are close and getting closer, even if there has yet to be a naval (as opposed to police) impetus towards multi-lateral co-operation within ASEAN.

The unresolved problem is the South China Sea. Despite recent workshops on the issue and Malaysian declarations that "the dispute will not reach a critical situation that can lead to war", concerns continue to multiply. Malaysia began building an airstrip on Layan Layang at the end of 1991; in February 1992 China’s parliament declared that the Spratlys and other island groups in the South China Sea were integral elements of the People’s Republic, reserving "the right to use armed force in the area to prevent any violation of its waters by foreign research or naval vessels." By mid-1992 there were rumours circulating of a clash between Malaysian and Chinese units which saw the sinking of a Chinese gunboat. Malaysia and the
other protagonists in the Spratlys have to live with the fact that, "with opposing troops (sic) gazing at each other all the time, a small incident may spark trouble".\textsuperscript{77}

If Malaysia ever decides to pursue a hard line, it must do so in the knowledge that the RMN does not possess the capability to withstand the massive - even if unsophisticated - forces which the PLA(N) can deploy to the area. Despite the plans for new construction, attaining such a capability remains a very distant goal. It may never be achieved.

Towards 2000

Despite the ambiguities of the Spratly problem, the RMN is in reasonably good shape to meet the other requirements of Malaysia’s maritime security in the future. Given the government’s decision on its defence priorities and its desire for peaceful "economic" solutions to boundary disputes\textsuperscript{78}, the submarine decision was inevitable and right. From a national aspect, the patrol and surveillance requirements are pre-eminent. Where the challenge will lie for the RMN will be in determining where the balance is drawn between patrol and war fighting forces to ensure an adequate deterrent capability. It must also educate the government in what the Navy can and cannot do in exerting force within the region.
Navies in Asia


3. Ibid, p.3.


The Royal Malaysian Navy


23. Ibid. p.27 & 29.


Navies in Asia


37. Ibid. p.76.


44. J.N. Mak "Malaysia's Naval and Strategic Priorities: Charting a New Course" Op. Cit. p.3 et seq.

45. Ibid.


The Royal Malaysian Navy


64. To give an example of costings, the Swedish project for one operational boat, an alongside trainer and six new boats by the end of the century was estimated at 1.7 billion pounds sterling (US $3.3 billion). Even with preferential credit terms over ten years delaying the third to fifth boats to the Seventh Plan (1996-2000) this would require at least $500 million in the 1991-1996 period alone. See NAVINT 18 January 1991. p.3.


67. Naval Forces IV/90. p.86.
Navies in Asia


72. John Harlow "Royal Navy Launches Task Force Against Pirates" The Sunday Times 24 May 1992. p.1. In fact, the RN will only contribute forces on an opportunity basis, presumably before and after port visits in the region. Such patrols are unlikely to amount to more than 20 ship days annually.

73. Malaysia is said to have some form of maritime boundary dispute with each of its neighbours, although many of these are not viewed as critical. See Amitav Acharya "Regional Military-Security Cooperation in the Third World: A Conceptual Analysis of the Relevance and Limitations of ASEAN" Journal of Peace Research Vol. 29, No. 1, 1992. p.12.


CHAPTER NINE

THE REPUBLIC OF SINGAPORE NAVY

Singapore's Navy started as the "third man" in the defensive measures planned by the newly formed Republic between 1965 and 1967 to ensure the integrity of the tiny island state. Its growth since 1980 has, however, reflected Singapore's increasing concern for protection of the shipping flowing in and out of the country and of South East Asia as a whole. From a purely coast defence and sovereignty protection service, the Republic of Singapore Navy (RSN) has moved on to claim a medium distance trade protection role, one which recent and planned acquisitions are making it increasingly capable of executing. The process has not been without costs. Apart from the budgetary element, Singapore has to balance out perceived military requirements against the concerns of its neighbours, particularly Malaysia, which might object to an overly strong Singaporean navy. But it is clear that the RSN is taking the lead in the directions in which the navies of South East Asia are likely to move, particularly in its new emphasis upon ASW, MCM, command and control and on integration with the Republic of Singapore Air Force.

Background

Like the Royal Malaysian Navy, the RSN originated from the 1934 Straits Settlements Royal Naval Volunteer Reserve (SSRNVR) which was intended to assist the Royal Navy with the local defence of Singapore. Volunteers from the SSRNVR were used to form the Royal Navy (Malay Section) in 1939 while the SSRNVR was expanded and renamed the Malayan Royal Naval Volunteer Reserve (MRNVR).\(^1\) Both these volunteer forces continued their existence through the Second World War, with a nucleus of personnel operating from Ceylon between 1942 and 1945. Others remained in Singapore, many working with resistance units.\(^2\)

Despite the record of the two naval forces, economies instituted by the colonial governments brought about the disbandment of both in April 1947, but the beginning of communist insurgency and declaration of the Malayan Emergency in June 1948 forced a rapid change in Colonial Office policy. As part of a large scale programme to mobilise Singapore and the newly formed Federation of Malaya against the communists, plans were developed for the creation of military forces. Singapore was viewed as being the best centre for a new naval
service. Apart from the core of trained personnel available locally and the obvious maritime security requirements around the island and within the Straits of Singapore, there was also the question of Malay susceptibilities to the prospect of large scale arming of Singaporean (and thus not ethnic Malay) ground troops. A Singaporean naval force would provide a contribution to the defence of the peninsula without rousing concerns within the Federation.

Again, two organisations were formed: the Malayan Naval Force (MNF) and a revived MRNVR. The former was the permanent force intended to form the nucleus of a future Malayan Navy, while the latter was to provide the reserve component. As the MNF got under way at Woodlands on the island of Singapore, the Royal Navy provided the MRNVR with an old Japanese escort which was renamed Laburnum and fitted out as a headquarters ship, while small craft including a seaward defence boat were handed over for sea training. The MRNVR continued to maintain a close connection with the RN, not only because training was conducted by personnel seconded from HMS Terror, the British depot for Singapore, but through regular attachments to ships of the Far East Fleet. Since the Singapore Division of the MRNVR was locally manned, it retained an inherently "Singaporean" character, while the MNF included an increasing proportion of Malays. Nevertheless, there was considerable co-operation between the services and many Singaporeans served in the MNF. In 1954, a small building programme began with an order for a seaward defence vessel, Panglima, to provide a platform for both training and patrol duties. In 1956 a women’s division, the Singapore Women’s Auxiliary Naval Service (SWANS) came into being.

The MNF was redesignated the Royal Malayan Navy in 1954 and in July 1958 the State of Singapore transferred the personnel and assets of the force to Malaya. The latter assumed full financial control on 1 January 1959. The status of the Singapore Division of the MRNVR was not altered until 16 September 1963 when Singapore became a member state of the Federation of Malaysia. At this point the Division became part of the Royal Malaysian Naval Volunteer Reserve (RMNVR) and it was soon actively involved in Confrontation operations. Panglima was transferred to the RMN (now the Royal Malaysian Navy) and, on 1 April 1964, 170 officers and ratings, including SWANS, were mobilised for full time service. Personnel who remained with the RMNVR on part time service assisted with local patrols using the remaining seaward defence vessel.

Independence for Singapore

The federation of Singapore with Malaysia did not prove a success and Singapore became an independent state on 9 August 1965. As well as the vast economic and human problems which Singapore faced in attempting to go solo, there was a considerable defence dimension. If all trained and partly trained personnel were mustered the new Republic could assemble two battalions of infantry, a half-regiment of artillery and two small naval craft. There was no air force. While there remained a considerable Commonwealth military and naval presence on the
The Singapore Navy

island, Singapore had no guarantee that this would be available to protect her in the event of disputes with her closest neighbour, Malaysia. Indeed, the country's Prime Minister, Lee Kuan Yew pursued an openly independent line with the British. Singapore not only reminded the latter that its independence cancelled previous treaties guaranteeing the United Kingdom bases on the island but promised Indonesia in 1966 that the British would be gone within ten years. Defence links with Malaysia were progressively eroded as deployed units were sorted out and their personnel returned to their own countries. By the middle of 1966, Singapore had left the Joint Defence Council and the Combined Operations Committee in which it had hitherto been associated with Malaysia.

Lee Kuan Yew's remarks to the United Kingdom were negotiating ploys. When the British announced their plans to withdraw from the Far East within less than ten years, a time table which was soon advanced by half a decade, Singapore was faced with alarming prospects. Confrontation with Indonesia was winding down and relations improving after the fall of the Sukarno regime, but the island state now faced the requirement to provide all its own defences at a time when it was losing one of its key sources of jobs and income - the British presence. It did, however, have sufficient breathing space to allow for rational planning and the deferment of expenditure until coherent doctrines had been evolved. Large scale implementation of these policies would need to begin only in 1967.

While measures were taken to establish a navy with the redesignation of the Singapore Division of the RMNVR as the Singapore Naval Volunteer Force (SNVF), the Government's initial priority was to create a National Service system and the core of an effective Army. The Government had additional motivations for this emphasis, since conscription was a useful element in the process of nation building and in creating common values and ideals across the range of ethnic groups within the island. Then, too, Singapore was concerned to avoid the creation of too large a professional military elite within the country while at the same time convincing a population with strong anti-military traditions that the Armed Forces would be a worthwhile career for their sons.

Early Roles

Since the Armed Forces were too small to allow for separate services, the Government created an Integrated Command under the control of the Ministry of Interior and Defence. The SNVF's role was designated as "patrols in Singapore Strait on smuggling duties and the protection of fishing vessels and other small craft." and the force was brought into formal commission on 5 May 1967. By this time, personnel mobilised into the RMN had returned from Malaysia and the Government had reached the point at which long term plans could be brought into effect.
## Republic of Singapore Navy - Force Levels

<table>
<thead>
<tr>
<th></th>
<th>1972</th>
<th>1982</th>
<th>1992</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Corvettes</strong></td>
<td>-</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td><strong>Missile Attack Craft</strong></td>
<td>2*</td>
<td>6</td>
<td>6</td>
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<tr>
<td><strong>Gun Attack Craft</strong></td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td><strong>Patrol Craft</strong></td>
<td>2</td>
<td>14</td>
<td>24**</td>
</tr>
<tr>
<td><strong>Landing Ships</strong></td>
<td>1</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td><strong>Mine Warfare Vessels</strong></td>
<td>-</td>
<td>2</td>
<td>2***</td>
</tr>
</tbody>
</table>

* Not yet fully operational.

** Includes 12 inshore craft.

*** Includes diving support vessel.

Sources: Jane's Fighting Ships/Combat Fleets of the World.
Singapore sought assistance from the United Kingdom for the creation of an air force, New Zealand for help with the navy and Israel for the army. It was, however, to Israel that the country looked for its general approach to defence. The strategic problems of the two nations were essentially similar, particularly in their lack of strategic depth. There was thus considerable Israeli influence in Singapore’s evolution of a "poisonous shrimp" doctrine which essentially meant that the country’s defences were to be on such a scale that no potential aggressor would think it worthwhile to attack because of the losses that would entail. Territorial survival was the paramount requirement in this early thinking on the defence issue. Thus, the Government focused upon creating a rapid reaction army and an integrated air defence system which would soon be the most capable in Southern Asia. Although the naval service had the lowest priority in the development of the capabilities which were required, it was manifest that coastal defence assets would be needed in addition to a much improved patrol force. What was also clear was that Singapore was moving towards a three dimensional concept of defence, in which combatant units on land and sea and in the air would be fully integrated in their operations.

In September 1967 the SNVF was designated the Sea Defence Command and moved from its old base in Telok Ayer Basin to a site at Pulau Belakang Mati (now Sentosa) which had formerly been used by the British Army. The location was not ideal, since there was no berthing for any of the Command’s ships which had to lie off at buoys or at anchor, but it did allow the establishment of a School of Maritime Training in November 1967 with the assistance of a cadre of New Zealand naval personnel. Officer training was managed with foreign assistance. The first cadets proceeded overseas in 1968, having received their basic training in Singapore.

A Navy of Attack Craft

The force structure programme was initially two pronged, emphasising the requirement for Singapore to develop its own facilities for warship production. This was in line with a general policy to encourage defence self reliance in order to maintain Singapore’s freedom of action. In June 1968 three fast patrol craft and three more heavily armed fast attack craft (gun) were ordered, one of each class to be built in the United Kingdom and two of each in Singapore. Later the same year, teams were despatched overseas to examine designs for missile craft and surface to surface missiles, the potential of which had been demonstrated in 1967 by the sinking of the Israeli destroyer Eilath by Russian built Egyptian craft.

The Israeli missile and boat programme was the most advanced in the West and Singapore took the same basic design of missile boat from Germany and the new Israeli Gabriel missile. Once more, lead units - two - were to be built in West Germany, while four more were ordered in Singapore. The expertise thus gained in indigenous ship building would later be used to good effect, with the construction of three coastal patrol craft and three fast attack craft for Brunei between 1973 and 1979 as well as 45 metre missile boats for Thailand. It was true, however, that the concept of a national warship building industry suffered from the inability of
NOTE:
1. GRAPH SHOWS TRENDS RATHER THAN EXACT YEARLY FIGURES.
2. RESERVES (AUTHORIZED) GENERALLY CONSTITUTE 100% ADDITION TO REGULAR FORCES SHOWN HERE.

SOURCES: THE MILITARY BALANCE/JANE'S FIGHTING SHIPS.
The Singapore Navy

the Singaporean armed forces, simply as a result of their limited size, to support continuous production. In consequence, orders such as that from Brunei and Thailand were a necessity to sustain expertise and the shortage of further projects after the mid 1970s would prove a considerable difficulty for the warship building elements of Singaporean industry. In the meantime, the missile craft squadron (185) went operational in 1974 with the first at sea firing of Gabriel by the lead unit, RSS Sea Wolf.

Overseas Assistance

The second approach towards force structure was to use overseas assistance, particularly from the United States, to acquire assets for amphibious operations and mine countermeasures which would otherwise be too expensive for the still limited defence budget. One tank landing ship was transferred from the USN in 1971 and this was followed in 1975 by two coastal minesweepers and five more landing ships. The latter, of World War II vintage, were practically rebuilt soon after their arrival in Singapore. Their principal role would be to support ground forces in the training expeditions which had to be mounted overseas in the absence of sufficiently large scale facilities within Singapore itself. Of themselves, the two coastal minesweepers were not enough to constitute a credible mine countermeasure capability but the Sea Defence Command did not as yet possess either the expertise or the funds to organise mine warfare on the large scale. In the interim, Jupiter and Mercury would provide platforms from which to accumulate expertise.

Planning for a new naval base matured with the selection of Pulau Brani in Keppel Harbour in 1971. Over the next three years, 122 hectares were cleared of civilian facilities and wharves, maintenance shops, schools and accommodation buildings were erected. The base was officially opened on 26 January 1974. Its operational status and the access which the Command now enjoyed to the old British naval station HMS Terror allowed the establishment of a technical training school and an officers’ training school, as well as expansion of the School of Maritime Training, newly renamed the School of Naval Training. By this time, the Singaporean Armed Forces were well embarked upon their attempts to patriate all training within Singapore and to do without foreign advisers. The increasing capabilities of the Command and of the Armed Forces as a whole were recognised by the establishment of the three service arms as distinct identities on 1 April 1975, when the Republic of Singapore Navy was established "as an independent armed service."

The Refugee Question

While the new RSN obviously required some years in which to consolidate hitherto rapid expansion and to develop concepts of operation for its missile craft and gun boats, its situation was not assisted by the increasing flow of refugees from Indo-China. Apart from specific major interception and relief operations which were designated Operation "Thunderstorm", the "job
of monitoring the flow of refugees and helping them on their way with water, food, fuel and medicine fell largely to the RSN. This had the effect of consuming resources and time which had been intended for developing operational techniques and probably delayed the RSN's progress in several areas. It was obvious, however, that employment of missile and fast attack craft in what were essentially coastal and inshore surveillance and interception duties was inappropriate and that smaller units could do the job much more efficiently. In 1979, twelve 22.7 metre fast patrol boats were ordered. Although essentially large police boats, the RSN did take the step of fitting the class "for but not with" two Gabriel missiles, thus providing the capacity to increase its numbers of missile boats at short notice.

The Strategic Requirement Widens

The late 1970s found the RSN examining its operational requirements in the light of Singapore's development and consequent dependence upon seaborne trade and the increasing uncertainty of the strategic situation in South East Asia. The Vietnamese invasion of Cambodia and the Soviet presence in Cam Ranh Bay carried with them the prospects of conflict spreading out of Indo-China. Singapore sought to encourage a continuing United States military presence but it also appreciated that the Armed Forces required more capability and, for the Air Force and Navy, more "reach" in order to defend the country's interests. The Singapore Armed Forces had also to consider the fact that, of the other ASEAN states, only Malaysia yet possessed any kind of sophisticated maritime forces and that Singapore might have to play a crucial role in the maritime defence of the region. As the expansion of the Soviet presence went on, so the Singapore Armed Forces tended "to acquire hardware and to evolve air and naval exercises which emphasize[d] readiness to engage not minor but major naval adversaries should such a requirement prove necessary." The emphasis of Singaporean defence was shifting away from territorial integrity to the contribution which the country could make to regional defence against external threats.

Some of Singapore's concerns were met by efforts at improving military co-operation with its neighbours and within the Five Power Defence Arrangement (FPDA), particularly after the 1980 Australian initiative to revive the latter with increasingly ambitious exercises. In 1979, after the commissioning of the new missile boats for Brunei, regular bilateral exercises began between that country and Singapore under the designation Pelican. Exercises with Indonesia had been conducted regularly since 1975; in 1983 the RSN began to operate with the Royal Thai Navy (Thai-Sing) and in 1984 - indicative of the slow maturing of the relationship between the two countries - with Malaysia (Malapura).

For the Navy's part, there were two elements to the service's future. One was that the RSN argued that it had effectively become the second line of national defence after the Air Force (RSAF) and thus could seek a higher priority in allocations from the defence budget. A certain amount of opposition had to be overcome in this process. The Defence Ministry was inclined
to allocate the available resources in favour of aircraft. On the other hand, larger and more sophisticated units meant order of magnitude capability increases in terms of what the RSN could achieve and at what range.

Protection of Shipping - The SLOC Role

This was significant because the RSN believed that it had to develop the ability to protect shipping moving to and from Singapore. The "Sea Lines of Communications" strategy was to become increasingly dominant within RSN planning over the next decade. The area of direct interest which the RSN developed came to cover the length of the Straits of Malacca and out to 500 miles from Singapore in other directions. Of particular and increasing concern was the prospect of conflict in the Spratlys. While Singapore was not directly involved in the web of conflicting claims within the island group in the South China Sea, the direct routes to many of the country's trading partners, particularly Japan, lay within the zone.

The SLOC role was clearly an extremely ambitious one and it was undeniable that the RSN had yet to possess the capabilities required to carry it out. The priorities were for larger craft, with more endurance and better sea keeping than the Sea Wolf class, improved command and control and, in particular, the capability to conduct Anti-Submarine Warfare (ASW). Such a type was under consideration in the early 1980s and an order for six 62 metre craft was approved in 1983. It is likely that the RSN considered larger units still, either instead of what would soon be designated the Victory class corvettes, or as follow-ons, but the Navy eventually decided in 1986 that the costs and disadvantages of larger units within Singapore’s operational environment outweighed their possible benefits. The manpower issue was perhaps most critical, because frigates would have required considerably larger crews than the 62 metre boats and would have forced an expansion of the RSN which could only have come at the expense of the Army or Air Force and at a time when Singapore’s defence effort was competing with the commercial sector for limited financial and human resources. The next three years were spent developing the details of the design, which was to be based on a Lurssen hull from Germany with a combat system designed to Singaporean specifications. A batch of six units was ordered in 1986, with the lead unit again being built in Germany and the remainder in Singapore.

A second element in the modernisation package for the Singapore Armed Forces was the modernisation and progressive rearmament of the Sea Wolf class with HARPOON missiles in addition to their Gabriels. But perhaps most important was the acquisition of four E2C Hawkeye aircraft from the United States in 1983. These aircraft were primarily aerial early warning units and they could not substitute for the maritime patrol aircraft which the Singapore Armed Forces required, but they did provide a basis of command and control for attempting to devise coordinated tactics for the Air Force and Navy in long range maritime strike. An interim, albeit barely adequate, maritime surveillance capability was brought into being in the RSAF with 121
# Republic of Singapore Navy

## Acquisition Programmes

<table>
<thead>
<tr>
<th>Year</th>
<th>Corvettes/OPV</th>
<th>Missle Attack Craft</th>
<th>Gun Attack Craft</th>
<th>Patrol Craft</th>
<th>Landing Ships</th>
<th>Mine Warfare Vessels</th>
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<td>6</td>
<td>1</td>
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<tr>
<td>1971-1975</td>
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<td>1976-1980</td>
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<td>12</td>
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<tr>
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<td>1986-1990</td>
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<td>12</td>
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<tr>
<td>1991-1995</td>
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<td>(6)</td>
<td>-</td>
<td>-</td>
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<td>4</td>
</tr>
<tr>
<td>1996-2000</td>
<td>(4)?</td>
<td>-</td>
<td>-</td>
<td>(4)?</td>
<td>(2)?</td>
<td></td>
</tr>
</tbody>
</table>

**Key:**

- 6 APPROVED/COMPLETED
- (4) PROJECTED (CONFIRMED)
- (4)? PROJECTED (NOT CONFIRMED)
Squadron of Skyvan aircraft which flew with naval observers. The RSAF also began to configure attack aircraft specifically for maritime strike operations.

Introduction of the Victory class into operational service proved a considerable challenge for the RSM, largely because the complicated combat system software had to be written from scratch and required lengthy "debugging". Nevertheless, the first three units were commissioned in August 1990, with the remaining trio being accepted in the following year. This experience with the corvettes was reflected in difficulties which the RSAF experienced in integrating the E2C Hawkeye aircraft in directing aircraft which were not equipped with data links. Small services which attempted independent approaches to system development had to expect setbacks in the resolution of what were highly complicated technical problems.

Although the corvettes consumed the bulk of the RSN's budget in the late 1980s, plans were in train for mine countermeasure units and, with the RSAF, for light maritime patrol aircraft (MPA) to round out the RSN's capabilities for both SLOC protection and seaward defence. Selection of a Swedish minehunter design was made in 1991, with the construction of four Landsort class being approved with the possibility of a further pair. It was notable that a coastal design was selected ahead of an inshore type, indicating the RSN's intent to protect not only the Singapore Strait but "the SLOCs in the Malacca Straits and the South China Sea."

The MPA requirement was met with the selection of six Dutch Fokker 50 aircraft, which would be manned by the Air Force and flown under naval operational control after their introduction into service in 1994. Over crowding on Pulau Brani forced construction of a second facility at Tuas in Jurong between 1990 and 1993 and plans were put in train for a complete new fleet base on reclaimed land at Changi.

The creation of an ASW capability and the other assets of the corvettes put a new emphasis upon bi-lateral and multi-lateral exercises, particularly with non ASEAN powers. The RSN had always welcomed the opportunity to exercise its tactics against sophisticated opposition; it now required submarines as sonar targets and these were provided through interaction with the United States Navy and the Royal Australian Navy. Such activities matched well with the Government's efforts to ensure continuing military engagement within the region by the United States after the loss of the Philippine bases. Singapore, while eager to maintain strong military links within ASEAN was firm in its declaration that "there is much to be gained from involving interested and like-minded extra-regional powers who are committed to preserving stability and security in the region."

The RSN's flurry of acquisitions and Singapore's obvious determination to create a credible trade protection force raised questions elsewhere in the region as to the long term intentions of the naval development programme. Much of this interest was motivated by the interest which Singapore's neighbours, particularly Malaysia, had been showing towards the acquisition of submarines and the expectation that Singapore would require to respond. The
Ministry of Defence was quick to decry such suggestions and it was true that a submarine force would require a reordering of priorities with the country's defence programme out of all proportion to the possible benefits. Apart from the fact that the operational environment around Singapore was not an easy one for submarines, such vessels also carried the risk of sending the wrong signals about Singaporean intentions to the country's neighbours, something to which the government was increasingly sensitive. The RSN preferred to concentrate upon the development of ASW capabilities in addition to its existing emphasis upon air and sea borne anti-ship warfare.

In reality, the RSN was already committed to considerable expenditures if it maintained a "one for one" approach to replacing its combatants. Despite modernisation, the six large fast patrol and attack craft were approaching the end of their second decade in service, the Sea Wolves were almost as old and the much refitted landing ships were nearing their half century. The RSN intended to maintain the Sea Wolf class "into the early part of the next century" while taking steps to replace the older boats with the same number of larger 57 metre units with a new combat system. While the RSN continued to eschew frigates, it was likely that later building programmes would include additional corvettes, possibly large enough to include a flight deck. The one clear deficiency in the RSN's capacity to meet the SLOC role, with or without maritime patrol aircraft, was the lack of organic helicopters.

Towards 2000

The era of rapid growth has ended for the RSN in favour of a period of consolidation of capabilities and skills. The basic structure of the service has now been established, with a mix of highly sophisticated corvettes and missile craft as the "high" combatant element and a less sophisticated but numerous patrol force as the "low" element for local surveillance and sovereignty functions. Inter-operability with the Air Force is key to the integrated strategy which the RSN has produced for its operations both locally and into the Malacca Straits and South China Sea. The RSN has also developed the extensive support infrastructure, particularly for tactical training and combat simulation, that is essential in sustaining what is a wholly independent approach to maritime operations. Its new capability for reach and its need to draw on other navies for training assets, together with the Government's concern for improved collective attitudes to regional security, are likely to combine to see the RSN working even more closely with ASEAN, the FPDA navies and the USN than has been the case before, but this is a natural development for the RSN. With a balanced force structure and well conceived organisation, the Republic of Singapore Navy has a bright future.
12. Ibid. p.62.
The Singapore Navy


52. "Interview with Commodore Teo Chee Hean (Commander of RSN)" Op. Cit. p.920.


Chapter Ten

THE ROYAL BRUNEI NAVY

An oil rich enclave in Borneo, Brunei has the distinction of being the smallest nation in South East Asia and one of the richest. Its possession of considerable gas and petroleum deposits has allowed what would otherwise be an unviable state to prosper independently of great neighbours such as Malaysia and the Philippines.

Early Development

Brunei was a protectorate of the United Kingdom from 1888 until 1984 and its development of defence capabilities only started at the end of the 1950s, initially as a response to internal security needs. ¹ The abortive revolt of 1962-63, which required the intervention of British and Malayan forces to sustain the position of the ruling Sultan², accelerated the government's plans for military forces. While Brunei did not opt for membership in the Federation of Malaysia in 1963³, the British presence at first provided sufficient guarantee of defence against external threat to allow development to concentrate on land forces for counter-insurgency warfare. The Royal Brunei Malay Regiment was established in 1961, with considerable British assistance, as the core of future expansion.⁴

The pace of such development was soon further forced by the start of "Confrontation" with Indonesia, in which Brunei was perforce involved through its co-location with Sabah and Sarawak, the primary targets of the Indonesians, and its association with the British.⁵ At this stage, the first steps for a maritime defence capability were laid in order to provide an indigenous patrol and intervention force in Brunei's territorial waters. A fast patrol boat, Pahlawan, was ordered from Britain in 1965 and commissioned into the Regiment in 1967.⁶

Since Britain remained responsible for Brunei's external defence, there were no immediate follow-on orders to the Pahlawan. But the British decision in 1966 to withdraw its military presence from the Far East and the subsequent acceleration of that process in 1967-68⁷ meant that great power protection could not be relied upon indefinitely by Brunei. In the following few years plans were laid for the creation of air and naval components within the newly designated Royal Brunei Armed Forces (RBAF). It was true that Britain retained absolute control, in theory, over Brunei's external defence and that this continued to be the case even after the protectorate agreement of 1959 was renegotiated in 1971.⁸ It was equally true - and more to the point - that the capability of the United Kingdom to defend Brunei against a serious threat was now doubtful, particularly as reinforcement of the Ghurka Regiment in country would
have to be conducted through Malaysia, which might well have another agenda for the little state. The development of offshore oil fields in the mid-1960s as the primary source of Brunei's petroleum production and thus its national income created a highly vulnerable maritime target through which pressure could be exerted on Brunei by an aggressor.

Brunei was not covered within the Five Power Defence Arrangement and thus could not rely on Australian or New Zealand assistance, which cut the maritime assets available to a reinforcement effort to two frigates. Even this force was to be rapidly reduced after 1971 and, by 1973 the RN presence was limited to a single frigate at Hong Kong which left for home in 1975.

Planning for External Security

It was at this time that the Sultan formally directed that the Regiment should take on the role of defence against external attack. Although the probability of such a contingency was assessed as low, a strike against the oil rigs was one of the more likely means by which an aggressor could put pressure on Brunei and this suggested that maritime combat forces were required.

The resulting development of the Flotilla was managed at two levels. The first was the creation of an embryo surface warfare capability with the acquisition of French SS-12 surface to surface missiles for the Pahlawan in 1972. This followed the example of the Malaysians who were in the early stages of creating their own force of missile craft. The second phase was to improve the coastal surveillance and the inshore and riverine transport elements of the Armed Forces through the purchase of coastal patrol craft in Singapore and small landing craft from the United Kingdom.

Brunei's naval development could, from a financial aspect, have proceeded more quickly than this in the early 1970s but there were several restraints in operation. First, although Brunei and Malaysia were in dispute over territorial boundaries, both land and maritime, an obvious disparity of strength between the RBAF and the Royal Malaysian Navy would have an unsettling effect on the situation. Second, Brunei's small population restricted the pool of manpower available for the Armed Forces. There was a considerable contingent of British loan and contract personnel within the RBAF but the Brunei government naturally wished to avoid a situation whereby the manning of Brunei units had too great an expatriate component. Third, the British officers involved in the RBAF themselves acted as a restraining influence, being unwilling to recommend equipment which was outside the practical capacity of the RBAF.
Navies in Asia

The Flotilla Takes Shape

An order for three missile armed fast attack craft was placed in Singapore in 1976 and for 36 Exocet missiles from France in the same year.\textsuperscript{12} Considering that each unit could carry only two Exocet, this large missile order represented a much more realistic estimate of the needs of maintenance and practice firings than the purchases of many other of the new missile navies. The three Waspada class, with the trio of smaller Perwira class coastal patrol craft, would constitute the core of the flotilla for the next twenty years. Comprehensive support facilities, including a synchrolift, were constructed at Muara and were ready for the Waspadas by the time all three had arrived from Singapore in 1979. A Special Combat Squadron was created and its personnel trained in close combat on the oil rigs, while the inshore and riverine task was to be carried out by a separate River Division.

With corresponding accessions of strength to other elements of the RBAF, this development put Brunei in a position whereby the small nation could maintain a credible defence posture in the wake of the final separation from the British. The pressure on manpower was relieved by the UK-Brunei agreement to retain a Ghurka battalion in country after 1983.\textsuperscript{13} Equally important for Brunei’s security was the fact that relations with both Indonesia and Malaysia improved markedly after 1981. The latter country had maintained fitful pressure on Brunei during the 1970s in an attempt to persuade the Sultan to join the Federation but the new decade saw Malaysian acceptance of Brunei’s special status.\textsuperscript{14}

The operational concepts under which the Flotilla was to work focused very closely upon the requirements of oil rig protection. The force was required to prevent both strikes against the rigs by hostile surface forces and any attempts to insert armed parties by sea. While somewhat limited, particularly by the tendency to exclude provision for operations elsewhere within Brunei’s Exclusive Economic Zone after its declaration in 1983, this approach was well matched to the capabilities of the small force of missile and patrol craft and their limited command and control facilities. Even with the extensive British presence, with Royal Navy and contract personnel working both at sea and ashore, the Flotilla had much ground to make up in developing an adequate base of experience amongst its personnel before more ambitious operational requirements could be contemplated.

Regional Co-operation

The Flotilla did not work in isolation. Apart from the British connection, which was sustained through regular visits by patrol craft from the RN Hong Kong squadron for joint exercises, bi-lateral activities were undertaken with most of Brunei’s neighbours and friends in the region. By the mid-1980s, regular bilateral exercises were being conducted with Singapore and Malaysia\textsuperscript{15} and with Indonesia and Australia. Apart from the exposure to other services, these exercises were particularly useful in that the Flotilla could practice against “aggressors”
within its own intended theatre of operations. The relationship between Singapore and Brunei became particularly close, not only because of the construction of the majority of the Flotilla in Singaporean yards, but because of the parallels in the two nations' situations as enclaves in South East Asia.16

Nationalisation

Staff and operational billets within the Flotilla were progressively nationalised as the 1980s progressed, although there remained a strong British component in the technical elements. Recruiting for both officers and sailors became a perennial problem. There were many easier jobs for Brunei nationals outside the armed services and it proved difficult to muster sufficient would-be entrants of the right quality. Even without further expansion, the RBAF at 4,000 men consumed approximately 13% of the total national manpower pool, which was estimated to be the highest proportion of any volunteer recruited national defence force in the world.17 By 1991, the Flotilla could muster only 50 officers and 530 men, which included those allocated to the Special Combat Squadron and the River Division.18 The nationalisation process was also proving to carry some implications for operational efficiency, since it was difficult to ensure that personnel had sufficient expertise for the newly opened up billets.

The personnel question constituted the major stumbling block to logical expansion of the Flotilla. Brunei’s Exclusive Economic Zone claims involved boundary disagreements with Malaysia both close to the coast and in the vicinity of the much disputed Spratly Islands - and in the latter case there was always the factor of Chinese claims to be considered. Unless Brunei acquired a much improved surveillance and presence capability, she stood the risk of being ignored when demarcation issues were raised in international circles. Some of the surveillance requirement could be met through the establishment of a small maritime air wing and this was put in hand in 1989 with an order for three CN-235 aircraft from Indonesia. The choice was very much in the way of a good will gesture to Indonesia to encourage that country’s nascent aircraft industries and Brunei did have some second thoughts about what was a less than ideal aircraft for the long range surveillance task.19 It had, however, the merits of simplicity and moderate size and would not strain the Air Force, which was facing the daunting prospect of acquiring a fighter force with a trained personnel base equally as limited as that of the Flotilla.20

Towards an Offshore Capability

Planning for a corvette force started in the late 1980s. The RBAF wanted three such craft in the 1,000 ton range with high speed and the ability to land a helicopter. Other warfare requirements were moderate. The RBAF did not ask for an anti-submarine capability and even indicated that it was content with an SSM type equivalent to the relatively short ranged MM 38 Exocet.21 The emphasis was on increasing the Flotilla’s reach and its command and control
capabilities rather than acquiring new weapons systems and this was recognised by the fact that the proposed ships were frequently designated as "Offshore Patrol Vessels" rather than corvettes. Since it was intended to keep at least the Waspada class in operation after the arrival of the new OPVs, the implication was that the Flotilla would have to undergo considerable personnel expansion. Even with minimum manning in the OPVs, the seagoing numbers would triple and there would need to be an accompanying increase in shore based and support personnel.22

As expected, the initial order went to a United Kingdom firm in October 1989, with Vosper Thorneycroft contracting for three Vigilance class corvettes.23 The Waspada class meanwhile began modernisation to extend their service lives and give them improved fire control and electronic surveillance systems. The contract, however, was never signed and in September 1990 the order was thrown open to a whole new competition in which it was obvious that Brunei intended to adopt a more leisurely approach than before.24 Internal politics aside, this at least gave the Flotilla something of a breathing space in which to prepare itself more adequately for the larger ships. Had the Vosper Thorneycroft order been carried out, the RBAF would have been faced with the prospect of commissioning the new ships in 1993-94, which would have been impossible without the effective deactivation of the remainder of the flotilla.

Towards 2000

The future of the Royal Brunei Navy, which the Flotilla was redesignated in 1991, must turn on the manning issue. Brunei possesses the financial resources to purchase the ships it needs and to import the supporting infrastructure from overseas in the absence of local knowledge. But the Sultanate will not accept RBN units that are not manned almost exclusively by nationals. It is thus likely that a commitment to a particular offshore patrol vessel design will be accompanied by an extensive training package in association with the Navy of the nation building the ships and with other services with which the RBN maintains friendly relations. Within the RBAF there must be a shift in priorities away from land warfare - and much of the RBAF's force structure was determined when internal security and border requirements were more pressing than they are in 1992 - towards strengthening the maritime element. Even if this occurs, there is certain to be something of a hiatus in the RBN's operational status as the new ships are inducted, but this is unavoidable if the required EEZ surveillance capabilities are to be achieved. The problems which any small navy experiences in altering its force structure are (ironically) magnified by the tiny size of the RBN and the complex manpower issues involved. Yet Brunei's continuing EEZ claims in the South China Sea dictate that the capability improvements must be made, however difficult their execution.
The Brunei Navy


Beginnings

The Dutch-Indonesian "round table" discussions had included an agreement to assist with the establishment of an Indonesian naval service through the transfer of ships, facilities and equipment at reduced prices, together with training support from a naval mission. This initial scheme was sensibly conceived. The Dutch transferred minesweepers, seaward defence boats and landing craft in 1949 and 1950 and set up a building programme of coastal patrol craft. They even promised a destroyer, which arrived in 1951 and was commissioned into the Angkatan Laut Republik Indonesia (ALRI) as the Gadjah Mada in March 1951.1

But the ALRI was not to enjoy an easy start. It lacked a core of trained personnel; most of the officers available were from the independence movements and had received little or no formal training. The unwillingness of the Dutch to commission Indonesians into the Royal N^P Nitor progress.

The Sukarno Factor

Sukarno was eager for more naval expansion. Indonesia's pressure on the Dutch to surrender west New Guinea was increasing and the Netherlands' refusal to accept that its last East Indian territory should become part of Indonesia raised the prospect of a military solution in which naval forces would be critical.2 Subijakto was enthusiastic about the prospects for the ALRI and began to seek more help from around the world. In general, he continued the policy of securing training assistance from the USA and the UK while attempting to place orders for new construction with other non-aligned nations. The training policy had the result of creating a cadre of officers who, despite very limited practical experience, were thoroughly trained and possessed a shrewd idea of the complexities of creating an effective navy. Foremost amongst this group, which became increasingly impatient with Subijakto's over-centralisation and failure to create an effective naval staff, was Lieutenant Colonel Raden Edi Martadinata.

Subijakto's efforts for help from the non-aligned world produced mixed results. Countries such as Sweden which were capable of building sophisticated warships would not assist without guarantees that Indonesia would be able to meet the costs. Where help was available, such as Yugoslavia (which would transfer submarine chasers in 1958), it was not of the scale or quality
required to face the Dutch. Western Europe was not much more help. West Germany could build minesweepers and fast torpedo boats, but no more and, while the French were asked for submarines they would not provide them. More encouraging was progress for a Fleet Air Arm. The Americans provided some basic flight and maintenance personnel, as well as a number of small patrol amphibians and Indonesia signed an agreement with Britain to buy between six and eighteen Gannet ASW aircraft. These would give the ALRI a "modest" anti-submarine and surveillance capability and the deal included training for aircrew and squadron personnel. 

Sukarno's determination to create a sophisticated army and navy allowed a modification of the policy of non-alignment. Indonesia would now seek help where she could find it. As early as August 1956 the President was in Moscow to lay the groundwork for arms transfers on a massive scale. In February the next year, Subijakto visited the United States and sounded out the American CNO on the possibility of purchasing a range of vessels, including a light cruiser. The Americans were not impressed by the concept, viewing the sudden acquisition of no less than 75 large and small craft as "quite unrealistic since the number of ships is far more than can be effectively integrated into the navy in the immediate future." They were willing to consider handing over submarine chasers and auxiliaries, but no more. Yet the turn to the Soviets was not inevitable, nor - as far as the ALRI was concerned - would it ever be complete. Relations between the ALRI and the USN remained cordial and Indonesian personnel continued to train in the United States. For their part, the British were sympathetic when the ALRI approached the Admiralty with a request for the transfer of a Dido class light cruiser and two Battle class destroyers but they would not act against Dutch and Australian interests. Even the relatively innocuous Gannet sale had brought protests from both countries and Britain refused not only the sale of second hand ships, but permission for new construction in its shipyards.

Subijakto made one more attempt to secure new ships from the West. Negotiations were opened with Ansaldos for construction of a cruiser and frigates in Italy. As Ansaldos had eventually received payment for the four ships they had already built for the ALRI, they were interested in the possibility of a renewed order. What caused the discussions to break down is not entirely clear but it is likely that this was due to a combination of Dutch and Australian pressure. Both these countries were alarmed by developments over west New Guinea and had little cause to relish the prospect of a modern and highly capable Indonesian fleet.

The Archipelagic Claim

In December 1957, Indonesia took its concept of a country of islands unified by water to its logical conclusion. Indonesia's claimed territorial waters were extended from three miles to twelve and the intervening seas were declared to be "parts of the internal or national waters which are under the exclusive sovereignty of the Indonesian state." The declaration had been timed to prepare the country's position at the forthcoming United Nations' conference on the law of the sea. That it was "in advance of the development of a capability to control access by naval
INDONESIAN NAVY - ORGANIZATION 1959

COMMANDER IN CHIEF / CHIEF OF STAFF

INTELLIGENCE OPERATIONS MATERIAL FINANCES PERSONNEL AVIATION MARINES

HEALTH EDUCATION COMMUNICATIONS TRANSPORT WELFARE

COMBATANT FLEET MARITIME AREAS NAVAL ACADEMY NAVAL TRAINING BARRACKS
powers\textsuperscript{11} was rapidly demonstrated. In January 1958, The United States Navy despatched Destroyer Division 31 to assert its rights of innocent passage through the Lombok and Mahassai Straits; the ALRI did not attempt to interfere.\textsuperscript{12} Nevertheless, the concept of archipelagic sovereignty became a centrepiece of the Indonesian approach to the law of the sea throughout the international negotiations of the next three decades and of the ALRI’s doctrine.

Rebellion and Expansion

The events of 1957 and 1958 put renewed emphasis on the ALRI. Following the nationalisation of all Dutch assets in December 1957, a rightist anti-Sukarno rebellion broke out in Sumatra and the Celebes in February 1958. Suppression of this uprising, which was led by local army officers, proved almost beyond the capabilities of the Indonesian armed forces and it was not until the middle of 1958 that the insurgents had been driven out of the populated centres of the islands. In the course of supporting operations ashore, the ALRI lost a Bathurst class minesweepers (the Hang Tuah) to air attack in April off Balikpapan\textsuperscript{13} while one of the two new Italian built corvettes, hastily pressed into service, went aground and was badly damaged.\textsuperscript{14} If the ALRI was to have any chance against the Dutch - and Sukarno was creating his own timetable for action - the ALRI needed extra ships and it needed them soon.\textsuperscript{15}

Poland acted as the intermediary for the first transfers which were of four Skory class destroyers, a pair of Whiskey class submarines and eight submarine chasers. Although the major combatants came from Polish service (the Poles soon received replacements from the USSR), the submarine chasers were new construction direct from the Soviets. Indonesia was able to achieve this accession of strength through highly favourable credit terms, with only 5% cash down and "soft currency" and commodity payments of the remainder in limited instalments over the next decade.\textsuperscript{16}

Sukarno and Subijakto were delighted with the acquisitions. The feelings of the ALRI’s junior officers were mixed. The ships represented a profound technological challenge in themselves but the addition of the obvious problems of expanding the ALRI’s manpower, training personnel and creating the necessary support facilities in the face of a real language barrier made the task almost insuperable. Some 1,000 personnel had to be transported to Poland to collect the destroyers and submarines and somehow trained in their use. The ALRI also feared that the Soviets would use the opportunity to indoctrinate naval personnel into communism.

The Soviet Experience

The Soviet designed units were a limited success at best. Neither the destroyers nor the submarines had been tropicalised and the submarines in particular suffered from heat accumulation which drastically limited their submerged endurance.\textsuperscript{17} Induction of the Skorys did at least allow the disposal of the now decrepit Gadjah Mada, conversion into a training ship
Navies in Asia

having proved impracticable, but it was clear that all the new units would require extensive training and some structural work to fit them for service in Indonesian waters. The Soviets did their limited best to help with refits in a country which achieved some improvement but not much. The lack of solid seagoing expertise in the ALRI was shown in spectacular form in November 1959 when the destroyer Sawunggaling passed at high speed on the wrong side of a buoy in the approaches to Surabaja and impaled herself on a wreck from which she could not be removed for several weeks.18 Sawunggaling’s Captain, Sudomo, was found guilty of hazarding his ship but his achievement of flag rank within two years suggests that the accident was chalked up as necessary experience.

Subijakto’s poor personnel management continued, culminating in a mutiny amongst the aircrew training in the United Kingdom which spread to units of the fleet in Indonesian waters. Ostensibly a protest at the selection of a poorly qualified officer to lead the Fleet Air Arm, the mutinies were effectively an indictment of Subijakto’s policies of the previous decade. The Admiral had few friends in the Army, which was becoming ever more powerful after the return to office of General Nasution and the replacement of parliamentary government by the Nasution-Sukarno concept of guided democracy. In consequence, Colonel Martadinata and his colleagues were able to engineer Subijakto’s removal and his replacement by Martadinata, now promoted Commodore.

The new C-in-C proved a more capable chief. Increasing tension with the Netherlands meant that there was no abatement in the naval expansion programme, despite Martidanata’s ambivalent attitude to it, but he attempted to secure better service from the Soviets in the way of stores and documentation. Martadinata also took advantage of improvements in US-Indonesian relations to renew links with the USN. The Americans were more concerned to avoid a Communist Indonesia than they were to support the Dutch and had no objection to transfers of ships and equipment which reflected the reasonable needs of the ALRI. For his part, Sukarno was only too pleased with the spectacle of the Americans and Russians vying for influence through the transfer of military equipment. Thus, Martadinata was able to obtain two submarine chasers and ten LSTs - a type of obvious utility in the archipelago - between 1960 and 196119, as well as receiving assistance in training and organisation.20

West New Guinea - Irian Jaya

The development of the fleet and the rhetoric over west New Guinea alarmed both Australia and the Dutch. By 1959 the Australian Department of Defence was submitting a strategic basis paper to Cabinet which argued that the country had to be prepared to defend its north western approaches without the help of a great power.21 The Netherlands was already deploying destroyers and submarines to New Guinea; in April 1960 the Dutch government announced that it was despatching a small task group based on the light carrier Karel Doorman as a show of strength. The Indonesians were unimpressed by the deployment - which could not
INDONESIAN NAVY - ORGANIZATION 1962

MINISTER / COMMANDER IN CHIEF
OF THE NAVY

DEPUTY CHIEF OF
NAVAL STAFF

NAVAL ACADEMY

PRINCIPAL
ASSISTANT TO THE
MINISTER OF THE NAVY

COMMANDANT
OF THE
MARINE CORPS

INTELLIGENCE OPERATIONS PERSONNEL AVIATION

TRAINING COMMANDER MARITIME AREA COMMANDS FLEET COMMAND

WELFARE MATERIAL FINANCE HEALTH EDUCATION COMMUNICATIONS TRANSPORT & SUPPLY
The Indonesian Navy

be continuous - and Sukarno continued to pressure the Netherlands for a settlement. The Dutch became progressively more isolated in 1961 after the new Kennedy administration in the USA indicated its sympathy with the Indonesian cause. Without the United States, Australia would not move and the only other western actor, Britain, had other concerns. Sukarno stepped up his campaign in December 1961 with the establishment of KOTI (Supreme Command for the Liberation of West Irian) under the local command of Major General Suharto with Colonel Sudomo as his naval deputy. KOTI immediately began a campaign of infiltration and harassment in West Irian.

While the existence of KOTI had political significance, its military achievements were very limited and in January 1962 the ALRI suffered an embarrassing setback. A trio of Jaguar class MTBs was intercepted by a Dutch patrol aircraft off the south coast of west New Guinea. The little force was under the command of Sudomo and carried some 150 troops for insertion into the Dutch controlled territory to establish an Indonesian bridgehead. It also included Commodore Jos Sudarso, the Deputy Chief of Naval Staff. The real intention of the landing was to provide Sukarno evidence of Indonesia's steady progress in "West Irian" for his next major speech and it was significant that the area of the coast selected had no military value and was thinly garrisoned.

The Dutch Neptune called in two frigates while it monitored the Indonesians' progress. The ALRI units did not at first realise they had been detected and continued their approach as the frigates closed them. Not until early evening did the Indonesians detect the Neptune and when the aircraft began to drop flares to mark the MTBs' position to the frigates, one of the Jaguars opened fire. This hostile act in international waters was in breach of Sudomo's instructions to his ships and it gave the Dutch the excuse they sought to open fire. Having landed their torpedoes to carry troops and rubber boats, the Jaguars were helpless. Matjan Tumul was soon overwhelmed and sunk and the remaining pair were chased back into Indonesian waters. Although the Dutch were able to find 52 survivors, who were soon repatriated to a heroes' welcome, Commodore Sudarso was not amongst them, having been killed when a shell struck the bridge.

The episode was a textbook case of confusing political intent with military action and had been both ill conceived and poorly executed. Sukarno relieved the commander of the Air Force because of the apparent lack of air support given the MTBs but neither the Air Force nor any service headquarters in Djakarta had been informed of the plan. Sudarso's part in the sortie remains uncertain, although it is likely that he was a prime mover in its planning. The first that the Indonesian central government knew of the encounter was apparently through an Indian journalist who had heard the news on Dutch radio.
Navies in Asia

The incident provided the ALRI with food for thought. Apart from the loss of its energetic and influential Deputy Chief of Naval Staff, the Navy now had some experience of what it was to face a determined and competent opponent at sea. Dutch naval forces in the area consisted of six frigates and destroyers and two submarines, whose operational efficiency was considerably greater than anything the ALRI could field.23 As well as their surveillance of Indonesian surface forces, the Dutch succeeded in detecting and tracking ALRI submarines on at least three occasions.24 This had a restraining effect on the ALRI's part in further West Irian operations and it may well have contributed to the cautious attitude which the Navy was to adopt during the period of "Konfrontasi" (Confrontation) over Malaysia.

The ALRI was able to avoid further action because Sukarno's tactics over West Irian proved masterly. The Americans' desire to see a peaceful settlement brought about negotiations in Washington in March 1962. The Dutch were determined to hold the line at least on the question of future self determination by the people of the territory but Indonesia remained intransigent and, in July 1962, began to make preparations for a full scale invasion.25 The Dutch forces in the region were sufficiently strong that an assault would have been repulsed with heavy losses, despite the warships and aircraft which the Indonesians were assembling. Even though Sudarso, now a Commodore, had been assigned a force centred on two Skory class destroyers with two frigates and many smaller units, as well as the entire ALRI submarine force in associated support, he was not sanguine as to his prospects of mounting a successful landing of the 20,000 troops that KOTI had gathered. Dutch air and submarine capabilities alone would make the mission "a one way ticket".26 The threat, however, achieved the desired result. Some further compromises on both sides saw a settlement reached on 15 August 1962 which promised effective Indonesian control of West Irian by May 1963.

More Soviet Ships

It was in this atmosphere that further transfers were agreed with the Soviets. Martadinata himself had worked out a ten year plan which, if ambitious, at least combined Sukarno's desires for naval expansion with a logical force structure. By the end of the decade, the ALRI would number some 50,000 personnel, with a further 10,000 in the KKO. Martadinata intended to create a seagoing Fleet in addition to separate local defence forces under the regional commands. The seagoing, or "Main" Fleet would be divided into a submarine force, an anti-submarine warfare task group based around a carrier and a surface action group based around a cruiser.

By the middle of 1961, cadre personnel for the cruiser and additional submarines were training in the USSR. The rate and scale of the transfers could not be concealed and by this time the western powers were paying close attention to developments in the ALRI. The Air Force, too, was receiving Soviet equipment on the grand scale. By November at least eight TU-16 (Badger) bombers were in Indonesia with indications that there were more on the way.27 It was soon apparent that the aircraft carried air to surface missiles.28 1962 saw a rash of naval
SOVIET BLOC TRANSFERS TO THE INDONESIAN NAVY

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KEY: 2 = COMPLETED  (2) = CANCELLED

AGREEMENTS:

MARCH 1958

SEPTEMBER 1960

JANUARY 1961

JUNE 1961
arrivals, with at least six Whiskey class submarines, another Skory class destroyers and, in
October, the Sverdlov class cruiser Ordzhonikidze and two Riga class frigates. The cruiser,
newly renamed Irian in an obvious commemoration of the recent humiliation of the Dutch, was
greeted with great ceremony. The ALRI used the occasion to boast of its progress, giving its
first public indication that the Navy would be acquiring surface to surface missile firing units
and that a second Sverdlov class cruiser would be transferred from the USSR "by 1964". The
scale of Indonesian ambitions was further indicated by the declaration that the ALRI had
achieved only 40% of the strength planned for the Navy and that surface to air missile firers
would be the next step.

Yet the relationship between the Soviets and the Indonesian Navy was not proving an
easy one. The ALRI was suspicious of the Soviets' political intent, which had been clearly
demonstrated by the Soviet Navy's heavy handed approach during a visit by a task group
including the cruiser Admiral Senyavin in November 1959. It was inevitable that the
complicated new ships should come with Soviet cadres to act as advisers while the Indonesians
familiarised themselves and equally inevitable that some form of base technical assistance should
be necessary. But the ALRI set its face firmly against Russian proposals for the permanent
stationing of advisory personnel or the deployment of Soviet warships to Indonesia for anything
other than courtesy visits. The Indonesians isolated Russian technicians when they could and
monitored their activities closely.

Even with a better will than existed on either side, the difficulties continued to be almost
insuperable. The sheer volume of documentation which had to be translated from Russian to
Indonesian overwhelmed the limited number of interpreters. The Soviets had little experience
in distant logistic support and the stores and spares problems were so acute that certain units,
notably two of the submarines, were transferred specifically for cannibalisation.

Yet the political agenda remained, now with an eye to destroying the federation of
Malaysia. Throughout 1963 the transfers continued, with missile armed Komar class fast attack
craft and two more Riga class frigates. Not surprisingly, the latter units, built to a simple and
robust design, soon became the backbone of the operational fleet and some were to remain in
service long after the cruiser and destroyers had gone. Martidanata, however, began to succeed
in slowing down the rate of transfers, or at least altering them in favour of units specifically for
cannibalisation. Although there continued to be talk of a second cruiser and even of a third
hull which the Russians would convert to an aircraft carrier, the extreme difficulties encountered
with operating the Irian made such acquisitions unlikely.

Martidanata had other reasons for reducing the pace of expansion. While the Soviet ships
had been paid for by special capital funding, the ALRI was not receiving the increases in its
operational budget which it needed to run the fleet. Indonesia's economic situation was becoming
progressively more serious and the armed forces were under pressure to limit their spending.
The Army was determined that it should not bear the brunt of reductions and began to agitate against further ship purchases. Martidanata was faced in 1963 with the prospect of cuts in the ALRI’s budget of 60%. The Navy, in the atmosphere of crisis which Sukarno was encouraging in his campaign against Malaysia, was able to limit the reductions but there was every chance that pressure would be renewed in 1964 and 1965.

Confrontation

Apart from the relief it afforded from the prospects of retrenchment, neither the Army nor Navy shared the enthusiasm of Sukarno for the idea of Confrontation with Malaysia. The ALRI was prepared to make some demonstrations with submarine and surface ship deployments around Malaysian waters, but it could not face the rapidly increasing forces of the Royal Navy and its allies. The ALRI’s low level of capability was again demonstrated when one of the Riga class frigates “ran aground on one of the Bintan islands, almost within sight of Singapore.” Martadinata agreed with the attitude of the Army general staff to the prospect of war and followed their lead in limiting the participation of regular forces within the organisations which Sukarno devised to prosecute his campaign. Thus, although ALRI patrol vessels maintained a presence outside Malaysian waters, sometimes aggressively, insertions of personnel into Malaysian territory were generally conducted by air or by disguised small boats or fishing vessels. The Navy’s amphibious units were not attached to the supposed invasion force which was to be assembled in Sumatra. Without such assets, any large scale activity was impossible.

As the months passed, the ALRI found itself caught up in the dislocations brought about by Indonesia’s increasing economic and political difficulties. The aggression against Malaysia had resulted in the suspension of the aid and loans promised from the West. The campaign to “Crush Malaysia” appeared to be playing into the hands of the increasingly powerful Communist party in Indonesia (the PKI). Lack of funds and continuing deficiencies in trained personnel were keeping the fleet in harbour for much of the time and most of its limited sea training was confined to the Surabaja exercise areas. Of the 12 submarines bought for operational service, no more than 6 were available. The Komars were experiencing continual difficulties with their SS-N-2 missiles and the Iran could barely steam. Martadinata was leading a service increasingly divided within itself. The KKO under the energetic Major General Hartono was pursuing a leftist pro-Sukarno line at odds with the Army, while junior officers within the ALRI were becoming dissatisfied with the state of the Navy and the apparent lack of priority given by the Naval Staff to improving operational efficiency.

Indonesia’s continuing inability to enforce its claims was again made clear in September 1964 when the British despatched a task group led by the carrier Victorious north through the Lombok Strait to emphasise the western claims to rights of innocent passage through the archipelago. Had Victorious not been suffering from a defective rudder, the passage would
The Indonesian Navy

have been conducted through the Sunda Strait, humiliatingly close to Djakarta. Once again, the ALRI did not attempt to interfere.

The uncertainty of Martadinata's situation was demonstrated by protest action taken by the "Progressive-Revolutionary Officers' Movement" in February 1965 who complained to Sukarno about Martadinata's inadequacies. The President temporised, advising the protesters to resolve their differences with the Admiral directly and this resulted in a mutiny of junior officers in the fleet and the Air Arm in Surabaya in early March. Even this was insufficient to force Sukarno to dispense with Martadinata, since the latter enjoyed the support of the Army commanders and the President declared that Martadinata was "fully entrusted" with resolution of the difficulties. Since many of the junior officers' complaints were professional rather than political, Martadinata moved carefully. Although some 145 officers were removed from the active ALRI, they were transferred to the Department of Maritime Affairs. The real cost of the affair was in the damage it did both to the ALRI's morale and its long term efficiency - many of the mutineers had been amongst the more capable of the Navy's junior officers.

The 1965 Indo-Pakistan War

The extent of Indonesian adventurism in the late Sukarno period and the ALRI's involvement was perhaps best demonstrated by the response to Pakistan's pleas for assistance during the brief war with India in September 1965. Sukarno promised "all possible assistance" and the Air Force agreed to transfer both MIG 15s and 19s. Martadinata went further, despatching two submarines, two Komars and two Jaguars to Pakistan. He even suggested that Indonesia attempt a takeover of the Andamans to put pressure on India's eastern flank. This idea got no further than demonstration flights over the islands but, combined with Sukarno's declared ideas of an "Indonesian Ocean", it caused justifiable alarm in India. The Indonesian warships arrived in Pakistani waters after the cease fire but they visited several Pakistani ports and stayed "until such time as the chances of recurrence of hostilities had receded."

Coup and Counter

The leftist "30 September" movement which attempted a coup against the Army on 1 October 1965 had relatively little direct ALRI involvement. When the counter-coup operations began under the direction of the commander of the Army Strategic Reserve (KOSTRAD), Major General Suharto, they were with Naval support. The ALRI's initial attitude had been one of caution and Martadinata initially co-operated with Sukarno in the President's responses to the coup but he soon accepted Suharto's effective leadership in the measures taken against the 30 September conspirators and against the PKI. The Navy's political position in the long term was, however, more complicated. The ALRI feared the prospect of a dominant Army and retained much sympathy for Sukarno as the Father of the nation. As a result, when Sukarno moved to reassert his authority with a Cabinet reshuffle that involved Martadinata's removal from
command of the Navy, there was no resistance. Sukarno was restrained from appointing General Hartono in his place but the officer eventually selected, Rear Admiral Muljadi, was a Sukarnoist. Martadinata, perhaps appropriately, was appointed as Ambassador to Pakistan but died some months later in a helicopter crash while visiting Java. The President also took the unusual step of including Hartono within the Cabinet as "Deputy Navy Minister" - he continued to command the KKO - which had no parallel in the other services. It was an attempt at packing the government which could be expected to offend the Army.\(^4\)

Nevertheless, while the Navy and the other services continued to support Sukarno, they were not willing to move against the Army unless the need was desperate. The feeling was mutual, since Suharto had no desire to push Indonesia into a civil war. This, although there were arrests of Sukarnoist ministers and sympathisers in March 1966 which meant the de facto end of Sukarno's regime, the facade of presidential authority was continued.

The New Order

Suharto continued to move very gently in the process of consolidating power while the Navy and the KKO maintained their ostensible support of President Sukarno in the hope that something would turn up to prevent the army dominating the government outright.\(^46\) Suharto was prepared to bide his time. Purging the leftist Air Force was a higher priority than dealing with the ALRI or KKO and in any case the change in the external political climate dictated new approaches to defence policy. Confrontation was quietly ended and the atmosphere of crisis which had prevailed almost continuously since independence gave way to an acknowledgement that Indonesia was not subject to direct external threat and that its first concerns must be domestic.

The Army outlined its new national security policies at a seminar in August 1966, which was followed by an inter-service meeting in November. At these gatherings, the concept of the ABRI as a military and social force, with its primary duty the internal security and development of the nation was outlined. External threats were secondary to this and the military's resources would be allocated accordingly. This, of course, cut across the Navy's emerging conception of Indonesia as a maritime nation under threat and the ALRI as its prime defender and removed the case for the maintenance of highly capable and expensive naval forces.

The Navy's displeasure was indicated by the steady reduction in the numbers of its officers attending the November seminar as the sessions continued. But this sort of passive resistance and the public criticism of the Army's purges which was expressed through the medium of naval supervised newspapers\(^47\) were of little use when the Sukarnoist elements elsewhere were progressively giving way to Suharto's supporters. Furthermore, the Army now controlled the government's finances and the progressive reduction in the Navy's vote combined with the departure of the Soviets to immobilise the bulk of the fleet. Measures to transfer
## INDONESIAN NAVY - FORCE LEVELS

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**KEY:** 2 = EFFECTIVE   (2) = INEFFECTIVE

**NOTES:** OPERATIONAL STATUS FOR 1962-1972 PERIOD ESPECIALLY DIFFICULT TO DETERMINE WITH ACCURACY.

The Indonesian Navy

transports to merchant charter and allow landing craft to "moonlight" for the Navy in inter-island trade brought in some funds, but they had no hope of making up the deficiencies. The Navy lost status in 1967 with the decision to abolish the separate service ministries and deprive the individual service commanders of their cabinet rank. Following the partial amalgamation of the cadet academies the previous year, it was clear that the Army was bent on creating - even if largely Army oriented - a cohesive joint organisation.48

By early 1967, Muljadi was planning to reduce the active fleet by at least half and concentrate resources upon a small unit of submarines and escorts. Refit work on the destroyers and the Irian continued, but it was gravely restricted by the now chronic lack of funds and Muljadi received short shift from the Soviets when he visited Moscow in late 1967. The latter made it clear in response to his enquiries about spare parts that "supplies would be made available only on a cash basis."49

The KKO under General Hartono engaged in sporadic resistance to the Army but, by 1969, its position and that of the Navy had weakened to the extent that Suharto was able to appoint both General Hartono and Admiral Nuljadi away from their commands to ambassadorships and appoint his protege, Rear Admiral Sudomo, as the new commander of the Navy. This posting came hard on the important structural changes of October 1969 which abolished the individual services commands-in-chief and created a joint service command organisation. The heads of the single services were now chiefs of staff and they surrendered most of their operational authority to the C-in-C of the Armed Forces or to the six regional commands (KOWLIHAN) which had been organised to subsume the local forces. Apart from the loss of formal authority by the smaller services, the Army's stranglehold on senior posts within the new organisation confirmed its domination of policy.

The budget arrangements reflected the new reality of the RENSTRA HAKAM (Defence-Security Strategic Plan). Resources allocated the military would be dependent upon the requirements of national development and would be adjusted "likewise, utilizing sound economic principles, in order to guarantee the continuation of the development effort."50 Government spending was now allocated according to Five Year Plans (REPELITA), the first of which would run until 1973-74. Its emphasis on reorganisation to create unified armed forces left little for technical services or equipment procurement. The new direction was indicated by the establishment of the Maritime Security Co-ordination Agency (BAKORKAMLA) as a wing of the Navy to integrate government policy on control of Indonesia's territorial and internal waters.51 The next five years for the Navy, renamed the Tentera Nasional Indonesia - Angrakan Laut (TNI-AL) would necessarily be a hand to mouth existence.

The new Naval Chief of Staff entered office with a mandate to bring the Navy into line with the Suharto regime and he set about his personnel reforms energetically. Sudomo's association with Suharto dated from his service as the naval component commander for the West
Navies in Asia

Irian operations in 1961 and he was a trusted associate of the new Acting President. Within weeks, a dozen senior officers had been dismissed or arrested and he continued his purge in the junior ranks "with such singlemindedness and despatch that it had become something of a joke amongst those in the Suharto group that, if Sudomo did not stop soon, the Indonesian Navy might be left with a number of ships but no officers to command them." Sudomo later admitted that he had removed some 1500 officers from the TNI-AL and KKO in the course of his reforms.

These personnel losses had their price. When combined with the effects of budgetary reductions and the loss of Soviet support, they meant that the fleet was moribund by 1970. Sudomo made desperate efforts to concentrate the very limited resources left after provision for patrol and transport work amongst the islands on a small task group centred around a headquarters ship and two of the Riga but his success was limited. Attempts to revive the submarine force proved impossible without foreign assistance and attempts at missile firings from the Komars were so unsuccessful that the capability was abandoned.

The Turn to the West

The rapprochement of the United States and Australia with Indonesia provided the access to military assistance which the TNI-AL now desperately needed. The continuing restrictions on operating funds prevented any large scale acquisitions but the United States Navy transferred six coastal minesweepers in 1971 which were immediately pressed into service. In fact, the Navy put them into such "constant usage" that their wooden hulls had deteriorated past economic repair when the initial five year loan expired in 1976. Australia followed the American example with two Attack class patrol boats in 1973 and 1974 but the rebirth of the TNI-AL as a seagoing force really began with the transfer of the first of four Claud Jones class destroyer escorts from the USA at the end of 1973. These diesel powered "mass production" ASW escorts had proven too small and slow for American service but they represented the reliable patrol and surveillance capability which the TNI-AL so needed. It was no coincidence that these transfers were accompanied by the wholesale scrapping of non-effective Soviet built ships between 1972 and 1974. By 1975, apart from small craft, the only Soviet combatants left in the TNI-AL were four Riga class frigates and two Whiskey class submarines, with a third as an alongside trainer.

Slightly improved funding under the second five year plan and the second hand ships provided a basis for improving training standards. The TNI-AL conducted passage exercises with the USN and RAN as well as with ASEAN navies and even managed a successful deployment in 1974 to southern Australian waters. In the same year, the active fleet was divided into Eastern and Western units, both based on Surabaya.
This period of limited but real progress in the TNI-AL within a relatively benign strategic environment was interrupted by two developments which together emphasised the need for effective maritime defence forces. The first was the collapse of resistance in South Vietnam in 1975. While Indonesia had always felt a certain empathy for the cause of the Vietcong and North Vietnam, the humiliation of the United States, the possibilities of disengagement from the region implicit in the Guam doctrine and America’s rapprochement with China - itself becoming more active in the South China Sea - created deep uncertainties for the future in Djakarta. As part of a package of measures designed to improve Indonesia’s security position, a supplement was added to the 1975-76 component of the second five year plan to provide for additional capital expenditure for the Air Force and Navy.

The second development was the Indonesian invasion of the former Portugese colony of East Timor. After considerable internal debate, the Indonesian government, fearing the effect that an independent Marxist aligned and unstable state would have on the archipelago, launched an assault in December 1975. The TNI-AL contributed no less than thirty landing ships and escorts and conducted bombardments in support of troops ashore. While the Navy’s part proceeded relatively smoothly, the despatch by the Portugese of a warship to demonstrate a presence in protest to the Indonesian intervention was a reminder that the TNI-AL required a capability to defend itself against other warships. Well aware of its limitations, the Navy did not suffer the shocks of the Army at the low levels of training and equipment but was fully in sympathy with the reform process which was embarked upon as a result of lessons learned in East Timor.

The first fruits for the TNI-AL were an order for three Exocet equipped light frigates from the Netherlands which would restore a credible surface warfare capability to the Navy. The way in which the project was handled was summed up by a Dutch engineer “There won’t be any repeat of the past. This time they have got the equipment they need and a very comprehensive maintenance programme...They are taking it all very seriously.” The Dutch order was followed by one from South Korea for four missile armed fast attack craft. In selecting the Korean design over a more costly (despite US Foreign Military Sales credits) American competitor, the TNI-AL displayed what was to be a consistent policy over the next twenty years of securing the cheapest workable type for its purposes.

The next step was the restoration of the submarine force and this came in 1977 with an order to West Germany for two Type 209 submarines, with a similar stores and training package to the light frigates. The TNI-Al was inclined to downplay the purchase of these units, noting that the primary interest in possessing them was to remain abreast of technological change, but their 1981 entry into service gave the Navy some capacity to deny movement through the archipelago to sophisticated opposition. This new credibility was important because the forthcoming 1982 Convention on the Law of the Sea largely recognised Indonesia’s concepts of archipelagic rights. This was something for which the Indonesian armed forces had long
laboured, occasionally pre-empting the responsibilities of the Foreign Ministry. So confident was the government of a successful conclusion to the concept that it advanced the schedule, proclaiming a 200 mile Exclusive Economic Zone in 1980. "Land and Water" remained an integral element of national policy and defence doctrine.

The reconstruction programme was formally acknowledged by President Suharto in January 1978 when he declared that "the growing financial capacity of the state allowed a reorientation of defence expenditures to better respond to foreign threats." Further purchases of a training frigate from Yugoslavia and landing ships from South Korea followed before the end of the decade. Despite the range of equipment involved in all these acquisitions, the TNI-AL was generally satisfied with them and planned further expansion. This was formally announced in 1980 with the declaration of a twenty year plan for naval development. The minimum force was to be based on four fast frigates and six submarines, with a range of fast attack and patrol craft and auxiliaries. If funds permitted, three more frigates and another six submarines would be added to the force. In 1980, too, as some indication of the progress achieved in all the armed forces, an archipelago wide joint exercise involving "upwards of thirty thousand men" was conducted. Results were mixed but the potential was obvious. Such exercises, under the designation Armada Jaya, became regular events from 1982 onwards.

Interrupted Progress

The TNI-AL had cause to be optimistic but, once more, economic problems intervened to stifle continuing development. Dramatic falls in oil prices in the early 1980s, the devaluation of the rupiah and increasing foreign debt forced a hold on expensive new construction programmes. A second Yugoslavian frigate was cancelled outright, no more Dutch light frigates were purchased and the expansion of the submarine force was delayed indefinitely. Although the German boats had proved reasonably successful, they were expensive to maintain and it eventually became clear that their "deep" maintenance was beyond Indonesian capabilities. The TNI-AL still required new warships but it would have to look in other directions.

There was a second complication for force development, the push to create an indigenous shipbuilding industry. A Maritime Industry Centre, P.T. PAL Indonesia had been established in 1980 using the naval dockyard at Surabaya as its basis for development. Enjoying the support of Dr Habibie, the influential Minister for Research and Technology, P.T. PAL had the stated aim of achieving a capability "to build, repair and maintain naval ships for the enhancement of the nation's defence and security capability." The long term aim was laudable, but the learning process would be lengthy. The dilemma for the TNI-AL was that the armed forces' concepts of supporting national economic development dictated that P.T. PAL should receive the Navy's support and this state of affairs was confirmed by the enactment of regulations to prevent TNI-AL purchases overseas. It would be impossible to justify orders to foreign yards for new construction if P.T. PAL thought that it could do the job and, in any case, development
The Indonesian Navy

of the shipyard was likely to draw off whatever capital resources existed. This was made clear when an order was placed with P.T. PAL in combination with the German firm of Lurssens for eight 57 metre fast patrol craft in various configurations. The first unit, built in West Germany and shipped incomplete to Indonesia for fitting out, did not commission until 1988. The class proved very successful in service but an 8 year building period was more than twice the time that a wholly overseas order would take. It was P.T.PAL's intention to follow the 57 metre project with one for the construction of the first of up to 23 light frigates, but, although the project was much discussed during the 1980s and received formal government approval, it did not develop further.

Meanwhile, the TNI-AL was faced with a requirement for replacement frigates which it had to obtain with limited funding and without political ramifications. The only solution was to enter the second hand market which Indonesia did in 1984 with the purchase of three twenty year old Tribal class frigates from the United Kingdom. Apart from refits to restore equipment to operational condition, none of the ships received any modernisation for the TNI-AL. This purchase was followed in 1986 by an agreement with the Netherlands for the transfer of two modified Leander (Van Speijk) class frigates with an option on a second pair - soon taken up. The TNI-AL was to complete a clean sweep of the Van Speik class in 1989 when it bought the last pair in Dutch service.

1984 saw the beginning of further reforms in the defence command structure. All the old service area commands were abolished and incorporated into the joint service regions (KODAM) which were reduced to ten. Each KODAM commander was given operational control of all service units within his area. The major units in the active fleet were divided into Eastern and Western Commands based on Surabaya and Teluk Ratai in South Sumatra. The concept behind these arrangements was that it allowed effective "strike" forces to operate against any large scale incursions into the archipelago while it created a series of discrete "strong points" (the ten KODAM) which would force any aggressor to adopt an "island by island" strategy. To support the Western Fleet, the TNI-AL proposed large scale development of Teluk Ratai, a project which would require considerable capital spending.

Concepts for the 1980s

The tenor of the TNI-AL's development plans in the 1980s generally reflected its belief that maritime forces required a higher priority in the developing strategic situation. The naval staff developed the theme of "SSAT", the "integrated fleet weapon system", which attempted to deal with naval warfare requirements as a whole, arguing that a balanced fleet embodying air, surface, sub-surface, amphibious and mine warfare components was required. Naval planners began to speak of the Navy's over-extension, noting that "their needs for their vast coastline are in the area of 150 frigates and destroyers, but they have to make do with 40(sic)." It is important to realise that the bulk of these remarkable numbers are derived from the TNI-AL's
INDONESIAN NAVAL COMMAND STRUCTURE - 1992

JAKARTA

NAVY HQ
JAKARTA

MARINE CORPS
HQ

MILITARY
SEALIFT
COMMAND

NAVAL
TRAINING
COMMAND

WESTERN FLEET
HQ JAKARTA

EASTERN FLEET
HQ SURABAYA

COMBAT GROUP
(GUSPURLABAR)
HQ JAKARTA

MARITIME SECURITY GROUP
(KOOPSKAMLABAR)
HQ MEDAN

COMBAT GROUP
(GUSPURLATIM)
HQ SURABAYA

MARITIME SECURITY GROUP
(KOOPSKAMLATIM)
HQ UJUNG-PANDANG

NOTES:
1. THE MARITIME SECURITY GROUPS HAVE A GEOGRAPHICAL COMMAND STRUCTURE WITH THREE SUBORDINATE LEVELS OF COMMAND - SATGASKAMIA, POKGASKAMIA AND UNITGASKAMIA.
2. COMBAT GROUP UNITS ARE BASED IN SURABAYA AND JAKARTA (TELUK RATAI WHEN CONSTRUCTED)

perception of the archipelago’s internal requirements for what are essentially police/coast guard functions rather than sophisticated naval warfare operations in the western sense. It was for this reason that the TNI-AL was and remains relatively content with elderly and fundamentally unsophisticated ships such as the Tribal class, provided that a core of capable units exists for a "strike" force. The Van Speijks with their modern weapons and sensors (the Dutch had "half-lifed" the class between 1976 and 1982) provided a very welcome supplement to the Dutch built light frigates and took some of the urgency out of the TNI-AL’s need to commit itself to the risks of P.T.PAL’s building programme.

Development of the base at Teluk Ratai was an indicator of the TNI-AL’s attitude to external strategy. Facilities in Sumatra improved its access to the Straits of Malacca and to the South China Sea at a time when other regional powers were undertaking significant naval developments. Yet none were seen as implying direct threats to Indonesia. Even the Indian build-up of naval combatants and construction of facilities in the Andamans was regarded with some equanimity. It was the Indian "intentions" that counted and only in 1989 did the Indonesian Chief of Naval Staff formally express "concern" about India’s naval activities in the course of an official visit to New Delhi. The situation in the South China Sea was watched with care, since Indonesia had extensive territorial claims in the area, but its approach was to seek peaceful solutions to conflicting interests.

Where Indonesia could be uncompromising was in its continuing assertion of its archipelagic claims. The 1982 Convention differed from the Indonesian conception in one important respect - other nations’ ships were allowed to make expeditious passage through the straits of the archipelago and Indonesia did not have the right to interrupt such activities. Indonesia was prepared to accept such doctrine for the Malacca Strait but it regarded the deep water Lombok and Sunda Straits as being a different matter. In September 1988, the TNI-AL announced that both straits would be closed temporarily while naval weapons firing exercises were held. The controversy which followed was apparently confined to the diplomatic arena but the affair was a significant indication of Indonesia’s continuing view of its rights and the TNI-AL’s espousal of the cause.

Operationally, the TNI-AL engaged in an exercise programme that was becoming, albeit slowly, progressively more sophisticated. While Indonesia continued to fight shy of multi-lateral defence activities, the level of bi-lateral passage and routine exercises also grew. Indonesia and Brunei engaged in the Pelican series of exercises and links with Singapore and Malaysia also matured steadily. The military relationship with the United States was low key but cordial and that with Australia, while often subject to disruption over other issues, improved in the early 1990s. The TNI-AL was able to combine operational gain with a boost for P.T. PAL in 1990 when it took two newly completed FRB 57 class fast patrol vessels on a sales and exercise tour of Malaysia, Singapore and Brunei. At least in the case of Singapore, this culminated in the most sophisticated joint training hitherto conducted between the two countries.
The Indonesian Navy

A Future Force Structure?

The most difficult question which the TNI-AL had yet to resolve was its future force structure development. The fourth five year plan had enunciated the concept of the "leading edge ship" to concentrate development on surface combatant and submarine forces for maritime strike, as well as amphibious units sufficient to allow two separate battalion level assaults within the archipelago. Although the intention to opt for a large (23 unit) light frigate programme had been publicly reaffirmed in 1989, doubts still remained over the viability of the concept. By 1990 it was clear that at least the lead unit would have to be built overseas and the total build proposed had dropped to 19 units. Debate continued over the next two years with no firm result. Similar uncertainties applied to the other key element of the TNI-AL, the submarine force. Although the Type 209s had been subjected to thorough half life modernisations in Germany between 1986 and 1989 they were "expensive and lengthy" and the TNI-AL hesitated to order more. The experience of the Indians with Type 209 construction was a clear warning for P.T.PAL's ambitions. The mine countermeasures force was struggling to exist. Two Tripartite type minehunters had been bought from the Netherlands in 1985 and commissioned in 1988 but plans for ten more to be built in Indonesia were stalled indefinitely due to "lack of funds".

It was in these circumstances that the TNI-AL was able to solve at least some of its problems by buying no less than 39 units of the old East German Navy. These included sixteen corvettes, twelve landing ships, two combat support ships and nine coastal minesweepers. The ships would have to be refitted and "tropicalised", and their standards of construction and the sophistication of their equipment were likely to prove remarkably familiar to the older personnel of the TNI-AL. Nevertheless, these relatively new ships would allow something of a clean sweep of the oldest units of the TNI-AL still being employed on patrol duties amongst the islands, while giving P.T. PAL a necessary breathing space for the start of the frigate programme.

Towards 2000

The TNI-AL approaches the twenty first century with every prospect of becoming a much more important element within the Indonesian scheme of defence and within the armed forces themselves. The sustained economic development which Indonesia is experiencing suggests that greater stability in the provinces, combined with better infrastructure and vastly improved communications will reduce the requirements for internal security operations within the archipelago. Much depends upon a smooth succession to the Suharto regime, a process in which the Navy's senior officers will be actors and any renewal of insurrection in the islands would immediately draw the TNI-AL's attention wholly inwards. It is much more likely, however, that the development of naval power elsewhere in the region will become the Navy's primary concern, particularly if the USN "drawn down" continues. This will require the TNI-AL to reorient its priorities to improving its combatant elements, particularly in the submarine force,
and its anti-submarine and anti-air warfare capabilities, which are presently very limited. What remains of the patrol function must include, too, an improved oceanic capacity to monitor Indonesia's interests in the Indian Ocean.

If the TNI-AL has much ground to make up in improving its capabilities, it can at least look to the prospect with confidence. Indonesia's progress in the last decade has been mirrored within the Navy and the TNI-AL has achieved what it so long lacked, a core of credible expertise. The process of developing an effective naval service with only sporadic and unreliable external assistance has been intensely difficult, but it has been realised.
The Indonesian Navy


5. C.L.M. Prenders & B. Hering (Eds) Ganis Hursano Recollections of an Indonesian Diplomat in the Sukarno Era University of Queensland, St Lucia, 1979. p. 150.

6. ONI Review Vol. 13, No. 4, April 1958. p. 182. The 75 ships were: one light cruiser, six frigates, a coastal minelayer, six corvettes, eight submarine chasers, six coastal minesweepers, 25 small submarine chasers and 24 motor torpedo boats.


8. ADM 1/27056 Head of GF Branch III Memorandum Dated 28 October 1958.


11. Ibid. p. 143.


Navies in Asia


24. Ibid. p.37.


45. Ibid. p. 175.


47. Ibid. p. 239.


49. Ibid. p. 239.


51. Bob Lowry *The Indonesian Armed Forces Current and Future Capabilities* Draft Paper for
the Strategic and Defence Studies Centre, The Australian National University, Canberra, 1992. p.41.


60. Ibid. p. 31.


64. Ibid. p.193.


The Indonesian Navy


73. Ibid. p.284.


75. General Rudini (Chief of Staff of Army) Cited *New Straits Times* 3 May 1983.


81. As evidenced by the convening in Indonesia of "workshops" on the Spratlys, to which the various protagonists were invited.


86. Ibid.
87. Ibid. p.283.

88. Ibid. p.289.


The Republic of the Philippines Navy (RPN) is the weakest and most under capitalised navy in South East Asia. Despite a fair start after the Second World War with United States assistance, it has suffered from a combination of complacency within the Philippines government over the defence umbrella provided by the American presence at Subic Bay and preoccupation with the threat posed by internal insurgent movements, both ideological and religious. As a result, the RPN has not been allowed to develop in the directions required by its considerable surveillance and presence tasks. It has yet to acquire either the weapons and sensors or the command, control and surveillance systems of many of its neighbours, while its major units are approaching their half century in service.¹

The post-Marcos governments have promised to support the modernisation of the RPN but this has yet to translate into significant practical action. The Navy has been forced to publicise its plight and this may result in confirmation of the projects which the RPN has in hand. Such confirmation, however, had still to be achieved in October 1992. The Philippines Navy thus faces the prospect of losing its entire, presently marginal, ocean going capability at a time when resource protection and sovereignty issues are becoming more prominent. As with so many other of the country's problems, time will tell over the achievements of the new regime, but that time is limited for the RPN.

Background

A Philippines naval service was established in June 1898 by the revolutionary government of Emilio Aguinaldo. Made up of captured Spanish vessels and requisitioned light craft, the service supported Filipino operations against the Spanish until suppressed by the United States in October 1898. Since this force had provided most of the logistic support for Aguinaldo's troops, its seizure by the United States Navy (USN) was a death blow to the Filipino attempts to resist American rule.
Navies in Asia

Not until 1939 was any kind of Phillipines naval force re-established. The initial Defence Act of the Commonwealth of the Phillipines provided for a Marine Division of the Army, which was designated the Offshore Patrol (OSP). This came into formal being in February 1939, equipped with three motor torpedo boats. Although the OSP was practically wiped out during the 1941-42 campaign against the Japanese, its personnel established a reputation for bravery. When the Patrol was reactivated in March 1945 it included a number of survivors to form a core of expertise for future expansion.

Post-1945 Reconstruction

It quickly became obvious that the Philippines would have to rely upon extensive United States' assistance for the reconstruction of its armed forces and formal application was made to the Americans after the end of the Japanese war. This resulted in the passage of the Military Assistance to the Philippines Act by the US Congress in June 1946, in which a five year aid programme was proposed, including the establishment of a military advisory group. The Filipino application had included a request for eight patrol and landing vessels for coast guard duties, the rationale for which was simple. The Philippines had suffered greatly from the Japanese occupation and the returning government had been unable to gain control over smuggling or illegal fisheries. The easy availability of large amounts of explosives had made dynamiting prevalent, to the point that the future of the country’s fish stocks was being threatened. Furthermore, the loyalty of many of the islands with the Philippines archipelago was doubtful and a strong military presence was required to re-assert the government’s authority.

The Americans were sympathetic to the requirements of the Philippines, particularly since they intended to remain in the archipelago in the form of the naval facility at Subic Bay, as well as substantial air and ground forces. By October 1947 some 95 ships (to the value of $US 62 million) had been transferred and the OSP’s reactivation was marked by its renaming as the Phillipine Naval Patrol (PNP). Support for the nascent PNP would be provided by the Joint United States Military Advisory Group (JUSMAG) which was formed after the Philippines and the United States signed Military Bases and Military Assistance Agreements in 1947.

Two factors would define the future shape of the PNP. The first was the relationship with the United States. Both the developing defence arrangement with America and its military presence meant that the USA was the effective guarantor of the integrity of the Philippines against an external threat. Thus, the armed forces - particularly naval and air forces - did not require sophisticated capabilities. The arrangement was confirmed by the Mutual Defence Treaty which was signed by the two nations in August 1951 and ratified the following year. While its commitments were not specific, the declaration that "an armed attack" on either state in the area of the Pacific would be recognised as endangering peace and safety and that both would "act to meet the common danger" was substantial enough.
The Philippines Navy

The second factor was that the rapid post-war emergence of anti-government movements, notably the Hukbalahap (Huk) rebellion centred on Luzon, required the armed forces to concentrate on counter-insurgency operations. The PNP's role was seen as being one of direct support for the army, through transport and patrol work. This had immediate ramifications. Playing an active role in internal security strengthened the PNP's position to the point where, as part of the general reorganisation of the armed forces, it could remove itself from the Army and assume a separate existence as the Republic of the Philippines Navy on 23 December 1950. Notably, however, the Army remained dominant within the headquarters organisation which was created to co-ordinate the activities of the armed services and the police and this was reflected in the ambiguous statement of the RPN's mission, which was to operate "naval forces in support of the missions of the Armed Forces of the Philippines". The RPN also began the formation of a Marine battalion, with a core of volunteers from other arms of the Navy. In 1951, the Navy conducted its first gunfire support operations against Huk insurgents and in the same year mounted a large scale campaign against smugglers in the Sulu Sea.

The difficulty for the RPN was that the operations in which it was engaged consumed the Navy's still very limited resources to the point that the service was achieving no advances in operational efficiency. Not all the ships handed over by the United States could be manned and some were already deteriorating in unmaintained reserve to the point where they were beyond economical repair. With USN assistance, some progress was made in improving technical and operational standards from 1952 onwards, but the RPN still lacked the resources to resolve such problems by itself. It was significant, for example, that the Philippines Army could despatch a battalion to operate in Korea during that conflict while the Navy, unlike that of Thailand, was not involved.

Standing Still

The Navy's situation was not much improved by developments in the Philippines' security arrangements as the decade progressed. Although the country was a leading actor in the formation of the South East Asia Treaty Organisation (SEATO) in 1954, its motivation was to establish a common front against Communism - by which it included internal subversion - and further bind the United States to the defence of the Philippines against an external threat. The then President of the Philippines, Ramon Magsaysay, viewed the real priorities as "the establishment of concrete methods by which to deal with subversion, [and] a plan of economic and military assistance."

While the Philippine Armed Forces did achieve some integration of their defence planning effort with the Americans, the achievements in terms of the RPN's "hot war" roles were limited. The obvious duties of the Navy would be ASW and MCM within and around the archipelago, but even these apparently limited tasks required much more investment than the government would allow. Magsaysay, himself a former general, believed that the military should
## REPUBLIC OF THE PHILIPPINES NAVY - FORCE LEVELS

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* Includes: Submarine Chasers (SC), Escort Patrol Vessels (PCE & PC) and former Ocean Minesweepers (AM).

** Does not include units employed on purely commercial duties.

Key: 2 = Effective  (2) = Ineffective

Sources: Jane's Fighting Ships/ The Military Balance/ ONI Review.
concentrate on internal security and assist with economic development and civil assistance. This established what would be a consistent policy for the next two decades of limiting military expenditure. Consequently, while the RPN was regularly involved in multi-lateral exercises from 1956 onwards through SEATO and in bi-lateral exercises with the United States, it found itself suffering from continued budgetary restrictions, which not only forced the Navy to rely upon American assistance but prevented it from increasing its operational forces. Transfers from the USN tended to be matched with deletions from the effective list of units in poor condition which the RPN could not afford to repair. There were contributions from other directions, including seaward defence vessels from Australia and new construction support ships (including a presidential yacht) as reparations from Japan, but these were very limited.

Looking to SEATO

The RPN certainly had ambitions for greater things, particularly after exposure to American MCM and amphibious exercises. Its planning in the late 1950s centred around the establishment of a "network" of naval bases around the archipelago with local forces of patrol boats and fast attack craft armed with torpedoes. To provide some oceanic capability, particularly for the waters to the north of the Philippines, the RPN began to press the USN for the transfer of two destroyer escorts, a type that the RPN was eager to label "destroyers". There were also considerations of prestige attached to this project, both domestically and in relation to the Philippines' contribution to SEATO. Finally, the RPN proposed to create an amphibious force through expansion of the Marine Corps and the acquisition of additional landing ships. For its part, the USN was less sanguine about the prospects for the RPN and proved unwilling to hand over equipment which it did not believe the Philippines government would support. Consequently, it was not until 1961 that a destroyer escort converted into a high speed transport was transferred to act as a command ship and this satisfied some of the gloomier American predictions by sinking in a typhoon the year after. She was raised and scrapped a few years later. After some debate, a replacement was finally handed over to the RPN in 1967.

Law of the Sea and Territorial Claims

It was ironic that the RPN was experiencing such difficulties at a time when the government was pursuing a much more active approach to questions of sovereignty and international law. In 1955 the Philippines first enunciated its archipelagic doctrine, by which the country's islands were enclosed by baselines within which the adoining waters were claimed as internal seas. The Philippines based its claim upon a complex chain of historical justifications but the motives were clearly "economic, and in part strategic, based upon an assertion of the need for security and control over these 'internal' sea areas." Philippine interest in the Spratly Islands also dated from this period, with claims of Philippine discoveries of new islands in a group that would come to be called "Kalayaan" (Freedom Land). In 1961, the Philippines enacted its archipelagic concept into law, drawing protests from several western states.
In 1962 the Philippines made a claim against the United Kingdom for the Crown Colony of North Borneo, which it based upon the fact that the territory had once been part of the Sultanate of Sulu, now one of the provinces of the Philippines. The question was raised at the time when the federation of the British colonies into the new nation of Malaysia was being undertaken by the British and it was pursued actively for some years after Malaysia came into being in 1963 and North Borneo was incorporated as the state of Sabah. Notably, however, the Philippines maintained a diplomatic offensive rather than an overt military effort. Although there were some increases in the presence of Philippines Armed Forces units in the south of the country, including ships of the RPN, such activities were limited in scale and duration. Military action was concentrated more upon the covert insertion of infiltrators into Sabah until the dispute was allowed to drop from the public view.

The same "diplomatic" element was apparent when the Philippines contended in 1968 that foreign warships could be excluded from its internal waters, contrary to the doctrine of "innocent passage". The RPN was not employed in attempts to prevent such passage; rather, the government confined itself to formal declarations and negotiations with the other powers affected. More important for the RPN in the long term was that 1968 also saw the Philippines assert its claim to mineral rights on the sea bottom within its internal waters. It was thus not surprising that a Coast Guard was established under naval auspices in October 1967.

Where the government did prove willing to take overt military action was in the Spratly Islands. Although the Philippine claims had yet to be formally enacted - this would not occur until a Presidential Decree in 1978 - three islands were occupied by Marines in 1968. This marked the beginning of a policy of reinforcement and fortification of the islands, which would take the numbers in the garrisons to battalion strength by the end of the 1970s.

The Need to Look Inwards

Nevertheless, the military continued to have greater concerns in maintaining internal security, which was drawing off resources which the Navy and Air Force would otherwise have been able to claim for improving external defences. Violence in Mindanao became an increasing problem from the mid-1960s as hostility between local Muslims and Christians spilt over into terrorism and anti-government insurgent movements. A crisis over the execution of Moro soldiers in 1968 brought matters to a head, with the declaration of a Mindanao Independence Movement. For the next decade, the war would leave "50,000 dead, [tie] down over one-half the Philippine combat forces, and [drive] over 100,000 Moros to Sabah."

The declaration of martial law by President Marcos in 1972 reinforced the effect of turning the Armed Forces inwards. Although increases in funding and personnel had preceded the declaration and continued for some years afterwards, they were clearly aimed primarily at the Army and then at the internal security elements of the other Services -"the resources that
were ploughed into military budgets...largely secured the interests of the regime authorities and not those of the nation."27 Furthermore, martial law not only resulted in a heightening of the conflict in Mindanao and in trouble elsewhere within the Philippines, but it also drew in the energies of many senior personnel who were required for its administration.

Not only did President Marcos impose immediate cuts in its budget to redirect money to the Army9, the RPN could expect no significant increases in its share of the defence budget in the future. Any acquisitions which could be managed would be through continuing US m"itary aid - after the Army’s needs had been met. Inevitably, the limited transfers comprised further patrol craft and landing ships with only the single destroyer escort (another ship converted to a high speed transport) in 1967. The internal security and transport roles remained paramount and the only component of the RPN to enjoy consistent expansion was the Marine Corps, which was deeply involved in counter-insurgency operations.

After Vietnam

The first fundamental change in the Philippines' security situation came with the fall of Vietnam. The country had been less directly affected by the American withdrawal from Indo-China and the implications of the 1969 Guam Doctrine than other Asian states because of the continuing presence of the American military bases and the obvious US commitment to them. But a united Vietnam meant a new equation for the South China Sea and thus for the Philippines' western waters. Apart from the role that Vietnam itself would play, there was now the prospect of a significant Russian presence in Cam Ranh Bay. If the Philippines wished to assert its claims in the Spratlys, it would do so without any prospect of US support.

The effects on the RPN were mixed. In 1976 the Navy received a considerable accession of strength through the transfer to the Philippines of the warships which had escaped from Vietnam and Cambodia to Subic Bay the previous year. These included several former seaplane tenders, serving as frigates, a destroyer escort and many landing ships and landing craft.29 Two more DEs were transferred from Japan and rehabilitated in Korea. The frigates and DEs gave the RPN the oceanic capability that it had long desired, but at a price. Although the ships had been acquired at scrap value, they were expensive to man and maintain and their accession into service inevitably put an indefinite hold on projects for new construction.

The RPN had such projects in train. In the wake of the South Vietnamese collapse, the Philippine Armed Forces began to recast their planning away from the holding strategy under which they had hitherto operated, by which the Armed Forces would expect to hold off an opponent only until the intervention of the United States, towards one which emphasised self-reliance. The primary threat was still considered to be one of internal subversion and insurgency but the partial cease-fire agreed with the Moros in 1976-77 indicated that progress was being made in domestic security.30 In 1979 the Philippines declared a two hundred mile Exclusive
PHILIPPINE NAVAL DISTRICTS - POST 1987

PHILIPPINE NAVAL DISTRICT COMMAND BOUNDARIES

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◊ DISTRICT HEADQUARTERS

* ND VI FROM SEPTEMBER 1991
The Philippines Navy

Economic Zone. The near half million square miles thus claimed overlapped with the zones of most of the Philippines' neighbours and it was by no means certain that a peaceful solution would be easily arrived at in each case. If these trends continued, the Armed Forces could look to reconfiguring their forces towards external threats.

Still No Progress

In reality they did not. The Moro cease-fire lasted little more than a year and domestic political considerations continued to dog the efforts of the Navy to replace its elderly ships. Practically the only navy in the region which did not possess surface to surface missiles, the RPN attempted to order three fast attack craft from South Korea, but this venture foundered through lack of funding, as did plans to acquire the Otomat missile. The Air Force achieved some improvements in its maritime surveillance capabilities through the acquisition of three Fokker F27 maritime patrol aircraft in 1981 but this was not enough and the extent of their integration with the RPN or its tiny air arm would remain questionable. Some attempts had been made in the 1970s to create an indigenous ship building capability, but the results were mixed and the industry did not succeed in producing units larger than small patrol craft. The state of the operational RPN was graphically demonstrated in 1981 when the frigate Datu Kalantiaw was forced ashore during a typhoon and became a total loss.

The RPN had hoped to reap a dividend from the renegotiation of the basing arrangements with the United States in 1983. The US administration promised a package of aid over a five year period which would include a total of $425 million for military purposes and, at this point, the RPN intended to acquire two small frigates under Foreign Military Sales arrangements and convert a Marine battalion to a quick reaction force. There was even public discussion of the prospects of acquiring one or two submarines from France. The fast attack craft project was also revived.

Unfortunately, such schemes reckoned without the United States Congress which expressed its increasing dissatisfaction with the Marcos regime by cutting the military aid component in favour of economic assistance. In the absence of direct US aid, the RPN was in no position to purchase new construction of this nature and nothing more was heard of such projects, even after partial funding was restored. As the political situation in the Philippines deteriorated, the Navy remained in suspended animation - albeit with ageing ships and continuing heavy demands for patrol and logistic work in support of counter insurgency and anti-smuggling operations.
PHILIPPINES NAVY COMMAND ORGANIZATION 1991

FLAG OFFICER IN COMMAND

(TYPE COMMANDS)
- FLEET
- COAST GUARD
- MARINES

(SUPPORT COMMANDS)
- NAVAL SUPPORT
- NAVAL TRAINING
- NAVAL FINANCE CENTER
- NAVAL COMPUTER CENTER

- NAVAL CONSTRUCTION BRIGADE
- NAVAL INTELLIGENCE & SECURITY FORCE
- NAVAL BASE CAVITE

(OPERTATIONAL COMMANDS)
- NAVAL DISTRICT I
- NAVAL DISTRICT II
- NAVAL DISTRICT III
- NAVAL DISTRICT IV
- NAVAL DISTRICT V
- NAVAL DISTRICT VI
- NAVAL DISTRICT VII
- SUBIC BAY COMMAND
Navies in Asia

Reform Begins

The RPN's position did not greatly improve even after the supersession of the Chief of the Armed Forces Staff, General Fabian Ver, by General Fidel Ramos in October 1984. Although Ramos had a programme for reform, he focused on internal discipline and the reorganisation of the Army and Constabulary, rather than on increases in spending. The Armed Forces' budgetary allocations had actually declined by over 20% in real terms between 1979 and 1984 but the country's laggardly economic growth did not permit new increases. For their part, the Americans were more concerned with directing aid towards the reconstruction of the internal security elements of the Phillipines Armed Forces than rebuilding the RPN.37

This unfortunate statis continued for the Navy through the period of the anti-Marcos revolution and the first years of the Aquino presidency. Although the RPN was the service least closely associated with the old regime, it experienced its share of changes in senior ranks, having four Flag Officers in Command between December 1985 and September 1986.38 The political change did, however, create an atmosphere in which the RPN could set about putting its house in order. In 1987, the operational command organisation was revised, the three task forces being replaced by six naval districts, with a seventh created in 1991. Many of the most decrepit ships were paid off and sold for scrap between 1989 and 1990. As the RPN was allowed to retain the funds raised through this activity within the service, limited repairs and modernisation could be effected on the ships remaining in commission. Construction was resumed on a 44 metre patrol boat which had been launched at Cavite in 1984 but never completed.39

The RPN also argued its case for a much more ambitious modernisation programme and found a much more favourable political response than ever before. The increasing prospect of the departure of the US military from the Phillipines carried the implication of a requirement for much improved external defences. The Spratlys question continued to unsettle the South China Sea, while the Phillipines was becoming increasingly conscious of the extent to which its EEZ was suffering from poaching by foreign fishing vessels.40

The Dumancas Programme

The installation of a new Flag Officer in Command, Rear Admiral Dumancas, saw the RPN formally enunciate its requirements for between 60 and 100 ships, with up to 120 coastal and inshore patrol craft over a period of 20 years. He devised a three stage reconstruction of the Navy's capabilities. The first stage would involve restoring the capability to control inshore areas and internal waters, the second would cover territorial seas and contiguous zones and the third involve the capacity to control the EEZ.41 The Modernisation Act which was sent to the Phillipines Senate in 1991 spoke of purchasing 1800 ton frigates, 1000 ton corvettes and a range of other units for the RPN in what would be a ten year programme to the year 2000.42 These
FLEET ORGANIZATION 1991

FLEET COMMANDER

PATROL FORCE  SERVICE FORCE  ASSAULT CRAFT FORCE  NAVAL AIR GROUP  READY FORCE
ambitions were not met by the Congress which authorised expenditure of only one sixth of the funds requested. Nevertheless, the Navy pushed ahead with plans for fast attack craft from Spain, fast patrol craft from Australia and a logistic support vessel from China to begin the replacement of the old tank landing ships.

When the Government was slow to provide either direct funding or negotiate "soft" packages with the countries concerned, the RPN increased the pressure in March 1992 by staging a ten ship exercise with invitations to politicians and journalists. The break downs and deficiencies so revealed were placed firmly in the government's court since it had "long neglected the needs for the Navy to buy new ships." The programme of scrapping the oldest ships would continue, whether or not their replacements were obtained. By 1995, half of the World War II vintage construction would have been disposed of. The Navy faced the alternatives of reconstruction or reversion to an inshore force with no ocean going and little coastal capability.

Towards 2000

The ultimatum which the RPN was putting to the administration and the Congress was a reasonable one in the circumstances. The umbilical to the United States had gone, the naval might of the Seventh Fleet was no longer in Philippines waters and the Philippines continued to assert its claims in the Spratly Islands. The lack of a maritime war fighting capability represented an incongruity with the active role being played by the nation in regional affairs and with its practically insupportable (by the RPN) forward presence in the South China Sea.

The challenge for the RPN would be to overcome the dual mindset created by the old American presence and the counter-insurgency problem. Much had been said within the Philippines about "self reliance" but it was not yet apparent that the Philippines government had grasped the implications of the concept. The commanders of the RPN were aware that the process of reconstruction would take "10 or so years" but they were also aware that the time which would be required lengthened as the government procrastinated. The central dilemma of the RPN was no longer one of finding a credible role but that of maintaining sufficient physical capability to do any sort of tasks at all.
Navies in Asia


14. W.D. Viray "Seapower for the Defense of the Philippines" Op Cit. p.61. The average seems to have been two major exercises each year, one with SEATO and one with the USN.


35. Michael Richardson "Reforms in the Armed Forces of the Philippines; But Will They Work?" *Pacific Defence Reporter* March 1985. p.35.


41. Ibid. pp.9-10.


46. "At Least 17 'antiques' to be sold as scrap" Ibid. p.5.


The attempt to draw comparisons in the development of navies brings the immediate temptation to adopt a statistical approach, matching force levels, personnel numbers and budgets. This must be resisted, for two reasons particularly apt in the Asian context. First, even the most straightforward data are not often of a quality to allow valid comparisons. Countries construct their budgets in widely differing ways. Not all costs are admitted publicly or, if acknowledged, they are often placed under different heads. The authors of the Military Balance of the International Institute of Strategic Studies annually draw attention to the difficulties encountered in assembling their estimates and the caution with which their resulting conclusions should be taken.

Some of the navies of this study are typical. Much of the Indian Navy's indigenous shipbuilding activity has been subsidised from outside the specific naval vote. The Thai Armed Forces are formally allocated "secret" funds, the disposition of which is an internal matter. When announced, the value of international arms sales changes with each individual case, even when it does not vary wildly between vendors. Assets are transferred from friendly great powers without charge, or at prices which are "written down" in proportion to the value placed upon the international relationship concerned. Personnel numbers might be actual or they might be authorised; they may include only effectives or they may be bloated by those who have been retained on full pay as the best alternative to an inadequate pension. When questioned in 1958 about the inordinately large number of Admirals on the active list of the Royal Thai Navy, the then Commander-in-Chief remarked simply, "They have to eat."

All of which points highlight the second objection to statistics. Navies are profoundly complex organisations which have been and are amongst the most sophisticated expressions of the societies from which they derive. John Ruskin remarked over a century ago that a ship of the line was the most honourable thing that man as a gregarious animal has conceived. His implicit point that a navy functions only because of collective activity on a grand scale remains valid to this day. Because of this, navies might not defy analysis but, by their nature, they do challenge it.

The apparently straightforward comparison of the force levels of two countries draws forth immediate questions which are not readily answered by tables drawn from open sources. What infrastructure exists to support seagoing forces? Are there adequate repair facilities with sufficient expert personnel? Have purchases of ships and equipment been made...
with enough provision for spare parts? Is there ammunition to provide a working reserve for practice firings? What is the annual fuel allocation? How many days a year does each ship spend at sea? How many in company with other ships? How many conducting exercises and of what nature? What targets are available? What aircraft and submarines are there for fleet training? What proportion of personnel in each ship are qualified for their individual billets? What is the turnover of personnel within each unit and the retention rate within the service?

Most of these questions can fully be answered only with the benefit of knowledge from within a particular navy - and a navy which is itself capable of collecting and collating this sort of information from its own resources. The point, however, is that tabulated data as available from open sources is valuable when assembled over time in determining the direction in which an individual service is moving, but it is of dubious utility as a comparative tool.

Force levels matter; more important in making assessments is an appreciation of what each navy claims that it is capable of and what it wants to be capable of. This approach has its flaws, yet it makes possible both the identification of trends and the suggestion of comparisons.

Context - Economic

Navies are institutions which function as part of the external security mechanisms of national government. It is a truism that, once brought into being, a navy must be supported. By existing, it creates its own structure of self-interest which in turn means that attempts at reduction or abolition must carry a political price. That price assumes greater proportions as non-military infrastructure is brought into being to support naval activities. India, Indonesia and Malaysia are all examples of attempts to create indigenous shipbuilding capacity which have produced ship builders who are only too eager to ensure that their allocation of naval work continues, even if independent of contemporary strategic judgement and financial considerations.

It is also an empirical truth, short of extraordinary changes in a country's security position, that the proportion of resources devoted from the public purse to the upkeep of a navy will remain approximately constant. As a nation prospers and the gross domestic product grows, so can the allocations to defence without hard arguments amongst the budget planners of government. It is even possible, as Singapore and Indonesia - amongst others - have demonstrated, to enjoy such growth rates that the proportion devoted to defence can undergo modest reduction at the same time as the real levels of spending on the armed forces are increased. Even when the economic situation is dubious and the apparent utility of a naval service equally so, it is possible, as with the Philippines, for the navy to display remarkable institutional resilience which is not wholly the result of simple inertia.
Trends and Comparisons

The economic argument also applies to the methods of financing a navy. It is practically impossible to create or maintain a small navy in a small country without continued access to hard currency for overseas purchases, or else a continuing and sympathetic relationship with a great maritime power. Most navies in the region would not have come into practical existence or survived their early years without support from overseas. Every navy in this study which existed at the time was more or less outfitted from scratch with ships by Britain (India, Pakistan, Sri Lanka and Malaysia), the United States (Thailand and the Philippines) or the Netherlands and the USSR (Indonesia) between 1945 and 1965. The bulk of this outfitting was done as outright gift or at much depreciated value.

After this era of "cargo cult" force structure planning ended, it was the extraordinary pace of economic development throughout most of South East Asia which allowed navies such as those of Malaysia, Indonesia, Thailand and Singapore the access to the resources they needed to operate and expand. Where such development was not so marked and where there is no immediate strategic threat, navies have naturally tended to stagnate, a situation still epitomised by the Philippines Navy. Even the Indian Navy, the largest in southern Asia, has found itself in difficulties because there exist in India other priorities for the hard currency reserves which that service needs to sustain its force structure requirements.

The Bangladesh Navy has survived by ingenious use of the old but still serviceable British built frigates and by turning to China for "bargain basement" warships, but this approach places severe limits on the service's capabilities. Pakistan has been forced to concentrate its funds on a submarine service at the expense of surface ships and its "on again - off again" pattern of aid from the United States is an example of the difficulties of attempting to resume an old client relationship with a great power when there is neither consistent coincidence of policy interests nor any residue of sentiment arising from old colonial links.

Despite the pace of economic growth throughout most of the region, the resources which can be devoted to naval defence are not endless. Every increase in capability, every new ship or system carries a premium in both purchase price and infrastructure costs. Both Malaysia and Thailand have considered the possibility of buying submarines for at least a decade; neither navy has committed itself to such purchases because there turned out to be no prospect of carrying them through without diverting money from other arms of the service which were more fundamental to basic maritime security requirements.
Navies in Asia

Context - Technological

It is another truism that capability is both time related and type dependent. A navy which operated frigates in 1952 possessed ships with medium range guns, anti-submarine weapons with ranges in the order of 1,000 yards or less, a simple weapon and sensor control suite and no ability to operate organic aircraft. Unless deliberate efforts are made to eschew a standard design feature, the frigate of 1992 will carry a helicopter, over the horizon surface to surface missiles, capable point defence and electronic warfare systems and ASW weapons whose performance is orders of magnitude ahead of those of forty years earlier.

Simply by maintaining seagoing capability, which necessitates the renewal of hulls at twenty to thirty year intervals, in an era of rapid technological change, navies can experience enormous increases in their own military capability. This is particularly apparent in southern Asia because development - up to a certain point - has tended to favour smaller services with sea denial missions ahead of larger ones whose task is sea control. The mine, the missile, the torpedo, the fast attack craft and the submarine are all weapons of a weaker power.

The technological factor appears elsewhere. Between 1945 and 1970, warships reached a peak of complexity of operation through their possession of highly complicated, maintenance intensive and user unfriendly weapons, sensors and machinery. Between the analog technology of 1950s and 1960s radars, fire control systems and sonars and the unforgiving nature of very high pressure steam machinery, a generation of ships was created which were challenge enough for the sophisticated navies of the west, but impossible in their original forms for anyone else. In this particular case there were language and political difficulties involved as well, but the scale of the problem was demonstrated in spectacular fashion by the Indonesian Navy between 1958 and 1965 when dozens of Soviet ships were taken on strength but very few ever achieved, still less sustained any degree of operational capability. By accident or design, few other countries invested greatly in ships of this period. There were exceptions, such as the Pakistan and Bangladesh Navies and, by virtue of its size, the Indian Navy, but most Asian services have thus avoided considerable difficulties. In the case of Bangladesh, the Type 41 and 61 frigates have proved unusually robust and simple, while Pakistan has approached the problem through the outright removal of systems such as Sea Slug from the Babur. It is notable, however, that the jury remains out on the performance of the Brooke and Garcia class frigates and their light weight 1200 pound pressure machinery in Pakistani service. The occasional purchases made by other countries in the 1960s showed that experiments with contemporary technology could be less than happy. Both the Malaysian Rahmat and the Thai Makut Rajakumarn soon had their short range Seacat surface to air missiles removed in favour of simpler anti-aircraft guns.
After 1970, the proliferation of solid state, user and maintainer friendly weapon and sensor systems and the progressive introduction of gas turbines and more reliable high performance diesels actually meant that new construction ships were easier to operate than their predecessors. This revolution in naval operations coincided with the beginning of the self directed expansion of many of the navies in this study and they have derived considerable benefit from it.

Context - Origin

Perhaps the most important "hidden" factor in assessing the nature of any of the navies of southern Asia is that of their origin. Eight of the services in this study were directly established by or with the support of the old colonial powers or originated from other Asian navies so established. One, that of Indonesia, came into existence as a "revolutionary" navy which had been closely involved in the country's efforts for independence and enjoyed only a brief partnership with the Royal Netherlands Navy. The tenth, that of Thailand, was the only one to come into being as the result of natural internal national development.

As described earlier, all the navies were subject to external influence of one sort or another, but what has proved profoundly important has been the nature of that influence, in particular the methods adopted by the old colonial power in creating local forces. There have been two approaches, that of the British and that of the Americans and Russians. The former may be loosely described as being directed towards creating a naval ethos, the latter was much more concerned with ships and systems.

The way in which the British operated was to create navies which were directly modelled on the Royal Navy, with very little modification for national characteristics. Training, particularly officer training, was conducted according to RN methods and very often in the United Kingdom. Such training included not only access to the initial entry establishments and advanced schools, but sea time in British ships. What occurred was a process of "immersion" in which the national personnel concerned were very strongly imbued over a period of several years - it was not unusual for Indian officers who entered between 1948 and 1955 to spend upwards of five years with the RN in the course of their careers - in the naval way of life, with all the associated traditions, customs and outlook.

The presumption was that these personnel would take back to their own countries the best of the Royal Navy and apply it to their own service. In many ways, this is what occurred. There remains a definite present relationship between the operational competence of a navy and its own assessment of its roles and duties and the earlier strength of the external connection. The various services have succeeded in "nationalising" themselves while continuing to depend greatly upon their distillation of RN procedures and attitudes.
In a formal sense, the British creation of administrative and command structures and support infrastructure also meant that each new navy could avoid many of the pitfalls of making its own way as it acquired new ships and capabilities. There was always a "British model" for any arm of the service and though this might have been imperfect and not wholly suited to local needs, it was generally very much better than starting from scratch. Similarly, the British provided access to intellectual property in the form of procedures, doctrine, technical publications, logistic supply systems, communications systems, confidential books and registered publications. All of these not only "short circuited" many of the processes of natural development for the navies concerned but saved them much spirit and coin which would otherwise have been expended in the processes of production anew.

Much of the British facility at this process of "navy creation" was due to existing experience with old Commonwealth navies which had come into being between 1910 and 1941. It was certainly a lode of expertise at dealing with national sensibilities and the realities of restricted resources which the United States Navy did not enjoy in its attempts to help with the Philippines and Thailand.

There was a down side to the British approach. The products of the Royal Navy could imbibe great power attitudes to naval roles and naval expansion which were not appropriate to local conditions. It was easy for force structures to be defined according to British concepts rather than individual local needs. The national services could be seen by external observers as being too slavishly "British" and not sufficiently national in their behaviour. The Indian Navy has, for example, been criticised for aping the imperial era of the Royal Navy by adopting a "blue water" approach to force structure requirements which does not match the country's real defence needs. Personnel structures have not always proved appropriate for local conditions. Within the Indian Navy, the divisional system of personnel management had to undergo considerable revision to cater for the Indian sailor and the vast differences in cultural conditions prevailing between Portsmouth and Bombay.

There is a certain amount of truth in such suggestions but it is also true that the same external observers have mistaken some of the attitudes and methods required for efficiency within a navy with Anglicisms. One of the most distinctive legacies of the British was a super-national attitude to naval affairs which seemed incongruous to developing nations which were pre-occupied with internal security problems or external land threats but which, in the context of the 1990s, is increasingly relevant. The British derived services have tended to be leaders in their appreciation of the implications of the Exclusive Economic Zone, increasing seaborne commerce and the need for increased inter-navy co-operation, whether bi-lateral or multi-lateral.
Trends and Comparisons

The American experience of naval assistance was not so happy and clearly, in terms of the resources devoted compared with results achieved, less successful. Although the Americans gave much equipment, set up Military Assistance Groups in the countries they helped and opened their schools for selected training, the quality of "immersion" in an ethos was conspicuously lacking. In consequence, the gains that were made in operational efficiency and in capability tended to be related to specific ships or equipment and to specific crews or individuals rather than the service as a whole. Consequently, it proved difficult to ensure that such progress was sustained or exploited. Despite very close relations, for example, the Philippines Navy never thought of itself as a nationalised version of the USN, as was the case with the Indian Navy and the Royal Navy, or attempted to emulate American standards in any concrete fashion. While the British approach would not have been wholly appropriate to either the Indonesian or Thai condition (although both navies sought assistance with training in the 1950s), the American aid programmes were largely ephemeral in their effect on both services.

The Russian approach, which neglected the infrastructure element almost totally and imposed an overt ideological slant on almost all the limited training which was conducted, proved simply disastrous in Indonesia, as was obvious to both countries concerned and to external observers. When India came to purchase Soviet equipment, the relationship was much more businesslike and, in a material sense, much more successful. The Russian influence on Indian naval thinking as a whole is difficult to assess and was probably limited by the refusal of the Russians to impart any doctrine to the Indians. The latter then developed their own. The Russian connection thus probably accelerated the mental emancipation of the Indians from British operational concepts but had little part in the development of substitutes.

Context - National Development

Because they are technologically intensive, navies require a considerable supporting infrastructure which can, in the absence of considerable outside help, only be maintained if there is both an industrial base and a reservoir of technically literate manpower. It was the absence of these features which was a factor in retarding improvements in efficiency in most Asian services in the 1950s and well into the 1960s. In any nation, a navy is itself an important producer of trained technical personnel, but it should not be expected to produce such technicians wholly on its own and it certainly cannot do so in the absence of a sound basic state education system and a high rate of national literacy. The Royal Thai Navy's training problems between 1950 and 1965 are a clear example of this problem, but it was also experienced by other navies, such as those of Pakistan, India, Indonesia and the Philippines. The remarkable progress of many of these nations in recent years has thus created conditions within which the various navies can operate more efficiently, independent of any formal changes in state or service policy.
Navies in Asia

Similarly, the creation of an industrial base often resembles the problem of the chicken and the egg. National development is a powerful argument for attempting to build ships and manufacture equipment in country, to the point that it can unlock resources for new construction which would not be made available for an overseas purchase. But there are hidden costs and difficulties. Sub-contractors require encouragement and subsidy if the building process is not to be one simply of assembling foreign components. The "learning" process associated with doing anything for the first time results in considerable increases in real costs, some of which have to be born by the Navy concerned.

There is also a time cost. With the possible exception of Singapore, licensed ship construction within Asian yards has tended to take between 30% and 80% longer than the parent (usually European) yard to produce a completed ship. If the process goes awry, as with the Indian built Type 209 submarines, the time penalty can be even greater. Once in place, it is not always easy to keep a shipyard fully employed, since few of the navies in Asia are large enough to provide the continuity of orders. Singapore succeeded in creating a highly efficient small ship building facility which could match any other yard for price, timeliness and quality, but the absence of naval orders in the 1980s found it struggling to convert to non-military work.

However great the effort, the yard concerned might not be up to military requirements. The Indonesian Navy was satisfied enough with the 57 metre craft produced by P.T. PAL at Surabaya, but it cannot be confident in its ability to build frigates to time or to cost. Since overseas orders for new construction are formally illegal and politically unacceptable, this has resulted in a series of alternative measures to provide the ships required, culminating in the recent mass purchase of ships from the former East German Navy.

Balancing Resources: How Much is Good Enough - What is Good Enough?

At one point or another, all navies are forced to make a judgement as to what levels of capability are sufficient to meet their requirements. The processes in southern Asia by which such judgements are made differ somewhat from those of the larger countries of the West because the financial factor is now generally more critical and the technological less so. It is certainly necessary to possess a proportion of systems which equal or exceed the quality of those possessed by other nations in the region, but it is not required that all units be sophisticated or that the numbers of "high" capability combatants be large, since the potential opposition is quite certain to be limited in scale itself.
This bears upon another point, the utility of limited power. It is generally more important within southern Asia that a navy be capable of doing something at all than it do it particularly well. This can be so because there is often no capable opposition or, when there is, its strength is so limited that risks can be taken. The Indian Navy’s carrier force is the most obvious example of this syndrome. The two aircraft carriers are elderly, expert manpower intensive and increasingly unreliable, while requiring lengthy periods in dockyard hands to maintain them in operation. The air groups which can be deployed are small, with very little scope for attrition or reinforcement. They cannot practically conduct strike operations while maintaining any sort of combat air patrol, which obviously limits their ability to conduct offensive operations in the presence of an air threat. But, when such opposition does not exist, they constitute a capacity for power projection which would not otherwise exist.

This approach exists more generally within the region for deterrent value. Indonesia’s possession of a small submarine force gives credibility to the Navy’s mission of preventing external threats to the Indonesian archipelago. That the submarine squadron has remained limited to two Type 209s is the result of continuing financial restrictions and there are obvious inefficiencies in the maintenance of the support infrastructure required for so small a force as well as risks inherent in the inability to maintain continuous operational availability. But the mere existence of such vessels and the knowledge that they can operate within the archipelago creates an "uncertainty factor" which no devotion of equivalent resources to other naval systems could match in deterrent effect.

The problem lies in achieving the right balance. Malaysia has struggled with the dilemma of devoting resources to submarines or to surveillance and surface presence forces and eventually settled on the latter course. The underlying judgement is clearly that forces capable of useful operation within low level contingencies are more likely to be needed than the "final solution" of submarines. Malaysia is therefore assuming that consistent and early demonstration of presence will answer its security needs, a judgement difficult to gainsay but one that carries obvious risks in the event of the escalation of hostilities.

The Strategic Factors

Those factors which can be described as structural and which have helped create the conditions under which naval expansion can take place have been described above. But there must clearly be strategic concerns in addition to expanding economies and rapid internal development behind the progress achieved by most of the navies of this study in the last twenty years. These can be thought of as falling within two areas. Firstly, within southern Asia there is for the immediate future a decreasing chance of major conflict on land, while at the same time most nations within the region are uncertain as to the form which the future balance of power will take. Significantly, when fears are raised as to the prospects of a new
Navies in Asia

regional hegemon arising in the wake of an American departure, the form which such domination will be manifested is usually discussed in naval terms. A "blue water" Chinese Navy or an expanded Japanese Maritime Self Defence Force with power projection forces in the form of aircraft carriers, nuclear submarines and capable underway replenishment units are considered to be the most likely means by which either power would manifest ambitions to dominate the region. Much of the criticism of India's naval expansion between 1983 and 1989 was concerned with the capability it gave India to influence events elsewhere within the region.

Thus, particularly within ASEAN but also in countries such as Pakistan and Bangladesh, the requirement to field naval forces sufficiently sophisticated to deter a would-be hegemon remains a subtext to much naval development and certainly provides a primary justification for continuing expenditure on equipment suitable for these purposes. On the other side of the coin, the future of the Indian Navy, particularly its maintenance of a carrier force and acquisition of nuclear submarines, depends directly upon the extent to which the Indian government wishes to retain the potential to assert power further afield than India's area of direct military interest.

The second group of factors working towards naval development is more directly concerned with economics. It includes the rising importance of the maritime sphere for economic exploitation, coupled with evolving concepts of internal law and maritime jurisdiction, the continuing development of sea communications as the principal mechanism for international trade, the increasing "permeability" of the sea as a national border and the vulnerability of littoral zones to environmental damage. In some ways, these could generally be described as coast guard rather than naval concerns, but that distinction is an American one which cannot simply be applied to this region. In any case, it ignores the fact that most "coast guard" roles, particularly those concerned with the protection of sovereignty in any form are classical "naval" roles in most parts of the world. The first permanent squadron of the Royal Navy was that employed for fishery protection.

There are also obvious defence dimensions. Fishermen have always been hostages to fortune in the event of a conflict in which one maritime nation is attempting to put pressure on another. Most navies within the region now have oil rigs and other petroleum facilities well out into their Exclusive Economic Zones which are, in several cases, of critical economic importance and which certainly require protection. Brunei depends absolutely upon its production of oil and gas, India and Indonesia - amongst others - rely very heavily upon their facilities.
Trends and Comparisons

The future of the energy industry suggests that exploitation of offshore fields will increase, rather than decrease, as will the mining of the seabed and the sea itself as the means for such work are perfected. The effort devoted to fisheries continues to expand in a similar fashion, albeit with more mixed success.

These activities point towards another source of concern for conflict within the region, the question of jurisdiction and mutual boundaries. The highly complex and much confused question of the Spratly Islands not only epitomises the problems associated with the development of the Law of the Sea but is in fact the major boundary issue involving, more or less directly, no less than six of the ten navies of this study. The situation is shown within the attached chart, which shows not only the mess of conflicting claims but the extent to which various of the claimants have occupied and more-or-less garrisoned and fortified various of the islets, atolls and rocks.

That there are clear internal conflicts in the policies of several of the nations involved in the Spratlys is little surprise. The Philippines has occupied several islands but has no capability to defend or support its garrisons. Malaysia can deal with most of its local rivals but could not face China, while Brunei - which has as yet no capacity to maintain even an occasional presence in the area - has contented itself with diplomatic action. But the requirement to be able to assert such a presence is a prime factor in Brunei’s planned expansion and in that of the Philippines, while it has also appeared consistently within Malaysian force structure calculations.

One of the other actors in the South China Sea, Singapore, takes the Spratlys into account in assessing its requirement to provide for the defence of sea communications into and out of the country. The great bulk of Singapore’s northern trade must pass through the archipelago and the interruption of traffic as a result of conflict there would have immediate repercussions on Singapore’s well being. Thus, much of the Singapore Navy’s recent development has focussed on this problem and it is receiving attention in Malaysia and Indonesia, with respect to the passage of shipping through the other choke points in the region. While the trade protection capabilities of most other regional navies remain in embryo, India is displaying increasing interest in commerce defence.

The sea as a permeable border has affected the great majority of the navies of this study over their entire lifetimes, firstly through smuggling and piracy and more recently through the need for refugee control. As seaways have become progressively more crowded and the means to hand for illegal activity more sophisticated, so the pressure on local navies has increased. Although some nations have created specific coast guards or allocated some functions to marine police, the limitations on national resources inevitably bring about naval involvement in support of these services.


**Navies in Asia**

The final consideration, that of the environment, has been a moving force behind much of the impetus in South East Asia to assert local jurisdiction over the Malacca Straits and other busy shipping lanes. This has so far been largely a "police" function, in that the primary requirement had been avoidance of oil spills through collision or dumping. There could, however, be a defence dimension if neutral powers adjacent to a conflict determine that their interests would best be served by preventing the protagonists from attacking ships or facilities which carry the risk of damage to the environment. The recent Iran-Iraq War and the 1991 Gulf conflict showed very clearly the ease with which such damage can be wrought and must be food for thought amongst nations which border on traffic lanes or offshore oil fields.

**Capability and Force Development**

The last decade has seen a series of increasingly sophisticated attempts to catalogue and classify the capabilities and functions of modern navies. Because these analyses focus on capability only in the general sense - ships and major weapons - the systems which they propose do provide a useful, albeit limited tool to describe Asian navies and to draw conclusions as to their roles.1 Eric Grove’s book *The Future of Sea Power*2 is the most sophisticated effort to date, developing previous work to propose a series of categories of progressive capability to which different navies can be allocated. With some modification, this system is applicable to southern Asia.

Grove divides navies into 9 ranks, of which ranks 4 to 8 are applicable to this study. They are:

**MORRIS/GROVE HIERARCHY OF NAVIES**

a. Rank 4: Medium Regional Force Projection Navy. This service should be able to project force into deep ocean areas.

b. Rank 5: Adjacent Force Projection Navy. This Navy is assessed of possessing the capability to project force offshore.

c. Rank 6: Offshore Territorial Defence Navy. Navies within this category are assessed as being capable of defence of their Exclusive Economic Zones.

d. Rank 7: Inshore Territorial Defence Navy. Such Navies should be capable of coastal defence against a sophisticated aggressor.

e. Rank 8: Constabulary Navy. This Navy is capable of police functions only and could not deal with a naval threat of any sophistication.
Trends and Comparisons

Some modifications are in order. First, the distinction between "Medium Regional Force" and "Adjacent Force" in terms of power projection is a difficult one to draw, because the difference lies not so much in numbers or types of warships or weapons but in the ability to sustain deployment at a distance and in the task to be accomplished. Thus, while India possesses two carrier task groups, its small replenishment force - with very limited stores or ammunition capacity - indicates that the carriers would have difficulty operating far afield for any period. On the other hand, a single task against limited opposition could effectively be conducted and at considerable distances from Indian bases. Much the same arguments apply to the Indian submarine force, which is large and capable but not of such a size that continuous distant deployments could be sustained without great cost. The author's decision, therefore, is to modify the distinction between Medium Regional and Adjacent Force Projection into a single category - Adjacent Force Projection, which does not exclude a capability to operate temporarily far afield. Such a category embraces the Indian Navy very comfortably.

The second modification is to compensate for the over emphasis within these categories on "force projection" at the expense of "commerce protection". After "offshore territorial defence" there is a definite group of navies which possess forces that are not, in general, equipped with greater endurance than is implied by the term "offshore", but which do have a capacity to protect commerce from threats above and below water. With the exception of the Philippines and Brunei, the navies of ASEAN have clearly moved in this direction. For southern Asia, then, the following hierarchy is proposed:

REVISED HIERARCHY OF NAVIES - SOUTHERN ASIA

<table>
<thead>
<tr>
<th>Rank</th>
<th>Category</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Rank 1:</td>
<td>Adjacent Force Protection:</td>
<td>India</td>
</tr>
<tr>
<td>b. Rank 2:</td>
<td>Commerce Protection:</td>
<td>Singapore, Malaysia, Indonesia, Thailand, Pakistan</td>
</tr>
<tr>
<td>c. Rank 3:</td>
<td>Offshore Territorial Defence:</td>
<td>Bangladesh</td>
</tr>
<tr>
<td>d. Rank 4:</td>
<td>Inshore Territorial Defence:</td>
<td>Brunei</td>
</tr>
<tr>
<td>e. Rank 5:</td>
<td>Constabulary:</td>
<td>Philippines, Sri Lanka</td>
</tr>
</tbody>
</table>
Navies in Asia

The attached Table outlines the major categories and the ships and systems which are applicable to each. It matches the result against the navies of the study, indicating what equipment has been obtained since 1970 and in which categories particular navies have experienced no activity.

Three features may be noted. First, the progress made since 1970 in most navies is striking. Second, while progress from one category to the next by an individual navy can be an ordered and linear process, this is not the case for all. With external assistance or with sufficient funding, it is possible (albeit difficult) to move from a "low" category to one several stages higher without the intervening stages. Conversely, it is possible for a navy, as in the case of the Philippines, to regress through failure to re-equip as its units become old and obsolete. The Philippines arguably possessed an offshore territorial defence capability in the 1960s, it certainly had an inshore capability which will not be recreated until the arrival of new fast attack craft.

The third element is the extent to which recent emphasis in all the expanding navies has been on the elements required for improved surveillance and command and control. This is largely a result of the need to maintain a watch over EEZs and internal waters, but it does point to the increasing sophistication of the operations of the various navies. Force multipliers will no longer be primarily in the proliferation of new weapons but in the improved ability to make use of existing systems to their full potential.

Towards 2000 - and Beyond

The direction in which the majority of the navies of this study will move is implicit in the nature of their development hitherto. More capability and an expanded capacity to employ that capability should produce services which are capable of increased reach and which display a greater concern for the surveillance of surrounding seas and for the protection of shipping. If there is no drastic change within the local strategic environment, most regional navies should have entered Rank 2 and some will be verging on Rank 1 by the turn of the century. Even some of the exceptions, such as Sri Lanka and the Philippines, could - subject to resolution of their countries' internal problems - be moving in that direction. The Philippines, at least, is likely to have made the transition to an inshore territorial defence force and be aiming in the near term towards a true offshore capability. Sri Lanka should be working towards the acquisition of units capable of operations out to the boundaries of her Exclusive Economic Zone.
## SOUTH AND SOUTH EAST ASIA NAVAL DEVELOPMENTS 1970-1992

<table>
<thead>
<tr>
<th>TYPE OF SERVICE</th>
<th>SHIPS/EQUIPMENT</th>
<th>DATE OF ACHIEVEMENT (POST-1970)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAVY:</td>
<td>PHILIPPINES</td>
<td>MALAYSIA</td>
</tr>
</tbody>
</table>

**IN THIS CONTEXT, 'ASW SYSTEMS' INCLUDE MODERN SOLID-STATE HULL SONARS AND HOMING TORPEDOES, MEDIUM-RANGE MORTARS, BUT NOT OLDER SONARS, SHORT-RANGE MORTARS, HEDGEHOG, OR DEPTH CHARGES.**

**MCMVs ARE TAKEN TO INCLUDE VESSELS WITH A CAPABILITY FOR MODERN MINE HUNTING.**

**INDONESIA POSSESSED 14 WHISKEY-CLASS SUBMARINES, GIVEN BY THE SOVIET UNION FROM 1958 ONWARDS. NONE OF THESE REMAIN OPERATIONAL AND THE STANDARDS ACHIEVED WERE NEVER COMPARABLE TO THE TYPE 209s NOW IN SERVICE.**

**SOURCES: JANE'S FIGHTING SHIPS/COMBAT Fleets.**

**SECNAV72**
Trends and Comparisons

Amongst the larger navies, Pakistan will concentrate on modernising her submarine force, while devoting only limited assets to surface warfare. India will be hard pressed to maintain existing force levels and will be pushed to make clearer choices between quantity and quality. This may mean the creation of smaller "high quality" combatant groups and devotion of the resources remaining to unsophisticated and inexpensive surveillance and presence forces for operation within the country's large EEZ.

All this activity is predicated upon there being little change in the directions of strategic change in southern Asia. Total military withdrawal on the part of the United States, too assertive an attitude on the part of China towards the Spratly Islands or towards achievement of a "blue water" capability, the resurgence of Japanese naval power or renewed activity on the part of India could result in much more strenuous efforts at naval expansion on the part of many, particularly the members of ASEAN. The form such expansion would take depends directly upon the extent to which these nations would unite to deal with the commonly perceived threat, but it is unlikely to take the form of power projection systems. Rather, the capacity to protect coasts and littoral zones will be reinforced and that to protect shipping developed. In essence, then, the rate of development will alter but not its nature.

That this should be so is a reflection of the nature of naval power and of the way in which navies develop. The healthy growth of a navy is analogous to that of a tree which grows not only in height and girth of trunk but with the multiplication of leaves and branches through 360 degrees in azimuth and 90 in elevation. If such "all round" development is prevented, the tree becomes stunted and weak. The corollary, of course, is that the resources required to sustain a 12 foot tree have increased by a cube over those required for one half the height. The ever greater sophistication of weapons and the corresponding expenses complicate the "real world" naval problem further.

Inshore territorial defence can adequately be conducted by fast attack craft; add the "offshore" role and airborne surveillance systems, improved command and control, larger hulls for better seakeeping and anti-air self defence weapons are immediately required. The progression to commerce protection involves another leap, this time into anti-submarine warfare and mine countermeasures, underway replenishment and organic helicopter operations - the list goes on and the costs magnify both for setting up and for the maintenance of the new capabilities. This is why progress between categories takes longer to achieve with each step from one level of capability to the next, however determined the navy concerned might be to achieve progress.
The Indians discovered how difficult it is to match intention with limited resources between 1985 and 1991 and the Indian Navy inevitably displays the unbalanced force structure which results from securing assets with higher order functions without provision for all aspects of the associated infrastructure. Two aircraft carriers to two fleet tankers is not a natural ratio for the Indian Ocean.

Such natural constraints on naval expansion work in two directions, but they also create insecurities. It is not easy for a maritime threat of any magnitude to manifest itself without some warning over a period of several years. Such warning, however, is likely to be treated as a signal requiring immediate response because other nations are unlikely to believe that they can afford to be left behind - the most important reason why the more powerful countries in Asia should be restrained in their approach to their own force development requirements.

This is an appropriate note on which to end a survey of the development of the navies of South and South East Asia. Whether the region turns into an armed camp over the next two decades, depends directly upon the great powers. To this date, the bulk of naval development has been ordered in ways which contribute to the internal and collective security of nations within the region without proceeding to accessions of strength which could cause legitimate alarm in others. Most auguries for the future suggest that this happy state of affairs can continue. But navies, as with any aspect of sovereign security, define their roles according to perceived threats. Change the present balance in southern Asia and Pandora's Box has been opened over the waters.
Trends and Comparisons


A NOTE ON SOURCES

A comprehensive bibliography of South and South East Asian Navies is in the course of preparation. References cited within the text have been given as complete as possible annotation and, where appropriate, suggestions for further reading have been included. The "open source" material on the navies of this study is scattered and incomplete and the search continues. Few of the navies concerned are willing to deal with direct approaches, although much informal and "word of mouth" assistance was granted to the author. The following notes are offered on sources:

Archives

United Kingdom

British Public Record Office Admiralty files contain much material concerning the relationships between the Royal Navy and the colonial and former colonial navies between 1945 and 1962 (the usual limit of clearance). ADM 1 series, ADM 116 and ADM 205 are worth consultation. It should be noted, however, that sensitive material has sometimes been weeded or has had 50 or 75 year rules applied to it. Certain files (such as that for Singapore) remain closed because they contain material for the period since 1963.

The Admiralty files are also worth studying for information concerning arms sales to countries such as Thailand and Indonesia. Much information concerning naval policy and force structure intentions can be gleaned from this material.

Colonial and Foreign Office files have not yet been consulted but may contain material which no longer exists in the Admiralty. Most requests, however, were very quickly passed to the Admiralty or were actioned effectively on a navy-to-navy basis (this was particularly the case for the Commonwealth navies).

The National Maritime Museum Ships' Covers contain information of value on ships which were purchased from the Royal Navy. That for Majestic Class light carriers, for example, contains details of the purchase and conversion of INS Vikrant.

The Naval Historical Branch of the Ministry of Defence has a certain amount of material relating to the early years of independence of the Indian and Pakistan navies.
Sources

The Hartley Library of the University of Southampton contains the papers of the late Admiral of the Fleet the Earl Mountbatten of Burma. These contain a wealth of information (largely official papers, few of which have survived in the Admiralty files) on naval relations with India and Pakistan between 1955 and 1964.

Canada

The Canadian national archives contain material relaying High Commission reports on the status of the Indian Navy in its first years of independence.

United States of America

The Naval Historical Center contains the Office of Naval Intelligence Review, together with its successor, the Defense Intelligence Agency Review. These include the cream of the reports by Naval Attaches and are generally declassified into the 1960s. Because of the increased emphasis which the USN put on the Soviet threat from 1961 onwards, the quality of reports tends to fall - and the number of observers "in country" decline. United States National Archives contain Attaches’ reports in original but the processes of declassification remain a little slow and the author has yet to examine a great deal of this material.

Journals and Periodicals

Several periodicals were of considerable use to the study. They include the following:

a. Asian Defence Journal
b. Asian Survey
c. Asia-Pacific Defence Reporter
d. Combat Fleets of the World
e. Far Eastern Economic Review
f. International Defence Review
g. Jane's Defence Weekly
h. Jane's Fighting ships
Navies in Asia

i. Journal of the United Services Institute of India
j. Military Technology
k. United States Naval Institute Proceedings
l. Naval Forces
m. Naval Review (British)
n. The Navy (British)
o. Warship International