

*Papers in Australian Maritime Affairs*

No.2



**JAMES GOLDRICK**

**NO EASY ANSWERS**

The development of the Navies of  
India, Pakistan, Bangladesh and Sri Lanka  
1945-1996

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*The comments expressed herein are the personal responsibility of the Author and do not represent the opinions of the Australian Defence Force, the Department of Defence or the Australian Government.*



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# INTRODUCTION

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This is a book about navies and about navies working with very limited resources in less than ideal circumstances. My concentration on this point is deliberate. All naval history is fundamentally concerned with the issue of limits and some of the best work of the last twenty years has been written about the attempts of the Royal Navy, the predominant power at sea for well over one hundred years, to reconcile its resources with its requirements. Naval history as a discipline has been profoundly marked by three books: Paul Kennedy's masterful *The Rise and Fall of British Naval Mastery* (Allen Lane, London, 1976), Jon Sumida's extraordinary book *In Defence of Naval Supremacy: Finance, Technology and British Naval Policy, 1889-1914* (Unwin Hyman, London, 1989) and Eric Grove's *Vanguard to Trident: British Naval Policy Since World War II* (US Naval Institute, Annapolis, 1987). But such efforts have not been confined to the Royal Navy. It is no coincidence that, in the era of "down sizing" as the United States Navy adjusts to the stringencies of existence after the end of the Cold War, a book like *One Hundred Years of Sea Power: The U.S. Navy, 1890-1990* (Stanford University Press, Stanford, 1994) should appear from the pen of George W. Baer.

No responsible historian can now describe naval policy or even the minutiae of naval operations without regard

to the political, economic and technological environments within which navies must operate and the constraints which those environments imply for naval planners. This study is in no way as sophisticated as the models mentioned above but it does operate according to the judgement that all naval decision making is an attempt to reconcile means to ends and that those ends are primarily concerned with the war fighting roles which navies envisage for themselves.

The direct origins of my interest in the development of the Indian Navy in particular were in research conducted in the British Public Record Office in 1984/86 while on leave from exchange service at sea with the Royal Navy. At that time, I was investigating the attempts between 1943 and 1955 by the Royal Australian Navy to create a carrier force centred around two light fleet carriers and the part played by the British Admiralty in supporting those efforts. Much of the Australian material, particularly that related to the personal correspondence of successive First Sea Lords, was located in close proximity to documents dealing with Indian issues. It was thus a simple matter to move from Australian concerns to those of India. Two themes were soon evident, both of which came to underlie this study as a whole. The first was the similarity between the challenges and difficulties which the Indian Navy was facing with those of my own service and the similarity between the responses which were made by each navy. The second was the dichotomy between India's strategic traditions and the assessment which the Indian naval staff developed and sustained of India's naval requirements.

My first researches resulted in 1987 in a paper entitled "The Parted Garment: The Royal Navy and the Development of the Indian Navy 1945-1965". This was presented to a number of gatherings, including the RAN Staff College. At the time I began a correspondence with Rear Admiral Satyindra Singh, who had just completed the first volume of the official history of the Indian Navy, *Under Two Ensigns: The Indian Navy 1945-1950* (Government of India, New Delhi, 1986). I was able to make available to him some of my material which was put to good, albeit not unquestioned use in the next volume of his project.

My interest soon extended to the development of the other navies of the Indian sub-continent and of South East Asia. In late 1991, I began a research project under the auspices of the Advanced Research Department of the United States Naval War College at Newport, Rhode Island, which would result in a study entitled "Navies in Asia: A Survey of the Development of the Navies of South and South East Asia 1945-1992". The Naval War College is a long way from Asia but for the scholar it possesses three inestimable advantages. The first is access to its own extensive naval library and the bibliographical resources of the United States as a whole. If a book has been published in the English language, then a copy can be found in America—a work which I required on the development of the Indian submarine arm was located from a university in Iowa. The second is the unrivalled expertise of the Naval War College staff and its institutional traditions. The third element is the presence of the international officers undertaking the Naval Command Course in the rank of Captain or senior Commander or the Naval Staff Course in the rank of Lieutenant Commander or Lieutenant. In the environment of free debate and open discussion which the Naval War College fosters, it was possible to derive a much more honest and comprehensive assessment of the state of many of the navies of my study than would otherwise be possible.

In addition to the generous assistance provided me at Newport and by the naval attaches in Washington DC, I was able to correspond with a number of senior officers who had served in or had direct experience of the navies concerned. In addition, I benefited greatly from the emerging historiography of the Indian and Pakistan Navies. The extent to which the Indian Navy in particular has become much more open in its self assessment over the last decade has been particularly notable, but the Pakistan Navy's official history *The Story of the Pakistan Navy 1947-1972* (History Section, Naval Headquarters, Islamabad, 1991) must rank as one of the most frank and uncompromising narratives to be produced anywhere in the world. It provided me with a remarkable insight into the thinking of the

Pakistan naval staff during the period and an excellent basis for further research.

The study was, it must be emphasised, wholly derived from open sources and all my work has had to operate under that constraint and all that it implies. If and when comprehensive archival research is possible for the navies of South and South East Asia, much more complete and "final word" assessments will be possible. Nevertheless, as my work expanded it became evident to me that there were a number of constant themes emerging from the experience of all the navies involved which were related to my early conclusions concerning the Indian Navy and which confirmed my assessments of the realities of naval planning processes.

To a greater or lesser extent, all shared the constant dilemma of matching inadequate resources to demanding roles. Those inadequacies derived not merely from a shortage of funds as such, but lack of infrastructure and capabilities on a national scale. The ability of nations to organise and maintain naval services depended in the absence of external assistance more directly upon the level of national development across a range of areas from elementary education to heavy industry than almost any other national activity. Much naval planning effort had therefore to be directed towards finding ways to overcome the deficiencies which were otherwise inevitable in a developing nation state.

A second repeated theme was the alienation which tended to develop between navies and the generally predominant national armies and between naval staffs and the remainder of the national strategic decision makers. The superficial cause of this phenomenon was the semi-dependent relationship on larger navies which either appeared to be the relic of colonial times or which grew up as small services were forced to look overseas for the assistance which their national economies could not provide. That there was a more fundamental issue at stake only became clear as the enunciation of naval doctrine began to rely much more heavily upon the issues of resource protection, trade defence and wide area surveillance. What

had been *felt* by navies now became more clearly *understood* and thus much more easy to explain to outsiders.

The nature of naval operations and the fundamental requirements of the successful defence of a nation's interests at sea had always instilled a super-national approach to security planning and a realisation that defence neither began nor ended with territory. The difficulty had been that navies were never very good at explaining that thesis to outsiders. As a former British Secretary of State for Defence complained about the Royal Navy when he attempted retrenchment ". . . I tried and tried and tried to get rational analytical and coherent answers from the Royal Navy but normally failed to do so. . . . The navy is the navy is the navy and you are a fool if you do not understand what it is for."<sup>1</sup> To a greater or lesser extent, each of the navies within this analysis has suffered from this syndrome. However, one of the most interesting elements of this study has been the clear evolution of more clearly enunciated doctrine, usually in the wake of, but sometimes ahead of developments such as the Law of the Sea and accelerated economic activity. That process is by no means complete, nor has it been consistent across all four services, but it has already achieved a new status for navies within the region in national security planning.

"Navies in Asia" was completed at the end of 1992 and placed in circulation within the American defence and academic system. I did not regard it, however, as a finished work, although I had been able to develop some of my arguments as to the form and nature of naval development. I took what opportunities were offered to assemble material and meet and correspond with other experts. Further publications also gave me the opportunity to revise my work and my thinking and Satyindra Singh's second volume of his history of the Indian Navy *Blueprint to Bluewater: The Indian Navy 1951-65* (Lancer, New Delhi, 1992) was particularly valuable. More recently, Rahul Roy-Chaudhury has published his thesis *Sea Power and Indian Security* (Brassey's, London, 1995), one of the most judicious assessments of the history and future of the Indian Navy yet to appear in public.

The time available for research and writing was very limited for me between 1993 and 1996, but one product of my earlier work was "Bangladesh: On the Way Back" in the March 1993 Foreign Navies issue of the *United States Naval Institute Proceedings*. An invitation to participate in the 1994 conference of the Centre for Maritime Historical Studies at the University of Exeter provided me with a new opportunity to refine my study of the early development of the Indian and Pakistan Navies. The presentation has since been published as "Imperial Jetsam or National Guardians? The Navies of the Indian Sub-Continent 1947-72" in the conference proceedings *Naval Power in the Twentieth Century* (Macmillan, London, 1996), edited by N.A.M. Rodger.

Early in 1996, the Australian Defence Adviser in New Delhi, Captain C.F. George AM, RAN, floated with me the possibility of publication of my work in India. After some discussion, we agreed that the South Asian component of the study should be revised and published as a separate book. My justification for this was twofold. In the first place, despite the limitations of some aspects of the survey, it deserves and will benefit greatly from wider circulation and exposure. The second, and this was Captain George's primary motivation, is that the Indian Navy in particular deserves to be taken seriously as a subject for study by outsiders and greater efforts must be made to acknowledge that fact in Australia and in other countries with strategic interests in the region. At a time when Australia is reaching out to achieve a greater understanding of and interaction with the sub-continent, it might be appropriate for one student of naval history to submit his work to the assessment of the subjects of his study.

This book is the result of that revision. I regard it still as only a way point in my continuing research. The concentration on force structure issues, which will be particularly apparent for the chapters dealing with the last two decades, is inevitable given the nature of the open source material. Much more needs to be said about the operational cycles of all four navies and their personnel and technical infrastructures, but this can only occur when archives are opened and services and personnel can speak

more freely and openly. This will come, but it will be by ways and means more akin to osmosis than anything more sudden. In the meantime, this is my attempt at a balanced and objective survey of the navies of the Indian sub-continent and Sri Lanka.

JAMES GOLDRICK

HMAS *Sydney*

December 1996

**NOTE**

1. Eric J. Grove *Vanguard to Trident: British Naval Policy Since World War II* US Naval Institute, Annapolis, 1987. p. 347.

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# 1

## **INDIA AND PAKISTAN: THE BEGINNING**

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The first years of independence for the navies of India and Pakistan were never going to be easy. Other elements of the old British Indian Empire might have been prepared for the change of government and even capable of accepting the implications of partition without undue damage or strain, but the Royal Indian Navy was not amongst them. *This was so not just because of recent political developments but because of the history of the service itself and the limited role which the RIN had played within the system of Imperial defence.*

The RIN was essentially the product and the victim of what can, even in 1996, still be described as the "Indian Way of Warfare". The consolidation of the British Indian Empire created a systematic policy whereby Indian energies and resources were devoted almost wholly to the defence on land of the northern frontiers of the Empire, principally against the threat of Russian expansion. This priority for land warfare remained when the axis shifted to the west,

as in the First World War with the Turko-German efforts in the Middle East, or to the east when the Japanese expansion began. Even when Indian contributions were required for operations not directly connected with Indian defence, as on the Western Front in France in 1914-18, they were provided by the Indian Army. The critical assumption which underlay all this activity was that the seaward defence of India and the protection of its maritime communications would be undertaken almost wholly by the great strength of the British Royal Navy.<sup>1</sup> There was little place within this scheme for anything more than a local seaward defence force.

The policy was pragmatic enough. The Indian Government had no desire to expend funds outside the sub-continent on the scale which would be required to organise and maintain a steam navy and India lacked the industrial capacity to produce such ships in country. In the nineteenth century, the British Admiralty had little enthusiasm for local navies within the Empire and there was equally little interest within the United Kingdom in encouraging the Indian economy to industrialise, even for its own defence.

### **THE ERA OF THE MARINE**

The restrictions on naval development not always been thus. To detail the long, if fragmented maritime history of the Indian sub-continent would be outside the scope of this work but there were periods of intense naval and maritime activity, albeit most often on a local basis. Despite their technological advantages, the occupying British did not subdue the Maratha navy until well into the eighteenth century.<sup>2</sup> For its part, the Honourable East India Company organised and maintained a naval service in the form of its Marine from as early as 1612. This remained a force of frigates and small cruising craft but had a distinguished and highly active history. In 1830 the Marine was retitled the Indian Navy but did not long survive as a fighting service the end of the East India Company's rule. In 1863, the remaining ships and men were reorganised into the largely non-combatant Bombay Marine, renamed Her Majesty's Indian Marine in 1877. An Indian

Harbour Defence Squadron was created in 1871, but this had a shadowy, "idle and uneventful" existence at Bombay with a pair of armoured coast defence ships and a handful of torpedo craft. Manned by a mix of Royal Navy and Indian Marine personnel, it did not survive past 1903.<sup>3</sup> The Marine was formally redesignated the Royal Indian Marine (RIM) in 1892. This, however, meant little change in its size or in its dedication to surveying, trooping and local security work around India and within the Persian Gulf.<sup>4</sup>

Later Indian contributions to naval defence consisted of a limited annual subvention which the British Admiralty was glad to get and over which the British Indian Government had little inclination to generosity. An attempt was made in 1906 to increase the allowance to one and a half million pounds (which would still be less than ten percent of India's total military budget) but the Imperial government did not feel that the matter could be pressed with India, even a few years later when Australia and Canada began the formation of their own navies.<sup>5</sup> By the 1930s, the payment was still no more than one hundred thousand pounds a year.

### **THE BIRTH PAINS OF THE ROYAL INDIAN NAVY**

Nevertheless, signs of change began slowly to emerge. The RIM played an active part in the First World War, but its limitations became very clear, particularly during the abortive Mesopotamian campaign of 1915-16, which resulted in the British surrender at Kut.<sup>6</sup> To be fully efficient, the RIM would have to be reconstituted as a combatant, properly equipped seagoing force. This was formally urged by Admiral of the Fleet Lord Jellicoe in the course of his 1919 mission to assess the naval defence requirements of the Indian Empire.<sup>7</sup> The Indian Government's response was ponderous and negative. Despite the relative moderation of Jellicoe's suggestions, the scheme was rejected in 1921 as neither "practicable or suitable at the present time." The problem, as the Admiralty fully realised, was that nowhere in the Indian Executive Council was there "a single name with a naval connection . . . so long as

that state of affairs prevailed it was . . . unlikely that maritime considerations would carry any weight with the government of India."<sup>8</sup> And so long as the RIM remained a minor component of the Indian Army and its Director a subordinate of the Army's Commander-in-Chief, it was unlikely that the situation would improve. All that could be done for the time being was to transfer a handful of escort vessels to the RIM to maintain a core of efficient units.

The door opened a little further as Indian strategic policy began to reorientate itself at least partially away from the North West Frontier towards defence against Japan. The key issue here was the protection of Singapore and other British possessions in Asia. Given India's own financial limitations, if a contribution had to be made to what appeared to be fundamentally a maritime defence problem, it would be politically preferable for funds to be expended in India on an Indian Navy, rather than increasing contributions to the Royal Navy.<sup>9</sup> Recognising this, the Admiralty continued to advocate the militarisation of the RIM and in 1924 this view was pressed upon General Lord Rawlinson, Minister for Defence in the Indian Government, by Rear Admiral Herbert Richmond, the C-in-C of British naval forces on the East Indies Station. Rawlinson himself became convinced of "the vital importance of Singapore to the defence of India" and of the need for an operational Indian Navy and formed a Departmental Commission to investigate the proposal.<sup>10</sup>

The Commission wholeheartedly endorsed the scheme for a Royal Indian Navy and even Rawlinson's death in 1925 did not mean a complete loss of impetus. The intent to create the RIN was publicly acknowledged at the 1926 Imperial Conference and measures taken to enact the necessary legislation. Ironically, it was the flexing of political muscles in the Indian Legislative Assembly which brought about the failure of the Indian Naval Discipline Bill in 1928 and not strategic bias in favour of the Indian Army. The results were unfortunate enough, however, and the formal creation of the RIN out of the newly militarised Marine did not take place until 1934.<sup>11</sup>

### **TOWARDS AN INDEPENDENT NAVY**

The Great Depression and its disastrous effect on the Indian economy probably meant that any development of the RIN between 1928 and 1934 would have been minimal in any case. Nevertheless, the loss of those six years was to be critical in limiting the navy's readiness for independence in 1947. The first Indian officer was not recruited into the service until 1928 and financial stringency restricted recruitment at all levels until well on into the next decade. Not until April 1938 was the annual subvention of one hundred thousand pounds retained by India on the understanding that it would be spent on "local naval defence".<sup>12</sup> At the same time a limited but comprehensive programme was developed by the RIN for expansion over nine years. The emphasis was still very much upon local defence within the framework of Imperial strategy and the RIN's new goals were limited to the creation of a squadron of six escorts, supported by six minesweepers and eight motor torpedo boats for the defence of Indian ports.<sup>13</sup> This cautious approach received high level endorsement the following year when a committee chaired by Admiral of the Fleet Lord Chatfield recommended a programme which was substantially the same.<sup>14</sup> As Chatfield himself later admitted, the committee's efforts were "too late",<sup>15</sup> although they gave the tiny Indian naval staff a working blueprint for naval expansion when war came.

### **WORLD WAR II**

The RIN remained a force of escorts, minesweepers and light units throughout the Second World War. This was not simply because it was too small in 1939 to do otherwise. The Canadians started the conflict with a handful of destroyers and finished with one of the largest navies in the world, operating small carriers and cruisers. India, however, still lacked not only the political imperative but most of the technological and human capabilities required to create a large navy from scratch. The RIN made substantial contributions to commerce protection and to India's seaward defence but it is significant that its greatest efforts—and those most clearly recognised outside the Navy—were in



direct support of land campaigns in the Red Sea and Persian Gulf and in Burma. By the time of the Japanese surrender, the RIN had well over 25,000 active personnel on its books, including a small women's service. The Navy was operating no less than fifteen large escorts and 30 minesweepers and armed trawlers but, with over 350 landing craft and other minor war vessels also in commission, it was clear where the priorities had been.<sup>16</sup>

The policy for expansion was essentially one of opportunism and improvisation to meet immediate needs, at least until the last year of the war and the RIN was still restricted by its enforced subordination to and dependence upon the Indian Army's administrative systems. The scale of the problem was set out in his memoirs by Admiral John Godfrey, Flag Officer Commanding the RIN from 1943 to 1946. He noted that "at the beginning of the war the RIN had no medical service, no accountant service, no welfare or amenities, no women's service, no anti-submarine school, no tactical unit, no mechanical training establishments."<sup>17</sup> Breaking the Navy almost entirely free of the Indian Army was one of the greatest achievements of the 1939-45 period. By the end of the war a training and support structure had been brought into being which might serve as a very effective basis for expansion.

There were still grave deficiencies, particularly in the officer corps. Jellicoe had recommended the recruitment of Indians to commissioned rank as far back as 1919 but the RIN had been slow to follow his direction. From 1928 onwards, the Navy's policy was to accept two Europeans for every Indian by race<sup>18</sup> and this carried over even into reserve officer recruiting until as late as 1944. In that year, political realities and the pragmatic recognition that suitable Europeans were unavailable in sufficient numbers at last forced Godfrey to confine recruiting to Indians.<sup>19</sup> In 1945, when independence became something more than a distant prospect, the numbers of officers likely to serve in a national navy were therefore still very limited and their depth of experience inadequate. Godfrey himself, who was developing a shrewd approach to the issue, assessed 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." He believed that complete "Indianisation" without a reduction in efficiency would take from ten to fifteen years.<sup>20</sup>

Strenuous efforts were also made to broaden the reach of the recruiting effort for ratings and to overcome the reservations which inland Hindus in particular felt for seagoing service. Nevertheless, the bulk of technical personnel, including the more highly skilled amongst the executive branches, were drawn from the Muslims of the Punjab. The locations of many of the training schools, even those newly established, reflected that constituency. On the other hand, despite the location of several operational bases for patrol and amphibious forces around the coast, almost all engineering facilities and the stores organisation were still centred on the one first class naval dockyard at Bombay. There had been neither the funds nor the requirement to develop other facilities.

The RIN lacked not only a clear way ahead but any substantial degree of political support or appreciation of its problems. In an attempt to remedy this, much work was devoted from 1943 onwards to developing a comprehensive programme for the Navy after the war and to improving the understanding of Congress politicians and other influential persons.<sup>21</sup> Here Admiral Godfrey employed what was to become a standard, although not always successful tactic of his successors in both India and Pakistan by emphasising to the local audience the prestige and connotations of mature and independent national power which were attached to large warships. Key to the whole effort was the development of a post-war force structure and the very limited staff resources available meant that this had to be largely the brainchild of FOCRIN himself. Nevertheless, the RIN was able to take advantage of joint planning processes which were set in place in 1944 to create a much more ambitious statement of its roles and functions than had ever been allowed before.

The relationship between Godfrey's force structure plans and the British Chiefs of Staff Committee "Report on the

Size and Composition of the post-war Forces of India" which was completed in April 1944 was certainly symbiotic. Much of what was written in the report and what was assessed as being necessary for a Royal Indian Navy to achieve its tasks matched very closely the plans of other Commonwealth navies for after the war.<sup>22</sup> The "Report" included several substantial additions to the Indian Navy's wartime functions. Local defence and support of the army, particularly in amphibious operations remained primary tasks. More significant for the purposes of expanding the RIN, however, were acceptance of the need to protect the sub-continent against seaborne invasion and to defend India's seaborne communications. These activities would require not only ocean going warships but "an adequate air component for seaward reconnaissance and a striking force." While co-operation with the Royal Navy and integration into the Empire's wartime efforts were implicit in the "Report", the theme was one which set the RIN on an assumed basis of equality with other Commonwealth navies, such as that of Australia, in a fashion which had never before been conceivable.<sup>23</sup> India, it was clearly the hope, would be a major component of an integrated and world wide maritime defence effort by the British Commonwealth.

Godfrey intended that the re-development of the RIN from this point be very swift indeed and the internal evidence suggests that much groundwork had already been laid informally with the British Admiralty to determine the number and type of ships which would be available for transfer on loan. Manpower shortages in the United Kingdom meant that there were more modern major units in service than could be manned. By commissioning a selection for Indian service under British operational control for the remainder of the war against Japan, the naval staff hoped to provide India with an effective post-war fleet without committing the country to the enormous capital costs which would otherwise be required. Admiral Godfrey opted for a two stage programme which would eventually give the RIN a force centred on three cruisers, two light aircraft carriers and a flotilla of eight destroyers as well as submarines and more modern escort ships. How much this was an

ambit claim is uncertain. Other British naval authorities thought the scheme "somewhat over ambitious"<sup>24</sup> and Godfrey was certainly quick to concentrate on retaining the cruiser programme in preference to other elements even before the end of the war.<sup>25</sup> The Indian Finance Department insisted on a reduction in costs of nearly 50% and the final result was approval in principle for a fleet centred around three cruisers and nine sloops and frigates in full commission, as well as a range of support ships.<sup>26</sup>

When the Japanese surrender eventually came in August 1945, the longer term priorities were soon largely submerged by the pressures of demobilisation and preparation for the suddenly immediate prospect of independence. Nevertheless, the plans of 1943-45 were critical to the immediate future of the South Asian navies which would emerge from the break up of British India. They effectively determined the roles which those navies would expect and be expected to undertake in the first years of their existence and they set the scale and very much the form of the force structures of the newly independent services. Other players and other influences would be required to support the further development of local naval power, but the right atmosphere would not have existed without the efforts of Admiral Godfrey and the wartime staff of the Royal Indian Navy.

### **POST-WAR REALITIES**

In the meantime, the problems of the RIN were more prosaic and much closer to hand. The process of demobilisation proved too much for the Navy's resources and dissatisfaction amongst junior personnel rapidly built to the point where open mutiny broke out in the ships and establishments at Bombay in February 1946. This was suppressed after three days and the death of ten men. While it is clear that there was a nationalist undercurrent to the incident and a clear failure on the part of some British officers to supervise and care for the interests of their junior Indian personnel, the root causes of the mutiny were summarised by the subsequent Commission of Inquiry: "The war having been won, the object was lost. Contact between officers and men was

lost, loyalty disappeared and team spirit vanished. Men had insufficient work and they were unlikely to be interested in their work when they expected to be out of the Service soon."<sup>27</sup>

Drastic steps were taken by Godfrey's successor, Vice Admiral Sir Geoffrey Miles, to remedy the major causes of the mutiny and he was confident by early 1947 that discipline and morale within the RIN had been re-established.<sup>28</sup> The implications of independence, however, were rapidly becoming more complex. The RIN was more or less successfully able to resist proposals for immediate nationalisation of the service but initially made little headway with its plans for post-war reconstruction. The scheme for three cruisers was progressively reduced to a single unit and then cancelled outright on the grounds of financial stringency and a shortage of technical manpower.<sup>29</sup> Only the direct intervention of the new Viceroy, Rear Admiral Viscount Mountbatten of Burma, brought about the restoration of a single second hand cruiser into the naval programme in April 1947. The British selected the *Achilles* for transfer and preparations were made for her refit and commissioning.<sup>30</sup>

However encouraging, such an advance in force structure seemed trivial in the increasingly troubled political environment. Partition of British India into separate nations became an increasingly serious prospect, but its form and timing remained uncertain. Coherent planning was almost impossible in such an atmosphere, although the Indian Armed Forces did their best to prepare for independence. Within the RIN, the Postwar Planning Staff worked their way through a variety of options for the future but most of their effort would be wasted. The putative date for independence of June 1948 seemed to offer little enough time to prepare but the reality would be even more extreme.

Mountbatten cut the Gordian knot after his appointment as Viceroy in February 1947. After a hectic round of negotiations, in which the Armed Forces commanders played little part, the decision to proceed with partition and independence to date 15 August 1947 was announced by the Viceroy on 3 June. To the RIN's commander, Admiral

Miles, the declaration came as "a bombshell".<sup>31</sup> He was not alone.

### **DIVIDING A SEAMLESS GARMENT**

The requirements of partition were devastating enough, both psychologically and materially, for the Indian Army but the latter at least had the advantage that many units had been organised on an ethnic basis and could be disposed wholesale into the new armies of India and Pakistan. The case of the Royal Indian Navy was even worse, however simple a division of the operational fleet might appear to be, and the naval sub-committee of the Armed Forces Reconstruction Committee would have its work cut out to achieve an equitable solution in the short time available.<sup>32</sup>

The fundamental problem lay with personnel. The RIN was ethnically mixed to a degree unheard of in most other areas of society, but it was not ethnically balanced. The proportion of Muslims to others on the lower deck was approximately 2 to 3 and, despite recent recruiting efforts, they remained concentrated in the more highly skilled specialisations, essential for the operation of sophisticated warships such as cruisers or destroyers. The location of the training facilities reflected that constituency and the majority of these establishments were in or around Karachi and thus would pass automatically to Pakistan. The latter's situation with technical infrastructure was, however, totally unsatisfactory in the absence of a naval dockyard or any kind of ship repair facilities. A naval stores organisation would also have to be created from scratch at Karachi, where the emergent Royal Pakistan Navy would have its makeshift base.

The officer corps, particularly the executive branch, was dominated by Hindus and the RPN would be hard put to man even a few of its ships at this level. Even the Royal Indian Navy would have difficulties, because the situation was further exacerbated by the definite reluctance of many of the British officers to remain after independence,<sup>33</sup> even if the new nations were eager to keep them. For both navies, some interim arrangements would have to be made with the British Admiralty to cover the deficiencies.

## Naval Forces at Partition

	India	Pakistan
Cruiser (projected)	1	
Sloop	4	2
Frigates	2	2
Fleet Minesweepers	12	4
Corvettes	1	
Survey Vessels	1	
Trawlers	4	2
Motor Minesweepers	4	2
Motor Launches	1	
HDML	4	4

In these circumstances the division of ships was a comparatively straightforward matter. The new cruiser would go to India and the smaller vessels were divided up on a rough two for one basis, with provision to meet India's greater oceanic and coastal defence requirements and Pakistan's greater riverine needs. The allocation was carried out relatively amiably. Despite the bitterness and resulting from the inter-racial murders and rapine which followed independence, at least one mixed training cruise was taken to a successful conclusion after the separation of the two services.<sup>34</sup> It remained to be seen how the new navies of India and Pakistan would deal with the future.

## NOTES

1. For a thoughtful survey of the effects of this policy in modern times see: George K. Tanham *Indian Strategic Thought: An Interpretive Essay* RAND, Santa Monica, California 1992. Recent historical research which makes clear how the strategy was implemented includes Keith Neilson "For Diplomatic, Economic, Strategy and Telegraphic Reasons": British Imperial Defence, the Middle East and India, 1914-1918" in Keith Neilson & Greg Kennedy (Eds.) *Far Flung Lines: Essays in Imperial Defence in honour of Donald Mackenzie Schurman* Frank Cass, London, 1996.
2. Rear Admiral K. Sridharan *A Maritime History of India* (Second Edition) Ministry of Information and Broadcasting, Government of India, New Delhi, 1982. pp. 77-82.
3. Oscar Parkes *British Battleships 1885-1960* (Second Edition) Seeley Service & Co., London, 1973. p. 170.
4. Commander D.J. Hastings *The Royal Indian Navy, 1612-1950* Macfarland & Co., Jefferson, North Carolina, 1988. pp. 28-32.

5. Nicholas Lambert "Economy or Empire? The Fleet Unit Concept and the Quest for Collective Security in the Pacific, 1909-1914" Neilson & Kennedy *Far Flung Lines Op. Cit.* p. 65.
6. See Lady Wester Wemyss *The Life and Letters of Lord Wester Wemyss Eyre & Spottiswoode*, London, 1935. pp. 284-285. See also Paul G. Halpern *A Naval History of World War I* Naval Institute Press, Annapolis, 1994. pp. 130-132.
7. Public Record Office (PRO) ADM 116/1832. For extracts of the report see A. Temple Patterson *The Jellicoe Papers: Selections from the Private and Official Correspondence of Admiral of the Fleet Earl Jellicoe* Volume II 1916-1935 Navy Records Society, London, pp. 297-312.
8. Stephen Roskill *Naval Policy Between the Wars* Volume I *The Period of Anglo-American Antagonism 1919-1929* Collins, London, 1968. p. 277.
9. W. David Macintyre *The Rise and Fall of Singapore Naval Base* Macmillan, London, 1979. p. 54.
10. Barry D. Hunt *Sailor-Scholar: Admiral Sir Herbert Richmond 1871-1946* Wilfred Laurier University Press, Waterloo, Ontario, 1982. pp. 144-145.
11. See Rear Admiral Satyindra Singh *Under Two Ensigns: The Indian Navy 1945-1950* Oxford & IBH, New Delhi, 1986. pp. 21-22 for an abridged transcript of the debate.
12. Vice Admiral A.E.F. Bedford "The Royal Indian Navy" *The Naval Review* Vol. XXVI, No. 2, May 1938. p. 220.
13. D.J. Hastings *The Royal Indian Navy, 1612-1950 Op. Cit.* pp. 323-331 reproduces the "Nine Year Plan" as submitted by the Flag Officer Commanding the RIN in March 1938.
14. *Ibid.* p. 332.
15. Lord Chatfield *The Navy and Defence: The Autobiography of Admiral of the Fleet Lord Chatfield* Volume II *It Might Happen Again* Heinemann, London, 1947. p. 162.
16. Satyindra Singh *Under Two Ensigns Op. Cit.* p. 28.
17. Admiral John Godfrey "Naval Memoirs" cited in Patrick Beesly *Very Special Admiral: The Life of Admiral John G. Godfrey CB* Hamish Hamilton, London, 1980. pp. 246-247.
18. A.E.F. Bedford "The Royal Indian Navy" *Op. Cit.* p. 216.
19. Patrick Beesly *Very Special Admiral Op. Cit.* p. 291. For a description of wartime recruiting problems see Sri Nandan Prasad *Expansion of the Armed Forces and Defence Organisation 1939-45 (Official History of the Indian Armed Forces in the Second World War 1939-45)* Orient Longmans, Calcutta, 1956. pp. 130-131.
20. Patrick Beesly *Very Special Admiral Op. Cit.* p. 292.
21. *Ibid.* pp. 259-261.
22. See James Goldrick "Carriers for the Commonwealth" In T.R. Frame, J.V.P. Goldrick & P.D. Jones (Eds) *Reflections on the Royal Australian Navy* Kangaroo Press, Kenthurst, 1991.
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14 / NO EASY ANSWERS

24. Admiral Sir James Somerville Diary entry of 27 February 1944. Michael Simpson (Ed.) *The Somerville Papers: Selections from the Private and Official Correspondence of Admiral of the Fleet Sir James Somerville* The Navy Records Society/Scolar Press, Aldershot, 1995. pp. 522-523.
25. Patrick Beesly *Very Special Admiral Op. Cit.* p. 293.
26. See S.V. Desika Char "Planning for the Post War Defence Forces" in Sri Nandan Prasad *Expansion of the Armed Forces and Defence Organisation 1939-45 Op. Cit.* pp. 199-206.
27. D.J. Hastings *The Royal Indian Navy, 1612-1950 Op. Cit.* p. 223.
28. *Ibid.* pp. 226-227.
29. *Ibid.* p. 227. See also; Rahul Roy-Chaudhury *Sea Power and Indian Security* Brassey's, London, 1995. p. 23.
30. Satyindra Singh *Under Two Ensigns Op. Cit.* p. 8.
31. D.J. Hastings *The Royal Indian Navy, 1612-1950 Op. Cit.* p. 228.
32. See Rahul Roy-Chaudhury *Sea Power and Indian Security Op. Cit.* pp. 23-26 for a good summary of the reorganisation of the RIN into the new services.
33. See Commander E.C. Streatfield-James *In the Wake: The Birth of the Indian and Pakistani Navies* Charles Skelton, Edinburgh, 1983 for a first hand record of a long serving British RIN officer's reactions.
34. K. Sridharan *A Maritime History of India Op. Cit.* p. 317.

## 2

# **THE INDIAN NAVY 1947-1971**

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### **TOWARDS A NEW FORCE STRUCTURE**

The setbacks of partition did not dismay the newly formed Royal Indian Navy. If the process of achieving independence for India had been traumatic, its attainment at least meant that a measure of stability could enter the operations and future plans of the service. There was much to be done.

The RIN immediately passed under new command with the appointment of the just promoted Rear Admiral J.T.S. Hall as C-in-C on 15 August 1947. For a brief period, the RIN would be directed by transfers from the old service, but Hall's term only lasted a year before his relief by a British flag officer, Vice Admiral Edward Parry. Perhaps a more significant loss was the death of his Chief of Staff, the brilliant Commodore H.M. StL Nott, in a plane crash in April 1948. Commodore Nott appears to have been the driving force in the frantic activity that resulted in the production of Naval Plans Paper Number One only ten days after independence.<sup>1</sup> By the end of 1947 a delegation was in London to seek the advice of the Admiralty on the cost and personnel requirements. Already the RIN was

intending to step up from the small force of cruisers and escorts which Admiral Godfrey had foreshadowed. In addition to restoring the projected destroyer flotilla, the force structure proposals now included a pair of light fleet carriers. In the months leading up to independence, the then FOCRIN, Admiral Sir Geoffrey Miles, had become aware of the details 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.<sup>2</sup>

Before his relief by Hall, Miles had succeeded in enlisting the support of Sardar Patel, India's Minister of Defence, who spoke in favour of the carrier concept in discussions with the Admiralty later in 1947. 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 British wanted an Indian 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."<sup>2</sup> 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.<sup>3</sup> There was, 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.<sup>4</sup> India, by pursuing a policy of non-alignment with the Western Alliance, was not committed to these arrangements.

The Admiralty would, however, 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 and a squadron of tank landing craft would be transferred as the core of a future amphibious capability.<sup>5</sup>

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.<sup>6</sup> 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-à-vis her Asiatic neighbours"<sup>7</sup> 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.<sup>8</sup> 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."<sup>9</sup>

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 term. 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.<sup>10</sup> While three *O* class destroyers were being handed over to Pakistan, it felt that 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.<sup>11</sup> 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 in terms of the immediate future. 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 they should be required.

### **FIRST STEPS**

In the meantime, the nascent Indian Flotilla began its recovery from partition as the stores and support organisations were rearranged and training programmes resumed. The transition period proved a disturbed one as repeated calls were made upon the RIN for assistance in the flurry of territorial problems which followed independence. The major event was Operation *Peace*, the landing of over five hundred troops and thirty tanks and vehicles on the coast of Kathlawar over a period of four weeks in October and November 1947.<sup>12</sup>

### **SECOND ROUND**

Vice Admiral Parry, who by coincidence had commanded the *Achilles* at the Battle of the River Plate in 1939, took over 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.<sup>13</sup>

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 continue the planning for a Fleet Air Arm.<sup>14</sup> 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.

#### Indian Force Structure Predictions—1950

	1960	1968
Fleet Carriers	—	4
Light Fleet Carriers	2	2
Cruisers	3	4
Destroyers	4	21
Escort Destroyers	9	—
Submarines	4	16
Frigates	6	6
Fleet Minesweepers	6	6

The Admiralty was not impressed by the Indian Navy's requests for assistance. The suggestion within the British naval staff that the proposed force levels were "grandiose"<sup>15</sup> 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".<sup>16</sup> 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".<sup>17</sup> 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.<sup>18</sup> India would have to take her place in the queue.

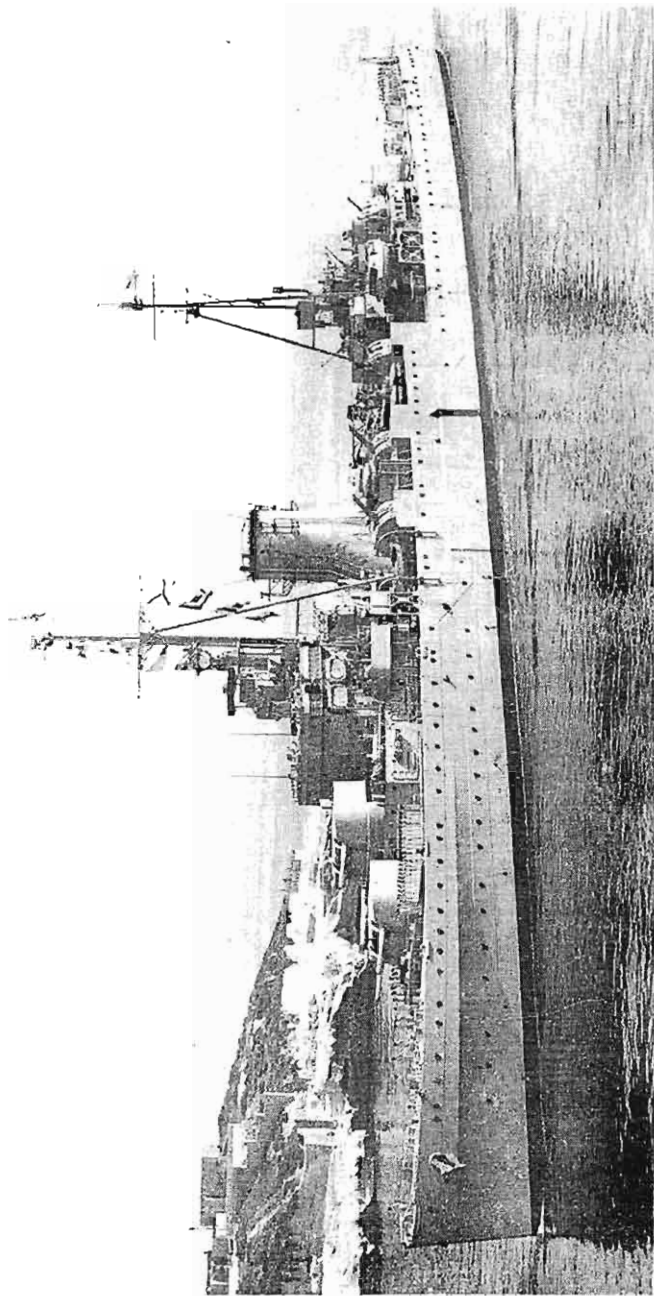
In the event, Britain's predictions of the future fleet strengths in the Sub-Continent proved much more realistic than the Indian Navy's. The drain of the conflict over Kashmir, continuing internal difficulties and less sanguine attitudes as to India's economic strength forced restraints on defence spending. 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.<sup>19</sup>

#### Admiralty Force Structure Predictions—1950

	1960-65 India	1960-65 Pakistan
Cruisers	3	1
Destroyers	8	4
Frigates	8	8
Minesweepers	12	12

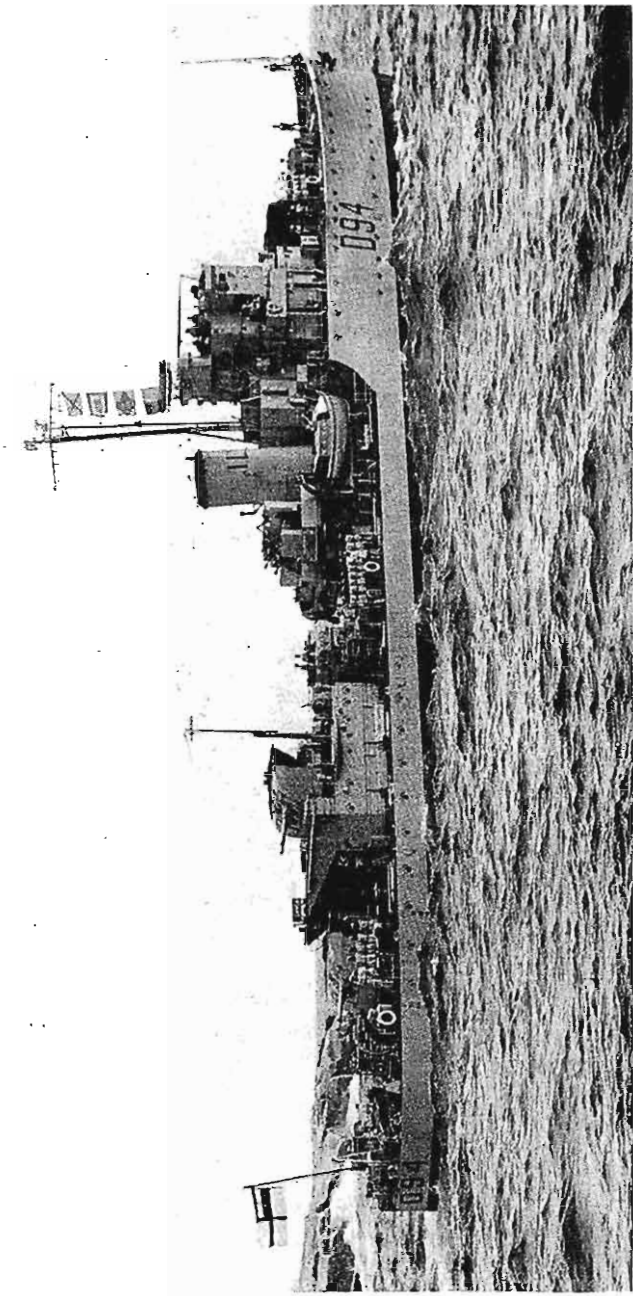
For the Navy, this financial stringency had other implications. While the restrictions on spending were a disappointment to the ambitions of Indian Naval Headquarters, the government had now become much more comfortable with the concept of the navy as a partner—albeit totally informally and without committing 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 Indian Navy finally embarked upon a revised expansion programme, one which both the Indian government and the British were able to support. This was promulgated



**INS DELHI** at Malta 1953. Photograph credit: A&J Pavia via John Mortimer





**INS GANGA** circa 1953. Photograph credit: John Mortimer

as part of the 1951 first Five Year Plan for India, although not all its acquisitions were intended to take place within that time. The prospective naval aviation component was reduced to the indefinite goal of two light fleet carriers and their air groups, as the core of a "hunter killer" ASW group which would include three light cruisers and a flotilla of destroyers.<sup>20</sup> The first 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".<sup>21</sup> 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.<sup>22</sup>

#### **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 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. Other Indian officers with great potential were similarly being "brought on" in preparation for high rank. 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.<sup>23</sup>

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. The Indian Navy 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 a few years after.<sup>24</sup> 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.<sup>25</sup>

### **OPERATIONS**

The British Commander-in-Chief East Indies in 1946-48, Admiral Sir Arthur 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.<sup>26</sup> 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 and the trip seems to have been a success as Mrs Gandhi later recalled it with some affection.<sup>27</sup>

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 purchase 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.<sup>28</sup> 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. Although the *Hunt* class were of relatively little military value, they were fast and handy ships which would fit in well to the existing flotilla.

The cancellation did not mean the end of negotiations for an additional cruiser, 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 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".<sup>29</sup>

The Indian naval staff continued to press for a fleet air arm but the Government procrastinated. Britain did not have any suitable carrier 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.<sup>30</sup> 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. Target towing *Fireflies* were purchased in 1955 and 1958. Significantly, *Vampire* jets and HT-2 trainer aircraft were added in 1956 and 1957.<sup>31</sup>

### REPLACEMENT 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),<sup>32</sup> after much debate the government approved a large scale programme of replacement units. Some of the credit for this must go to the influence of Earl Mountbatten, 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. The new C-in-C, Vice Admiral Sir Mark Pizey, lobbied hard to secure government support and the Cabinet Defence Committee decision in 1953 was cheerfully described by the Army's Chief of Staff as "the greatest naval victory after Trafalgar!"<sup>33</sup>

The British were only too 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, two Type 12 (First Rate ASW), four Type 41 (AAW) and six Type 14 (Second Rate ASW), together with up to eight coastal minesweepers and a number of inshore minesweepers.<sup>34</sup> 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.<sup>35</sup>

There were two notable features about Pizey's programme. First, it formally defined 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. The immediate benefits for Indian naval development, which might otherwise not occur at all, were obvious. As one observer has noted, however, the extent to which such integration was accepted "remains controversial" and the Indian Navy's slant towards ASW at the apparent expense of other capabilities was soon criticised.<sup>36</sup>

Nevertheless, plans for an aircraft carrier also made progress with active British support for the acquisition of ASW light carriers.<sup>37</sup> 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.<sup>38</sup> 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 cancelled 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.<sup>39</sup>

*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 two degree increase on her angled deck and her fittings were strengthened to operate the *Sea Hawk* fighter.<sup>40</sup> 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*.<sup>41</sup>

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.<sup>42</sup>

### SETBACKS—IN A CROWDED OCEAN

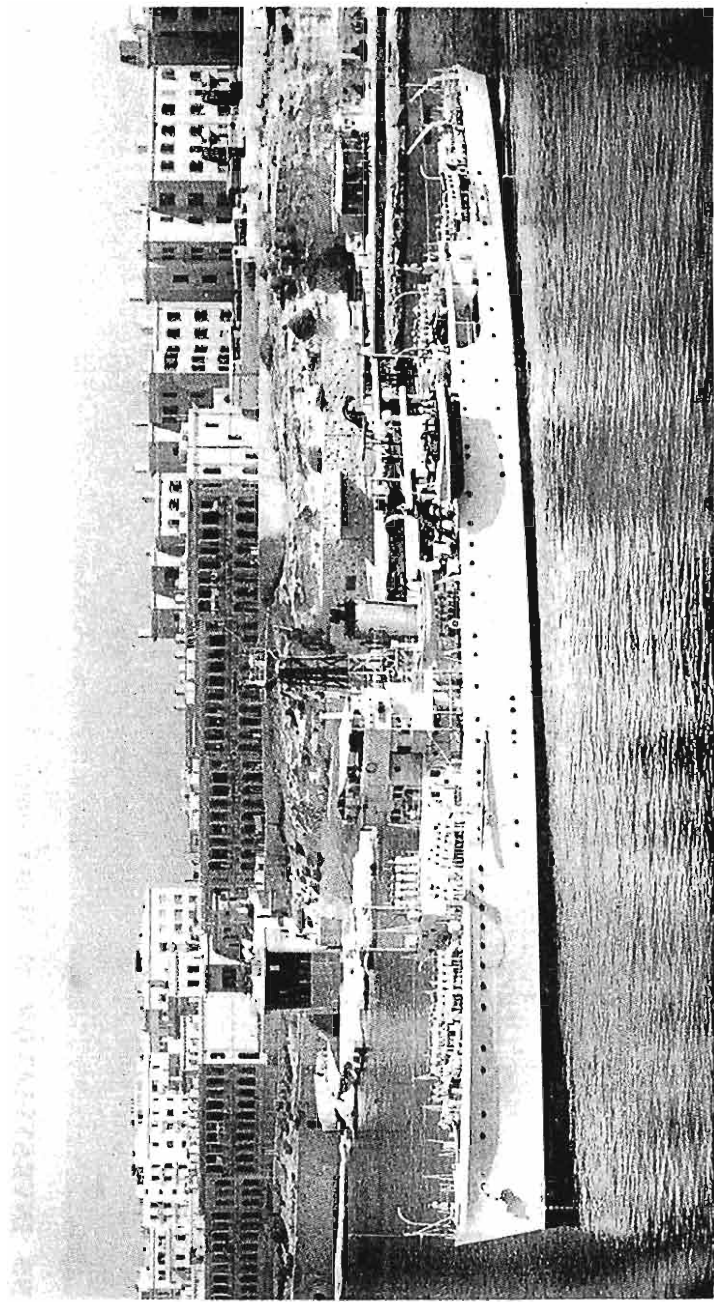
Not carried into execution were proposals to establish a submarine arm, initially for ASW training but with the long term objective of operating a force capable of offensive operations. The British proved less than enthusiastic about the proposal, which had obvious ramifications for Pakistan, and their warnings about the resource implications proved sufficient to kill the idea, at least for the time being.<sup>43</sup>

Nor was the building programme accomplished in full. Execution of the second part of the package, the Type 12s, the remaining single Type 41 and three more Type 14 units, in 1956 coincided with increasing balance of payments difficulties as well as a deep uneasiness on the part of the Indian naval staff that the fleet was too focused on ASW when the emerging threat was primarily in the form of surface ships.<sup>44</sup> 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, only the two Type 12s were ordered. 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.<sup>45</sup> The immediate effect was to ensure the retention of the *R* and *Hunt* class destroyers in the fleet



**INS INVESTIGATOR** at Malta circa 1954.  
*Photograph credit: A&J Pavia via John Mortimer*





**INS SUTLEJ** at Malta circa 1954.  
*Photograph credit: A&J Pavia via John Mortimer*

indefinitely. The twelve frigates had been conceived as their replacements, as well as those of the sloops, but eight ASW/AA escorts 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 by 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).<sup>46</sup>

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 five 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.<sup>47</sup> 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.<sup>48</sup> Nevertheless, Pakistan now possessed some capable surface combatants and there was the prospect of more transfers to aid "mutual defence".<sup>49</sup> 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 Stephen Carlill, preferred to hold out for approval from the Indian government for the construction of three new destroyers, modifications of the larger *Daring* class.<sup>50</sup>

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 *Ordzonikidzke*.<sup>51</sup> 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".<sup>52</sup> The acquisition of the *Vikrant* acquired a new importance, since the carrier might be required not for ASW but in the anti-ship strike role.

These developments coincided with the accession of Vice Admiral Katari to the office of Chief of Naval Staff in April 1958. The new CNS 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 Indian 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.<sup>53</sup>

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.<sup>54</sup> Spending on defence as a whole was ill coordinated. Although the Navy had clearly the lowest priority in the overall vote, even the Air Force and Army suffered through false economics 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 three destroyers. But the latter could not spare the *Darings* 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.<sup>55</sup> That issue also coloured the Indian Government's attitude to the problem. The Navy did not seem to possess a role and a place in the defence strategy which would justify much expenditure or a priority ahead of the other services. An advance from the concentration on ASW was clearly essential, but it would take time for the IN to produce a credible concept of operations as an alternative. The irony was that such a concept would be almost impossible to evolve without changes in the Navy's force structure and such changes could not be achieved without additional funding.

The occupation of Goa in 1961, in which the Indian Navy took a leading role, proved a boost to India's confidence but revealed considerable problems in the navy's own planning<sup>56</sup> and in joint service operations which were not properly addressed.<sup>57</sup> 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 dropped by 20% between the 1961-62 and 1962-63 financial years.<sup>58</sup> 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.<sup>59</sup>

### **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. The IN made much of reports that Chinese submarines had been seen in the Bay of Bengal during the border war and the Cabinet began to appreciate that submarines in particular possessed deterrent and defensive capabilities which had a place in Indian defence strategy. Vice Admiral Katari had repeatedly raised fresh proposals for a submarine force since becoming Chief of Naval Staff and this intent was taken up by his successor, Vice Admiral B.S. Soman. A nucleus of officers and sailors began training with the Royal Navy in early 1962. By November that year, approval in principle had been given for the purchase of three submarines.<sup>60</sup> Since both Britain and the United States had indicated their willingness to provide arms and defence credits for future purchases, India would be able to afford new construction.<sup>61</sup>

In the meantime, the Navy obtained approval for a number of measures to improve its ability to defend both the mainland and India's offshore islands. Ten more *Sea Hawk* fighters were purchased and a second naval air station, *INS 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 Jarawa*) in the Andaman Islands.<sup>62</sup> Small steps in themselves, these policy changes were still valuable in increasing the impetus for the creation of a more coherent strategy for naval defence.

### **BARGAINING WITH THE WEST**

The negotiations for new units which occupied the years 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.<sup>63</sup> 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 reluctant to interfere with the United Kingdom's historical role as a supplier of warships.<sup>64</sup> 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 India at their own expense.

Chavan put several specific requests to the British. First, the Navy wanted three *Daring* class destroyers and three modern frigates transferred on a three year renewable loan as replacements for the increasingly decrepit R and *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.<sup>65</sup> Third, similar arrangements were requested for the construction of *Leander* class frigates in India.<sup>66</sup>

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

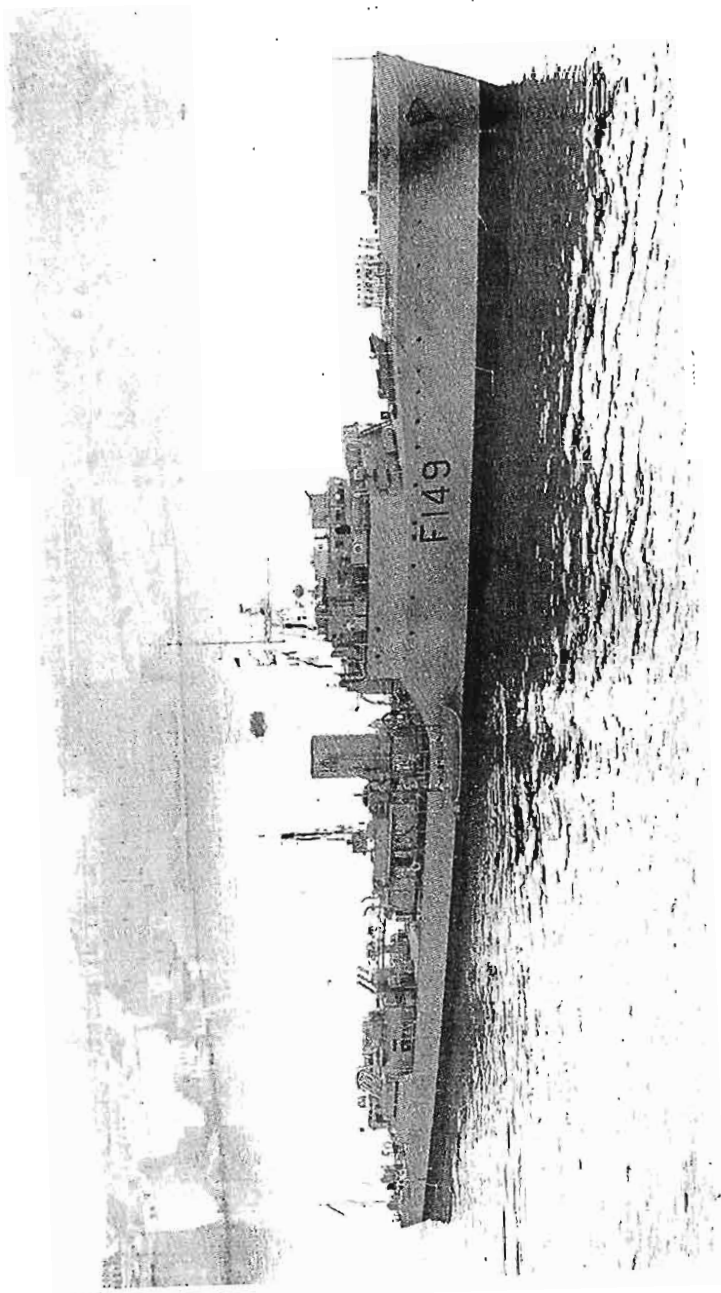
of its seven *Daring* class or the modern frigates that India wanted. Nor was a modern submarine available on preferential terms since the Royal Navy had all too few new conventional submarines for its own tasking. A counter offer of *Weapon* class air direction destroyers was made as alternatives to 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 would leave no political sympathy for the replacements which would be required in only a few years time.<sup>67</sup>

Mountbatten sought to defer the submarine proposals as he had in 1955 by emphasising the expense associated with creating a submarine arm.<sup>68</sup> He proposed that 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 had 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.<sup>69</sup>

### **ENTER THE SOVIETS**

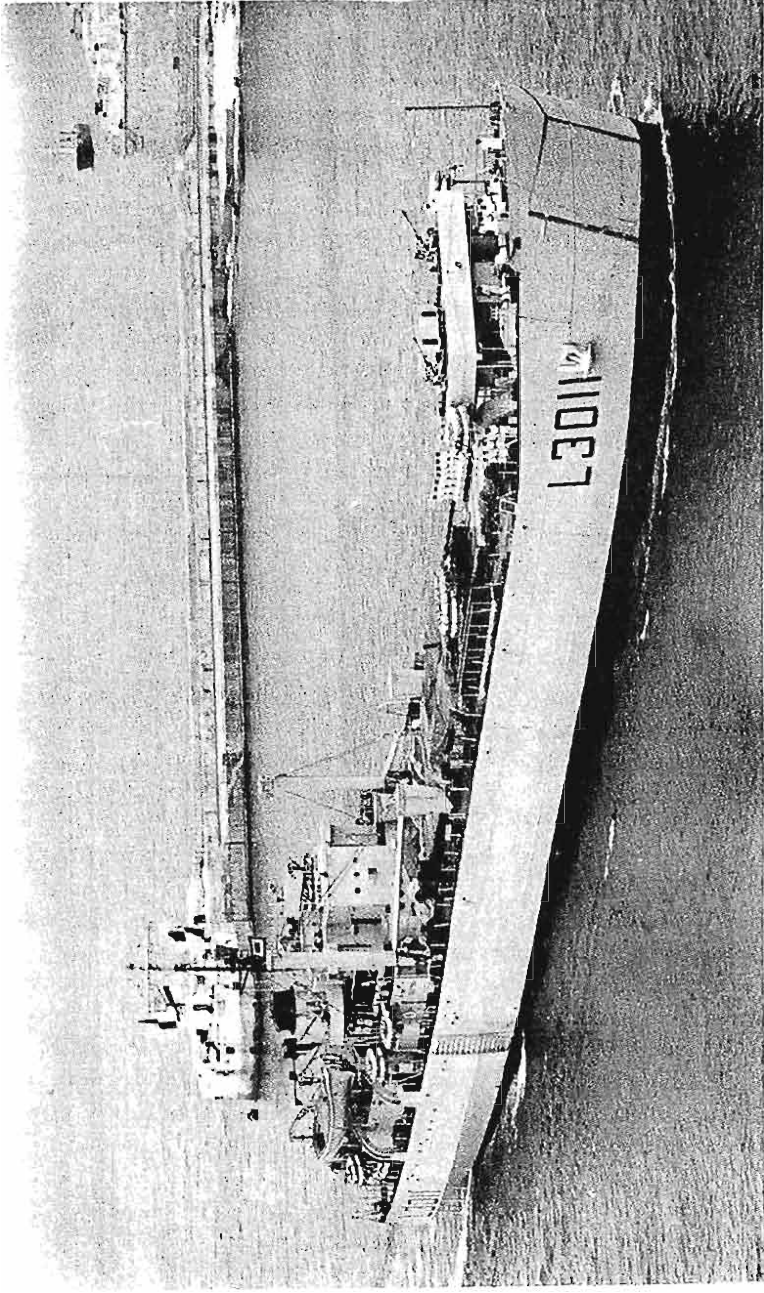
In the meantime, Chavan also visited the Soviet Union where his delegation was "given a good look at the Soviet fleet",<sup>70</sup> including a sea day in a *Foxtrot* class submarine.<sup>71</sup> The Russians were prepared to offer a package of surface combatants and submarines, together with spares, 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 the Russians would be prepared to accept payment in rupees rather than hard currency.<sup>72</sup>

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 had clashed



**INS KHUKRI** at Malta on passage from builders.  
Photograph credit: A&J Pavia via John Mortimer





**INS MAGAR** at Malta. Photograph credit: A&J Pavia via John Mortimer

with Marshal Zhukov over the question of British naval assistance during the latter's visit to India in 1957.<sup>73</sup> 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.

### **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 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 Pakistan 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.<sup>74</sup> 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.<sup>75</sup>

In consequence, the only notable activity was a bombardment raid on the Indian west coast town of Dwarka by a Pakistani task group which included the light cruiser *Babur*.<sup>76</sup> 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.<sup>77</sup>

*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.<sup>78</sup> 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 operational 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.<sup>79</sup>

### **THE TURN TO THE SOVIETS**

The signing of a naval arms agreement with the USSR was announced in the Lok Sabha on 7 September 1965.<sup>80</sup> 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 attention 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.<sup>81</sup>

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 separate fleets in the East (Soviet) and West (Western).<sup>82</sup>

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 four 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.<sup>83</sup> The corollary of this was an emerging requirement for two fleets, one for the West and the other for the East Coast. 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.<sup>84</sup> 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.<sup>85</sup>

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.<sup>86</sup> 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.<sup>87</sup>

The ambitions of the Indian Navy were not at first well received by the Indian Government and the Defence Minister even went so far in 1967 as to leave out any mention of the IN in his Defence budget statement to the Lok Sabha. He did not accept the need for a two fleet navy or for naval rearmament beyond the limited additions already planned. For the Government, the Indian Ocean did not yet present strategic uncertainty, whatever the changes in power structures which would result from the British departure.<sup>88</sup>

Despite the flamboyance of Admiral Chatterji's approach, events in 1968 backed up some of the Indian Navy's claims. The first Russian built submarine *Kalveri* arrived at Vishakapatnam in July.<sup>89</sup> In October Prime Minister Gandhi launched the *Nilgiri*, first Indian built *Leander*, at Mazagon Dock in Bombay.<sup>90</sup> 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.<sup>91</sup>

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.<sup>92</sup> 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 replacement carrier programme was placed in abeyance.<sup>93</sup> 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 *Eilat* 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.<sup>94</sup> The second Soviet package included *Osa* class fast attack craft, as well as more submarines and frigates.<sup>95</sup>

### **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

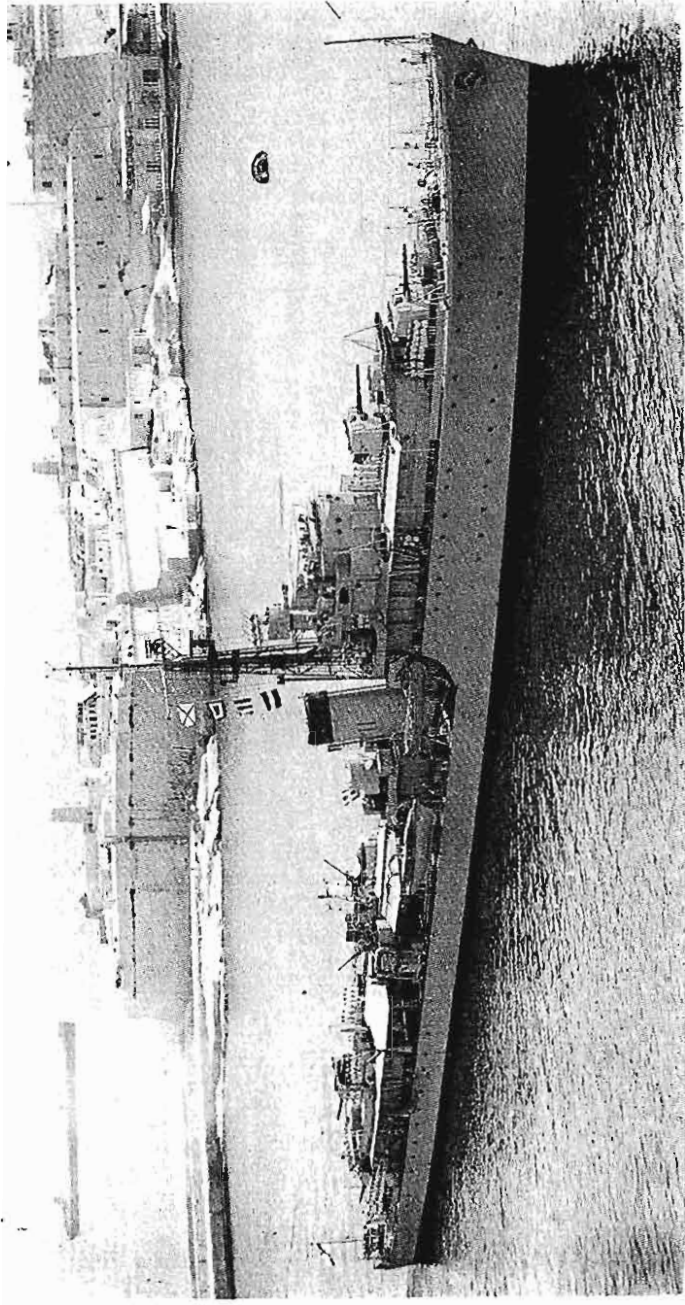
attack craft acted as a catalyst for the evolution of doctrine. The annual exercise programme was re-organised to create a coherent progression through basic procedural serials to more complex tactical exercises and thence to the major "fleet problem" of several weeks length which would be analysed by 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 (four) 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, with which the now elderly *Ton* class coastal minesweepers and the handful of *Ham* Class would be unable to cope.<sup>96</sup> 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.

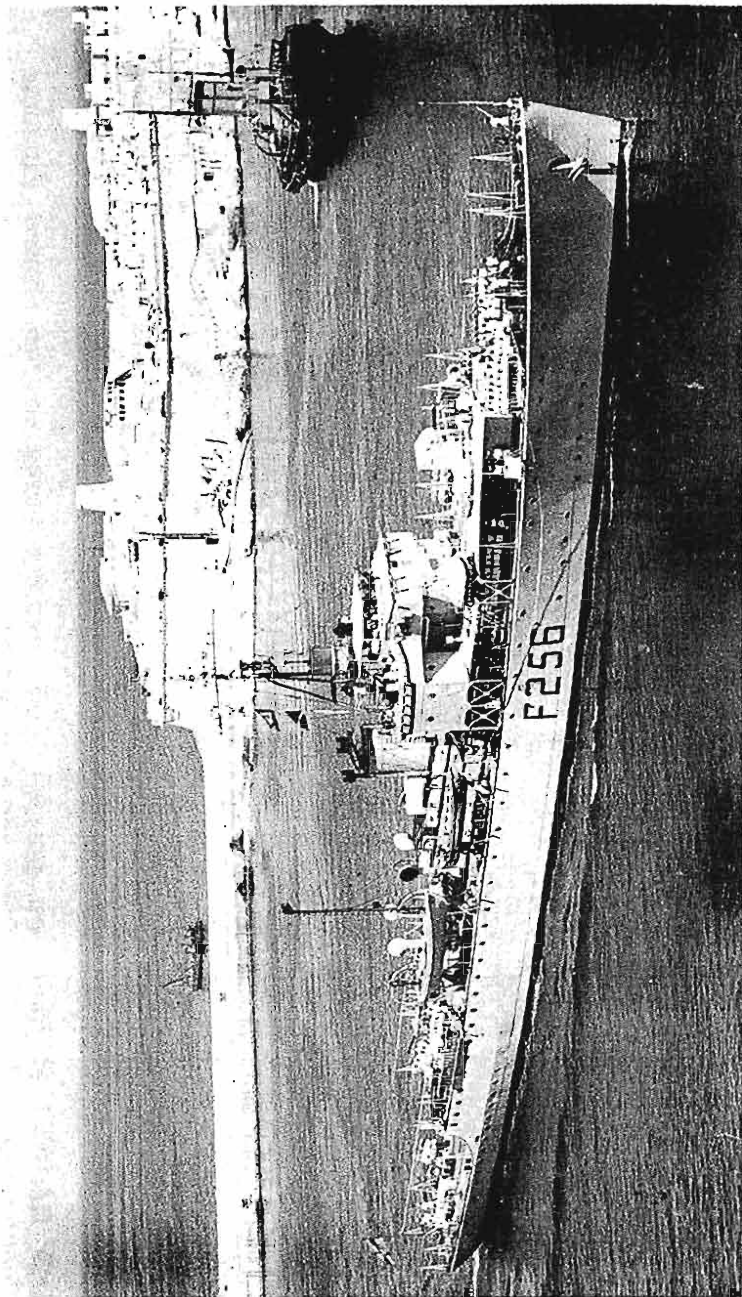
### CONSIDERATIONS ON AN ERA

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



**INS RAJPUT** at Malta on passage from commissioning in the United Kingdom.  
*Photograph credit: A&J Pavia via John Mortimer*





**INS TIR** at Malta circa 1953.  
*Photograph credit: A&J Pavia via John Mortimer*

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 jib 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 work 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.

#### NOTES

1. ADM 116/5852: Military Branch Memorandum dated 10 November 1947 and Minute MF 09/47 dated 20 December 1947. See also:

- Vice Admiral W.E. Parry "India and Sea Power" *Journal of the United Services Institute of India* January-April 1949. p. 27. Rahul Roy-Chaudhury *Sea Power and Indian Security Op. Cit.* p. 27.
2. Public Record Office (United Kingdom) ADM 116/5852: "Indian Naval Aviation"—Fifth Sea Lord minute dated 8 September 1949.
  3. 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".
  4. See James Goldrick "Carriers for the Commonwealth" and Eric Grove "British and Australian Naval Policy in the Korean War Era" in *Reflections on the RAN Op. Cit.*
  5. ADM 116/5852: Military Branch Memorandum dated 10 November 1947 and Minute MF 09/47 dated 20 December 1947. See also: Vice Admiral W.E. Parry "India and Sea Power" *Journal of the Royal United Services Institute of India* January-April 1949. p. 27.
  6. Tughlak "The Birth of the Indian Navy" *The Naval Review* Vol. XLIV, No. 2, April 1956. p. 173.
  7. *Ibid.* p. 175.
  8. *Nehru: A Political Biography* Oxford University Press, London, 1959. p. 414 et seq.
  9. Raju G.C. Thomas *The Defence of India* Macmillan, New Delhi, 1978. p. 157.
  10. ADM 116/5852 "Appreciation of Future Requirements for India and Pakistan". Memorandum dated 15 April 1948.
  11. ADM 116/5852 "Indian Naval Aviation" Minutes of a meeting held on 8 September 1949 and chaired by the Fifth Sea Lord.
  12. Satyindra Singh *Under Two Ensigns Op. Cit.* pp. 98-99.
  13. Captain G.A. French CBE RN letter to the author dated 11 June 1987.
  14. ADM 116/5852 C-in-C RIN letter to Fifth Sea Lord dated 22 July 1949.
  15. ADM 116/5852 Fifth Sea Lord Minute dated 18 January 1950.
  16. ADM 116/5852 Undersecretary of State Minute M 01679/49 dated 19 November 1949.
  17. ADM 116/5852 "Appreciation of Future Naval Requirements for India and Pakistan" Memorandum dated 15 April 1948.
  18. Eric J. Grove *Vanguard to Trident: British Naval Policy Since World War II* US Naval Institute Press, Annapolis, 1987. pp. 72-73.
  19. ADM 116/5852 First Sea Lord (Admiral of the Fleet Lord Fraser) letter to C-in-C RIN N3424/1SL 79/49 dated 14 November 1949. The text refers to a letter by Admiral Parry and its contents but a copy of the latter does not exist in the file.
  20. Rear Admiral Satyindra Singh *Blueprint to Bluewater: The Indian Navy 1951-65* Lancer International, New Delhi, 1992. pp. 39-49 for a detailed narrative of the evolution of this plan within Indian Naval Headquarters.
  21. Raymond Blackman (Ed.) *Jane's Fighting Ships* Sampson Low, Marston & Co. London. p. 104.

22. Lorne J. Kavic *India's Quest for Security: Defence Policies 1947-1965* University of California Press, Berkeley, 1967. p. 118.
23. D.J. Hastings *The Royal Indian Navy Op. Cit.* pp. 227-228.
24. Admiral Sir Mark Pizey "The Indian Navy Today" *Asian Review* January 1956. p. 44.
25. Satyindra Singh *Blueprint to Blue Water Op. Cit.* pp. 267-268.
26. Admiral Sir Mark Pizey "The Indian Navy Today" *Op. Cit.* p. 46. See also Commodore N. Krishnan in "Strategic Concepts of Indian Naval Expansion" *Journal of the United Services Institution of India* July-September 1958. p. 217 for a description of one such joint exercise in the late 1950s.
27. Dom Moraes *Indira Gandhi* Little Brown & Co. Boston, 1980. p. 99.
28. 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.
29. Admiral Sir Mark Pizey "The Indian Navy Today" *Op. Cit.* p. 47.
30. *Ibid.* p. 48.
31. *Ibid.* p. 49 and Lorne J. Kavic *India's Quest for Security Op. Cit.* p. 120. See also Commander C.U. Bhaskar, IN "Indian NavAir" *USNI Proceedings* Vol. 113, No. 3, March 1987. p. 106 and Satyindra Singh *Blueprint to Bluewater Op. Cit.* pp. 133-138.
32. Lorne J. Kavic *India's Quest for Security Op. Cit.* pp. 223-225 (Appendix II).
33. Vice Admiral V.A. Kamath recollections cited in Satyindra Singh *Blueprint to Bluewater Op. Cit.* p. 50.
34. Rahul Roy-Chaudhury *Sea Power and Indian Security Op. Cit.* p. 41. The division of orders within the plan for "twelve frigates" was not made clear in public when the scheme was finally announced on 12 July 1955 and observers assumed that four of each would be ordered. See *Jane's Fighting Ships 1957-58* Sampson Low, Marston & Co. p. 98. The intent of the IN at this stage was obviously in favour of numbers at minimum price.
35. Eric J. Grove *Vanguard to Trident Op. Cit.* pp. 123-124.
36. Rahul Roy-Chaudhury *Sea Power and Indian Security Op. Cit.* p. 42.
37. *Ibid.* pp. 43-45.
38. First Naval Member RAN letter to First Sea Lord dated 27 May 1953. Papers of Captain (S) J.B. Foley CBE, RAN (Author's collection).
39. See extensive correspondence in the papers of Admiral of the Fleet the Earl Mountbatten of Burma, Hartley Library, University of Southampton. (Hereafter *Mountbatten Papers*). See especially: Mountbatten letter to M.K. Vellodi (Secretary of Ministry of Defence) dated 21 December 1956 and Mountbatten letter to Vice Admiral Carlill (CNS Indian Navy) dated 21 December 1956.
40. *Majestic Class Ship's Cover* DNC Minute "Aircraft Carrier for India" dated 22 July 1955. National Maritime Museum, Greenwich.
41. 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 Etenard 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 Kohl (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*.

42. Lorne J. Kavic *India's Quest for Security Op. Cit.* p. 120.
43. 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*.
44. Rahul Roy-Chaudhury *Sea Power and Indian Security Op. Cit.* p. 43.
45. Lorne J. Kavic *India's Quest for Security Op. Cit.* pp. 119-120.
46. Leela Yadava “Pakistan's Foreign Policy: An Analysis of Pakistan's Relations with the United States of America” in Surendra Chopra (Ed.) *Perspectives on Pakistan's Foreign Policy* Guru Nanak Dev Press, Amritsar, 1983. pp. 208-209.
47. *Babur* was actually paid for wholly by Pakistan.
48. See Raymond Blackman (Ed.) *Jane's Fighting Ships 1959-60* Sampson Low, Marston & Co. London, 1959, and succeeding editions.
49. Pervaiz Iqbal Cheema *Pakistan's Defence Policy 1947-58* St Martin's Press, New York, 1990. p. 149.
50. 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.
51. Raymond Blackman (Ed.) *Jane's Fighting Ships 1964-65* Sampson Low, Marston & Co. London, 1964. p. 126.
52. 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.

53. Neville Maxwell *India's China War* Anchor Books, Doubleday, New York, 1972. p. 190 et seq.
54. Lorne J. Kavic *India's Quest for Security Op. Cit.* p. 163. See also: Admiral R.D. Katari *A Sailor Remembers* New Delhi, 1982. pp. 102-105 for his personal account of the incident.
55. ADM 205/173. Admiralty to RN Liaison Officer UK Joint Services Liaison Staff Melbourne. 191515Z September 1958.
56. Sureshwar D. Sinha *Sailing and Soldierring in Defence of India* Chanakya Publications. Delhi, 1990. p. 62.
57. Lorne J. Kavic *India's Quest for Security Op. Cit.* pp. 62-81.
58. *Ibid.* p. 225.
59. *Ibid.* p. 124.
60. Satyindra Singh *Blueprint to Bluewater Op. Cit.* p. 235.
61. Raju G.C. Thomas "The Politics of Indian Naval Re-Armament 1962-1974" *Journal of the United Services Institute of India* October-December 1976. p. 343.
62. K. Sridharan *A Maritime History of India Op. Cit.* p. 328. See also: Ravindra Tomar *Development of the Indian Navy: An Overstated Case? Strategic and Defence Studies Centre, Working Paper No. 26, The Australian National University, Canberra, 1980. p. 4.*
63. Rahul Roy-Chaudhury *Sea Power and Indian Security Op. Cit.* p. 50.
64. Raju G.C. Thomas "The Politics of Indian Naval Re-Armament 1962-1974" *Op. Cit.* p. 343.
65. See Admiral A.K. Chatterji *Indian Navy's Submarine Arm* Birla Institute of Scientific Research. New Delhi, 1982. pp. 37-42.
66. Lorne J. Kavic *India's Quest for Security Op. Cit.* pp. 201-202.
67. 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 relatively poor condition and even the *Darings* would not be retained in operational service in the Royal Navy after 1969-70.
68. Raju G.C. Thomas "The Politics of Indian Naval Re-Armament, 1962-1974" *Op. Cit.* p. 343.
69. Lorne J. Kavic *India's Quest for Security Op. Cit.* p. 201.
70. Ravi Kaul "India's Russian Navy" *Op. Cit.* p. 41.
71. A.K. Chatterji *Indian Navy's Submarine Arm Op. Cit.* p. 43.
72. *Ibid.* pp. 41-44. Admiral Chatterji 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.
73. R.D. Katari *A Sailor Remembers Op. Cit.* p. 84.
74. See especially M. Asgar Khan *The First Round: Indo-Pakistan War*

- 1965 Islamic Information Services, 1979, and Ravi Kaul "The Indo-Pakistani War and the Changing Balance of Power in the Indian Ocean" *USNI Proceedings* No. 843, May 1973, p.186.
75. See Admiral Soman's account in Admiral S.N. Kohli *We Dared* Lancer Publications, New Delhi, 1979, p. 2.
  76. Pakistan Navy Historical Section *The Story of the Pakistan Navy* Naval Headquarters, Islamabad, 1991, pp. 219-222.
  77. Ravi Kaul "The Indo-Pakistani War" *Op. Cit.* p. 186.
  78. K. Sridharan *A Maritime History of India Op. Cit.* p. 330. See also *The Story of the Pakistan Navy Op. Cit.* pp. 222-224.
  79. The most extensive narratives of the 1965 war at sea yet to appear in public can be found in Satyindra Singh *Blueprint to Bluewater Op. Cit.* Chapter 13 "The Blunted Scimitar" and Pakistan Naval Headquarters *The Story of the Pakistan Navy Op. Cit.* Chapter 9 "1965 War".
  80. *Keatings Contemporary Archives 1965-66*, 20136C.
  81. Ravindra Tomar *Development of the Indian Navy: An Overstated Case? Op. Cit.* p. 7.
  82. *The Times* (London) 6 August 1965.
  83. Ravindra Tomar *Development of the Indian Navy: An Overstated Case? Op. Cit.* p. 8.
  84. Raju G.C. Thomas "The Politics of Indian Naval Re-Armament, 1962-1974" *Op. Cit.* p. 344.
  85. Vice Admiral A.K. Chatterji (Chief of Naval Staff) "India and Sea Power" *Hindu*, 11 December 1966.
  86. Admiral A.K. Chatterji (Chief of Naval Staff) "The Navy" *Defence of India* Vikas, New Delhi, 1969, p. 18.
  87. *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.
  88. Rahul Roy-Chaudhury *Sea Power and Indian Security Op. Cit.* p. 61.
  89. K. Sridharan *A Maritime History of India Op. Cit.* p. 336.
  90. *Ibid.* p. 332.
  91. Raju G.C. Thomas "The Politics of Indian Naval Re-Armament" *Op. Cit.* p. 349.
  92. *Ibid.* pp. 350-351.
  93. Indian Ministry of Defence *Report 1969-70* New Delhi, 1970, p. 25.
  94. Ravi Kaul "India's Russian Navy" *Op. Cit.* p. 42.
  95. Ravindra Tomar *Development of the Indian Navy: An Overstated Case? Op. Cit.* pp. 10-11.
  96. 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.

# 3

## **THE PAKISTAN NAVY 1947-1971**

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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.

### **BEGINNINGS**

When Pakistan came to independence on 14 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, most 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.<sup>1</sup> 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.<sup>2</sup> Neither the 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,<sup>3</sup> 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.<sup>4</sup>

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.<sup>5</sup> The senior Pakistani officer, M.S. Choudri, was only an Acting Captain. His fourteen years of service reflected the maximum.<sup>6</sup> Of the rest, "only six had done more than eight years and very few had any experience at sea."<sup>7</sup> 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 Muslims.<sup>8</sup> 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.

### **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.<sup>9</sup> 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 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, occasional confrontations with the Royal Indian Navy and 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 cease fire 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."<sup>10</sup>

### 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 1945-46 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.<sup>11</sup> 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."<sup>12</sup> Naval Headquarters' ability to engage in such lateral thinking was 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."<sup>13</sup> 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",<sup>14</sup> 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

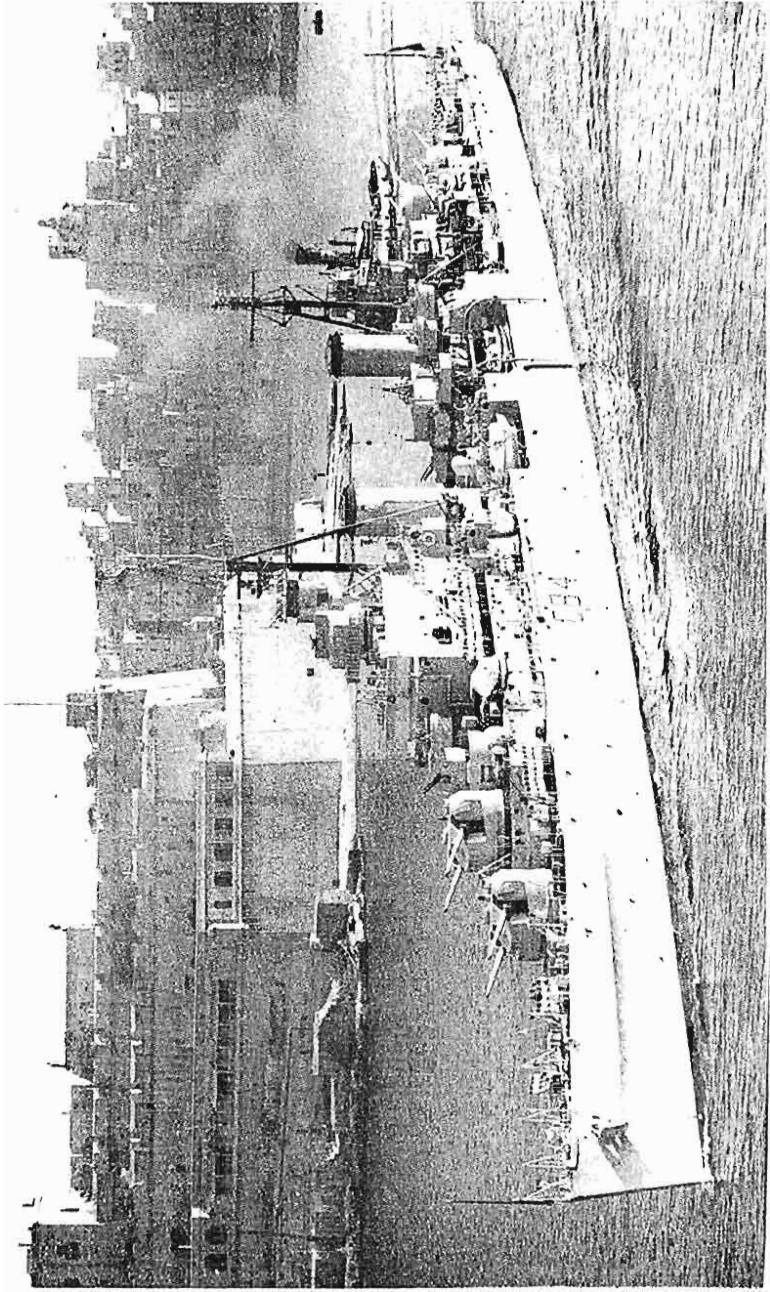
scheme lacked strategic justification and asked for a new plan which would "indicate" the minimum fleet which Pakistan had to maintain to meet the requirements of her seaward defence.<sup>15</sup>

**Initial Five Year Plan—Estimated Force in 1953<sup>16</sup>**

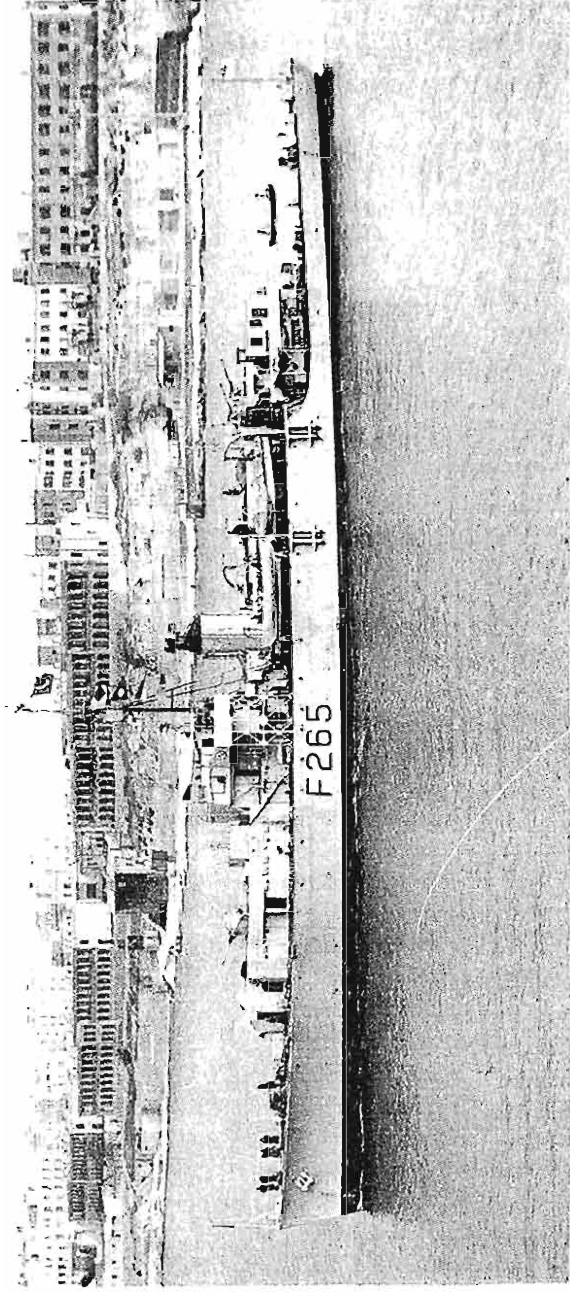
Destroyers	7
Frigates	4
Fleet Minesweepers	8
Harbour Defence Motor Launches	6
Submarine	1

The revised study was completed in July 1950. To some extent, it reflected the emphasis which the British 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.<sup>17</sup> 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.<sup>18</sup>



**PNS BABUR** at Malta on passage from commissioning in the United Kingdom 1957.  
*Photograph credit: A&J Pavia via John Mortimer*



**PNS ZULFIQAR** at Malta circa 1953. Photograph credit: A&J Pavia via John Mortimer

**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.<sup>19</sup> 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 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."<sup>20</sup>

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."<sup>21</sup> Consistent pressure finally produced the necessary improvements in 1951.<sup>22</sup>

### **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.<sup>23</sup> 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 frigate 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."<sup>24</sup> 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.<sup>25</sup> 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 twofold. 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 com-

mitment "to the defence of an area that extended from Turkey to the Philippines"<sup>26</sup> 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 Americans accepted the requirement for Pakistani escort groups and a modern mine countermeasure force to replace the obsolete *Bangors*. They agreed in an *aide-mémoire* 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.<sup>27</sup> 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".<sup>28</sup>

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 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.<sup>29</sup> *Diadem* was renamed *Babur* and finally recommissioned in July 1957, arriving in Pakistan two months later.

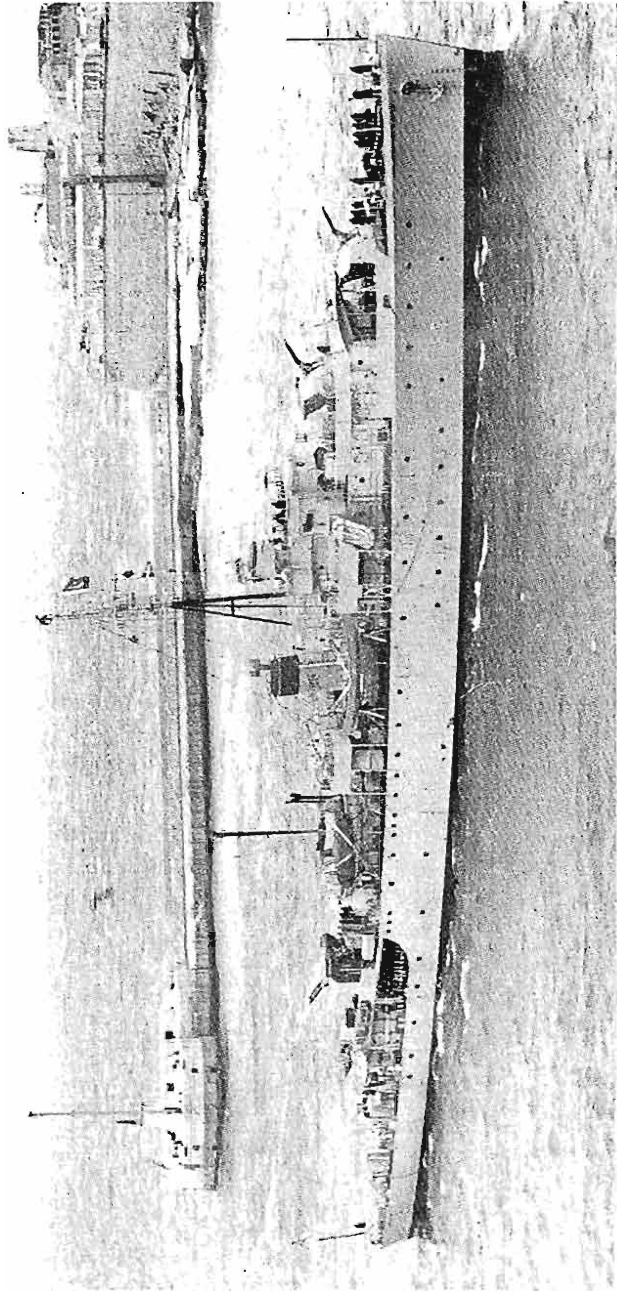
Continuing availability of US MAP funds allowed the negotiation of conversion programmes for the *O* class destroyers into ASW frigates, together with the purchase of a second *CH* class destroyer. Choudri was also able to organise a complex international exercise, code named *Crescent*, in November/December 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 presumably convenient grounds that its fleet programme was already set.<sup>30</sup> 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 Pakistan Navy (PN).<sup>31</sup>

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",<sup>32</sup> in the same month Pakistan's representatives at the regular Baghdad Pact

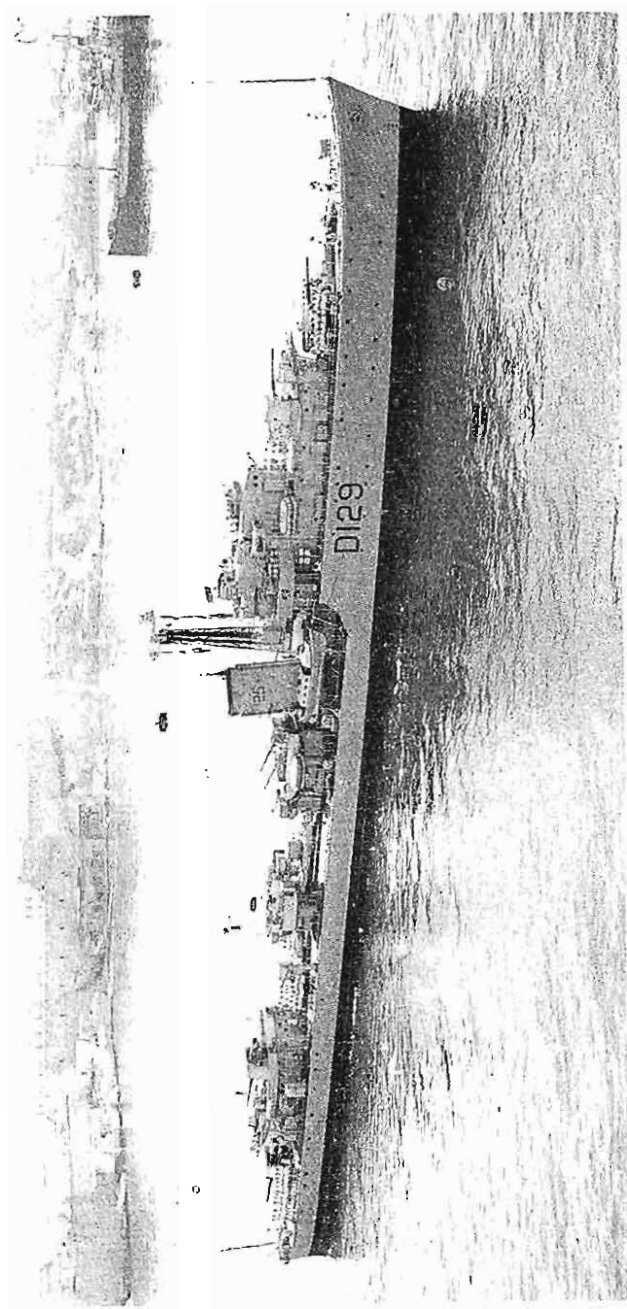
meeting signalled that they saw "the need for the addition of 6 submarines and 3 cruisers."<sup>33</sup> The truth was that submarines represented a much more attractive avenue for naval expansion to the Government and the other armed services than did surface ships. They would be an effective counter 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<sup>34</sup> 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."<sup>35</sup>

Inevitably, 1958 proved a confused year for the PN. 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."<sup>36</sup> The British firmly down played 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.<sup>37</sup>



**PNS JHELUM** at Malta circa 1953. Photograph credit: A&J Pavia via John Mortimer



**PNS TARIQ** at Malta circa 1951. Photograph credit: A&J Pavia via John Mortimer

The Pakistan Navy was not defeated and at this point opened negotiations in secret with Sweden. The latter showed "a keen interest."<sup>38</sup> 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.<sup>39</sup> 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."<sup>40</sup> 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."<sup>41</sup> 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 now 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."<sup>42</sup>



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.<sup>43</sup> The escort force remained relatively unscathed, although *Tariq* was not converted to an ASW frigate because of cost over-runs on her sister ships.<sup>44</sup> In poor condition, she was returned to Britain in 1959 and scrapped, as was the *Taimur* which had been badly damaged in a collision. 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."<sup>45</sup>

#### **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.<sup>46</sup> 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<sup>47</sup> and, in June 1964, the streamlined but otherwise unmodernised American *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 co-ordinated 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."<sup>48</sup> Rather than encouraging a truly "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."<sup>49</sup>

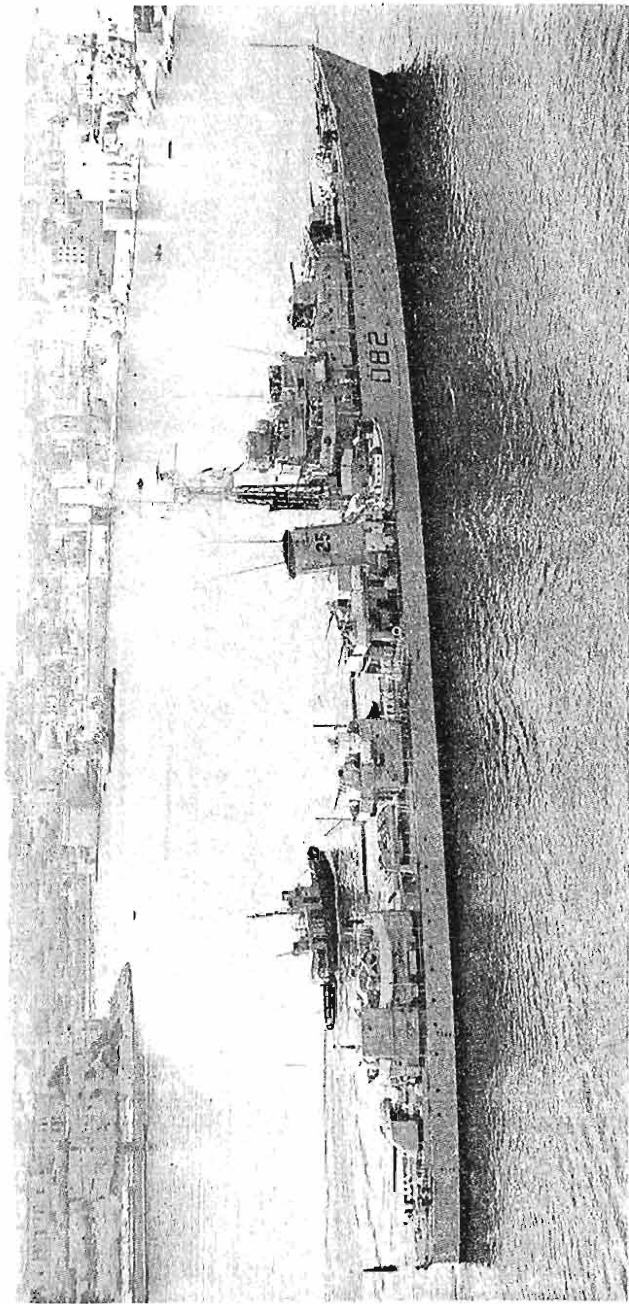
What Ayub Khan did not address was the question of staff integration—or even of the highly unsatisfactory

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.

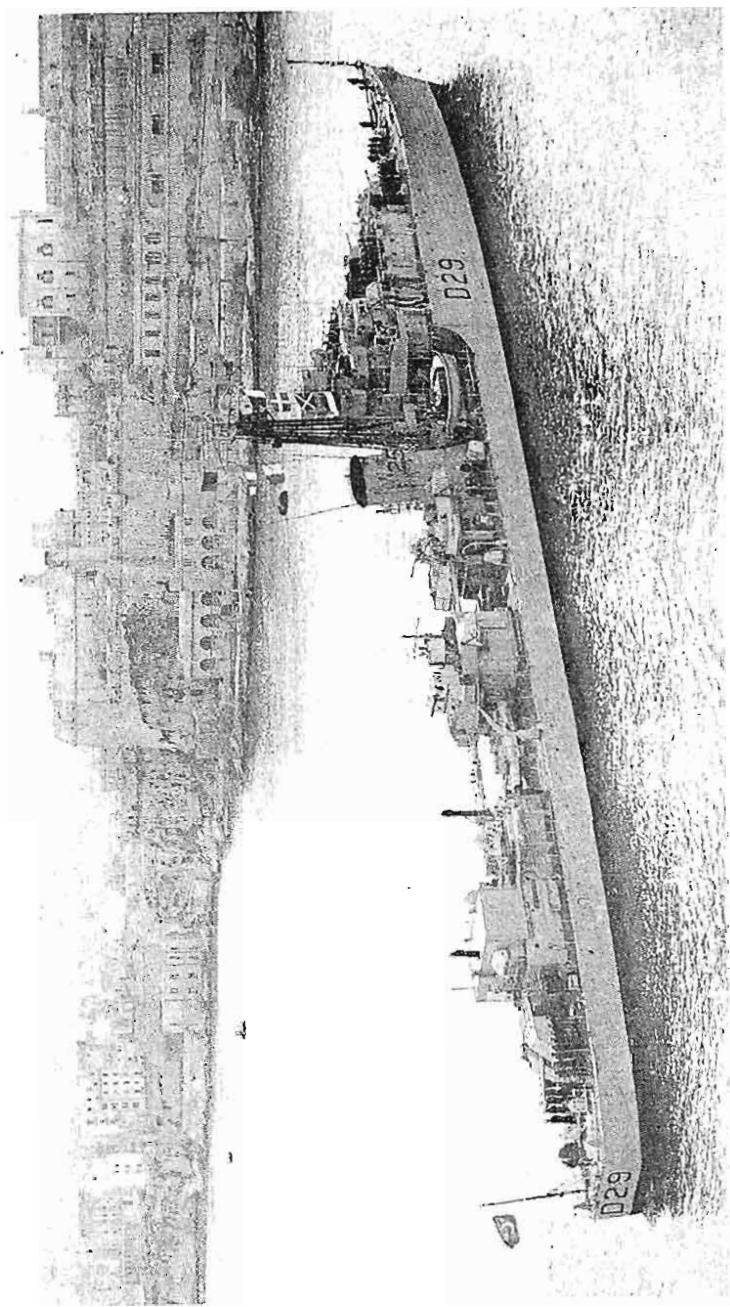
### THE 1965 WAR

Despite its lack of "a defined place in Ayub Khan's overall strategic plans for the defence of Pakistan",<sup>50</sup> 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.<sup>51</sup>

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 town 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 *Tippu Sultan* collided, sustaining



**PNS ALAMGIR** at Malta circa 1958.  
*Photograph credit: A&J P via John Mortimer*



**PNS SHAH JAHAN** at Malta circa 1958.  
*Photograph credit: A&J Pavia via John Mortimer*

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.<sup>52</sup> 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."<sup>53</sup> 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 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 profound 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 cease fire had been agreed on 23 September. Thus, although the Indonesian ships proceeded to Karachi and tarried in Pakistan waters until the risk of the resumption of hostilities had ceased, all remained in Indonesian hands.<sup>54</sup>

**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:

**Pakistani Requirements from the USSR—1968**

Submarines	4
<i>Kynda</i> Class Destroyers	5
<i>Osa</i> Class Fast Attack Craft	8
<i>Shersten</i> 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.<sup>55</sup>

**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.<sup>56</sup> 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."<sup>57</sup> 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.<sup>58</sup> 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 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.<sup>59</sup> 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 establishment but the work was hindered by the chronic shortage of funds.<sup>60</sup> The Navy began 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,<sup>61</sup> 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.<sup>62</sup> 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.<sup>63</sup> 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.<sup>64</sup>

In all, despite the fact that the naval staff had for long foreseen both the war and its causes, the Navy was ill prepared for the coming conflict. Pakistan was about to have a sharp lesson in the consequences of disconnecting strategy from reality.

#### NOTES

1. Pervaiz Iqbal Cheema *Pakistan's Defence Policy, 1947-58* St Martin's Press, New York, 1990. p. 98.
2. Vice Admiral F. Qadir letter to the Author dated 21 September 1972.
3. *Report on the Royal Pakistan Navy: 15th August 1948-14th August 1950* Naval Headquarters, Karachi, 1st December 1950. p. 1.
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.
6. See Pakistan Navy History Section *Story of the Pakistan Navy 1947-1972* Naval Headquarters, Islamabad, 1991. pp. 66-70.
7. Vice Admiral Iqbal F. Qadir "Initial Manning Problems".
8. Commander D.J. Hastings, RINVR *The Royal Indian Navy, 1612-1950* McFarland & Co., Jefferson, North Carolina, 1988. p. 252.
9. Pervaiz Iqbal Cheema *Pakistan's Defence Policy 1947-58 Op. Cit.* p. 80.
10. *Report on the Royal Pakistan Navy: 15th August 1948-14th August 1950 Op. Cit.* p. 1.
11. ADM 116/5852 "Appreciation of Future Naval Requirements for India and Pakistan" Memorandum dated 15 April 1948.
12. *Report on the Royal Pakistan Navy: 15th August 1948-14th August 1950 Op. Cit.* p. 2.
13. *Ibid.* "Preface".
14. Vice Admiral Iqbal F. Qadir letter to the Author dated 14 March 1992.
15. *Report on the Royal Pakistan Navy: 15th August 1948-14th August 1950 Op. Cit.* p. 65.

16. *Story of the Pakistan Navy Op. Cit.* p. 111.
17. *Report on the Royal Pakistan Navy: 15th August 1952-14th August 1953* Naval Headquarters, Karachi, 1953. p. 8.
18. *Story of the Pakistan Navy Op. Cit.* pp. 156-160.
19. *Ibid.* p. 71.
20. Vice Admiral Iqbal F. Qadir letter to the Author dated 23 April 1992.
21. *Report on the Royal Pakistan Navy: 15th August 1948-14th August 1950 Op. Cit.* "Preface".
22. *Report on the Royal Pakistan Navy: 15th August 1950-14th August 1951* Naval Headquarters, Karachi, 1951. "Preface".
23. "The Navy of Pakistan" *United States Office of Naval Intelligence Review* Vol. 5, No. 4, November 1950. p. 444.
24. *United States Office of Naval Intelligence Review* Vol. 7, No. 9, September 1958. p. 379.
25. Vice Admiral Iqbal F. Qadir letter to the Author dated 14 March 1992. See also: *Story of the Pakistan Navy Op. Cit.* pp. 142-144.
26. Pervaiz Iqbal Cheema *Pakistan's Defence Policy 1947-58 Op. Cit.* pp. 143-144.
27. Rear Admiral M.S. Choudri letter to Admiral the Earl Mountbatten of Burma (First Sea Lord) dated 20 September 1955. *Mountbatten Papers.*
28. First Sea Lord Minute dated 7 October 1955. *Mountbatten Papers.*
29. Admiral the Earl Mountbatten of Burma to Rear Admiral M.S. Choudri. Letter dated 2 January 1957. *Mountbatten Papers.*
30. First Sea Lord Minute "Exercise Crescent" dated 3 February 1958. *Mountbatten Papers.*
31. Pakistan became a Republic on 23 March 1956.
32. Rear Admiral M.S. Choudri to Admiral the Earl Mountbatten of Burma. Letter dated 2 November 1957. *Mountbatten Papers.*
33. Admiral Arleigh Burke (US Chief of Naval Operations) to Admiral the Earl Mountbatten of Burma. Letter dated 6 January 1959. *Mountbatten Papers.*
34. Vice Admiral Iqbal F. Qadir letter to the Author dated 14 March 1992.
35. Vice Admiral H.W. Biggs [C-in-C East Indies) to Admiral the Earl Mountbatten of Burma. Letter dated 8 April 1958. *Mountbatten Papers.*
36. Admiral the Earl Mountbatten to Admiral Arleigh Burke. Letter dated 18 December 1958. *Mountbatten Papers.*
37. ADM 205/173 "Sale of Warships to Pakistan and India". Minutes of a Meeting held on 2 January 1958. Public Record Office, UK.
38. Vice Admiral Iqbal F. Qadir letter to the Author dated 29 April 1992.
39. 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 *UI* class.
40. Vice Admiral Iqbal F. Qadir letter to the Author dated 29 April

- 1992.
41. Admiral the Earl Mountbatten to Admiral Arleigh Burke. Letter dated 18 December 1958. *Mountbatten Papers*.
  42. Vice Admiral M.S. Choudri to President Ayub Khan. Letter dated 26 January 1959. Supplied by Vice Admiral Iqbal F. Qadir. See also: *Story of the Pakistan Navy Op. Cit.* pp. 199-202.
  43. *Story of the Pakistan Navy Op. Cit.* p. 208.
  44. ADM 205/173.
  45. Vice Admiral Iqbal F. Qadir letter to the Author dated 29 April 1992.
  46. 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*.
  47. *Story of the Pakistan Navy Op. Cit.* p. 209.
  48. Air Marshal Asghar Khan *The First Round: Indo-Pakistan War 1965* Islamic Information Service, London, 1979. p. 4.
  49. *Ibid.* p. 5.
  50. *Ibid.* p. 33.
  51. Admiral R.D. Katari *A Sailor Remembers New Delhi*, 1982. p. 6.
  52. Asghar Khan *The First Round Op. Cit.* p. 33.
  53. *Ibid.* p. 34.
  54. *Ibid.* p. 38. See also: *Story of the Pakistan Navy Op. Cit.* pp. 227-230.
  55. *Story of the Pakistan Navy Op. Cit.* pp. 283-288.
  56. *Ibid.* p. 288.
  57. Shirin Tahir-Kheli "Defense Planning in Pakistan" Stephanie G. Neuman (Ed.) *Defense Planning in Less Industrialised States: The Middle East and South Asia* Lexington Books, Lexington Massachusetts, 1984. p. 213.
  58. See Mountbatten to Marshal of the Royal Air Force Sir William Dickson (Chief of Defence Staff). Undated letter but probably late February 1959 and written in response to Dickson's letter WFD/560 dated 10 February 1959. *Mountbatten Papers*.
  59. *Story of the Pakistan Navy Op. Cit.* p. 294.
  60. "Foreign Navies in 1956" *United States Office of Naval Intelligence Review* Vol. 12, No. 5. June 1957. p. 202.
  61. 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.
  62. *Story of the Pakistan Navy Op. Cit.* pp. 268-270.
  63. *Ibid.* p. 295 & pp. 306-307.
  64. *Ibid.* p. 299.

# 4

## **THE 1971 INDO-PAKISTAN WAR AT SEA**

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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<sup>1</sup> 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 over stretched 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 dispatch 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.

### **THE APPROACH OF 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 threefold. 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".<sup>2</sup> Third, 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 became 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). Thirdly, the Chiefs insisted upon developing 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. Manekshaw, who combined a determined approach to military questions with shrewd political judgement. His 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."<sup>3</sup> Neither the Chief of Air Staff nor Admiral S.M. Nanda, Chief of the Naval Staff, disagreed with Manekshaw's assumption



of leadership within the committee.<sup>4</sup> 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."<sup>5</sup> 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."<sup>6</sup> 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 *Sea Hawks* 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 October 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.<sup>7</sup> The Indian government approved covert measures to increase the pressure on East Pakistan and the Director of Naval Intelligence, Captain Mihir K. Roy, 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 a training nucleus of Indian naval clearance divers.<sup>8</sup> 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.<sup>9</sup> The Mukti Bahini suffered casualties,<sup>10</sup> 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 mm guns which "made forays up the Chalna River and carried out sporadic shelling of ships going up to Chittagong and Chalna."<sup>11</sup> 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."<sup>12</sup> 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. The three brand new French built *Daphne* class had 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<sup>13</sup> 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 *Osa* 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."<sup>14</sup>

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 exercises.<sup>15</sup>

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".<sup>16</sup> 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 demonstration of an 18 knot tow of an *Osa* 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.<sup>17</sup>

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.<sup>18</sup>

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".<sup>19</sup> This had ramifications in two ways because shortage of steam 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,<sup>20</sup> but lack of wind would have a material effect on *Vikrant's* operations on more than one occasion.<sup>21</sup> The older frigates, well into their second decade of life, would also prove to have problems as a result of the combination of old age and a rigorous operational schedule while the new *Petyas* 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."<sup>22</sup> Kohli's concerns about his capabilities in the West reached the point where Nanda had to warn him that he would be relieved if he could not accept the CNS' aggressive concept of operations.<sup>23</sup> Even then, Admiral Nanda was forced "to make several sorties to Bombay to assuage the feelings of both the C-in-C and his Fleet Commander."<sup>24</sup> Nanda's uncertainties over the determination of Western Command to achieve the end he desired were to result in Naval Headquarters in New Delhi playing a much more direct role in events than anyone expected.

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.<sup>25</sup> The Indian Navy believed that both types could be brought into Indian ports by merchant ships and 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.<sup>26</sup> 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 interdicator aircraft to assist the Navy in dealing with enemy shipping".<sup>27</sup> Unfortunately, the *Super Constellations* were only makeshift maritime patrol aircraft and the expertise of their crews was 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."<sup>28</sup> 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.<sup>29</sup> 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.

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.<sup>30</sup> 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.<sup>31</sup>

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.<sup>32</sup> 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.

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 West on 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, 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 sites, 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.

### **EASTERN AND SOUTHERN THEATRES**

Under his command in the East, 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 *Rajput* 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.<sup>33</sup> 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. Shortly after midnight on the evening of 3/4 December, a very loud underwater explosion was heard close offshore. The destroyer *Rajput* and patrol vessel *Akshay* had been on routine patrol outside the harbour entrance until midnight, dropping occasional depth charges as a deterrent. At no time had either a sonar contact and both had already returned to harbour. Some days later, however, 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 field or that a mine exploded prematurely during the course of the lay.<sup>34</sup>

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* and the IN's knowledge of the operations of the *Ghazi*.<sup>35</sup>

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."<sup>36</sup> Krishnan's gamble had thus already paid off.

*Vikrant's* first action came with a morning *Sea Hawk* 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 *Sea Hawks* 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 *Sea Hawk* 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."<sup>37</sup> 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 *Sea Hawk* 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. There is no merchant ship of any size in the Chittagong harbour or approaches which has not been struck and incapacitated."<sup>38</sup> 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.<sup>39</sup> 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 *Khadmat* and the old destroyer *Ranjit*. In addition, Kuruvilla had under his operational command the frigates *Cawery* 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."<sup>40</sup>

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,<sup>41</sup> 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, and there were some hard feelings within the Mysore group on the subject.<sup>42</sup>

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 Osa raid would the SAG be allowed to attack the coast of Pakistan.

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, *Vijeta*, one of the two Osas, broke down and was towed back to harbour. Shortly afterwards, the frigate *Kuthar* suffered a boiler fire and had to be detached to Bombay under tow by *Kirpan* and escorted by *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 *Petyas*, *Kiltan* and *Katchall*, with the *Osa*, *Vinash*, sailed from Bombay at 2000 on 3 December to rendezvous with the *Nipat*, *Nirghat* and *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, *Vinash* was detached to remain on patrol as a reserve and to cover the eventual retreat of the Indian force. Shortly afterwards, *Kiltan* and *Veer* began to suffer engine problems which caused them to lag behind the remainder.<sup>43</sup>

On the outbreak of hostilities, of which the Pakistan Navy did not learn until several hours after the Army and Air Force began operations, 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 *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 *Khaibar*, *Jahangir* and *Tippu Sultan* at sea, searching for a Pakistani merchant ship which required escort into Karachi, but the submarine's report suggested to *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, *Khaibar* and *Shah Jahan* were despatched to join the outer patrol and by sunset they were in station. The 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.<sup>44</sup>

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 at a range of 20 miles 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, increased speed 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 *Veer*. The minesweeper practically disintegrated with the missile's explosion.

Two other surface contacts were engaged in the same period by *Nipat* in a position 32 miles south west of Karachi. One contact may have been *Shah Jahan*, which saw or heard nothing of the missile.<sup>45</sup> The other was less fortunate and received a direct hit. 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 gave 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.”<sup>46</sup> 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 *Nipat* lost the lubricating oil pump on one of her four engines. *Nipat* 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).<sup>47</sup>

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”<sup>48</sup> 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 *Friendships* 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 "decided to assume control of operations"<sup>49</sup> and 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 time 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"<sup>50</sup> 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."<sup>51</sup>

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."<sup>52</sup>

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 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 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.

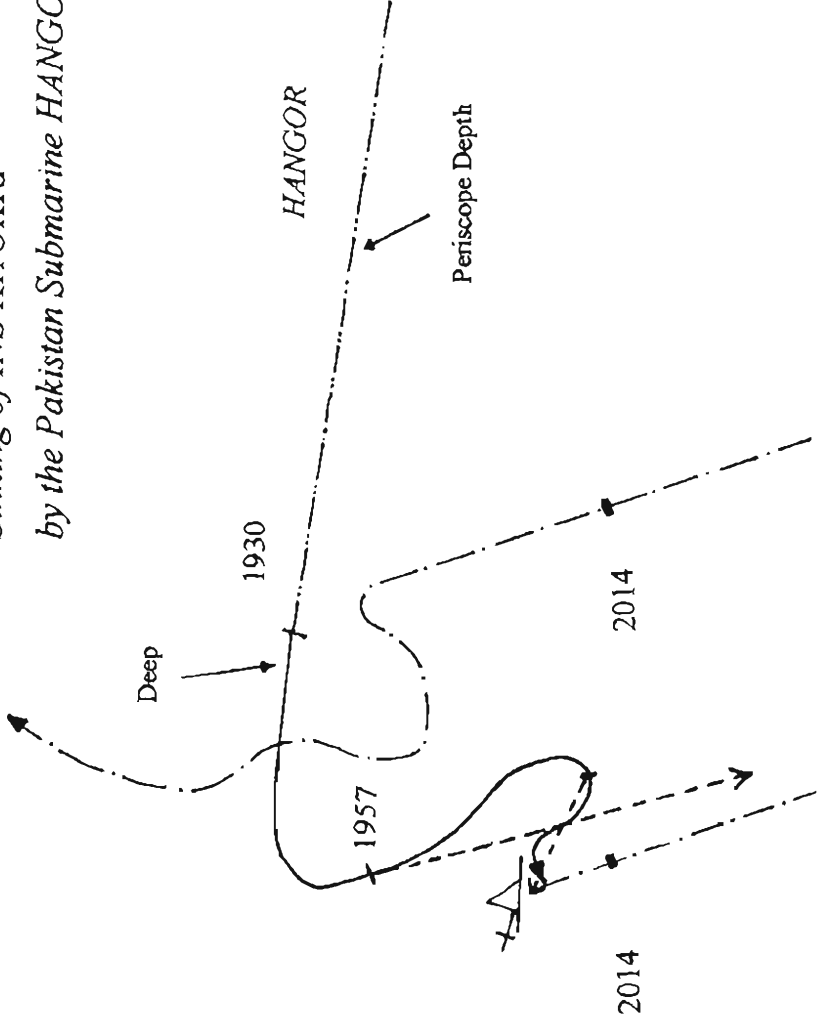
Consequently, when the frigates finally arrived in the vicinity of the submarine, *Hangor*, after the latter had tried for twelve hours to get "in the grain", she was presented with easy targets, steaming a steady course at 12 knots.

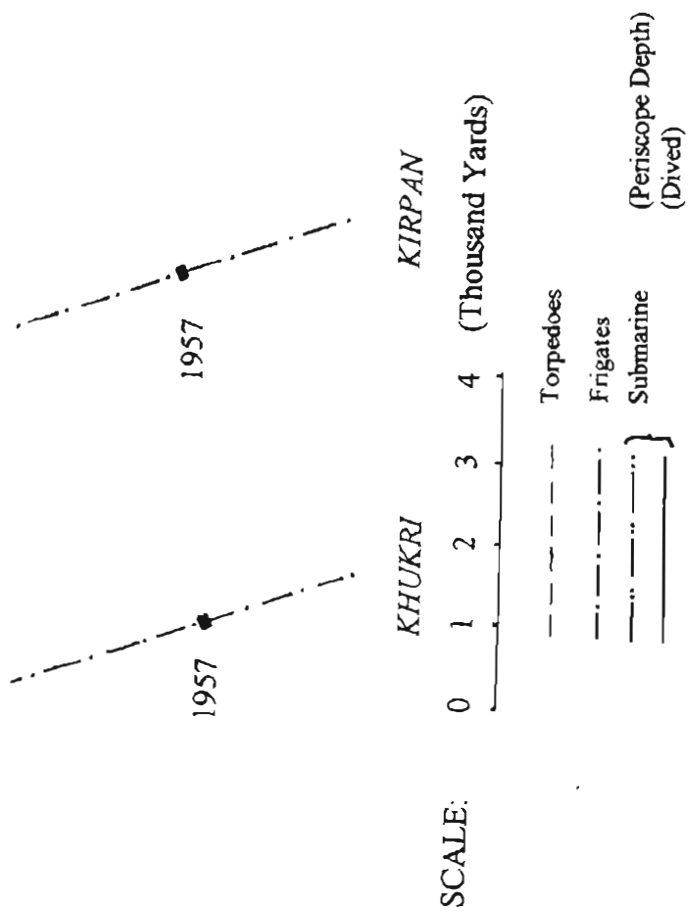
At 1930, the submarine used her radar to obtain a range of 10,000 yards on the nearest frigate and the Captain then took *Hangor* deep to conduct the attack on sonar. A first torpedo fired fine on the bow at 1957 missed, but a second from broad on the Indians' beam at 2014 struck home on *Khukri*. As *Kirpan* appeared to be turning towards *Hangor*, the submarine fired a third weapon, which also struck *Khukri*, before taking evasive action.<sup>53</sup> *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 *Kirpan's* Mark 10 mortars in a barrage mode down the threat bearing as he withdrew, a primitive but reasonable 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.<sup>54</sup>

*Sinking of INS KHUKRI  
by the Pakistan Submarine HANGOR*





SCALE:

0 1 2 3 4 (Thousand Yards)

- Torpedoes
- .-.- Frigates
- Submarine (Periscope Depth) (Dived)



### 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.<sup>55</sup> 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, *Khanderi*, 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 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.<sup>56</sup> 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.<sup>57</sup> 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."<sup>58</sup> 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.<sup>59</sup>

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 *Khanderi* 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."<sup>60</sup> 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.<sup>61</sup> 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.

### **THE 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 substantial 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.

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.

**NOTES**

1. The destruction of the Israeli destroyer *Eilat* in 1967 had been accomplished with *Styx* missiles fired from Egyptian *Komar* class missile boats in harbour.
2. Onkar Marwah "India's Military Intervention in East Pakistan 1971-1972" *Modern Asian Studies* Vol. 13, Part 4, 1979. p. 560.
3. Commodore Ranjit Rai *A Nation and its Navy at War* Lancer International, New Delhi, 1987. p. 30.
4. "Interview with Admiral Nanda" in Sureshwar D. Sinha *Sailing and Soldiering in Defence of India* Chanakya Publications, Delhi, 1990. p. 227.
5. Admiral S.N. Kohli *We Dared* Lancer International, New Delhi, 1989. p. 38.
6. Vice Admiral N. Krishnan *No Way But Surrender* Vikas, New Delhi, 1980. p. 22.
7. Ranjit Rai *A Nation and its Navy at War* Op. Cit. p. 55.
8. *Ibid.* p. 78. See also Vice Admiral Mithir K. Roy *War in the Indian Ocean* Lancer, New Delhi, 1995. pp. 145-153.
9. Pakistan Navy History Section *The Story of the Pakistan Navy 1947-1972* Naval Headquarters, Islamabad, 1991. p. 330
10. Ranjit Rai *A Nation and its Navy at War* Op. Cit. p. 55.
11. *Ibid.* p. 55.
12. *Ibid.* p. 78.
13. See Major General Fazal Maqsood 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.
14. S.N. Kohli *We Dared* Op. Cit. p. 32.
15. N. Krishnan *No Way But Surrender* Op. Cit. pp. 31-33.
16. S.N. Kohli *We Dared* Op. Cit. p. 34.
17. "An Interview with Admiral S.M. Nanda" *Sailing and Soldiering in Defence of India* Op. Cit. p. 229. According to Nanda, he ordered a *Styx* firing against a radar enhanced battle practice target. The missile achieved a hit at "about 22 miles".
18. S.N. Kohli *We Dared* Op. Cit. p. 38.
19. N. Krishnan *No Way But Surrender* Op. Cit. p. 9.
20. "Interview with Admiral S.M. Nanda" *Sailing and Soldiering in Defence of India* Op. Cit. pp. 227-228.
21. N. Krishnan *No Way But Surrender* Op. Cit. pp. 9-11 and p. 62.
22. S.N. Kohli *We Dared* Op. Cit. p. 34.
23. Mithir K. Roy *War in the Indian Ocean* Op. Cit. p. 188.
24. *Ibid.* p. 193.

25. Robert Gardiner (Ed.) *Conway's All the World's Fighting Ships 1947-1982* Volume II. Conway Maritime Press, London, 1983. p. 354. A dozen underwater craft including six midget submarines existed as part of the Pakistan Navy's Special Service Unit (SSU) but the latter lacked the torpedo capability which had been planned for them. See *The Story of the Pakistan Navy Op. Cit.* pp. 233, 238.
26. Sureshwar D. Sinha *Sailing and Soldiering in Defence of India Op. Cit.* p. 144.
27. Air Chief Marshal P.C. Lal *My Years With the Indian Air Force* New Delhi, 1982. p. 295.
28. S.N. Kohli *We Dared Op. Cit.* p. 58.
29. *The Story of the Pakistan Navy Op. Cit.* pp. 256-257.
30. 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.
31. Fazal Maqbool Khan "Pakistan Navy in the War" *Op. Cit.* p. 172.
32. *The Story of the Pakistan Navy Op. Cit.* p. 331.
33. COMSUBS signal DTG 252307E NOV 71 to *Ghazi*. Recovered from the wreck of the *Ghazi* by the Indian Navy. See N. Krishnan *No Way But Surrender Op. Cit.* p. 32 (photograph).
34. Mihir K. Roy *War in the Indian Ocean Op. Cit.* pp. 202-207.
35. *Ibid.* pp. 202-203.
36. N. Krishnan *No Way But Surrender Op. Cit.* p. 24.
37. *Ibid.* p. 61.
38. *Ibid.* p. 63.
39. Ravi Kaul "The Indo-Pakistani War and the Changing Balance of Power in the Indian Ocean" *United States Naval Institute Proceedings* May 1973, No. 843. p. 189. See also: Ranjit Rai *A Nation and its Navy at War Op. Cit.* p. 127.
40. S.N. Kohli *We Dared Op. Cit.* p. 33.
41. *Ibid.* p. 38.
42. *Ibid.* p. 37. See also: Ranjit Rai *A Nation and its Navy at War Op. Cit.* p. 85.
43. S.N. Kohli *We Dared Op. Cit.* p. 54.
44. *The Story of the Pakistan Navy Op. Cit.* p. 344.
45. The Indian Navy remains convinced that *Shah Jahan* was at least damaged by a *Styx* missile.
46. Fazal Maqbool Khan "Pakistan Navy at War" *Op. Cit.* p. 181.
47. This account is my own reconstruction of events based on a composite of Indian and Pakistan sources. The following narratives were valuable: *A Nation and its Navy at War*, *War in the Indian Ocean*, *The Story of the Pakistan Navy*, and *We Dared*. I am also particularly grateful to Captain Anthony de Sam Lazaro IN (Ret), presently Professor of Computing Science at Washington State University, for his personal

- recollections as Executive Officer of an *Osa*.
48. *The Story of the Pakistan Navy Op. Cit.* p. 349.
  49. S.N. Kohli *We Dared Op. Cit.* p. 60.
  50. *Ibid.* p. 60.
  51. *Ibid.* p. 63.
  52. P.C. Lal *My Years with the Indian Air Force Op. Cit.* p. 197.
  53. See *The Story of the Pakistan Navy Op. Cit.* p. 358 for a narrative based on Hangor's Report of Proceedings.
  54. Ranjit Rai *A Nation and its Navy at War Op. Cit.* pp. 141-142.
  55. S.N. Kohli *We Dared Op. Cit.* p. 81.
  56. See Henry Kissinger *The White House Years* Little Brown & Co. Boston, 1979. pp. 842-918 for a lengthy exposition of the then National Security Adviser's part in the crisis.
  57. *Ibid.* pp. 902-903.
  58. Elmo R. Zumwalt, Jr *On Watch Quadrangle*/New York Times Book Press, New York, 1976. p. 365.
  59. 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.
  60. N. Krishnan *No Way But Surrender Op. Cit.* p. 57.
  61. *Ibid.* p. 302.



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## **THE INDIAN NAVY 1972-1996**

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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 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 structure<sup>1</sup> 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. 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.

#### **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 greatest 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 coastline while strengthening the offensive 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 against Indian interests. In consequence, India steadily opposed American efforts to deploy and sustain its forces within the region.

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 the treaty specifications of the fifty year lease included an airfield and anchorage as part of the communications station.<sup>2</sup> American large scale deployments were difficult and highly

resource 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.<sup>3</sup>

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.<sup>4</sup> 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.<sup>5</sup>

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.<sup>6</sup> On the other, progressive naval development would continue "despite the constraints of resources"<sup>7</sup> for a navy which would be—because of the requirements of non-alignment—an organisation wholly independent of alliances with other nations.<sup>8</sup> 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<sup>9</sup> and by early 1981 the fields were providing more than 20% of India's total petroleum requirements.<sup>10</sup> 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.<sup>11</sup> 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.<sup>12</sup> 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 concern within the Army at the Navy's "blue water" ambitions which were to manifest themselves at intervals in the public domain,<sup>13</sup> 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.<sup>14</sup> 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.

### **FORCE STRUCTURE**

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.<sup>15</sup>

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

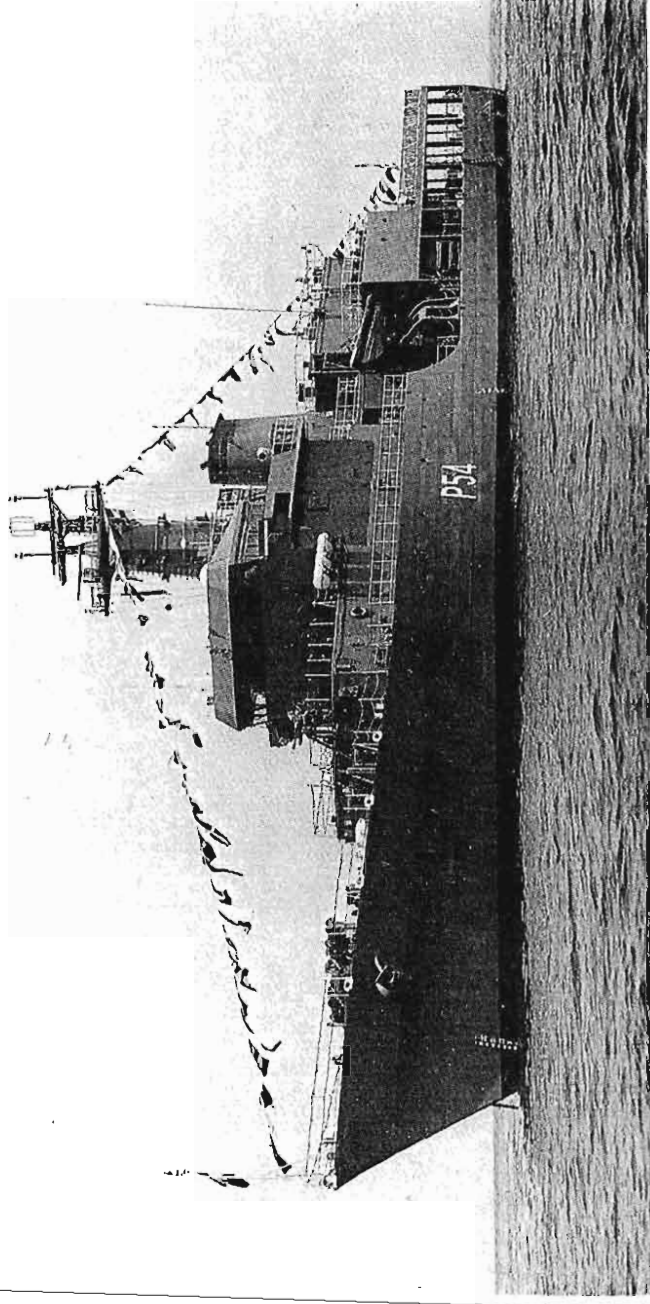


naval operations remained in doubt, despite the order for the first British through deck cruiser in 1973.<sup>16</sup> In the meantime, Indian fixed wing aviation would continue with the judicious limitation of flying hours and juggling of airframes.

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 III* 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. 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.<sup>17</sup> 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*<sup>18</sup> but an in-country building programme with a minimum of western (and thus hard



**INS SARYU.** Indonesian Fleet Review 1995. Photograph credit: John Mortimer



**INS UDAYGIRI** circa 1995. Photograph credit: *John Mortimer*

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.<sup>19</sup>

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 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.<sup>20</sup> 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.<sup>21</sup> 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" gun 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.<sup>22</sup>

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. These 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.<sup>23</sup> 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.<sup>24</sup> Money was still required to bring the surface shipyards up to modern standards and this had proved a considerable drain on resources from 1966 onwards.<sup>25</sup>

### **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.<sup>26</sup> 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
  - e. 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."<sup>27</sup>

The aim is to have the ability to influence the likely outcome of a conflict in the Indian Ocean.<sup>28</sup> 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.<sup>29</sup> The third feature is that this wide variety of tasks both forced and justified the continuing attempts to create the "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".<sup>30</sup> 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 involve elements of all three services.<sup>31</sup>

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.<sup>32</sup> 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*.<sup>33</sup> 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.<sup>34</sup>

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.<sup>35</sup>

### 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,<sup>36</sup> while the American deployments more than doubled, reaching a peak in 1980 with the Iranian hostage crisis.<sup>37</sup> 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 East—and thus the oil supplies of the West—from what it viewed as the direct Soviet threat had already been signaled 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 was *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.<sup>38</sup> The challenge for the Indian Navy was 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 increasing 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.<sup>39</sup> 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.

### **DEALING WITH THE SUB-CONTINENT**

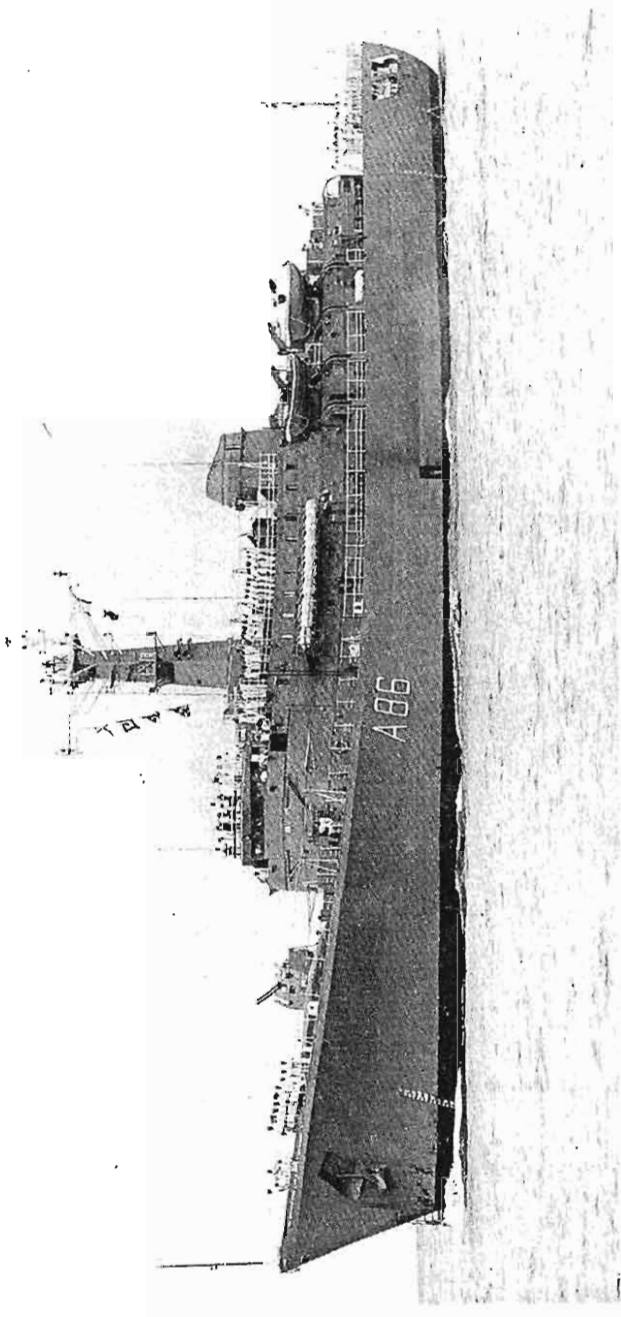
The developments in the Gulf were near-contemporary with increasing difficulties in relations with both Bangladesh and Sri Lanka. From 1978 onwards, India was in dispute with Bangladesh over the ownership of the newly formed New Moore (South Talpatty) Island. Both countries claimed this deposit of silt, 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.<sup>40</sup> 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.

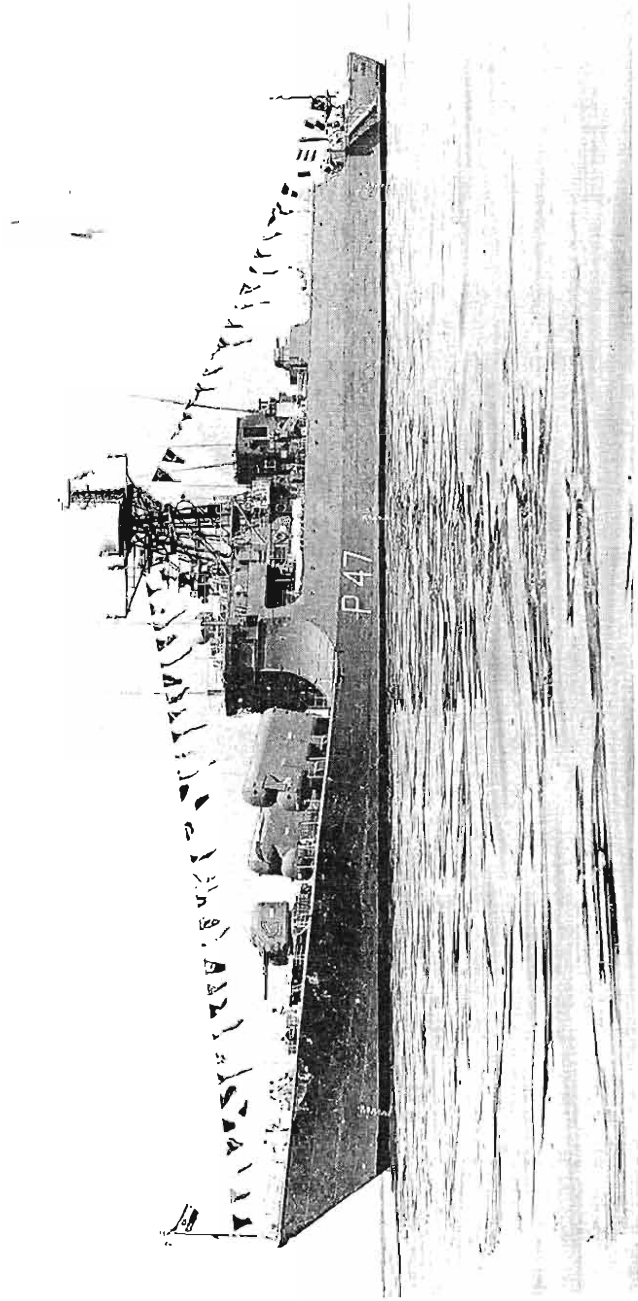
The continuing disputes in Sri Lanka between the Tamils and Sinhalese were also drawing India closer towards direct military involvement. From 1981 onwards, there were Tamil insurgents operating their base camps from Indian territory, using the sea passage across Palk Strait to insert supplies and personnel 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.<sup>41</sup>

### **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 within the Navy (led by the energetic Vice Admiral R.H. 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



**INS TIR** circa 1993. Photograph credit: John Mortimer



**INS KHANJAR.** Indonesian Fleet Review 1995. Photograph credit: John Mortimer

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.<sup>42</sup>

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 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 *Udalajs*, 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.<sup>43</sup>

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 of a small Chinese Navy task group. 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.<sup>44</sup>

### **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 in 1982, 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 still 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.<sup>45</sup>

But the real point, as Admiral Tabiliani 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.<sup>46</sup> 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<sup>47</sup> but matters had been in train since at least 1981.<sup>48</sup> 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.<sup>49</sup>

while constituting a strong signal to the United States of India's determination to be master in its own waters.

The project had its opponents within the Indian Navy. Admiral R.L. Pereira, Chief of Naval Staff from 1979 until 1982, believed that India possessed neither the "resources nor manpower to induct this large and expensive underwater platform into the Indian Navy",<sup>50</sup> but he soon retired from the scene. In fact the SSN enjoyed the highest levels of external political support. By late 1983 Indian submariners had begun their training courses within the USSR and negotiations were well advanced for the lease of a single hull to the IN. The Soviets initially offered a twin reactor *Victor* and, although the Indians wanted "a better and less noisy submarine", they eventually settled on a single reactor *Charlie I* class. By September 1987 a full SSN crew was in the USSR to collect the ship.<sup>51</sup>

### 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.<sup>52</sup>

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."<sup>53</sup>

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 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. 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 of radiation leaks. These stories, together with local agitation in Vishakapatnam brought the *Chakra* and the Navy into the sights of the powerful Indian environmental lobby.<sup>54</sup> By December 1988 the Indian Defence Secretary was denying that there were plans to acquire or build more SSNs in the immediate future.<sup>55</sup>

### 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'".<sup>56</sup> 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 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'".<sup>57</sup>

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.<sup>58</sup> The Prime Minister of Singapore went even further and suggested that India and China both represented sources of potential trouble for ASEAN<sup>59</sup> 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."<sup>60</sup>

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.<sup>61</sup> 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, by comparison with the exuberance of 1988-90,<sup>62</sup> down played 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.<sup>63</sup> In force structure terms, the need for replacing the oldest hulls provided the rationale 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.<sup>64</sup> Equally to the point, there were only two large fleet tankers. These did not represent the scale of fleet train required to sustain substantial operations at long range.

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 but this would not be enough to resolve the emerging problems. Over the next five years it became apparent that the Indian Navy was finding the reconciliation of its ambitions with its financial situation increasingly difficult to achieve.

The naval staff struggled to retain both carrier and nuclear submarine programmes within the intended force structure for the future but their efforts bore little fruit. The aircraft carrier project lay becalmed 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 and the Government gave cautious approval in principle in 1989.<sup>65</sup> 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.<sup>66</sup> It was apparent, too, that the terminology underwent a change at this time as what had been freely termed the "third aircraft carrier" was now emphasised as being simply the long due replacement for the *Vikrant* and not an addition to the Indian Navy's force levels.<sup>67</sup> Even this more limited goal received short shrift from the Minister for Defence.<sup>68</sup> 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 . . ."<sup>69</sup> The Indian Navy did not give up hope and continued lobbying by both Admiral L. Ramdas, Chief of Naval Staff from 1990 until 1993, and his successor achieved, for what it was worth, renewed Government commitment to the small carrier.<sup>70</sup>

In these circumstances, the possibility of an opportunity buy to solve the conundrum 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.<sup>71</sup> What is most significant about these reports, which postulated various alternatives for completion, is that they relied upon the perception that the Indian Navy had to remain fundamentally opportunist if it was to maintain credible force levels, despite the insistence by Admiral Ramdas,

that "we are going to build our own [carrier]".<sup>72</sup> In truth, the IN continued to prefer in-country construction and the continuing interest in a Russian unit, which was resuscitated in 1994 after the Defence Secretary's visit to Moscow, appeared to be centred in the Indian Ministry of Defence. Plans to acquire the *Gorshkov* were refloated at intervals but the sticking point, aside from all the problems of stores and spare parts, appeared to be the price.

The naval staff were still prepared to "nurse along" the old carriers until sufficient funds were available to start construction in India.<sup>73</sup> All too soon, the problems of such nursing were manifest. *Viraat* suffered a serious machinery space flood in 1993<sup>74</sup> and the near moribund *Vikrant* a fire in 1994.<sup>75</sup> The following year, the IN finally admitted defeat and paid *Vikrant* off into reserve.<sup>76</sup> As Admiral V.S. Shekhawat (CNS 1993-1996) admitted in 1996, the IN would have "to do with one carrier."<sup>77</sup> Despite increasing political support within the Lok Sabha for a carrier replacement,<sup>78</sup> no easy solution was manifest.

The nuclear submarine programme, which had the highest priority for funds, experienced similar problems. Detailed development of an advanced technology submarine with an Indian designed nuclear reactor continued from the early 1980s<sup>79</sup> but at a slow pace.<sup>80</sup> A complex management structure, with responsibility divided between the Navy and other departments could not have helped and there were problems in integrating the Department of Atomic Energy's reactor with a submarine hull based on the Russian *Charlie* class.<sup>81</sup> The Indians did not abandon all hope of obtaining a unit from the Russians. When the latter returned in desperation to the international arms market in because of their difficulties in converting 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 reopened when the Indian Defence Minister visited Moscow in August 1991.<sup>82</sup> Even this failed to produce results and the IN was finally forced to press ahead with a renewed conventional submarine programme to maintain numbers.<sup>83</sup>

The twin conundrum of carrier and nuclear submarine was not the only difficulty for the Indian Navy in the 1990s. Of even more urgency was the problem of spares supply resulting from the break up of the USSR, a situation little improved by the renewed drive for arms sales by the Russians after 1991. 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.<sup>84</sup> 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.<sup>85</sup> Despite repeated negotiations with Russia and the Ukraine from 1992 onwards,<sup>86</sup> little progress was made in an increasingly desperate situation until well into 1995.<sup>87</sup>

The shortage of Soviet origin spares and equipment had a serious effect on the operational availability of the fleet as a whole<sup>88</sup> and it delayed completion of the new destroyers of the *Delhi* (Project 16) class, centrepiece of the future surface force, by well over four years. It was with some relief that Admiral Shekhawat declared in 1996 that "the first . . . will be commissioned by early 1997 as equipment problems with Russia have been resolved"<sup>89</sup> but the gap of nearly a decade in the completion of major combatants for the IN between 1988 and 1997 had serious effects. By the time that *Delhi* and the first of the second batch of *Godavari* class frigates joined the fleet, the average age of the remaining destroyers and large frigates would be well over 15 years. This was too much to even talk of sustaining existing force levels without a much expanded and accelerated building programme.

## **TOWARDS 2000**

All these restraints on the Navy at least 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."<sup>90</sup>

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."<sup>91</sup> 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, which took place later in the year<sup>92</sup> and in January 1995 a joint military exercise agreement was signed between the United States and India. The naval exercise which took place in May that year seemed very much a routine event.<sup>93</sup> The wheel had turned very far from the 1971 incursion of Task Force 74; it was now likely to turn further still. There was some Opposition criticism in the Rajya Sabha of the breach in Indian self reliance which such exercises implied, but the IN's response was unambiguous, if restrained. The technological implications of the 1991 Gulf War meant that the navy could no longer remain "in purdah".<sup>94</sup> By 1996, in addition to passage exercises with several navies, the IN would be involved in a regular cycle of exercises with the Singaporean Navy<sup>95</sup> and that of the United Arab Emirates.<sup>96</sup> Even the Russians, for the first time, operated at sea with the Indians.<sup>97</sup>

Despite the problems with spare parts and fuel caused by the continued restraint on defence spending, the IN's

operational commitments remained and even increased. In addition to the requirement to provide surveillance and counter-insurgent patrols between Sri Lanka and the Indian mainland, bomb attacks in Bombay in March 1993 forced the Coast Guard and Navy to mount extensive anti-smuggling patrols off the west coast.<sup>98</sup> India took a leading role in the intervention in Somalia and IN units not only conveyed 66 (Independent) Brigade of the Indian Army to Mogadishu at the outset, but covered its final withdrawal from Kismayu and Mogadishu in December 1994.<sup>99</sup>

### **FACING THE FUTURE**

A host of other such actions, small in themselves but cumulative in their confidence and influence building effect, have marked the most recent years of the Indian Navy, despite its increasing structural difficulties. Between efforts at improving interaction with ASEAN on the one hand and involvement in Antarctic research and exploration on the other, the IN has progressively achieved a much more widely understood role within South Asia and the Asia-Pacific region as a whole than has ever before been the case. The extraction of the Indian forces from Somalia and the minimum of fuss and attention which this substantial and highly significant effort, the first such naval contribution to the UN by an Asian power, was greeted indicates that the Indian Navy remains capable and competent.

1996 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 experimenting with the entire range of warfighting capabilities 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.

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# 6

## **THE PAKISTAN NAVY 1972-1996**

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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 during the raids on Karachi 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.

The return of civilian rule under Zulfikar Ali Bhutto found that the military temporarily enjoying less influence in the government of Pakistan. In practical terms for the long term, this meant more for the Army than the Navy but Bhutto did put pressure on the services to work together more effectively 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"<sup>1</sup> 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.

Of more immediate concern was the new government's decision to purge the senior command. Vice Admiral Muzaffar Hasan was removed as C-in-C and replaced by the hastily promoted commanding officer of the *Babur*, Vice Admiral H.H. Ahmed. His task of reconstruction was formidable. Nearly 3,000 East Pakistani naval personnel required repatriation to Bangladesh, while over 1300 officers and men were prisoners of war. With 408 dead at sea or in East Pakistan, the Pakistan Navy had suffered a loss of some three eighths of its total strength before the outset of the troubles.<sup>2</sup> The return of personnel from captivity was accomplished relatively quickly, but there were many gaps in manpower throughout the fleet.

Ahmed's internal priorities were the restoration of morale and the re-development of professionalism within the Navy as a whole. In meeting the new roles of the Pakistan Navy, the submarines and the Special Service Group would function as the nucleus of the future combatant force. Nevertheless,

despite the simplification of the defence problem, credible coastal protection and trade defence required much more sophisticated weaponry for surface ships and aircraft than the PN yet possessed. It would be relatively straightforward to work out an ideal strategy for maritime operations, the problem now was obtaining the tools necessary for the task. In the interim, the function of the remaining surface ships was to reinforce and sustain a core of seagoing expertise.

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 investment in Italian built midget submarines to supplement the existing Special Service Group units as a "cheap" deterrent.

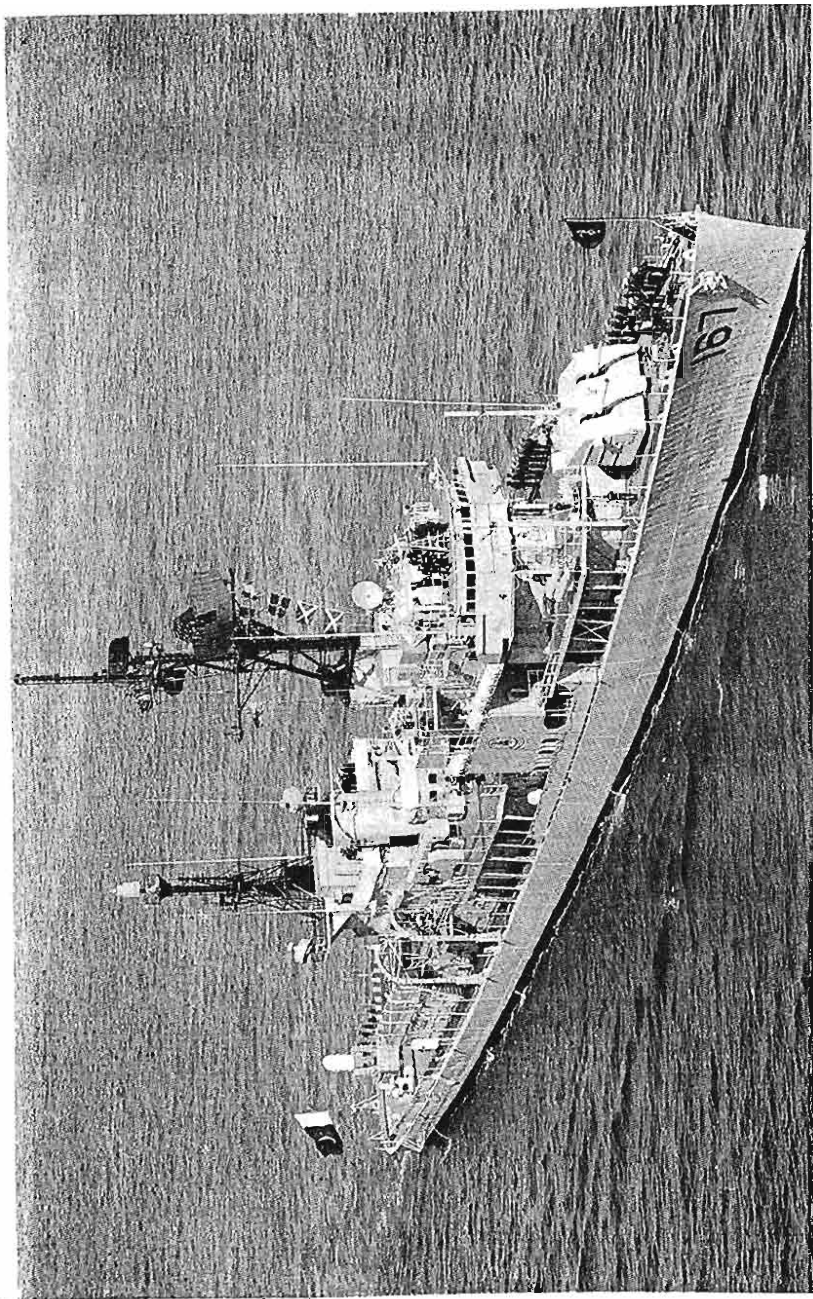
The Navy also began to develop plans for helicopter carrying escorts equipped with surface to surface missiles as a reply to the evolving Indian SSM capability. The Indian remained vulnerable to sophisticated weaponry and the ability to deploy SSM at long range, especially in concert with helicopters which could provide remote targeting or themselves act as firing platforms, would complicate the problem of approaching Pakistan territory enormously for them. 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.

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

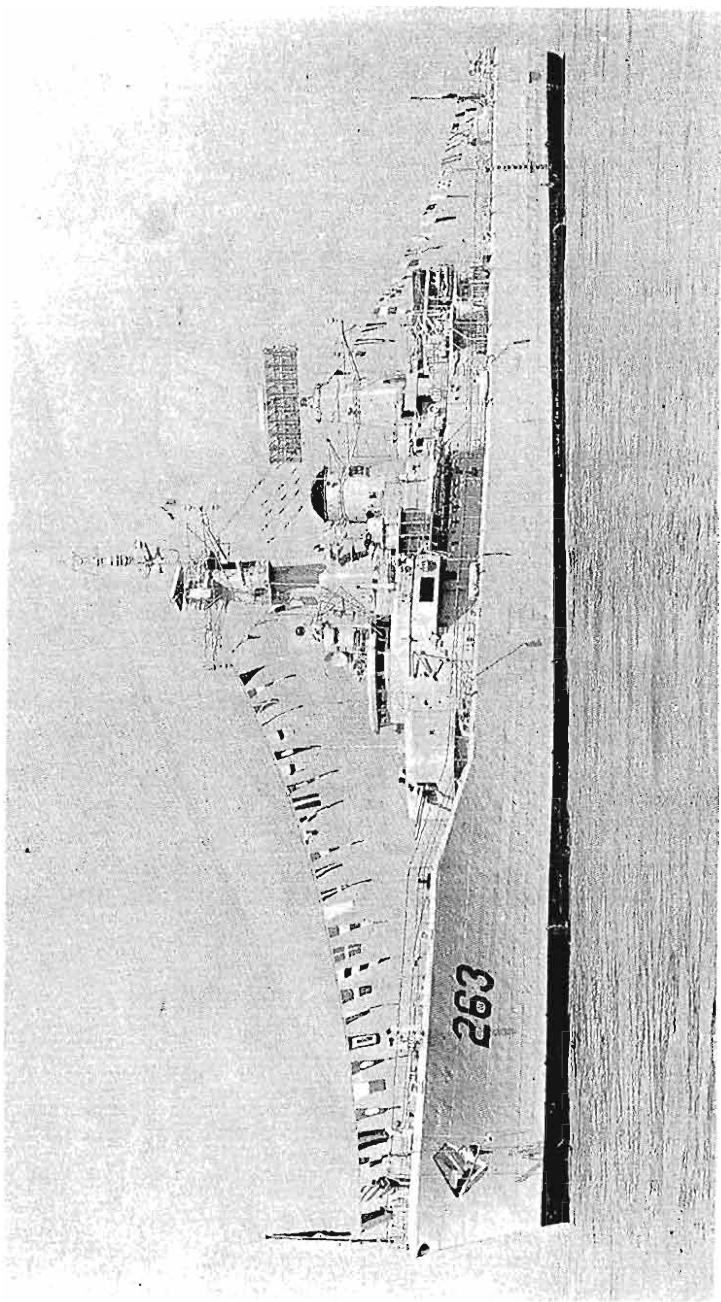
efficiency and the morale of personnel (and their families) but the very seagoing expertise, which takes years and years to acquire, was gradually being lost.”<sup>3</sup> Although transfers of Chinese built major units were considered, the PN believed that it would be better served by purchases of surplus ships from the West. A similar approach to the maritime patrol aircraft requirement saw Pakistan to obtain three *Atlantique* maritime patrol aircraft from France in 1973, which at last gave the Navy credible surveillance and targeting capability.<sup>4</sup> Attempts were made to arrange with the French for the refit of *Babur* and two destroyers or to secure two or three surplus frigates or destroyers but the French would only agree to new construction, assessing that the cost-effectiveness of modernising such old ships was negligible. They were proved correct when Pakistan purchased two Type 12 ASW frigates, *Tenby* and *Scarborough* from Britain in 1974, with the idea of modifying them to carry helicopters. Their condition was so poor that the cost of the refit rapidly became prohibitive. To Pakistan’s extreme irritation—and Britain’s embarrassment—both had to be sold for scrap.<sup>5</sup>

The Pakistan 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 *Gearings*, however, was twofold. First was their compatibility with and their ability to take new US equipment as it came available. The second was the access, even on a “user pays” basis, to the American logistics system which Pakistan now enjoyed. This resulted in a far higher serviceability for the ex-American destroyers than had been possible for many years with the British built ships.

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



**PNS TUGHRIL**, Australian Bicentennial 1988. Photograph credit: John Mortimer



**PNS SHAMSHER.** Indonesian Fleet Review 1995. Photograph credit: John Mortimer

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. The government and the other services made few difficulties over the allocation of finance and they were purchased for Pakistan in November 1978.<sup>6</sup>

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. The first *Babur*, renamed *Jahangir*, was retained as an immobile headquarters unit for the coastal defence organisation,<sup>7</sup> a temporary palliative for the Pakistan Navy's chronic shortage of shore facilities.

### **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 linchpin 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."<sup>8</sup>

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.<sup>9</sup> 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 1986),<sup>10</sup> 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*.<sup>11</sup>

Until this point, the primary anti-surface weapons in the surface fleet belonged to the small and short ranged fast attack craft of the Chinese built *Hegu* class, acquired in 1981, and the barely larger *Huangfen* class, which arrived in 1984.<sup>12</sup> Unlike the Chinese missiles of the fast attack craft, which were themselves local variants of the Russian SS-N-2 *Styx* missile, *Harpoon* would provide the surface ships with a weapon which outranged the *Styx* of the Indians and against which the Indian Navy possessed inadequate defences.<sup>13</sup> 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.<sup>14</sup> This "uncertainty element" represented a key step in the development of Pakistan's maritime strategy and threw out of kilter many of the operational assumptions under which the Indian Navy had been operating since the 1971 War. It was one thing to bottle up the Pakistan Navy within a bastion from which the Pakistanis could do little more than protect their own coastline; it was quite another to contemplate intercepting Pakistan shipping outside the Arabian Sea when modern, quiet, missile firing submarines were deployed. In fact, 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,<sup>15</sup> but the wartime threat they constituted was manifest.

An important and growing activity for the Pakistan Navy as the 1980s opened was its developing relationships with the Middle East nations. In the wake of the Iranian revolution, the United States began large scale efforts to assist the armament of Saudi Arabia and the Gulf States. Although the Americans and, to a lesser extent, the European powers could provide the ships and systems and a degree of training and support, the expert personnel of the PN were well positioned to provide in country assistance. Officers and technical personnel were frequently seconded to the new navies of the region. Aside from the foreign exchange and diplomatic benefits for Pakistan as a whole, the PN was able to maintain access to and develop experience of some of the latest Western weapons and sensors, which it would not otherwise be able to afford. In addition, PN units began a programme of regular port visits within the Persian Gulf, engaging in passage exercises with local forces which were on a modest but increasingly sophisticated scale.<sup>16</sup>

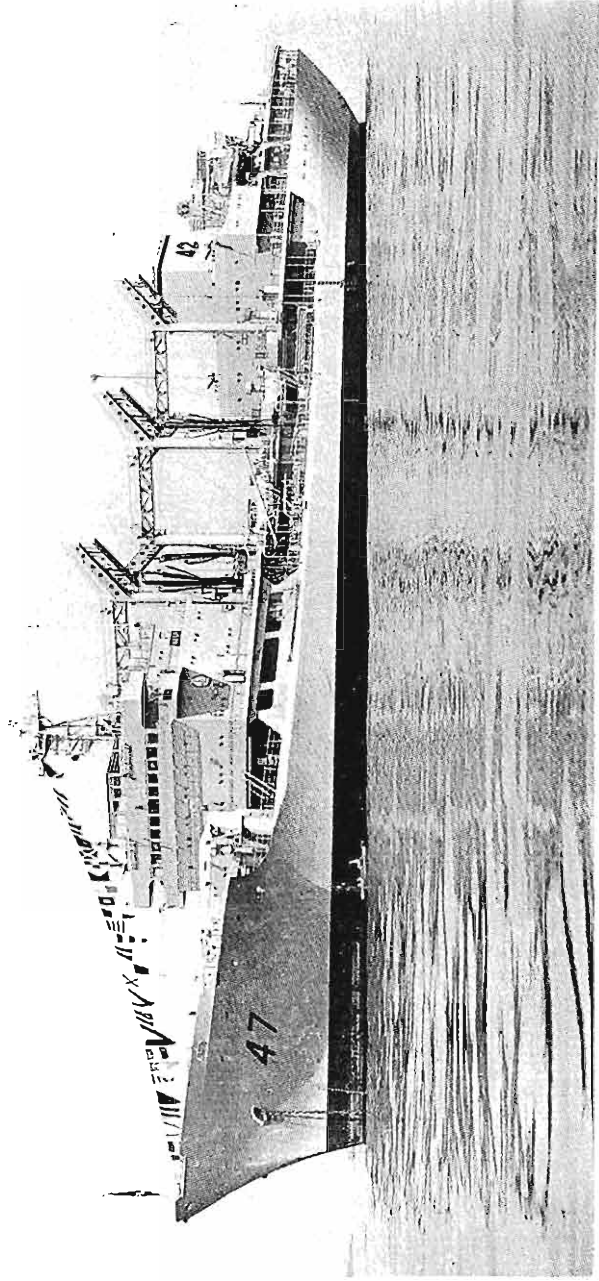


### **TOWARDS A MARITIME OUTLOOK?**

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.<sup>17</sup> 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.<sup>18</sup> Although this was a grossly over optimistic estimate it did serve to indicate the potential for markedly Pakistan's export earnings. Concern over the need to demonstrate control over Pakistan's Exclusive Economic Zone and increasing evidence of poaching by foreign fishing vessels crystallised 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."<sup>19</sup>

### **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



**PNS NASR.** Indonesian Fleet Review 1995. Photograph credit: John Mortimer



**PNS BABUR** circa 1982. Photograph credit: John Mortimer

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.<sup>20</sup>

The sudden influx of so many ships and totally new systems obviously had a temporary effect on readiness but their arrival in Pakistan not only gave the fleet new capabilities (including its first area defence anti-aircraft 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. Discussions were in progress for the transfer of surplus USN DDG 2 *Adams* class destroyers, which would further improve the anti-air warfare capabilities of the fleet.<sup>21</sup>

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 interests 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 at least one *Han* class nuclear submarine from China.<sup>22</sup> The latter was willing enough but, to a service accustomed to the *Daphnes* and the *Agostas*, the inadequacies of even the latest Chinese new construction were manifest. 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. Pakistan was no longer the bulwark of the American effort to contain the USSR since the latter's withdrawal from Afghanistan. Consequently, there was no protection within the American Administration for the anti-nuclear sentiment in the Congress.

Both maritime patrol aircraft and helicopters were immediately 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 embargo, nicknamed the "Pressler Amendment" after its sponsor in the United States Congress, rapidly took effect and its ramifications rapidly extended further than the aircraft and systems still awaiting delivery. The *Brooke* and *Garcia* class frigates had been acquired from the USN on five year leases, with the option of renewal with mutual agreement. Such leasing was a common device employed to transfer surplus ships to friendly powers without recourse to the complexities of seeking Congressional approval for outright sale. Renewal, whatever political difficulties were experienced between the United States and the leasing nation, had hitherto been automatic. The Americans made clear, however, that the arrangement would not be renewed in 1994 and that the frigates would have to be returned by the Pakistan Navy. By August of that year, all had paid off and were in the process of return to the United States for scrapping. With them went the repair ship *Maowin*.<sup>23</sup>

Pakistan turned to the United Kingdom for the replacement units which were urgently required and was able to take advantage of the disposal of the six Type 21 frigates which became surplus to British requirements in 1993.<sup>24</sup> To some

extent, this deal appeared to mark a return to the hand to mouth existence of the PN in previous years, but arrangements were made for the refit of the ships' combat data and fire control systems and the transfer of *Harpoon*, *Phalanx* and other equipment from the *Gearings*.<sup>25</sup> In service support received a higher priority than had generally been the case before and indicated that the PN was developing a more realistic idea of its operating requirements.<sup>26</sup> With the frigates came the purchase of three Lynx helicopters and an option for three more, adding significantly to the navy's anti-surface capabilities. Nevertheless, despite the potential of the new acquisitions as weapon and sensor platforms, the average age of the Type 21s was approaching twenty years and the class could only serve as a relatively short term solution before the problems of block obsolescence yet again mounted up for the PN.

The way ahead was shown when Pakistan and France agreed in principle on the sale of three new construction *Agosta 90* class submarines.<sup>27</sup> Second hand boats had been considered, since they would allow speedy replacement of the elderly *Daphnes*,<sup>28</sup> but new ships were a much more attractive proposition. The Pakistanis, however, were determined to get the best bargain they could. The reduction in European defence spending had produced a buyer's market and separate negotiations were continued with the Swedes and with the Chinese before the *Agosta 90* deal was confirmed.<sup>29</sup> Even the UK intervened with an offer.<sup>30</sup> Pakistan was able to take advantage of generous French financial credits provided to keep the under-employed shipyards in work.<sup>31</sup>

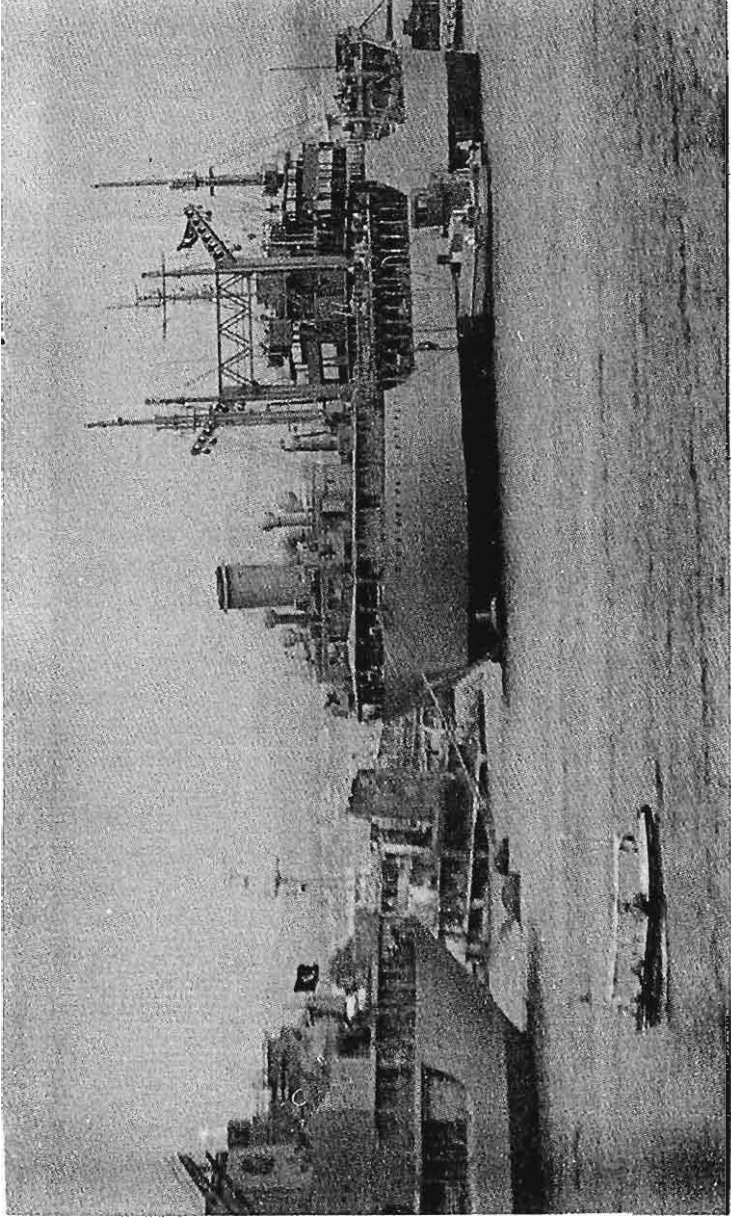
### **MAKING DO**

The Pakistan Navy faced 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 naval 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 uncertainties of the "New World Order", such support was unlikely to manifest itself at all.

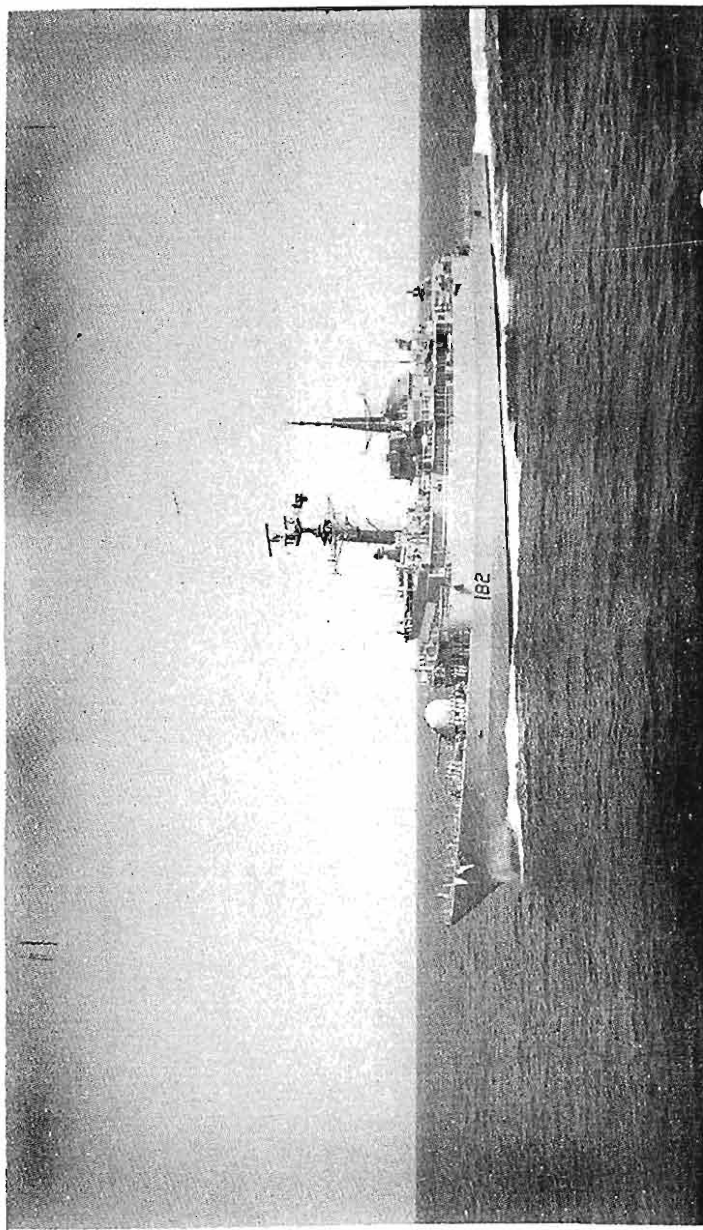
The physical form of the Navy reflected the insufficiency of resources. Despite valiant efforts to improve the infrastructure over previous decades, both base and training facilities remained inadequate.<sup>32</sup> In Karachi, the PN had to compete for space with the commerce of a busy port; its ancillary bases were unsophisticated and inadequate for the needs of large units. The Karachi Naval Dockyard still did not possess a large dry dock, so the tankers and other ships had to refit in commercial facilities.<sup>33</sup> Work was underway on new facilities for the submarines in Karachi and on a whole new complex at Ormara in the west, but this would not be complete until at least 1998.<sup>34</sup> By 1996, with the exception of the *Agostas*, which had just entered the second half of their lives, only three major combatants were less than twenty years old; most were nearer thirty and the *Gearings* were approaching their half century. Only three of the latter remained and the *Babur* had also been removed from the effective list. The equipment of the operational units 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."<sup>35</sup> The Maritime Safety Agency was similarly under-resourced, despite the rhetoric of EEZ surveillance needs. Although "six corvettes" were projected, after ten years the MSA's assets still consisted of an old destroyer and a handful of Chinese built patrol vessels which lacked any oceanic capability.<sup>36</sup>

PN's return to a policy of concentrating on the submarines and the special forces 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.



**PNS DACCA** 1995. Photograph credit: *Jane's Fighting Ships*





**PNS BABUR** 1995. *Photograph credit: Jane's Fighting Ships*

Even the submarine force was operating within tight constraints. Although every effort was being made to equip the three new boats with the latest systems, including air independent propulsion as a retrofit,<sup>37</sup> the project represented an enormous commitment of hard currency at a time when the national economy was under renewed pressure and the International Monetary Fund dissatisfied with Pakistan's performance as the budget deficit grew, at least partially as a result of increased defence spending.<sup>38</sup> The three new boats, despite their undoubted capability increases, would not represent an increase in numerical strength for the submarine fleet. By the time the first commissioned, the four *Daphne* class would be more than thirty years old and the first pair of *Agostas* would be starting the third decade of service.<sup>39</sup> The in-country construction of the later submarines and for the later Tripartite minehunters had the potential to begin the development of much more capable high technology industrial operations in support of the navy than had ever before been possible, but the experience of other countries such as India did not suggest that the experiment would be without its problems. The same question of expense applied to the Special Service Group, which required progressively more sophisticated equipment to maintain its operational edge.<sup>40</sup>

Given that the submarine arm and special forces had priority, the Pakistan naval staff continued to develop what avenues it could to sustain the force structure required for the "concentric rings" defence of Pakistan's coast and ports. Steps were taken to improve the surveillance capabilities of the *Atlantique* maritime patrol aircraft with new radar, electronic support systems and sonobuoy analysis gear.<sup>41</sup> The effective life of the four aircraft force was considerably extended by the purchase of three stripped out *Atlantiques* from the French Navy for breaking up into spare parts. While the timing of this sale indicated that it was a sweetener for the prospective confirmation of the submarine buy, it was a vital move in sustaining the Pakistan Navy's capabilities.<sup>42</sup> A second hand replenishment ship was purchased from the Netherlands, giving

the fleet the services of two operational support ships and at last allowing the disposal of the aged *Dacca*.

One ray of light at a time of increasing domestic political turmoil was the partial remission of the arms embargo by the United States, which would allow the transfer of the long delayed trio of P3C *Orion* aircraft. The American link had never entirely disappeared. Access to some stores and spare parts had been allowed through a favourable interpretation of the Pressler Amendment's ban on *additional* capabilities as opposed to existing ones. Furthermore, occasional exercises with the United States Navy continued, including *Inspired Siren* in early 1994, which included an American nuclear submarine and maritime patrol aircraft.<sup>43</sup> Nevertheless, short of some extraordinary change in the relationship, it was unlikely that the PN would ever look again to the United States for major combatants.

Negotiations were renewed with China for the purchase of up to four new construction frigates.<sup>44</sup> This was a definite change of direction for the PN in the acceptance of lower technology units, but there seemed no other practicable way of maintaining the numbers of frigates and destroyers at reasonable levels when the remaining *Gearing* class had passed their half century in service. The existence of a "low" end of the combatant scale had long been accepted for light attack and patrol craft; it was clearly now to be extended to larger ships.

### **AN UNCERTAIN CONTEXT**

The PN entered 1996 in reasonable shape but with solutions to few of its long term difficulties. Some hard decisions remained to be made and a clear way ahead had yet to be evolved for the surface fleet, its roles and compositions. It was possible that the hand to mouth existence of much of the previous half century would continue, but the realities of technology and finance would make such an approach progressively more precarious and less practical in the operational context.

The dilemmas of the PN were not, however, either entirely of its own making or wholly capable of resolution by the service itself. Whatever gains the Pakistan Navy was making

in its plans for development, the political and economic context remained uncertain and unfavourable. The whole matter of the exploitation of Pakistan's maritime resources lay under a shadow of insufficient capitalisation and thus insufficient achievement. The Pakistanis were convinced that undersea oil resources lay within their EEZ but no comprehensive oil exploration programme was underway in 1996. Fisheries were expanding but too slowly. 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%."<sup>45</sup> Matters had improved little by 1995. Although the average sized ship within the merchant fleet had increased by 1500 tons to 6500 tons gross, there were ten less ships on the Pakistan register and the total tonnage had increased by only 39,000 tons, or little more than 10%.<sup>46</sup>

In sum, the Pakistan Navy and the Maritime Safety Agency had weak platforms on which to justify their existence other than at the lowest levels. If the MSA seemed to be a relatively small, anti-smuggling unit rather than a true resource surveillance and protection force, the PN continued to be defined, and regarded by the Pakistan Government, wholly in terms of its role in defending the nation against India. In these circumstances, the concentration on submarines and special forces would have to continue, with all the limitation which this implied for the Navy's ability to achieve any other credible tasks.

The inevitable conclusion for the observer 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 fifty years. Until this occurs, the maritime environment will never be seen as a source of opportunity rather than as an inconvenient vulnerability.

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# 7

## **THE BANGLADESH NAVY**

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In the course of its twenty five 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 incursions 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.<sup>1</sup>

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 officer, was ordered to take charge of the small contingent of personnel who had remained with the naval base at Chittagong.<sup>2</sup> 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

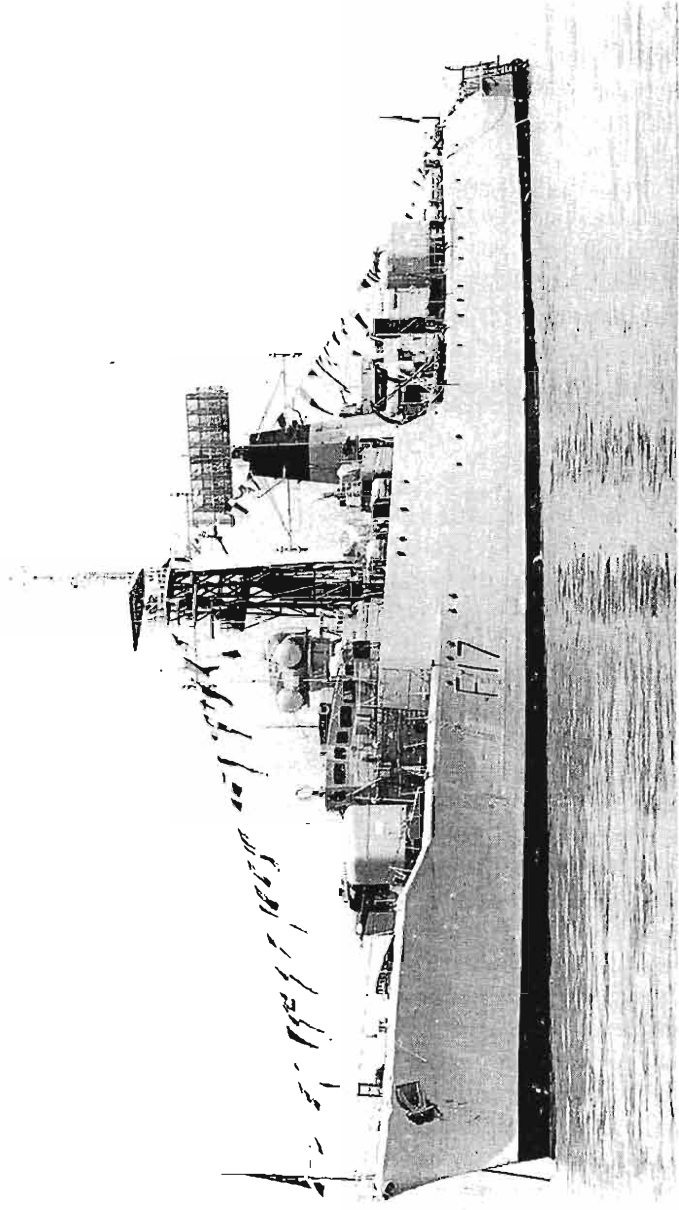


the personnel who had served in Pakistan's military forces. The latter, labelled "repatriates" had generally not been involved in the war of liberation, spending the conflict in Pakistan's detention camps. The Government sought to play one group off against the other, forming many ex-Mukti Bahini fighters into a para-military force called the Jatiyo Rakkhi Bahini (National Defence Force) and providing it with funds and new recruits at the expense of the professional Army.<sup>3</sup> The Bangladesh Navy did not become directly involved in the struggle that followed, although it suffered from the diversion of money to the Jatiyo Rakkhi 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.

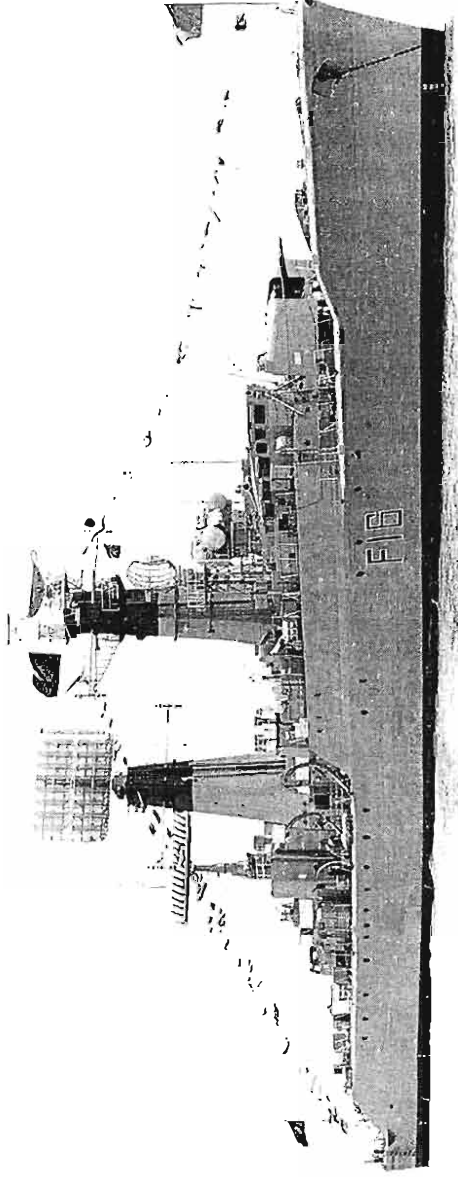
The second problem for the Navy was that the Bangladesh Army sustained its dominant position in relation to the other services which had been a feature of Pakistan. Although the Chief of Naval Staff was given theoretical equivalent status (but not equal military rank) to the Army Chief of Staff, the Army had twenty times more personnel and the lion's share of the budget. It would sustain these relative positions for the next twenty five years.<sup>4</sup>

### **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. The latter had been the senior



**BNS ALI HAIDER**, Malaysian Fleet Review 1991. Photograph credit: John Mortimer



**BNS UMAR FAROOQ.** Malaysian Fleet Review 1991.  
*Photograph credit: John Mortimer*

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.<sup>5</sup> He developed close personal connections within the Government and his talent for publicising the new service, as evidenced by the large scale turn out of naval personnel to the 1973 independence celebrations, helped establish the right atmosphere for naval development.<sup>6</sup>

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",<sup>7</sup> 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 40 mm 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 offshore 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.<sup>8</sup> 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 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.<sup>9</sup>

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 onwards, 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.<sup>10</sup> 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 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.<sup>11</sup> 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, mostly 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.<sup>12</sup>

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.<sup>13</sup>

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 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 its possession of South Talpatty by placing troops ashore.<sup>14</sup>

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.

### **RE-DEVELOPMENT 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 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.<sup>15</sup>

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.<sup>16</sup>

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.<sup>17</sup>

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.<sup>18</sup> 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.<sup>19</sup> 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.

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.

### **HOLDING THE LINE**

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, a missile armed frigate 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.<sup>20</sup>

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 fit a flight deck and maintenance facilities

while there was some prospect of the ex-British frigates also being converted to carry 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 having difficulty 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 April 1991 saw Naval units suffer considerable damage—including some sinkings amongst the patrol and attack craft. Local authorities had been caught unprepared by a rapidly moving storm and many BN craft were trapped alongside and damaged against their wharves or struck by derelict ships, water craft or debris moving down river in the flood waters. Matters were not helped by the collision in August of the new frigate *Osman* with a merchant ship, which put the former temporarily out of service. In all, 1991 was a dreadful year and the BN's budget was so fully occupied with the repairs necessary to existing ships that any thought of a second frigate from China had to be abandoned for the time being.

A new realism now entered the BN's thinking and proposals for modernising the old frigates or developing a submarine arm were no longer accorded a high priority. The Navy's focus, after the reconstruction of the patrol forces, was now on developing a mine countermeasures capability, since Bangladesh's ports and rivers were assessed as particularly vulnerable to this threat, and acquiring improved offshore patrol vessels. At this time, the idea of a separate coast guard force was first floated officially, with the idea of allowing the BN to concentrate on more directly naval functions.

The reductions in British defence expenditure allowed

the BN to secure a quartet of the steel hulled coastal minesweepers of the *River* class from the Royal Navy. These very simple vessels were ideal for Bangladesh and would supplement the four larger *T 43* type minesweepers which were ordered as new construction from China in 1993.<sup>21</sup> Another opportunity purchases from Britain had already produced a training ship, which took the name and duties of the old *Shaheed Ruhul Amin*.

### **TOWARDS THE FUTURE**

Further encouraging developments were to follow, which gave promise of allowing the BN to find at least partial solutions to some long unsettled problems. In late 1995, the BN issued requests for tender for a brand new frigate, which would be equipped with Western weapon and sensor systems. This unexpected move was made possible only by a grant in aid from Saudi Arabia of some \$US 100 million. Although the ship could be expected to be as utilitarian as possible, it would vastly increase the capabilities of the BN in offshore operations and allow the retirement of at least one of the now aged trio of ex-British units.<sup>22</sup> At the same time, an offshore patrol vessel was ordered in South Korea. This 600 ton ship would provide an intermediate capability for offshore patrol and reduce the burden on the small frigate force.

The decision to create a coast guard was finally implemented in 1996 with the transfer of a number of coastal patrol craft and small boats to form the core of the new force.<sup>23</sup> While a logical step, what did remain uncertain was the demarcation between the BN and the future Bangladesh Coast Guard for operations away from estuaries and coastal waters. If the latter were to include large offshore patrol vessels, then it ran the risk of diverting resources which the Navy desperately required to maintain its combatant forces in sufficient numbers for their war roles.

This issue of resources remained the central problem for the maritime defence of Bangladesh. Considering what the Navy had achieved in its first twenty five years, Bangladesh had some cause for self-congratulation. Nevertheless, in

1996, the BN faced an uncertain future. Its national security roles were now clearly understood within Bangladesh and their importance could only increase as the country turned more to maritime zone resources. But any development programme would have to be mounted with a clear understanding that practical limitations remained. In the future, improvisation will continue to be the key to sustaining capability and the BN must restrain some of 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 which must be devoted to deterrence for Bangladesh to be able to retain some control over any future conflicts at sea in its littoral zones.

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## **THE SRI LANKA NAVY**

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The Sri Lanka Navy (SLN) is a resource limited organisation 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 and 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 moved quickly to secure a Defence Agreement 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.<sup>1</sup> 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."<sup>2</sup> 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.<sup>3</sup>

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 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.<sup>4</sup>

Britain 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."<sup>5</sup> 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.<sup>6</sup>

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 minesweeper,<sup>7</sup> 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 successes,<sup>8</sup> 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 coastal 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.<sup>9</sup> 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.<sup>10</sup> 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 British 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.<sup>11</sup> 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.<sup>12</sup> 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.<sup>13</sup>

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."<sup>14</sup> Negotiations followed but neither side had much interest in continuing with the base arrangements. All the facilities in Ceylon could be transferred elsewhere<sup>15</sup> 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 "Eastern Fleet".<sup>16</sup> 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 ships 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<sup>17</sup> and the existing minesweeper, *Vijaya*, was in poor condition with a dubious future.<sup>18</sup> 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 re-organised at Government *diktat*<sup>19</sup> 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".<sup>20</sup> 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.<sup>21</sup>

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 the minesweeper *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 inquiry 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.<sup>22</sup>

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.<sup>23</sup>

#### **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 pre-occupied 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 year)<sup>24</sup> 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<sup>25</sup> 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"<sup>26</sup> 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 utmost 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 non-aligned 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 leftist Sinhalese Janatha Vimukthi Peramuna (JVP) [People's Liberation Front], during which Indian assistance had to be sought to supplement the Navy's too limited capacity to prevent arms and supplies being brought into Sri Lanka.<sup>27</sup>

The campaign against the JVP was long, arduous and expensive in manpower and equipment. Nevertheless, it gave the three services experience of counter-insurgency operations which would prove vital in the future and it forced them to develop "a concept and practice of joint operations" which would be a key element in the years ahead.<sup>28</sup>

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<sup>29</sup> 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.<sup>30</sup> 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<sup>31</sup> 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<sup>32</sup> and 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, even 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 receiving 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 as the Liberation Tigers of Tamil Eilam (LTTE) became increasingly active. 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.)<sup>33</sup>

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 LTTE 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 with 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.<sup>34</sup> Unless the Tamils developed their own seagoing units, such vessels were hardly vulnerable to terrorist activity, or so it seemed at the time. This

was, of course, a makeshift solution, since the patrol requirements were vast and the LTTE 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.<sup>35</sup>

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.<sup>36</sup> 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."<sup>37</sup>

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 LTTE 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".<sup>38</sup> 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.<sup>39</sup> The SLN eventually concentrated its own efforts on improving its operational methods against the LTTE.

Reforms in the command structure produced a division of the coastline into three command areas, North, East and West, 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.<sup>40</sup> The SLN emphasised better "training methods to achieve higher standards of professionalism"<sup>41</sup> 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.<sup>42</sup>

### **INDIA'S "HUMANITARIAN RELIEF"**

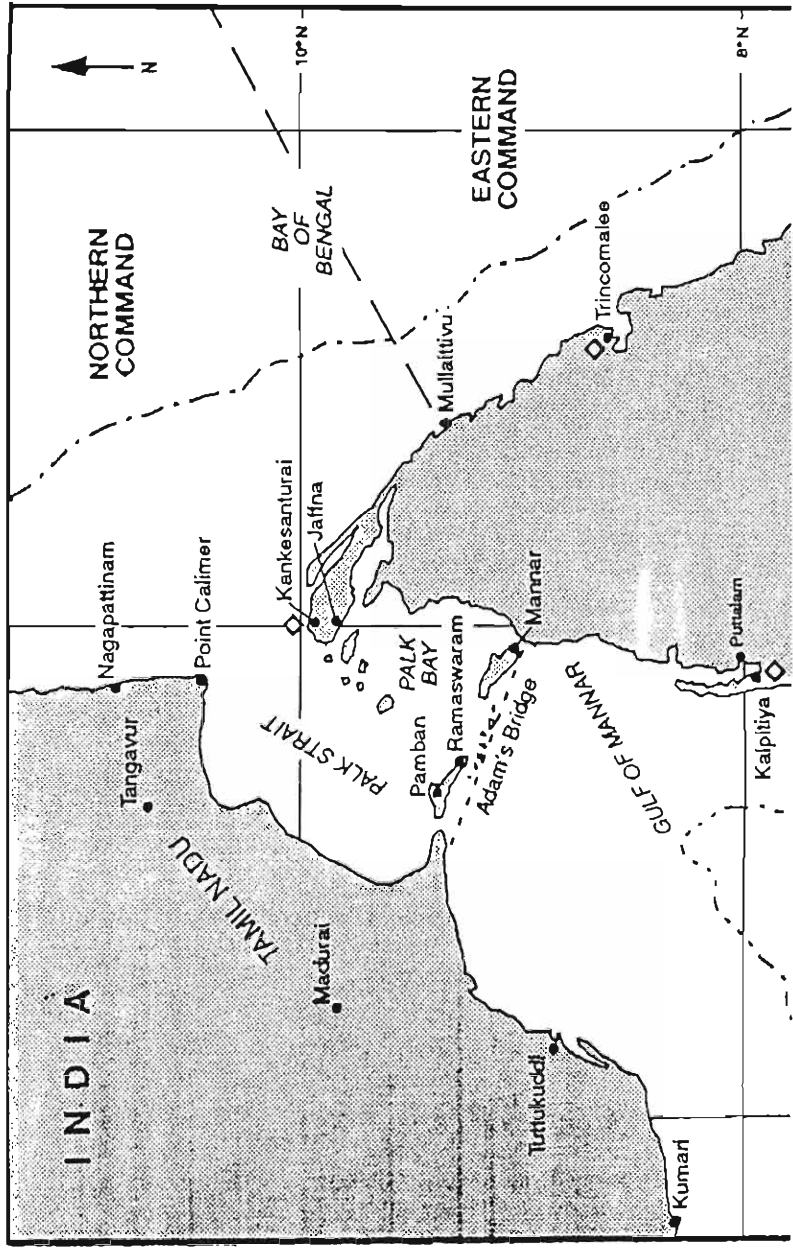
India's response to Operation *Liberation* was to promise aid and supplies for "humanitarian" purposes.<sup>43</sup> The Sri Lanka government naturally viewed the dispatch of unsolicited succour for the Tamils as an expression of solidarity with the LTTE and warned India that any attempt to bring the supplies across Palk Strait would be turned back.<sup>44</sup> 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.<sup>45</sup> The Sri Lankan gunboats which intercepted the fishing vessels were equally circumspect, relying upon verbal warnings to achieve the turn around of the Indians.<sup>46</sup>

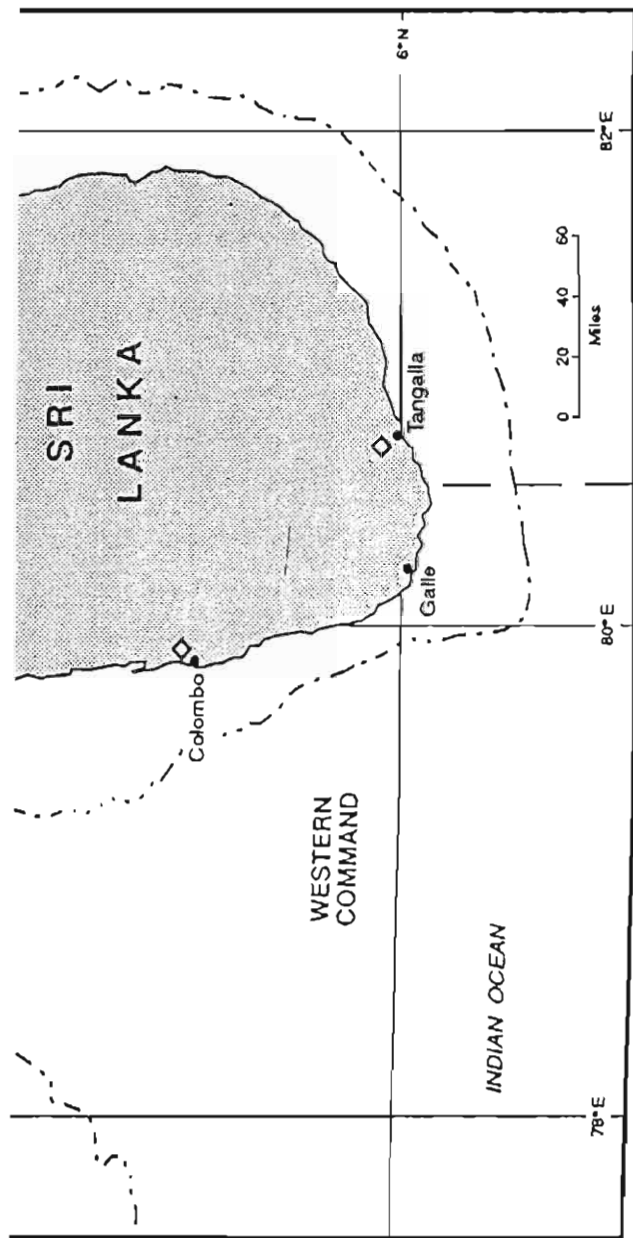
Although India soon switched to aircraft to get its supplies into Sri Lanka, the incident provided a shortlived boost to both national and naval morale. The Indians, however, eventually insisted on a compromise which saw Indian relief vessels enter Sri Lankan waters under SLN escort and land their supplies 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."<sup>47</sup>

### **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

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SECNAV1

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 began 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.

The breakdown of the Accord was complete by October 1987. After a series of incidents, a boat from Tamil Nadu carrying arms and guerillas was intercepted on the 4th of that month by the SLN with indirect assistance from the Indian Navy. This flagrant breach of the agreement by the LTTE proved the last straw for India and the latter now embarked upon the long drawn out Operation Pawan in an attempt to bring the insurgents to heel.<sup>48</sup>

While the Indians embroiled themselves in an increasingly bloody campaign to suppress the LTTE, 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".<sup>49</sup> After a new entry training programme and new facilities at Colombo and at other locations around the coast 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."<sup>50</sup>

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"<sup>51</sup> 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",<sup>52</sup> 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".<sup>53</sup>

### **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 LTTE, the Indians finally pulled out in March 1990. In June of that year the Tamil Tigers once more turned on the government security units.<sup>54</sup> The Sri Lankan forces were soon convinced that "a political solution is the only way out"<sup>55</sup> 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, but it was no longer impossible.

The fighting continued into 1991 and by May of that year had claimed another 5,000 lives.<sup>56</sup> The Tamils were



displaying progressively more capability across all arms of warfare. The SLN found that the movement had even formed its own naval wing, designated the "Black Sea Tigers". The Tamils were determined to protect the Jaffna peninsula and to maintain the seaborne movement of supplies into their stronghold. By 1992, the areas held by the LTTE were effectively a mini-state and the rebels were building their own small craft and producing mines and other munitions. Although an amphibious offensive was mounted by Sri Lankan government forces late that year, the destruction of Tamil infrastructure proved only a temporary setback for the insurgents. Because the Tamils were wary of becoming involved with Indian Navy patrols in the Palk Strait, they focused on the sheltered lagoon which separated the peninsula from the mainland of Sri Lanka to the south. Combining a well co-ordinated radar and visual surveillance programme with a series of "wolf pack" operations by fast small craft, the Tamils began to take a heavy toll of the light patrol boats which the SLN was using in the area.<sup>57</sup> One of the SLN's few landing craft was mined in October 1992 and, although salvaged by the end of the year, it proved a constructive total loss. At the same time, the Government's forces remained under pressure through conventional land warfare and a series of terrorist attacks in urban areas. Several struck home on the SLN, including the assassination of the Chief of Naval Staff, Vice Admiral Clancy Fernando in November 1992<sup>58</sup> and the mining of a *Dvora* class patrol boat in August 1993.

The SLN was not idle in reply. Its own surveillance and response systems were drastically improved with the establishment of shore radar stations, secure communications and closer co-operation with the Indian Navy. The command structure was again revised and a new Southern Command established with its headquarters at Tangalle. Colombo naval base was again extended in preparation for a new building programme of French designed coastal patrol craft. Nine were ordered in 1992, five of which were to be built in Sri Lanka. The programme of inshore patrol craft already in hand was extended.<sup>59</sup> All these measures would soon be needed.

The Government attempted to break the stalemate in September 1993 with an offensive intended to break the Tamils' access to Jaffna Lagoon. Although the insurgents suffered heavy losses in men and material, the setback was only temporary. In November they inflicted the most serious defeat yet on the Government forces by a massive, largely waterborne attack on the base at Pooneryn, which had been established to support SLN and Army operations on the lagoon. Some 600 personnel were killed or captured and the SLN lost at least five of its valuable water jet propelled light craft, the majority of which passed directly into rebel hands. The LTTE had temporarily achieved complete control of the lagoon.<sup>60</sup>

The Sea Tigers were extending their operations in other directions in an attempt to interfere with the movement of supplies for Government forces in the north. Hitherto, the difficulties of access overland and the greater security offered by shipping had meant that this was the primary medium for logistics. The hard pressed SLN now had the prospect of dealing with a much more widely dispersed threat and one which was developing increasingly sophisticated operational techniques, even extending to mini-submersibles.<sup>61</sup>

Both the Navy and the other armed services needed time to regroup and develop more sophisticated responses to the highly capable insurgent forces. In fact, both sides were feeling the pressure and there followed a series of disjointed attempts to achieve a negotiated settlement. These made little progress and the campaign degenerated into a series of raids and counter-raids. In June 1994, the LTTE achieved a minor victory with a successful attack on the naval base on Kairangar Island, west of the Jaffna peninsula.<sup>62</sup> Elections the following August brought the People's Alliance (PA) Party to power, with the possibility of a more conciliatory attitude to the Tamil movement but there was no let up for the SLN. While naval patrols kept the Tigers under constant pressure and succeeded in restricting the movement of arms and guerillas into and around Sri Lanka, the losses mounted. The converted command ship A 516 was sunk on 16 August 1994. The

following month, the patrol vessel *Sagawardene* was destroyed. This was a particularly heavy blow to the SLN, because the latter ship and her sister had been the first substantial attempt at in country construction and were a source of some pride.

The chance of successful talks was torpedoed by the assassination of the leader of the United National Party (UNP) in October but, after the PA Party had consolidated its hold on power in the following month by winning the Presidential election, negotiations between the Government and the Tamils were resumed once again. The Sri Lankan armed forces desperately needed the breathing space and it was with some relief that a cease fire was declared on 8 January and soon afterwards extended to 100 days.

Although at the outset there was hope for a successful outcome to the peace talks, the Government forces were not complacent and did their best to rearm and rest their forces. So did the Tamil Tigers. The Government's refusal to remove the bases around the Jaffna peninsula which controlled access to LTTE occupied territory was the pretext for the Tamils to end the cease fire on 19 April. Within hours they had signalled their determination to win by an underwater attack on SLN units in Trincomalee. Caught unprepared, possibly because the Government had been attempting to maintain a restrained approach "to forestall any attempts to provoke the commencement of one more disastrous war", the SLN lost the gunboats *Sooraya* and *Ranasaru*, while two more patrol vessels were damaged. The LTTE lost only four men.<sup>63</sup>

The naval war reached a new intensity, caused largely by the increased capabilities of the Sea Tigers, which were matched elsewhere in the heavy losses of Sri Lanka Air Force transport and patrol aircraft to shoulder fired missiles. The start of more active operations by Government forces in July 1995 found the SLN heavily engaged as the LTTE attempted to interrupt coastal traffic and protect its own supply vessels. The command vessel *Edithara* was mined north of Jaffna on the night of 15/16 July, after a sharp engagement off Point Pedro had resulted in the destruction of four LTTE light craft.<sup>64</sup> On 29 August, the Tamils scored

another success when they sank two *Dvora* class patrol craft.<sup>65</sup>

With these heavy losses, the SLN took urgent measures to acquire replacements, while repairing and refitting other units. A trio of gunboats arrived from China in September, together with two more *Dvoras* and a *Shaldag* class fast patrol vessel from Israel by the end of January 1996. In the meantime, as the other armed services consolidated and rehearsed their front line units, the Joint Operations Centre developed plans for a concerted campaign to capture Jaffna and destroy the Tamil state which had been built up during the LTTE's occupation.<sup>66</sup> That campaign was launched on 17 October 1995 as Operation *Riviresa* only a few days after the Tamils had launched their own attacks on Government occupied towns in the north east. A sharp engagement off the coast at Mullaittivu saw the LTTE lose several small craft after attacking an amphibious group on its way to support the offensive. The SLN's landing craft *Ranagaja* was damaged by gunfire, but remained afloat despite suffering heavy losses amongst her embarked personnel.<sup>67</sup>

This distraction did not stop the offensive and, as the Government forces advanced against heavy opposition, the Sea Tigers redoubled their attacks against shipping and their enemies' sources of supply. A cargo vessel was mined in Trincomalee, emphasising again the vulnerability of the harbour, and a strike against the oil tank farm at Colombo resulted in the destruction of some 25% of the national stocks of petroleum.

Jaffna fell on 5 December but the LTTE simply withdrew to the countryside and refused to resume negotiations, despite the apparent strength of the Government's new strategic position. Its real weakness was revealed when it became obvious that the concentration of forces to attack Jaffna had left vast areas effectively unpatrolled and open to LTTE control. For the next few months engagements continued as the Government struggled to maintain its hold both on the peninsula and the eastern provinces. The SLN played a vital role in sustaining supplies to the Army, one which did not go unrecognised by the Tamils.

On 31 March 1996 a convoy from Trincomalee to Jaffna was attacked by a flotilla of ten LTTE fast boats. In the engagement that followed one of the *Dvoras* was rammed and sunk by a Sea Tiger suicide boat.<sup>68</sup>

As was becoming almost routine, this naval engagement to protect the lines of supply was the curtain raiser for Operation *Riviresa Two* to dislodge the Tamils from the eastern areas of the Jaffna peninsula, launched in April 1996.<sup>69</sup> This achieved some success, although the heavy losses and the overall scale of operations put an increasing strain on the Sri Lanka armed forces. The extent of LTTE infiltration was indicated by the requirement to mount Operation *Seda Pahara* (Tidal Wave) in July in order to resecure the areas north of Batticaloa on the central east coast. Any gains made in this operation were soon rendered trivial by the LTTE's victory at Mullaituvu, which was over run on 18 July with the loss of over 1200 Government personnel.<sup>70</sup>

Aside from the effect on morale, the occupation of Mullaituvu gave the LTTE the contents of one of the major armouries of the Sri Lanka Army and allowed it to rearm itself for the continuing campaign. When the Government launched an attack on the new "capital" of the LTTE at Killinochchi in Operation *Sath Jaya* (Certain Victory), its troops found themselves facing fierce resistance and heavy weapons which could only have come from Mullaituvu.<sup>71</sup> Killinochchi fell to the Government on 1 October 1996, but the war was very far from over.

### **FACING THE FUTURE**

The last months of 1996 found the SLN still heavily engaged in its primary tasks of intercepting LTTE movements at sea and in coastal waters and sustaining the supply of Government forces operating against the Tamils. Strenuous efforts over the previous few years had improved its communications, command and surveillance systems considerably and force strengths had achieved reasonable stability, with losses being made up through transfers of large patrol craft from overseas and an increasingly efficient building programme for smaller vessels in Sri

Lanka itself. Tenders were out for new command and support vessels to replace those lost in previous years. Manpower was under stress but the SLN seemed to be maintaining both morale and efficiency, despite the difficulties of the strategic situation.

Whether or not a workable solution is found to the Tamil question, the SLN's future remains uncertain. The Navy has made considerable gains in raising its profile and in educating the Government in the requirements of maritime security. For some years, its senior officers have emphasised the point that the SLN should receive priority in any process of reconstruction, since an island nation with extensive resource zones must inevitably depend upon strong naval defences for its security in the long term.<sup>72</sup> The Tamil emergency has meant that Sri Lanka has yet to exploit its Exclusive Economic Zone in any coherent fashion; a more stable political environment could see rapid and highly profitable development. This would certainly require the SLN to rebuild a true seagoing capability in the form of offshore patrol vessels, even if more sophisticated weapons and sensors were not immediately required.

The problem for the SLN is two fold. The first is the issue of the relative positions of the Army and the Navy in Sri Lanka. In a period of inevitable retrenchment, the Army is unlikely to accept reductions at its expense, however pressing the strategic arguments of the SLN. The second, and perhaps more important point is the economic question. Although the Sri Lanka Government was for several years relatively successful in minimising the budgetary costs of the insurgency, sometimes to the extreme frustration of the hard pressed armed services, that effort began to fail in 1995. Defence spending increased rapidly as resources were devoted to preparing for the major offensives against the Tamils and the hard fighting which followed forced renewed injections of funds to cover munitions and equipment costs. The situation worsened in 1996, with a 36% overshoot on the budgeted defence expenditure and an increase in the budget deficit from an intended 7.8% of the GDP to nearly 12%. Even with Sri Lanka's relatively encouraging economic growth, these figures could

not be sustained indefinitely and will require retrenchment within the armed services at the first opportunity.<sup>73</sup> With so many soldiers requiring resettlement, the Government's priorities would be in other directions than the acquisition of expensive major units for the SLN.

The Sri Lanka Navy will probably be forced to bide its time, retaining the most effective of its current force of large and small patrol craft, and developing greater expertise in offshore operations. Many other countries have had reasonable success in EEZ surveillance with patrol craft no larger than the *Hainan* and *Shanghai* classes and the SLN at least has the present advantages of reasonable force strengths and experience of demanding operational cycles. A little, as the SLN has known since the beginning of the Tamil insurgency, can be made to go a long way.

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# 9

## **REFLECTIONS ON FIFTY YEARS**

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By the time this book appears in print, the Indian and Pakistan Navies will be on the verge of celebrating in August 1997 the fiftieth anniversary of their creation as separate entities and the beginning of their existence as part of the armed forces of independent nation states. The same anniversary will follow soon after for the Sri Lanka Navy. That of Bangladesh celebrates its quarter century in 1996.

This coincidence of calendars is a neat analogy for the many similarities in the historical experiences of all four services. Some of these similarities have obvious roots in the shared origins of the quartet of navies and their relationship with the British Royal Navy. Less direct, but no less significant, have been the complex issues of policy and decision making in relation to national armies and air forces and to the arms of governments which were themselves built upon and profoundly influenced by the practice and ethos of British colonial government. Perhaps the single most important abiding theme of this study of South Asian navies has been their progressive refashioning

from externally conceived and created organisations into something distinctly national in form and function.

The first driving force for such change was the obvious one of time and distance. As the extent of British involvement lessened, particularly through the reduction of training activity with the Royal Navy, so did the instillation of the British system of naval culture. This process had always been more subliminal than intellectual. Thus, because much of the framework within which the navies operated had been received rather than completely understood, it took time for the services to work out strategic policies and operational doctrine of the necessary sophistication, let alone relevance. Here the greatest challenge was to determine what within the old "Imperial" scheme of thinking had to be retained and what discarded without the distortions of anti-colonial sentiment.

They were not alone in this dilemma. If the navies have had to refashion themselves to meet national needs, it should be clear from this study that equal, if not greater changes were required within other components of defence and government to meet contemporary realities. In this, the four navies may have been more successful than many other groups. It is notable that both India and Pakistan retain defence organisations which very clearly retain the form and limitations of the former colonial administrative structures and which, despite repeated efforts and some political urging, have yet to be refashioned to meet modern requirements.

For India and Pakistan, the problem of meeting national and naval needs at the same time was demonstrated during the first fifteen years after independence, when both navies became involved in what was very much a twilight world of western force structures, which was never in retrospect what the services wanted or wholly required. Yet there were advantages to the arrangement. The British and, for Pakistan, American connection allowed the operation of ships and equipment and the maintenance of technical and operational standards which would not otherwise have been possible. Informal involvement within the Western alliance's anti-submarine effort may also have simplified

the life of governments content to exist in a region within which great power maritime activity was largely confined to the residual and friendly British presence. The two services were given a reasonably well-resourced and largely undisturbed time to expand their personnel base and train the leaders of the future. This strategic hiatus did, however, mean that the navies were progressively confined more and more to the margins of decision making as armies and air forces focused upon local threats and justified their control of the lion's share of defence budgets on that basis.

The situation could not last and events pushed both navies towards new force structures based wholly on local requirements and towards the development of indigenous doctrine. Conscious of their limitations, since a small navy can never be capable of generating a solution to every problem, the IN and PN would have been happy to utilise Western operational and tactical procedures had these been made available to them. What became obvious during the 1950s, however, was that neither country was being allowed the privileged access to the latest methods and equipment available to Commonwealth countries which were fully integrated within the Western Alliance. Even Pakistan's membership of the South East Asia Treaty Organisation was more on the basis of a second eleven as far as maritime operations were concerned. Furthermore, the allocation of ships, when it enjoyed any kind of priority or reduced costs, was as often as not decided not on the basis of Indian or Pakistani judgements, but on what Great Britain or the United States thought appropriate for them. Had either service possessed the hard currency to pay for new construction outright, the relationship would have been very different.

The only way out of this conundrum was the development of policies and structures which were not only matched to local needs but were seen to be so matched by observers outside the two navies. This would improve the naval position in the allocation of defence funds. For a time both the Indian and Pakistan Navy were caught in a strategic "Catch 22". Because neither possessed the ships or systems

which were seen to be directly relevant to immediate defence needs, both were excluded from the higher levels of planning. Because they were so excluded, it was almost impossible to secure agreement to the purchase of units which did meet those perceived immediate needs. In these circumstances, it was not surprising that the initial emphasis would be the navy's ability to deal with existing and developing threats and for both India and Pakistan this has more often than not meant each other. Even in the mid-1990s, much of the open press rhetoric regarding force structure needs is pre-occupied with particular systems and capabilities, such as Indian concerns over the prospect of Pakistan obtaining *Harpoon* missile equipped maritime patrol aircraft.

Nevertheless, there has in the last decade been an increasing sophistication in making the naval case, particularly in India and a focus on national interests as much as threats. This has been made possible largely because of the more or less rapid development of maritime activities in fishing, merchant shipping and offshore resources. All of this is closely associated with the inception of the Exclusive Economic Zone and the new regime of the Law of the Sea, which give maritime nations much to protect as well as good reason to protect it. Offshore petroleum and gas exploitation comes at one end of the technology scale, but both commercial and subsistence fisheries have key economic and social roles. With increasing economic strength has come an appreciation of the vital role of maritime trade. All the nations in the region are acutely aware of their dependence upon energy imports, while it is shipping which carries an overwhelming percentage of the export trade throughout the region.

Operational doctrine has undergone similar evolution. The IN seems to have been shocked into this by the purchase of ships from a country which had no intention of providing any accompanying information as to their operation in the tactical environment. Whether or not the USSR missed a chance to achieve a position of influence, it did mean that the Indian Navy moved rapidly away from a reliance upon other navies and towards developing its own concepts

and methods. The same process was achieved by the Pakistan Navy somewhat later, first through the development of its own submarine forces, both conventional and midget, with very specific missions and roles, and then in the creation of procedures and tactics to utilise the over the horizon capabilities of surface to surface missiles. In an inevitably less sophisticated fashion, the Bangladesh and Sri Lanka Navies have done their best to develop doctrine to meet their own needs.

That increasing sophistication at both strategic and operational levels has meant that navies have begun in their turn to influence defence strategy and generally in a beneficial way. Naval rhetoric, particularly in Pakistan, has on occasion outrun the realities of national performance in making use of the maritime environment, but naval staffs have been reasonably adept at recognising wider strategic realities and changes in the world around them. The insistence that national defence has a wider dimension than simple territorial protection has been a constant. Even in the early days of association with Western anti-submarine warfare policies, the Pakistan Navy developed and retained a much clearer perspective of Pakistan's weak strategic situation and the direction in which the country was headed than did the dominant Army. In the India of the 1990s, there can be little doubt that the Indian Navy will be playing a leading role in the creation of national policies for external security.

### **MEETING THE NEED**

Even so, the South Asian navies have and probably will always face a disparity between their assessment of strategic requirements and the national capacity and readiness to pay the bill. The attempt to face this problem and its implications has been the second recurrent theme within the history of all four services.

The degree of success which each service has enjoyed has varied dramatically over time but the availability of money, while key to the process, has never been the sole determinant. While the Indo-Pakistan 1971 War, in particular, demonstrated the importance of technology—

a judgement reinforced by the experiences of others in the Falklands War of 1982 and the Gulf War of 1991—it also made clear a very different lesson. *Vikrant's* activities showed that even very limited capability has merits when facing an even more limited opponent. In other words, it is sometimes better to be able to do something badly than not to be able to do it at all. The point has been noted by commentators in relation to India's determination in the 1980s to possess the ability to limit and influence super power naval activity in the Indian Ocean.<sup>1</sup> Pakistan gave an early demonstration of this reality in 1965 when the single, elderly and second hand submarine *Ghazi* placed considerable restrictions upon the operations of Indian forces in the Arabian Sea. Similar thinking was evident when the Bangladesh Navy obtained cheap and unsophisticated missile craft to provide some sort of deterrent capability in offshore disputes. This approach is alien to much contemporary naval and military doctrine, which has for the last thirty years operated under the influences of systems analysis and the concept of "cost effectiveness" but it is one which will be familiar to the smaller and poorer armed services of the world.

On the other hand, even with such an approach to their force structures, the four navies have never found existence easy within the economic and social circumstances of the region. This has not been simply a matter of navies placing excessive financial demands upon limited national budgets. The problem has been one of the nature of those demands rather than their scale. A perennial shortage of hard currency has been the most obvious factor. The record of both the IN and the PN is confirmation of the dictum that only first class industrialised powers can possess the capacity to create and sustain sophisticated naval forces without extensive overseas assistance. It was the need for such assistance and not geo-political strategic considerations, which finally pushed a reluctant Indian Navy into purchasing submarines and missile equipped combatants from the USSR. Pakistan has been forced to concentrate its limited funds on a submarine service at the expense of surface forces. While India has experienced

the frustrations of attempting to maintain a supply line with the fragmented and disorganised states of the former Soviet Union, the Pakistan Navy has been even more severely disrupted by the repeated American bans on military assistance, forcing the withdrawal from service of a whole class of major combatants. Bangladesh has repeatedly been forced to seek 'bargain basement' purchases to maintain adequate operational forces and Sri Lanka's long civil war has hamstrung the Sri Lanka Navy's attempts to re-develop any substantial seagoing capabilities for EEZ protection.

One result of these difficulties is that the four navies adopted what was essentially an opportunistic approach to arguing their cases for expansion and selecting the ships and systems to achieve what development has been allowed them. The criticism has been that the navies tended to decide the force structures they wanted before determining their actual requirements. This was certainly true in the earlier years of the Indian and Pakistan Navies but it was true in an era when strategic assessments were generally unsophisticated at the national level, if they were made at all, and when the fragmented and factional nature of defence decision making and financial allocations forced an essentially hand to mouth approach on naval staffs. Such tendencies have not and probably never will disappear entirely but they are on the wane. A utilitarian approach is now prevalent within all the services.

### **FINDING THE TOOLS**

Less obvious are the difficulties which a navy faces in existing and operating effectively within a developing nation state. Its maintenance and operation are demanding in physical infrastructure and skilled personnel, both of which are needed elsewhere to support more obviously productive areas of economic activity and both of which are historically in short supply. Even in the 1990s, Pakistan's major naval dockyard and naval base at Karachi lacked key repair facilities and suffered a recurrent shortage of berthing space. The dilemma for governments has been that diverting resources towards the creation of naval infrastructure must be at the expense of more directly productive economic



activity. It is not surprising—or unreasonable—that national security has sometimes been construed to possess other dimensions than naval defence.

Such problems have been magnified by the efforts required to induct new capabilities which require considerable additional investment in specialist facilities and expertise. Pakistan's submarine force and India's efforts to produce an indigenous nuclear submarine and replace its carriers are all examples of highly resource intensive capabilities, whose creation and maintenance must come at a heavy price. Furthermore, even in the maintenance of existing capabilities, infrastructure and training systems have both been constantly subject to the tyranny of technological change. Each of the four services has had to undergo painful self education in the requirements of modernisation and retraining.

The extent to which a navy should commit to in country construction remains a dilemma. The Indian experience has, until very recently, enjoyed mixed results and the long building time and cost over-runs of the Type 1500 209 class submarines at India's Mazagon Dock must give the Pakistan Navy considerable pause for thought at the beginning of the *Agosta 90* project. Whether the new and apparently successful commercial approach of the Indian shipbuilding industry<sup>2</sup> translates into cost effective ships for the Indian Navy is yet to be seen. On the other hand, there may be no other way to secure approval for large scale construction programmes than to justify them at least partially on the basis of national industrial development and technology transfer.

All navies of any scale must make a substantial commitment to technical training but those in underdeveloped countries are often further constrained by the need to supplement national education programmes in order to provide an adequate number of sufficiently literate new entries. The industries which are brought into being to support naval activities can experience the same problem. Even then, successful industrialisation and economic growth bring further difficulties as both officers and sailors, as well as dockyard workers, are drawn away by the better

pay and conditions available outside the service. The Indian Navy's shortage of technical officers in the 1990s suggests that this fifty year old problem may never wholly be solved.<sup>3</sup> The experience of more developed nations is that it will not.

### **THE FUTURE**

Whether the region's navies experience a "continuing on of the same" or a shift in their priorities and force structures must depend upon the end, or at least the reduction of the long standing disputes between India and Pakistan and on the resolution of the civil war in Sri Lanka. Even their containment would improve capacity to meet the emerging needs of the future.

One unresolved issue, unresolved because its full implications are only just emerging, will be the relationship between navies and coast guards. The terrorist attacks in Bombay and the Palk Straits patrol requirements are problems at one end of the scale, but there are a host of matters which will require resolution over the next decade as economic exploitation of maritime zones increases, the sea becomes ever more a "permeable border" with the movement of economic refugees and environmental protection becomes increasingly important and prominent.

Those needs must relate to improved surveillance and command and control, not only to watch over Exclusive Economic Zones and internal waters but to exploit the potential of existing and potential systems. India and Pakistan, in particular, already possess at least partial access to some of the most capable weaponry in the world and their force multipliers must now be not so much the acquisition of new or additional weapons but in improving their ability to make use of existing systems to their full capacity. This will have obvious implications for operational cycles and sea time. The other part of this equation relates to support infrastructure, not only in spares and maintenance organisations but in training systems. The Indian Navy is embracing simulation and it is arguable that the benefits of realistic computer training will be even more extreme for smaller, resource limited services than it has already

been for the major navies such as that of the United States.

A related tendency, provided that the security environment allows, will be greater integration and co-operation with regional navies. India has made the point that foreign exchange can be saved by judicious sharing of assets for work such as hydrography and oceanography but there are also clear economies of scale. This can only build on the long traditions of both India and Pakistan in providing training for foreign navies.<sup>4</sup>

The form of all the navies will inevitably change, perhaps none more so than the Indian Navy. The IN must deal with the question of structural over-extension. Unless there is a marked improvement in the funding for the navy, and neither India's improved economic position or changes in defence structures make this likely, then a choice will have to be made in favour of either the carrier force or the nuclear submarine programme. The time is rapidly approaching when an attempt to do both may result in neither being achieved at all. The direction which the IN will take must remain uncertain but there is one straw already in the wind. Environmental issues were raised with the *Chakra* in the late 1980s; a decade later the difficulties which Russia, the United States and the United Kingdom have experienced in disposing of old nuclear units have indicated that there is much more to through life costs than construction and maintenance. At a time when a medium power such as the UK is considering a movement away from nuclear boats in future construction<sup>5</sup> the Indian Navy must have much food for thought.

All four services will have to reduce manpower to restrain costs. The newest units entering service have little space for the semi-skilled; the wages paid the skilled must match those in society at large. This effect has already had a considerable effect on the navies of the West, but it is now apparent in South Asia. Sri Lanka's recent grant of a progressive pay rise of 50% over two years to its armed forces is an indication of the scale of the problem and, at \$US 143 million per annum, the cost.<sup>6</sup> In consequence, there may well be a drive to remove older ships from front line service which would otherwise have been retained.

The Bangladesh Navy will probably be the last of the seagoing navies to experience this effect but will not be free of it indefinitely.

All in all, the challenge for the navies of South Asia will be to determine where the balance must be struck between the essential and the merely desirable. This is not a simple matter in any nation, but it becomes even more challenging in developing countries with continental preoccupations, in which a navy is not easily recognised as a first line of national defence and whose requirements are demanding on limited national infrastructure and expensive to meet. That situation has changed elsewhere and is changing in South Asia. The experience of the "Tiger Economies" of South East Asia, more than any other region in the recent past, has shown that economic development provides the key to rational and practical naval development and, if there has been a subtext to this whole study, it is the confirmation of Paul Kennedy's truism that "maritime strength depends, as it always did, upon commercial and industrial strength."<sup>7</sup> The opportunity for naval services at the end of the twentieth century is that the relationship between maritime activities and economic achievement has never been more acutely defined and the nature of and need for the protection of those activities never more obvious.

#### NOTES

1. See Paul George "Indian Naval Expansion" Working Paper No. 32, The Canadian Institute for International Peace and Security, Ottawa, Canada, February 1991. p. 8. See also *Jane's Defence Weekly* 3 December 1988.
2. "We Can Take the World on Its Terms: Interview with D.K. Varma, CMD of Hindustan Shipyard" *Maritime International* Vol. II, No. 8, August 1996. pp. 28-29.
3. *Jane's Defence Weekly* 26 February 1994. p. 16.
4. See Rear Admiral K.R. Menon "Maritime Developments and Opportunities in South Asia" *Op. Cit.* pp. 42-43 for a discussion of co-operative activities already engaged in by the IN.
5. "Future UK Boats may not be Nuclear-Powered" *Jane's Defence Weekly* 23 October 1996. p. 12.
6. "Sri Lankan Salary Boost" *Jane's Defence Weekly* 4 September 1996. p. 5.
7. Paul Kennedy *The Rise and Fall of British Naval Mastery* Macmillan, London, 1983. p. 337.

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