

2

A MARITIME RESURRECTION GETS UNDER WAY

Plans for the Navy's Development and Expansion of The Naval Squadron into a Fleet

The RIN's Raison d'Étre

The renowned theorist of sea power, Admiral A.T. Mahan (1840-1914), laid down six important factors contributing to the growth of a naval power: geographical position, physical conformation, extent of territory, population, national characteristics and Governmental institutions, besides scientific achievement and industrial strength. At the time of partition, India possessed nearly all these factors, barring perhaps the last two, in adequate measure. She was in a position to formulate and adopt a suitable policy to set up a number of national institutions, develop her industry and evolve a scientific temper conducive to designing and manufacturing state-of-the-art weapons, weapon systems and weapon delivery platforms such as ships, smaller craft, aircraft and helicopters for the Indian Navy. In 1945 Sardar K.M. Panikkar, the distinguished historian, wrote in his *India and the Indian Ocean*:

In modern times no country can be a great naval power unless its

science of nautical engineering is of the highest standards and is continuously keeping up with improvements elsewhere: if the industrial potential of the country is not large enough to produce not merely the necessary warships and auxiliary craft, but a hundred other things required for its efficient equipment and maintenance . . . it will take her (India) many years before her industry can reasonably be expected to undertake the building, equipment and maintenance of a great navy. Equally her scientific work will have to be improved and extended many times before it can shoulder independent responsibility in these matters. . . . With these limitations it is obvious that India must have both a long-term and a short-term policy in regard to naval matters. The long-term policy can easily be laid down. Its object will be to develop India as a naval power capable by herself, of defending her interests in the seas vital to her and of maintaining a supremacy in the Indian Ocean area. This objective can be attained only when India has emerged as a major industrial power, with her scientific achievements and technological skill equal to those of other advanced countries. . . . The short-term policy (would be) the development of a balanced regional navy capable of, (a) operating as a task force within its own area, and (b) co-operating with the high sea fleets of friendly nations in the strategy of a global naval warfare. As a regional navy its purpose will be to keep inviolate and free from enemy action, the seas vital to India, the Bay of Bengal and the Arabian Sea, to protect the commercial routes, to deal with raiders, keep the sea clear of submarines and mines, and afford protection to shipping. . . . There is no reason why a small, efficient and well-balanced Indian Navy should not secure control of the Bay of Bengal and of vital stretches of the Arabian Sea.

In order to achieve this aim within a reasonably short period, Panikkar recommended that the Indian Navy:

must, in the first place, develop her training institutions for *all types* of naval warfare. Without an adequate supply of trained personnel, no navy, big or small, can be created . . . The second step is the acquisition of light crafts, frigates, destroyers and light cruisers with ancillary vessels, which constitute the effectiveness of a small navy. If the navy is well-organised and amply supplied with these vessels, its expansion in times of war would present no difficulty. Thirdly, India must develop, as fast as she can, a merchant navy which would provide the necessary reserve of the skills and also vessels which could be converted in times of war. Fourth, at all costs, she must develop her own shipbuilding industry, for a country which has to buy all her vessels

outside cannot be a naval power. The ground organisation of dockyard, repair establishments and other institutions which a navy implies has to develop side by side with this.

Equally important, especially for a country like India with a vast coastline, is the development of a naval air arm, as an integral part of the sea forces. The function of the air force should not be confused with that of the naval air arm. The air force is an independent service whose objectives are governed by other factors. The naval air arm has an important part to play in naval warfare, by patrolling the coasts, by keeping the sea clear and affording air cover to the navy. Its main duty is to sweep the air over the sea approaches and work in co-operation with the navy.

Post-World War II Development Plans

In the changed circumstances prevailing at the time of the cessation of hostilities in 1945, the tasks and responsibilities of the then Royal Indian Navy, as envisaged by the Chiefs of Staff Committee in its *Report on the Size and Composition of the Post-War Forces in India* which was prepared a year before the war was over, were significantly different from those postulated by Panikkar whose book was published in the same year. The differences in their points of view apparently arose from the fact that the Committee was deliberating on the future of a dominion navy, as the status of the Service then was, while Panikkar, after taking into account the winds of change blowing across the subject nations of Asia at that time, was attempting to concretise the shape of the navy that independent India should have.

The Committee conceded the fact that India's unique and strategically significant position in the Indian Ocean rendered her particularly sensitive to the need for an increased naval force with larger and more versatile warships than the RIN possessed as a *de facto* satellite of the RN. It felt that these ships would adequately represent India in other parts of the Commonwealth and foster better relations with the 'Empire'. The tasks and responsibilities of the RIN, the Committee felt, should be confined to those of a dominion navy, i.e., a navy mainly responsible for coastal defence. Hence, the primary post-World War II responsibilities of India's navy would be the safety of Indian and 'Empire' shipping in the sea areas contiguous to India's coastline, their approaches and the trade routes in the Indian Ocean. The RIN, the Committee felt, would also be responsible for the combined operational training of the Indian Army's specialist amphibious formations and for providing escort and assault ships and craft for landing these formations on hostile shores, whenever necessary, for which a nucleus force of assault ships and craft as well as a training organisation

was to be maintained. Besides these, the Navy, in conjunction with the Air Force, was to ensure neutralisation of any foreign invading force attempting a landing on the shores of India by timely interception and neutralisation of such threat. It was also essential for India's navy, the Committee felt, to have an adequate air component which was to be used for seaward reconnaissance and as a striking force to support surface forces.

The threat perception of the Committee was restricted to one country, viz., the USSR, since the launching of a war by Russia against Great Britain was considered a possibility at that time. It was assumed that the brunt of the attack would have to be borne by India, even if she was granted freedom, because she was likely to continue as a member of the Commonwealth.

Based on the assumption that the RIN had a limited coastal defence capability and a modest seagoing strength with obsolescent ships, weapons and equipment, the Committee recommended the creation of a complete force comprising one squadron of three cruisers, a destroyer leader with a flotilla of eight destroyers, one eight-ship training flotilla of sloops, one eight-ship flotilla of frigates for miscellaneous duties, eight Bangor/Bathurst class minesweepers and eight motor minesweepers (MMSs). As regards smaller amphibious and auxiliary craft, a total strength of eight motor torpedo boats (MTBs), eight motor launches (MLs), eight harbour defence motor launches (HDMLs), two hydrographic survey vessels, along with auxiliaries, trawlers, assault ships and craft and one repair ship, was considered essential.

The case for the expansion of the RIN received support from various quarters. These included a detailed proposal submitted in 1944 by Vice Admiral J.H. Godfrey, Flag Officer Commanding the RIN (FOCRIN), to the Reorganisation Committee on the 'Future of the Royal Indian Navy', some papers and reports on the subject prepared immediately prior to and after World War II; communications from the then Viceroy of India, Viscount Wavell, to the then Secretary of State for India, Mr Amery; statements made by the Viceroy, Viscount Mountbatten, in 1947, at a meeting of the India and Burma Committee and certain other papers prepared during this watershed phase in the chequered history of the Navy.

The recommendations made for the expansion of the service included weapon platforms operating in all three elements with aircraft carriers and submarines, for developing it into a viable dominion naval force. This force was to be deployed for India's coastal defence as a vanguard of Commonwealth interests, tied to the apron strings of the Royal Navy, with the British Admiralty continuing to exercise monopoly over the Indian Navy's jugular by way of supplying ships, weapons, equipment, maintenance facilities, training technology and even its tactical philosophy.

The Post-Independence Metamorphosis in Strategic Philosophy

When, however, Independence came on August 15, 1947, the threat perception underwent a metamorphosis and plans for the future Indian Navy consequently underwent considerable change. Undivided India's navy had in commission by mid 1947, six sloops, four frigates, one corvette, 16 minesweepers, six trawlers, one survey vessel, six motor minesweepers, one motor launch, eight harbour defence motor launches and a fleet of landing craft. But after partition India's fledgling naval fleet comprising roughly two-thirds of the strength of the RIN, consisted of four sloops, two frigates, one corvette, 12 minesweepers, four trawlers, one survey vessel, four motor minesweepers, one motor launch, four harbour defence motor launches and all existing landing craft. With a coastline exceeding 6,000 kilometres in length, to the Arabian Sea, the Bay of Bengal and the Indian Ocean, and proximity to countries which, if turned belligerent, could threaten her sea lanes and coastal waters, India needed to expand her navy quickly and tailor it to suit her requirements of maritime strategy.

Within a week of the country attaining Independence, therefore, an *Outline Plan for the Reorganisation and Development of the Royal Indian Navy* was prepared by Naval Headquarters. In its preamble, the plan paper said:

The Navy and Army of India as united forces have existed for over 300 years. The Army at the date of partition numbered some 480,000 men and was fully equipped as a modern fighting machine. The RIAF has existed for 10 years and at the date of partition possessed some 11 squadrons. The Navy, by contrast, possessed but a handful of small ships.

The reason for this state of affairs is to be found in the fact that the Government of the past needed troops, and to a less extent aircraft, both for the defence of India and for its policies abroad whereas it relied entirely on the Royal Navy for its major naval defence.

India, till recently, has been little interested in her overseas trade nor has she appreciated her position in world strategy as the focal country of the Indian Ocean area.

Today all is changed. India intends to develop and probably to reserve her coastal trade; she has plans for the expansion of her overseas ocean-going shipping upto 2,000,000 tons within five years; she aspires to a position of pre-eminence and leadership among the nations of South East Asia.

These plans and aspirations will entail obligations and commitments. Peace-loving India will never attain security or pre-eminence

till she is in a position to maintain her position against every aggressor. India stands at the threshold of a new era - an era of industrialisation, of contacts with foreign countries never dreamed of in the days that are past, and a fast expanding overseas trade. A Navy commanding the respect of the world is not a luxury for her but a vital necessity.

The ships that independent India's navy at that time had were the sloops *Kistna*, *Cauvery*, *Jumna* and *Sutlej*; frigates *Kukri* and *Tir*; corvette *Assam*; minesweepers *Orissa*, *Deccan*, *Bihar*, *Kumaon*, *Khyber*, *Rohilkhand*, *Carnatic*, *Rajputana*, *Konkan*, *Bombay*, *Bengal* and *Madras*; survey ship *Investigator*; trawlers *Nasik*, *Calcutta*, *Cochin* and *Amritsar*; motor minesweepers *MMS 130*, *MMS 132*, *MMS 151* and *MMS 154*; motor launch *ML 420*; harbour defence motor launches *HDML 1110*, *HDML 1112*, *HDML 1117* and *HDML 1118* and a large number of landing craft. Out of these, the sloops and frigates had some small operational utility and two minesweepers, two motor minesweepers, the motor launch and the harbour defence motor launches could, if required, be used only as tenders to training establishments. The remaining 10 minesweepers were of no real value as they were already obsolescent and had been laid up at Trombay near Bombay since the end of the War. Most of the landing craft too had very little potential left. India's navy would have to be, therefore, virtually reconstructed from scratch.

As visualised at that time, the eventual role of the navy of India would be:

To safeguard her shipping on the high seas from interference in war; to ensure that supplies can both reach and leave India by sea in all circumstances; to keep open her ports and coastal shipping routes; to prevent an enemy landing on her shores; and to support the Army in any operations which may be required in furtherance of the national policy.

So long as India remains within the British Commonwealth of Nations, her task will be very much lightened by the assistance she will receive from the Royal and other Dominion Navies. But even in these circumstances, she will be expected and indeed she will wish to contribute to the general Naval Defence of the Commonwealth in accordance with her status as the Principal sovereign state in the Indian Ocean.

The immediate task before us, therefore, is to build up, in the shortest time, a balanced naval task force, officered and manned by Indians, which is capable of exerting, when the need arises, a definite influence on Eastern waters. The minimum force which would be likely to achieve this object would be two light fleet carriers (cost about

own or adjacent territory and provision of assistance to India's army and air force in combined amphibious operations.

In order to determine the size of the navy that Independent India would require to fulfill these functions, the two possible forms of war that India could be engaged in, were taken into account. These could be either another world war, though its probability was considerably remote, or a localised war, involving neighbouring countries with or without the support of a superpower with global ambitions. In the case of a world war, India, it was felt, was likely to remain neutral but her important strategic position, commanding international sea lanes could draw her accidentally into an unintended involvement. In such an eventuality, there would be consistent enemy submarine activity against merchant shipping and warships and sporadic raids by fast surface units. Hence it was felt necessary that India should possess a navy strong enough to repel sea-borne attacks on her merchant shipping, coastal forces, ports and installations.

In the case of a localised war, it was felt that India would require a navy stronger than that of any other neighbouring country or combination of countries in the neighbourhood. In times of war such countries would be dependent on vital sea-borne supplies which could be quickly strangled by blockades and further harassed by vigorous naval activity and amphibious operations along their coasts. For this purpose a navy strong enough to meet these eventualities was considered essential.

However, since India had just gained her independence and thus could spare only a limited amount of her meagre financial resources for the development of her navy, in view of other important commitments such as social reform, industrialisation, etc., her navy had to be confined to the minimum size and strength necessary to safeguard her vital commitments and interests.

The experience of World War II had made it abundantly clear that the hard fighting core of a balanced fleet consisted no longer of battleships but of aircraft carriers. The most powerful fighting force at sea now was the carrier task force generally comprising four fleet aircraft carriers, with four cruisers (or, in the absence of these, battleships) and 16 antisubmarine, antiaircraft, radar and general-purpose-type destroyers as escort. The proposal therefore recommended a balanced naval force for India spearheaded by aircraft carriers.

According to the battle philosophy of the late 1940s, aircraft carriers provided the main striking power of such a force but since the aircraft carrier herself was highly vulnerable due to her light armour and inability to carry heavy guns, cruisers were provided as escorts for cover against surface attacks and to augment antiaircraft fire against enemy air strikes. Destroyers were also stationed on the outer screen which, in addition to providing

cover against air and surface attacks, provided the all-important submarine screen and acted as a radar picket to give early warning of the approaching enemy. Battleships had by now become obsolete and had been reduced to large slow-moving targets that were likely to fall easy prey to the latest armour-piercing shells of the long-range rapid-firing guns borne on cruisers, destroyers and frigates.

It was recommended that the Indian Navy begin its expansion and modernisation with the acquisition of two light fleet carriers, which were smaller vessels whose complement of aircraft was about half that of fleet carriers. These two light fleet carriers would be replaced by two fleet carriers. Eventually, four fleet carriers would be acquired, the aircraft complement of each carrier being two 16-aircraft fighter squadrons and two 16-aircraft strike squadrons.

In the strategic perception during the 1940s, the biggest threat to merchant shipping was expected from the submarine and hence a large number of fast escorts in the form of destroyers and modern frigates became imperative for guarding convoys and for patrolling at focal points. Therefore, a nucleus force, capable of rapid expansion in war, of four destroyers with three frigates retained for training in this form of warfare was to be set up. In order to protect the convoys against the new fast submarines which had been acquired by some navies, it would also be necessary to provide air escorts. Aircraft carriers would escort each convoy or be stationed at suitable positions on important convoy routes. But instead of requisitioning additional carriers for the purpose, the carriers acquired for the task forces would be diverted, whenever required, to carry out this task.

Since cruisers could also be used as escorts for aircraft carriers or important convoys for defence against heavy surface craft, two training cruisers were to be acquired. In an emergency, these two cruisers could also be employed for trade protection duties.

Should relations with another power be strained or on the outbreak of hostilities, ships employed on training duties could be used for local naval defence. Merchant ships from coastal trade could also be requisitioned and converted rapidly for antisubmarine, escort and minesweeping duties.

Four harbour defence motor launches were to be retained from the existing fleet for sea training of Boys during the period of their training in shore establishments. In addition, the six frigates recommended for retention for training in escort duties were to be used for training of ratings in the first instance, until an adequate number of cruisers had been acquired. Of these, two frigates could be used for the training of Boys and one for the training of engineroom and electrical artificers. As mentioned earlier, the other three frigates would be used for training in antisubmarine warfare.

Besides these ships, the specialist schools in the various training estab-

lishments that were being set up all along the Indian coast, would also require ships for specialist training. Of the existing fleet at the disposal of the truncated RIN, one anti-aircraft sloop was to be used as a gunnery training ship and one frigate as a torpedo firing ship. A converted landing ship for tanks was to be used as a radar training ship; one anti-aircraft sloop as a navigation training ship and an anti-submarine frigate was to be used as an anti-submarine training ship.

As regards the shore establishments that were proposed to be set up for training in naval aviation, it was felt that a total of 82 aircraft would be required out of which 22 would be used for basic flying training, 30 for operational flying training and the remaining 30 for training in naval air warfare. In addition, a few squadrons of aircraft would have to be positioned at naval bases where ships were likely to be stationed and at the site of the Gunnery and Navigation Schools for training purposes. Hence two Fleet Aircraft Requirement Units (FRUs) would have to be set up, one on each coast. The Unit attached to the training schools on the West Coast would require 14 aircraft and the second Unit on the other coast would require 10, making a total of 24 aircraft for fleet requirement purposes.

During World War II the immense value of landing craft in naval warfare had been established. Many important operations undertaken during the war had begun with amphibious operations and an appreciable proportion of the total personnel of the various navies had been employed in combined operations. Therefore, it was decided to establish and maintain a landing craft wing in India's navy. But the establishment of a large wing of this type was not economical in peace, as these craft have a short life-span and are both difficult and expensive to maintain. It was therefore decided to set up a small landing craft wing, with 30 such craft of different types, comprising one landing ship for tanks (LST), one landing ship for infantry (LSI), four landing craft for tanks (LCTs), eight landing craft mechanised (LCMs), eight landing craft for assault (LCAs) and eight large landing craft for personnel (LCPs).

In order to carry the war into the enemy's waters, to deny his fleet access to his advanced coastal air bases for refuelling and repairs and to prevent him from attacking India's ports and cities it was felt necessary to develop the capability of operating India's fleet for prolonged periods, far from its main bases. For this purpose, the navy needed support ships such as tankers, store carriers, repair ships, depot ships, air sea rescue launches, battle practice targets, barges, lighters and certain other types of small craft. According to the proposal, the navy would need three 10,000-ton tankers for replenishment of fuel at sea, as each carrier would require 5,000 tons of oil fuel and aviation spirit and each cruiser 2,000 tons of oil fuel; two store carriers would be required for naval stores, naval armament stores and

victualling stores; one repair ship would be needed to undertake minor repair of larger ships and all types of repairs for destroyers at sea; two depot ships would be necessary for the submarines, each depot ship providing the normal amenities of life for submarine crews, acting as the parent ship and repair ship to each submarine flotilla; two hydrographic survey vessels would be required for preparing hydrographic charts of the sea areas contiguous to the long Indian seaboard, and for locating and defining new navigational dangers for the navy and the mercantile fleets in peace as well as for surveying advance bases for operations. The survey vessels would prepare special data on such navigational aspects as beach extent, beach gradients, etc., and, if necessary, operate as frigates, after due conversion, in war; eight tugs - four at Bombay, two at Cochin and two at Vishakhapatnam - would be required for berthing duties for heavy ships and 'rescue' duties in war; for gunnery practice at sea, the navy would require four battle practice targets and four high speed battle practice targets; eight air sea rescue launches would be required for rescue of personnel in the event of an aircraft crash into the sea; 16 amphibian aircraft, eight for each coast, would form two air sea rescue squadrons, for use in areas not accessible to air sea rescue launches. These squadrons would also engage in coastal reconnaissance in areas not heavily defended by the enemy. A squadron of 16 transport aircraft would be needed for expeditious transportation of personnel and stores between various bases and, in an emergency, for reconnaissance purposes when aircraft from the air sea rescue squadrons were not available; three dredgers of various types would be necessary for dredging the entrance to naval harbours, basins, docks, etc., and approaches to berths and jetties; certain other minor craft such as self-propelled barges for stores and oil fuel, dumb barges, boats, launches, etc., classed as yard-craft, would be required for efficient harbour ship-handling and turn-round operations.

The summary of the proposal to refurbish the post-Independence RIN is given in Table 1.

Table 1. List of vessels, ships and other craft recommended (under the 15 year plan) for refurbishing the post-Independent RIN.

Main Fleet

Fleet Carriers	4	Destroyers	16
Light Fleet Carriers (to be given up when two Fleet Carriers were acquired)	2	Submarines	16
Cruisers	4	Fighter Aircraft	128
		Strike Aircraft	128

Trade Protection and Local Defence

Frigates used as training vessels first instance)	3	Escort Destroyers	(to be in the
---	---	-------------------	---------------

Training Vessels and Aircraft

Cruisers	2	Motor Launch	5
Frigates	3	Service Training	
Destroyers	1	Aircraft	22
Landing Ship (Tank)	1	Operational Training Aircraft	30

Landing Craft Wing

Landing Ship (Tank)	1	Landing Craft	
Landing Ship (Infantry)	1	(Assault) Landing Craft	
Landing Craft (Tank)	4	(Mechanised) Landing Craft	

Fleet Train

Fleet Tankers	3	Repair ship	
Store Carriers	2		

Surveying Service

Survey Vessels	2		
----------------	---	--	--

Other Vessels and Aircraft

Fleet Tugs	8	Communication Aircraft	
Targets	8	16	
Air Sea Rescue Launches	8	Dredgers	3
Air Sea Rescue Aircraft	16	Other minor Vessels	

Resource Limitations Whittle Expansion Plans

This proposal, if approved by the Government of India, was to be implemented over a period of 15 years, i.e., by 1963. However, the limitations of financial resources, the absence of any provisions to offset escalating prices and the gross inadequacy, of training facilities, both for officers and sailors, resulted in the division of the expansion plan into a number of phases. Added to these difficulties was the lead-time required between the indentation of naval hardware and its actual acquisition. For instance, during the late 1940s it took four years to build an aircraft carrier and about two years to build a destroyer. The lead time for training personnel and bringing the level of their performance to an acceptable level too was considerably long. Due to these factors and the compulsions of diverting the meagre financial resources for national development, the 15-year plan was reduced to a six-year plan and the ships and aircraft that were now proposed to be acquired by 1954 were as given in Table 2:

Table 2. List of Vessels and Ships in the revised six-year plan

<i>Warships</i> Light Fleet		Submarines Survey	6
Carriers	1	Vessels Landing	1
Cruisers		Ships (Tank)	1
3 Destroyers (Including <i>Fleet Train</i>			
Fleet	1	Depot Ships Landing	1
Tankers	1	Ships (Infantry)	1
<i>Aircraft</i>	32	Second-Line	24
Fighter	16	Aircraft Training	82

It was also decided to review the position each succeeding year and to obtain Government approval for the development programme progressively six years ahead, a planning procedure which later came to be known as a 'roll-on' plan.

These plans were modified once again to suit the immediate needs of an expanding navy with limited resources and a pragmatic threat perception. The revised immediate objective was to build up a balanced modern naval force, more powerful than the navy of any of the nations situated in or close to the Indian peninsula. This navy would include ships designed for all types of warfare at sea, and would be large enough to provide an appropriate foundation for rapid and sound expansion, to suit the country's changing needs. The essence of the revised proposal was to provide a naval task force based on the updated concepts of naval warfare. It would be sufficiently powerful to exercise an effective influence in the Indian Ocean in the event of hostilities and could also be used for other purposes such as convoy protection, interdiction, contraband control, for blockade, for protection of our coastlines, island territories, offshore interests and sea lines of communication in times of war.

The revised plan envisaged a small balanced carrier task force and reduced its strike content to two light fleet carriers, three cruisers and 12 destroyers. Light fleet carriers were considered suitable for the dual purpose of forming part of an attacking force or for playing a defensive role in escorting convoys. A minimum of two such carriers was considered necessary for a majority of offensive operations. This would provide a sufficient number of aircraft for a strike and, at the same time, ensure sufficient fighter protection for our own forces. Since vessels designed for surface action constitute an essential part of a task force in order to follow up and destroy enemy forces which could be sighted or slowed down but not sunk by carrier aircraft, cruisers would be required to perform these tasks. They would also provide cover against surface attacks and augment anti-aircraft fire against enemy air strikes. For these roles, a minimum of three cruisers would be required for a small carrier task force. As regards destroyers, a carrier task force would have destroyers

stationed on the outer screen, which, in addition to providing cover against air and surface attacks, would provide the all-important submarine screen, a radar screen and early warning of the approach of the enemy. A minimum of twelve such destroyers was considered necessary, eight of these being of the escort type and four of the fleet type (British Battle and Weapon classes) which were more powerful and suitable for offensive operations. In addition, in certain circumstances, a number of cruisers and destroyers of the carrier force could be formed into a surface force and detached for surface action, especially for night operations or during low visibility.

The requirements of all other types of ships, craft and aircraft were also suitably altered to meet the challenges that were likely to be encountered in the immediate future. However, due to the practical limitations concerning the availability of resources and the rate at which personnel for the expanding navy could be trained, it was now proposed to phase the development of the navy over a period of ten years.

Accordingly the proposal made the recommendations as given in Table 3:

Table 3. Recommendations made in the revised ten-year plan

Light Fleet Carrier	2	One in 1954, one in 1956
Escort Destroyers	9	Three in 1949, two each in 1953, 1955 and 1956
Fleet Destroyers	4	Two each in 1957 and 1958
Submarines	4	Two each in 1957 and 1958
		Already with the RIN
	2	Already with the RIN
Fleet Minesweepers	6	Already with the RIN
Landing Ships (Tank)	1	Already with the RIN
Survey Vessels	1	Already with the RIN
Motor Launches	5	Already with the RIN
Minor Landing Craft	28	Already with the RIN
Fighter Aircraft	32	16 each in 1952 and 1954
Strike Aircraft	32	16 each in 1953 and 1955
Operational Training Aircraft	18	12 in 1951, 2 in 1953 and 4 in 1954
Observer Training Aircraft	8	4 each in 1951 and 1952
Fleet Aircraft Requirement		All in 1950
Unit Aircraft	13	
Advanced Trainer Aircraft	10	3 each in 1950 and 1951 2 each in 1952 and 1953 2 each in 1953 and 1955
Air Sea Rescue Aircraft		

Nomenclature Policy Revised

It was at this time that a general policy was formulated for naming ships and craft that were being acquired. According to this policy the names to be chosen were, as a rule, to be of Indian origin and the choice of names was to be based on three considerations - functional, historical and geographical. The functional names would express the function of the ship in naval warfare, the historical names would perpetuate names from India's maritime history and the geographical names would commemorate such Indian geographical features as rivers, mountains and capital cities. Uniformity of nomenclature was to be ensured for each class of ships.

The light fleet carriers were to be named after mountains or peaks such as *Vindhya*, *Vikrant*, *Satpura* and *Gauri Shankar*; cruisers were to be named after the national capital or the capital cities of our principal maritime states, such as *Delhi*, *Mysore*, *Bombay*, *Calcutta* and *Madras*; destroyers were to be named in such a manner that members of each flotilla or squadron would have the same initials, such as *Rajput*, *Rana*, and *Ranjit* or *Ganga*, *Gomati* and *Godavari*; anti-aircraft frigates were to be named after rivers such as *Jumna*, *Sutlej*, *Cauvery* (earlier spelling of *Kaveri*) and *Kistna* (earlier spelling of *Krishna*); anti-submarine frigates were to be named after Indian weapons such as *Khukri*, *Kirpan*, *Kuthar*, *Tahoar* and *Trishul*; submarines were to be named after the various species of fish such as *HUSA* and *Matsya*; minesweepers were to be named after states such as *Bengal*, *Bombay* and *Madras* (earlier name of Tamil Nadu); major landing craft were to be named after ferocious predatory animals, reptiles and birds such as *Magar*, and miscellaneous craft were to have appropriate functional names, such as *Shakti* for a tanker, *Dharini* for a stores carrier and *Bathi*, for a tug.

Further Cuts in Development Plan

The proposals made by Naval Headquarters to the Government in 1948 were approved by the Defence Committee of the Cabinet and adequate funds were made available for the express purpose of replacement of obsolete or obsolescent ships. The first phase of the development plan was formulated in July 1950 which, dictated by financial considerations, catered for the replacement, as stated before, of only a small number of ships. In an attempt to further reduce the expenditure on the Armed Forces of India during the period from 1952-53 to 1955-56, the Armed Forces Reorganisation Committee examined the Naval Development Plan in great detail. It decided to reduce the number of ships to be acquired for the navy during the planned period without making any provision for funds for replacement of ships. According to the recommendations of this Committee, two cruisers were to be acquired (one in 1953-54 and one in 1954-55) besides *INS Delhi*, during the plan period and the acquisition of the carrier was shelved indefinitely. The number of destroyers was to go up to eight including three 'R' class destroyers acquired in 1949 and three smaller Hunt class destroyers to be acquired during 1953-54. In addition, the navy would have, after some replacements, four frigates, two survey ships, eight minesweepers, one store ship, twelve seaward defence motor launches, one dredger, one mooring vessel, two fleet tankers and two tugs.

The former Vice Chief of the Indian Navy, Vice Admiral V.A. Kamath reminisces on the development of the Service:

The Defence Committee of the Cabinet, under the Chairmanship of Pandit Nehru, finally approved the Navy's proposals in 1953. The Service Chiefs were in attendance at the Cabinet Meeting and I, as the Director of Naval Plans, a lowly Commander, was in attendance on the Naval Chief, then Vice Admiral Sir Mark Pizey. I well remember when the Service Chiefs came out of the Cabinet room after the item was approved, the then Army Chief, General Maharaj Rajendra Sinhji, turned to Admiral Pizey and said, "Mark, congratulations! That was the greatest naval victory after Trafalgar!" In the climate then prevailing with regard to spending money on the Armed Forces, especially on the Navy which unfortunately took the lowest priority, this was no understatement.

However, in 1955 the development plans for the Navy had to be revised once again to match the availability of ships and craft from various sources. According to the revised plans and replacement programme prepared under the personal supervision of Admiral Sir Mark Pizey, by 1962 there would only be one cruiser in the Navy, *Mysore*, as the earlier acquisition, *Delhi*, was to become a training ship and replace *Tir* in 1958; there would be no destroyers as the three 'R' class destroyers, *Rajput*, *Ranjit* and *Rana*, were to be attached to training establishments in the Reserve Fleet in 1957; the three escort destroyers, *Godavari*, *Gomati* and *Ganga*, were to be either returned to the British Admiralty as they had been obtained on loan, or consigned to the Reserve Fleet. The Operational Fleet would thus have four Type 41 anti-aircraft frigates, two Type 12 surface escort frigates and six Type 14 antisubmarine frigates, eight coastal minesweepers, eight inshore minesweepers, and two tenders to training establishments - *Kistna* and *Cauvery*. The Reserve Fleet would thus comprise the three 'R' class destroyers, four fleet minesweepers and the three Hunt class escort destroyers.

Another factor emerging from a careful assessment of the material state of the existing ships was, that, of the 16 major vessels in the Indian Navy, nearly all would be paid off soon. *Rajputana* had already become due for superannuation in 1952, *Konkan*, *Rohilkhand*, *Bombay*, *Bengal* and *Madras* in 1953, *Rajput*, *Rana*, *Tir* and *Investigator* in 1957, *Delhi* would be taken off active service in 1958, *Jumna* and *Sutlej* in 1958 and *Kistna* and *Cauvery* in 1959. This would mean that even with a reasonable extension of life of nearly 10 years, if the projected acquisitions were not accelerated, there would virtually be no navy left by the middle of the 1960s!

Refurbishment of Acquisition Plans

Earnest efforts thus began to be made to expeditiously acquire a few ships to refurbish the navy, especially because by now the proposal to acquire a light fleet carrier had been revived and fast, modern escorts to operate against the enemy in all three elements would also be required for the protection of the carrier.

If the carrier was to have its full complement of aircraft embarked, the need for a surface escort would be less than that for a cruiser but with a reduced outfit of aircraft, the carrier's reconnaissance and strike effort would be limited, which could permit a hostile surface unit to bring the carrier to within its effective gun range before air effort could be ranged against it. It was, therefore, considered necessary to provide the carrier with surface escorts comprising cruisers or destroyers for protection against hostile surface forces.

Since it was not possible for carrier aircraft to intercept each hostile aircraft, and its antiaircraft armament was limited to the 40-mm close-range variety, it was considered desirable that long-range antiaircraft ships should also be in attendance on the carrier

With the increasing importance of and emphasis on the development of submarines around the globe and their ever-increasing lethal power, protection of heavy fleet units such as carriers and their escort cruisers from threats in the subsurface element was considered vital and for this purpose, the carrier would also need adequate sonar protection which was to be provided by antisubmarine escorts.

In addition, the carrier would at times be required to operate at a speed of 30 knots or thereabouts for launching and recovering aircraft, the maximum speed of both carriers and cruisers being around 30 knots at that time, and the escorts would be required to position themselves at vantage points ahead, astern or abreast of the carrier and to manoeuvre to engage the enemy whenever necessary. Therefore they would require to have an advantage of at least 5 or 6 knots over the carrier, i.e., their maximum speed should be around 36 knots. Besides, because of their increased speed and enhanced responsibilities, their sonar domes needed to be strengthened and their detection range enhanced.

In short, the escort vessels would be required to carry heavy antiship, antiaircraft and antisubmarine equipment, state-of-the-art radar, sonar, weapons and detection devices and speeds of over 30 knots. For surface and antiaircraft defence, modern fleet destroyers were considered suitable and first-rate antisubmarine frigates would provide adequate antisubmarine and antiaircraft defence.

The optimal choice for the protection of the carrier would thus be various categories of frigates designed specially for certain tasks but for reasons of paucity of financial resources, a compromise was accepted and a type of ship was selected, that would have a combination of antiship, antiaircraft and antisubmarine offensive capabilities, which could be provided by a post-World War II destroyer. The vital statistics and capabilities of some of the ships that could be made available for the purpose by Great Britain at this time are given in Table 4.

Table 4. Data on ships to be provided by Great Britain

	Destroyers	Later Battle
Displacement (tons)	<i>Weapon</i>	<i>Class 1460"</i>
Dimensions (feet)	<i>Class "1980</i>	
(length, beam, draught)	to 2800	355x40x17
Guns (Long Range)		Five 4.5-inch
Guns (Close Range)	Antisubmarine Weapons	

Torpedoes Speed (knots) Complement

* Antisubmarine multiple-barrel projectile launchers of different

	Frigates		
	<i>Type 12</i> <i>(Surface escort)</i>	<i>Type 14</i> <i>(Antisubmarine)</i>	<i>Type 41</i>
Displacement (tons)	2,000	1,300	1,750
(length, beam, beam)			
Dimensions (Fleet)	360x41x12	300x33x10	330x40x10
Guns (Long Range)	Two 4.5-	-	Four 4.5-
Guns (Close Range)	<i>Six</i> 40-mm	Three 30-	Two 40-mm
Antisubmarine	Li.nbo	Limbo	Squid
Torpedoes	-	Four 21-	-
		(Two twin)	
Speed (knots)	27	24	23
Complement	221	149	204

Planned but not fitted

It is evident from this data that the frigates of various types, while being somewhat superior in their antisubmarine capability, were markedly inferior to the destroyers in speed and antiaircraft and antiship armament.

While the UK, France, Japan, the USA, Sweden, the USSR and certain Eastern Bloc countries were capable of undertaking the construction of destroyers for carrier escort, the IN was still tied to the British Admiralty's apron strings and hence the Indian authorities decided to follow perforce the beaten track and ask Britain to supply these ships. The Admiralty, however, were unable to spare any existing destroyers of the type required by India from out of those in commission with the RN or already under construction. At the same time the lead time required for the construction of new destroyers was far too long for India's requirements. It was, therefore, decided to acquire a mixed bag of new vessels - two type 12, three Type 14 and three Type 41 frigates - from the UK in the first instance, with provision for acquiring three additional Type 14 and one Type 41 frigate at a later date, if required.

International developments during the decade following World War II, however, began changing the maritime threat scenario in South East Asia. Based on the 1948 objective "to build up a *balanced naval force* on modern lines which will be *more powerful than* the navy of *any* of the nations in the Eastern Area" (emphasis author's), India had been developing her navy at a comfortable pace, commensurate with the availability of trained manpower, technical expertise and financial resources and occupied the top spot in the region so far as naval might was concerned. But ominous clouds developed over the horizon when in early 1956, the USA announced its decision to transfer one cruiser, four destroyers and some submarines to Pakistan (Pakistani naval personnel were already training in Turkish submarines). The cost of the ships, as well as the expenditure to be incurred on their refit and modernisation, and the training of Pakistan Navy personnel was to be borne by the USA. Pakistan, as a result of her alliance with the Baghdad Pact powers and the South East Asia Treaty Organisation (SEATO), had jockeyed herself into a bargaining position for obtaining military and naval equipment from member nations of these organisations. In addition, she was likely to make her fleet considerably stronger as a result of the UK policy of dispersal of valuable fleet units to 'friendly' countries, due to the threat of nuclear weapons.

As a result of this windfall to the Pakistan Navy from the USA and the UK and India's modest acquisition plan, the state of the two navies during the course of the next four years, exclusive of non-effective ships such as training ships, survey ships, etc., was likely to be as given in Table 5;

Table 5. Comparative strengths of the envisaged Indian and Pakistan Navies

It was thus apparent that the Indian Navy would be superior to the Pakistan Navy till the middle of 1957, when the latter would achieve parity. With Pakistan acquiring a cruiser thereafter and India returning three frigates to the UK, Pakistan would achieve a marked superiority from December 1957 to June 1958 and a reduced superiority thereafter till December 1959. In addition, three destroyers acquired on loan by India from the UK in 1949 were due to be returned in 1959 in which case, Pakistan's superiority in naval might would again become marked and would remain so for many years to come. If, in addition to the ships in the pipeline, there were future additions to Pakistan's naval fleet as a result of her alliance with the Baghdad Pact powers and the SEATO, it

was likely to become a grave threat to the security of our ports and the safety of our shipping, both coastal and foreign. It was, therefore, considered most desirable that the ratio of two to one between the navies of India and Pakistan, as was adopted when the assets of the RIN were divided between the two countries in 1947, be maintained throughout. This was considered imperative because, firstly, the commitments of the Indian Navy were far greater than those of the Pakistan Navy and, secondly, it was necessary to ensure proper exercise of maritime power in the seas around the Indian peninsula and her island territories to enable her to sustain her trade with any country in peace and war.

The proposed strength of the Indian Navy was, therefore, to be expanded as given in Table 6:

Table 6. The proposed **p*pttgh** of the Indian Navy

Strike Force

One Aircraft carrier - approved, to be acquired. Two cruisers (*Delhi, Mysore*) Six destroyers (Three *R' class - *Rajput, Rana, Ranjit* - in service, three to be acquired in lieu of three proposed Type 14 Frigates). Three escorts destroyers (three Hunt class - *Ganga, Gomati, Godavari* - on loan). Four Type 41 antiaircraft frigates

Convoy Protection Force {three on order, fourth approved).

Two Type 12 surface escort frigates (on order). Three Type 14 antisubmarine frigates (on order but recommended to be replaced by three de destroyers). Three antiaircraft sloops (*Kistna, Cauvery, Tir* inservice).

Seaward Defence Force

Motor launch 6420 and five shore patrol craft inservice.

Six shore patrol craft (three on order, three approved).

Minesweeping Force

Eight coastal minesweepers (four completed, four approved).

Eight inshore minesweepers (two in service, six approved).

Four Fleet Minesweepers {*Bombay, Bengal, Ma-*

ships and aircraft was well below the mark. The fleet could boast of only a light fleet carrier with half the complement of her air component consisting of nine Seahawk strike aircraft, four Alize antisubmarine aircraft and one Alouette searvand-rescue (SAR) helicopter, two cruisers which were both undergoing extensive repairs, six destroyers of which five were not operational due to their age and poor material state, two old frigates, eight modern frigates out of which three had severe operational limitations, six minesweepers, three sea ward defence era ft, one small tankei^nd one repair and maintenance ship.

It was estimated by Naval Headquarters that in order to be able to effectively counter the possible combined threat from China and Pakistan, the additional ships that would be immediately required by the Indian Navy would include three destroyers to escort the carrier, 10 modern minesweepers, two fleet tankers, one supply ship, four submarines, two landing ships for tanks, six medium patrol vessels or submarine chasers for the Andamans, six patrol craft for the Sunderbans, one dredger, 60 aircraft for the carrier including 18 Skyhawks, 16 Seahawks, six Alizes, 12 Alouette helicopters and eight jet trainers, two squadrons of eight Neptune aircraft each for the Indian Air Force for maritime air reconnaissance (the responsibility for maritime air reconnaissance was transferred to the Navy years later) and an adequate supply of weapons, equipment and spares for these acquisitions. The Alouette helicopters were to be positioned on board the carrier and the naval bases at Cochin and Goa for search-and-rescue operations, on board the survey ships and tankers for logistic support and on board the indigenous frigates under construction as antisubmarine weapon carriers and for surveillance. The number of Alouette helicopters embarked on the *Vikrant* later rose to three.

A reassessment of the threa t from the two countries ruled out the naval involvement of China in the conflict though the presence of Chinese submarines had been confirmed, both in the Arabian Sea and the Bay of Bengal, and the likelihood of Pakistan joining hands with China to pose a combined maritime threat was considered low. Most of the proposals were, therefore, shelvedbut the ongoing process of replacement of obsolete ships, weapon systems and equipment, modernisation of obsolescent ships, indi-genisation of warship construction, development of indigenous designs, etc., continued beyond 1965.

Acquisitions During the Late 1940s

After Independence acquisition of ships for India's truncated Navy began, as mentioned before, with the commissioning of *HMS Achilles*, (renamed HMIS De//n'),of the World WarllBattie-of-the-River-Plate fame; (along with)*HMS Ajax* and *Exeter*, this cruiser, which had been loaned to the New Zealand Navy,defeatedtheGerman battleship *Admiral Graf Spee* on December 17, 1939). The *Delhi* was independent India's first cruiser and was commissioned on July 5,1948, less than a year after Independence. She had a standard displacement of 7,114 tons (full-load displacement 9,740 tons); her length was 554.5 feet, her beam a little over 55 feet and her draught 16 feet forward and 20 feet aft. Powered by four-shaft 72,000-horsepower turbines, she had a maximum speed of 32 knots. Her armament package comprised six 6-inch guns

for surface operations and eight 4-inch guns, fifteen 40-mm guns and four three-pounders for anti-aircraft defence. The ship had eight 21-inch torpedo tubes which were later removed in 1958. Her oil fuel capacity was 1,800 tons and she had been designed for a complement of 800 officers and men. Her pentagonal crest depicted a caparisoned elephant carrying a ceremonial umbrella with the logo *Sarvato Jayam-ichchami* - may you be a victor everywhere.

On commissioning, *Delhi* was handed over by the Commander-in-Chief of Nore to Shri V.K. Krishna Menon, the then High Commissioner for India in the United Kingdom. Her first Commanding Officer was Captain H.N.S Brown of the Royal Navy and her first Executive Officer, i.e., Second-in-Command, was Commander (later Admiral) R.D. Katari. The ship arrived at Bombay on September 16, 1948 and received a very warm welcome from the large crowd which had gathered at Balaard Pier. Prime Minister Jawaharlal Nehru, Defence Minister Sardar Baldev Singh and a large number of civilian dignitaries visited the ship as soon as she came alongside the pier. The Prime Minister addressed the officers and ratings and expressed his pride in the floating fortress and the hope that the men on board would, if the occasion arose, effectively defend the country's shore with all their might.

Of the four landing ships for tanks (LSTs) of the RN, *HMS Smiter*, *Thrasher*, *Bruiser* and *Avenger* which were in Indian ports at the time of Independence, having been borrowed from the British Government by the Quartermaster General of the Indian Army, on behalf of the Government of India, for dumping surplus ammunition into the sea, only one, *Avenger*, was in operation, owing to an acute shortage of trained personnel. Since there was an immediate need to transport large quantities of stores and equipment from Bombay and Calcutta to Cochin and Vishakhapatnam for the development of the latter as full-fledged naval bases and the Navy's premier training establishments, it had been decided to acquire one of these landing ships for the purpose and thus *Avenger* was transferred to the RIN and recommissioned as *HMIS Mngar* on April 11, 1949. This ship had a cruising speed of 13 knots and bunked accommodation for 18 officers and 150 men in addition to her normal complement. She could carry 2,000 tons of stores or, alternatively, a varied combination of lorries, landing craft and tanks and land them directly on beaches for amphibious operations and disaster relief. Her displacement was 2,256 tons (4,980 tons full load), overall length 347.5 feet, width 55.25 feet and draught 11.25 feet. She was powered by a 5,500-horse-power twin engine developing a speed of 13 knots, her armament included two 40-mm and six 20-mm anti-aircraft guns and she had a complement of 180 officers and men.

Early in 1948 the British Government had agreed to transfer three 'R' class destroyers, *HMS Rotherham*, *Redoubt* and *Raider* to the RIN after renaming them *HMIS Rajput*, *Rana* and *Ranjit* after extensive refit and modernisation. They constituted the 11th Destroyer Squadron with the *Rajput* as the senior ship. The standard displacement of these ships was 1,725 tons (2,424 tons full load) and their dimensions were 362 feet (length), 35.7 feet (beam) and 16 feet (draught). The armament consisted of four 4.7-inch guns which could

be used against both surface and aerial targets and four two-pounder pompoms for close-range antiaircraft defence. Besides, the *Rajput* had six 20-mm antiaircraft guns while each one of the other two ships had four 40-mm antiaircraft guns. For antisubmarine warfare, each ship was fitted with eight 21-inch torpedo tubes on quadruple mountings and four depth-charge throwers. The propulsion machinery of each ship comprised Parson's geared turbines, delivering a shaft horse-power of 40,000 on two shafts giving her a maximum speed of 32 knots.

On July 28, 1949, the *Rajput* with Captain (later Rear Admiral) A. Chakraverti as its Commanding Officer and Senior Officer of the squadron of destroyers (D11), later designated the 11th Destroyer Squadron (11DS), was commissioned with much ceremony at Portsmouth. Earlier, the *Ranjit* with Commander (later Rear Admiral) G.S. Kapoor as its Commanding Officer, had been commissioned on July 4, 1949. The third destroyer, *Rana*, whose Commanding Officer was Commander (later Admiral and Chief of the Naval Staff) S.N. Kohli, was the last to be commissioned on September 9, 1949 at Devonport.

The three 'R' class destroyers were supplied at a cost of 1,045,000 pounds while De//n, acquired earlier, had cost 736,500 pounds. All four ships proved to be excellent bargains, as similar ships from any other source would easily have cost twice as much.

Quest for New Ships Begins

While these ships were acquired without much difficulty it became a problem convincing the British authorities of the Indian intent, regarding her maritime interests, after she became a Republic on January 26, 1950. To quote from *The Parted Garment: The Royal Navy and the Development of the* was prepared to go when it wanted to be generous. The Naval Plan which the Minister of Defence had presented *Indian Navy 1945-65* by Lieutenant Commander James Goldrick of the Royal Australian Navy, a research scholar specialising in naval history:

The British may well have proved more co-operative, even to the extent to which they supported the Australian and Canadian efforts to acquire light fleet carriers, had the widely diverging strategic interests of Britain and the Indian Government not been such a considerable stumbling block. It w?s this issue which was to restrict British support in the years ahead, if only because the British were not prepared to subordinate the requirements of services which were formally allied to the Royal Navy to Indian requests.

India was pursuing a neutralist policy and it was determined to remain within the British Commonwealth, particularly after the declaration of the Republic in 1950, only on the understanding that this did not involve commitment to any collective defence arrangements with other members of the organisation.

In consequence, the system which the British had evolved of encouraging the creation of Commonwealth naval forces which were capable of local defence operations and of contributing to joint activities, particularly in trade protection, was incapable of application to India. While the British wanted India to acquire modern ASW (antisubmarine warfare) and A A (antiaircraft) escorts, minesweepers and harbour defence craft, the Indians were more interested in developing naval forces which had the capacity to dominate the region (what is now termed a bluewater navy - author).

The strains in the relationship between the Admiralty and the Indian Navy were becoming apparent in 1949. Perhaps the most notable point is the extent to which Admiral Parry (the Flag Officer Commanding the RIN) and his fellow loan officers (officers on loan to the Indian Navy from the Royal Navy) pursued arguments which took a markedly 'Indian' line against the objections from Britain and it was over aircraft carriers that matters came to a head.

The Admiralty position was somewhat awkward because between 1946 and 1949 the merits of a two-carrier force were being publicised in support of the expansion of the Royal Australian Navy. If two light fleet carriers were being proposed as the minimum force capable of independent operations, it was inevitable that Indian naval authorities should be interested in the argument. Furthermore, the British had made Australia the offer of two carriers for the price of one, which was a gesture as public in its demonstration of how far the Admiralty was prepared to go when it wanted to be generous.

The naval plan which the minister of defence had presented to the Admiralty in 1947 had included provision for two light fleet carriers. The British Naval Staff later reflected that they had probably been over enthusiastic in discussions with the Indians. The VCNS (Vice Chief of the Naval Staff of the Royal Navy), Vice Admiral Sir George Creasy, reflected 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'.

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 importune the Admiralty for support.

The Admiralty was not impressed. The British were well aware that assistance in the creation of a naval air arm required Government-to-Government agreement and this would be impossible without the formal Defence talks with India which Nehru had already indicated that, '... he would be embarrassed if (Britain) initiated proposals to hold them'.

In fact, the British had already decided that India and Pakistan 'should be able to maintain, in some ten to fifteen years, forces of the order of: India - 3 cruisers, 8 destroyers, 8 frigates, 12 minesweepers; Pakistan - 1 cruiser, 4 destroyers, 8 frigates, 12 minesweepers.'

In general, these predictions for 1958-63 were to prove rather more sensible assessments than those of the Indian Naval Staff. By 1959, the latter were suggesting that their force levels for major units were to be: 1960 - 2 light fleet carriers, 3 cruisers, 9 escort destroyers, 4 fleet destroyers, 4 submarines, 4 anti-aircraft frigates, 2 anti-submarine frigates, 6 fleet minesweepers; 1968 - 4 fleet carriers, 2 light fleet carriers, 6 cruisers, 21 destroyers, 16 submarines, 6 frigates, 6 fleet minesweepers. In the circumstances, the suggestion by the British VCNS that these proposals were 'grandiose' had a point. Strategic considerations aside, it seems in retrospect that the Admiralty had a more realistic idea of the financial situation of India than did the Indian Naval Headquarters.

After some agonising on the subject, the Admiralty took a firm line with the Commander-in-Chief when the Fifth Sea Lord wrote to him on June 23 1949, saying: 'it would be undesirable to embark on detailed examination of your scheme on the present semi-official basis before the strategic background has been agreed (upon) and a decision has been reached, in general Defence Talks, on the future size, shape and role of the Indian Navy'.

Parry pleaded in return that India was not politically ready for Defence Talks and that he had no other means but those of personal contact which he could employ. Since he had made the open admission that the Indian view was that 'Pakistan is the enemy', apparently during the course of a visit to Britain earlier in 1949, it was odd - although perhaps an indication of his enthusiasm for naval development for its own sake - that Parry showed so little apparent appreciation of Britain's strategic reservations.

It seems, however, that the Commander-in-Chief eventually took the hint, although not before the First Sea Lord himself had warned that India should not attempt to develop a sea-going Fleet Air Arm for some time yet. By late 1949, Indian hopes were being drawn in. Parry explained to the Admiralty that financial difficulties had forced him to plan within rather restricted means and that carriers were no longer an immediate goal.

In a letter addressed to the Right Honourable Viscount Hall, the First Lord of the Admiralty, Mr Patrick Gordon Walker, the Secretary of State for Commonwealth Relations, said on November 20, 1950:

The fact is, as I think we all realise, that there is a fundamental divergence of view between the Indians and ourselves on what the function of the Indian Navy should be. We naturally wish to see them build up a navy which, while providing adequately for their own home defence needs, would also in the future be able to make a significant contribution to Commonwealth naval strategy, on the assumption that India would be willing to cooperate. Hence the importance which we have all attached to the provision in the Indian Navy of adequate anti-submarine and minesweeping forces. The Indians, on the other hand, have been pressing for United Kingdom help in building up what they describe as a fully balanced force, including a substantial naval aviation element.

I entirely agree with your view that it is not possible to give proper advice to the Indian Government unless they are prepared to tell us the role which they intend their navy to play. I should have no hesitation in suggesting discussions with the Indian authorities if I thought this would help. But we have already consulted our High Commissioner about the possibility of such talks and his strong advice was that the mere suggestion that such talks should be held would do harm. It was for this reason that the talks between the Vice Chief of the Naval Staff and Admiral Parry were arranged this summer. There is, of course, the further underlying difficulty that we learn this summer, in strictest confidence from the two British Chiefs of Staff in India, that the aim of Indian defence policy was to produce balanced forces in all three arms which would be capable of dealing with any force that Pakistan might have and that planning throughout the Indian armed forces was based on the assumption that Pakistan was the potential enemy.

Unsatisfactory as it may be, it seems preferable to leave things as they are, until we are able to make some progress with the Indian Government on the whole front of their willingness to cooperate with us in defence matters.

The Admiralty's Viewpoint

About this time, i.e., at the beginning of the 1950s, in an appreciation of the future naval requirements for India and Pakistan, however, the Admiralty said that it was in the interest of the Commonwealth as a whole that India and Pakistan should maintain such naval forces as could be supported by their resources in material, manpower and finance and that the functions of these naval forces in war would primarily be to provide for the security of India and Pakistan including provision for harbour defence, minesweeping and coastal convoys, and, secondarily, to contribute to the overall security of the British Commonwealth. This would also include a share in the control of sea communications in the Indian Ocean, particularly in the Arabian Sea and the Bay of Bengal.

In order to ensure effective co-operation it was essential, the Admiralty felt, that India and Pakistan should share a common strategy. In peace, these countries were to provide basic forces (capable of expansion in war) for 'police' duties and adequate training facilities. To be able to carry out their primary functions in war, these two navies would require frigates, minesweepers, antisubmarine trawlers and coastal forces and such light forces should for some years form the hard core of both navies. To carry out the wider function of contributing to the Commonwealth's security, balanced forces consisting of cruisers and destroyers would be required. But India had already signified her intention of building up to a strength comparable to that of the Royal Australian Navy and Pakistan, though she had so far not given any indication of the strength she was planning to attain.

In addition, as a long-term policy, the Admiralty strongly felt, if India and Pakistan were to continue to remain firm adherents to the British Commonwealth of Nations, their naval aspirations should be encouraged, though not at the expense of their army and air force, and suitable guidance provided for their naval build-up which, over the next ten to fifteen years, should raise the level of their forces to three cruisers, eight destroyers, eight frigates, 12 minesweepers and small craft for India and one cruiser, four destroyers, eight frigates, 12 minesweepers and some small craft for Pakistan. As the expansion of the two navies progressed, the short-term policy would be the establishment of suitable training, maintenance and logistic facilities, the development and maintenance of ships and craft to be used for 'policing' and sea training, thus welding the fleets into efficient forces capable of integration with other British dominion forces. Towards this end the Admiralty would provide necessary assistance to the two countries in developing their flotillas of ships and craft, expertise in the maintenance of ships and equipment and training of personnel.

Accordingly, in July 1951 the Admiralty received a proposal to transfer three old Type 2 Hunt class escort destroyers to the Indian Navy on three years' loan in lieu of the offer for the cruiser 'Jamaica' which was going to be the Indian Navy's second cruiser out of a three-cruiser force, which they now had decided to withdraw. In a letter to the Right Honourable Lord Pakenham, the First Lord of the Admiralty, on July 2, 1951, Mr E. Shinwell, Minister of Defence, said:

I am aware that these ships are in poor condition, having been in low category reserve since the war, and that there is little prospect that the Admiralty will be able to do any work on them in peacetime to prevent them from deteriorating still further. I also understand that one of the conditions of the loan would be that the ships should be returned to the Admiralty on demand in emergency.

Nevertheless, I must confess that I have grave doubts of the wisdom of allowing any more of the antisubmarine vessels which we now possess to pass out of our own control by transfer to another country ... we have no defence arrangements with India, nor are we likely to have while the Kashmir dispute remains unsettled. Nor do I think that India's attitude over this and other important political questions in the past few months has been so helpful to us as to make it particularly desirable to show her a friendly gesture of this kind at present.

In his reply made on July 11, 1951, the First Lord of the Admiralty said: The Admiralty policy for some time has been to encourage India to build up the type of navy which we feel to be most suitable for her own defence, and which at the same time would be most useful if it were to be ranged alongside the Royal Navy in war. To this end we have advised her against embarking immediately on an aircraft carrier programme and have suggested rather that a force of cruisers, destroyers, frigates and minesweepers should be her first objective, with emphasis on antisubmarine vessels. India, acting on our advice, has strengthened and expanded her navy in readiness to man the cruiser that it is in which we encouraged her to believe we could lend. This offer had to be withdrawn with the result that India is

left with surplus personnel and is, understandably, keenly disappointed. This can be mitigated but not entirely offset, by the present proposal to lend three frigates

The three vessels now under consideration are not required for our peacetime fleet but we cannot dispose of them permanently outside NATO as there is an overall shortage of frigates. In the circumstances it is clearly in our interests to meet India's requirement if we can thereby ensure that the frigates will be maintained in good running order and will be immediately available to us in emergency. The only circumstances in which this would not be achieved would be those in which India ranged herself against us in war, and I am convinced that we need not look to such a future.

The Secretary of State for Commonwealth Relations, Mr Patrick Gordon Walker, still had reservations on the transfer of the escort destroyers to India. While admitting that if these ships, along with a large number of ships of their class which lay in British mothball yards in varying states of disrepair, were to be refitted in British yards and were to be made available on completion if necessary, it would be far better than letting them remain unused and unusable, he felt. "... it would be very difficult to expect India to give any undertaking about refraining from using the vessels in any particular contingency."

The various authorities continued to dither on the issue and the situation was about to reach an impasse when the First Lord of the Admiralty wrote to Mr E. Shinwell, Minister of Defence, on October 18, 1951:

Although it was decided at the Defence Committee on 10th September (1951) that it was important in dealing with requests from Pakistan to ensure that the jealousy of the Indian Government was not aroused and answers to requests and complaints of both Governments should be made with equal impartiality, and although you were invited to arrange with the Arms Working Party to examine the request for equipment from the Pakistani Government together with any requests for equipment from the Indian Government and to report to the Defence Committee, nevertheless the Prime Minister (Clement Attlee) has informed you that he wishes arrangements for the transfer of three frigates (escort destroyers) to India to be put in hand.

And on October 22, 1951 a note from the office of the British Prime Minister to the Minister of Defence put the seal on the deal, 'The Prime Minister's Principal Private Secretary has confirmed order proceed with the proposed transfer of three frigates (escort destroyers) to India.'

Three Hunts Join the Fleet

It was on the same day, October 22, 1951, that the Admiralty officially conveyed to the High Commission of India in London the availability of three Hunt class escort destroyers on loan to the Government of India on seven conditions:~firstly, India would be responsible for any work required before taking over the selected ships, including any equipment installed to meet her needs; secondly, outfits of naval armament and logistic support would be supplied free of charge but equivalent amounts were to be returned at the end of the loan period; thirdly, the standard of maintenance and refits, and the periods between refits, would be the same as for the Royal Navy; fourthly, all additions and alterations would be subject to the approval of the Admiralty and at India's expense; fifthly, the vessels were to be returned, with stores, in as good condition as when loaned excepting fair wear and tear; sixthly, in the event of any losses, adequate compensation would be payable and, finally, the loan was to be for a period of three years in the first instance and subject to extension by agreement, but the vessels were to be returned in an emergency. The most significant aspect of the conditions laid down was that barring any additional equipment required to be fitted by the Government of India, the cost of refitting the three ships, which would take approximately eight months, was expected to be of the order of 120,000 pounds.

Out of the four vessels that were available for transfer to the Commonwealth navies, namely, *HMS Bedale* {Pennant No. F126}, *HMS Qriddingfold* (Pennant No.F131), *HMS Lamerton* (Pennant No.F88), *HMS Croome*, the first three were earmarked for the Indian Navy and the fourth for the Royal Ceylon (now Sri Lanka) Navy. While the *Bedale*, after her refit, modernisation and recommissioning, would become *INS Godavari* (Pennant No. D92), the leader of Indian Navy's 22nd Destroyer Squadron (22DS), the *Chiddingfold* (Pennant No. F131) and *Lamerton* (Pennant No. F88) would become *INS Ganga* (Pennant No. D94) and *INS Gomati* (Pennant No. D93), respectively, the other two ships of the three-ship destroyer squadron. The three escort destroyers *Bedale*, *Chiddingfold*, and *Lamerton* had originally been laid down on May 29,1940, March. 1,1940 and April 10,1940 respectively and completed on June 18,1944,October 16,1941 and August 16,1944. All three had seen service during World War II and were put in the mothball fleet when the hostilities ended in 1945.

By January 1952 escalation of prices and the cost of carrying out major refits had taken its toll and the estimated expenditure on reconditioning the three ships nearly doubled itself to 200,000 pounds.

Work on all three destroyers was taken up by different shipbuilders at Liverpool towards the end of 1952. The three officers selected to command the destroyers soon arrived along with their key personnel for familiarisation and specialist training. The first Commanding Officer of the *Godavari* and Senior Officer of the Squadron (D22) was Commander (later Admiral and Chief of the Naval Staff) S.N. Kohli, the Executive Officer was Lieutenant Commander (later Commander) G.S.Gupta and the Squadron Engineer Officer was Lieutenant Commander later Vice Admiral) J.T.G. Pereira. The first Commanding Officer of the *Gomati* was Lieutenant Commander (later Commodore) Inder Singh and her Executive Officer was Lieutenant (later

Commander) R.N. Batra. The first officer to command the *Ganga* was Lieutenant Commander (later Commodore) K.K.Sanjana and the Executive Officer was Lieutenant (later Vice Admiral) V.E.C. Barboza. One of the junior officers in the commissioning crew of the *Ganga* was Sub-Lieutenant J.G. Nadkarni who later rose, in 1987, to occupy the highest office in the Navy - that of the Chief of the Naval Staff, as an Admiral.

All three ships were commissioned during the second quarter of 1953, *Gomati* on April 24, *Godavari* on April 27 and *Ganga* on May 26. Each one of these ships had a standard displacement of 1,050 tons, dimensions of 264.25 feet (length), 31.5 feet (width) and 14 feet (draught), a weapon package of six 4-inch antiaircraft guns, four two-pounders and four 20- mm antiaircraft guns, propulsion machinery comprising twin shaft geared turbines producing 19,000 shaft horse power at a maximum speed of 25 knots, a radius of operation of 3,700 nautical miles at 14 knots and a complement of 200 officers and men. The commissioning ceremony for all three ships was performed by Shrimati Saraswati Kher, wife of Shri B.G. Kher, the then Indian High Commissioner in Britain.

The three escort destroyers were commissioned as British ships with the HMS prefix and the commissioning orders were issued by Admiral Sir Maurice James Mansergh, Commander-in-Chief, Plymouth. Hence, when the coronation of Queen Elizabeth II took place on June 2, 1953, all three ships flew the RN ensign on their mastheads. When the queen reviewed the British Fleet at Spithead on June 10, 1953, these three ships, still flying the British colours, along with three other ships of the Indian Navy *Delhi*, *Ranjit* and *Tir* flying the Indian colours, took part in the review.

It was on June 18, 1953 that the ships were formally transferred to the Indian Navy at Liverpool, assuming their Indian names, with the Indian Navy ensign replacing the RN ensign on the masthead. The then Indian Naval Adviser to the High Commissioner for India in London, Captain (later Rear Admiral) G.S. Kapoor represented the Indian Navy at the transfer ceremony and the traditional breaking of coconuts (in replacement of bottles of champagne) against the bows of the ships was done by his wife, Shrimati Sundari Kapoor.

Soon after their transfer to the IN, the three ships left Liverpool and sailed for Plymouth to embark stores and ammunition and to undergo a brief work-up (on-the-job practical training for the improvement of operational and material efficiency). After a short stay there, the ships left for Malta to join some of the ships of the Indian Fleet under the command of Rear Admiral N.V. Dickinson of the RN who was at that time on deputation to the Indian Navy as the Flag Officer Commanding the Indian Fleet (FOCIF) and was flying his flag on board the flagship, *Delhi*, whose Commanding Officer was Captain (later Admiral and Chief of the Naval Staff) A.K. Chatterji. The other ships of the IN in company were *Ranjit* commanded by Commander (later Admiral and Chief of the Naval Staff) S.M. Nanda and *Tir* commanded by Commander (later Vice Admiral) N. Krishnan.

The three escort destroyers took part in exercises with the British Mediterranean Fleet, under the command of Admiral Horris, Flag Officer Second-in-Command, Malta, with Admiral Lord Louis Mountbatten acting as umpire for the exercise from his flagship.

At the end of the exercises, the ships paid the first goodwill and flag showing visit to Italy during the third week of July 1953, commencing with their berthing alongside at the Italian Naval base at Naples on July 22. Commodore K.K. Sanjana, the then Commanding Officer of *Ganga* reminisces:

We also had the unique honour of a private audience with His Holiness, the Pope. The three of us accompanied by our Ambassador from Switzerland, who is accredited to the Vatican, were ushered into the Pope's private study. The three of us and our Ambassador lined up and awaited His Holiness' arrival. As soon as the Pope entered the study, one of the Swiss Guards, thumping his mace on the floor, made the formal introduction, starting with 'Commander Sourendra Nath Kohli of the Indian Navy, not of our faith'. Unfortunately, the other two Commanding Officers i.e. Inder Singh and myself were also not of His Holiness' faith! However, the Pope presented each one of us with a small personal medallion and turning to Commander Kohli, said 'On return to India, please convey to the people of India my blessings and good wishes.' Commander Kohli very quickly replied, 'We also bring the good wishes and blessings of the Indian people to Your Holiness'.

Early in August the ships proceeded to Benghazi in Libya and thereafter to Alexandria in Egypt. General Mohammed Neguib, the then President of Egypt, added to the significance of the Indian Navy's first goodwill cruise to his country by paying a visit to the three ships on the very day of their arrival, August 6, 1953. The senior most Indian dignitary to grace the occasion was Sardar K.M. Panikkar, the eminent historian-diplomat who was then Indian Ambassador to Egypt.

The ships then returned for some more exercises to Malta, where they were honoured with a visit on August 28, 1953 by Admiral Lord Louis Mountbatten, Lady Edwina Mountbatten and their younger daughter, Lady Pamela Mountbatten.

The Squadron sailed from Malta on September 8, 1953 and, after calling at Port Said for a day, paid a goodwill visit to Jeddah in Saudi Arabia whose ruler then was King Ibn Saud. While reminiscing on the visit to Jeddah, Commodore K.K. Sanjana records: Since King Ibn Saud of Saudi Arabia was old and ailing, all the duties of the state were at that time being performed by the Crown Prince (he became the King later) who honoured the ships with a visit on September 15, 1953. During his visit, His Royal Highness who had brought sacksful of Ryals with him, gifted handfuls of the bounty to the sailors of the ships and presented an expensive watch to each officer, the junior officers receiving Swiss chronometers while senior officers were gifted with solid gold watches with the dials in Arabic and the King's insignia and an inscription engraved on them. Being a Commanding officer I too received a solid gold watch.

Many years later I happened to be wearing this particular watch at Bombay airport when I spotted the Consul General of Saudi Arabia and requested him to translate for me the Arabic inscription on the dial. Immediately on reading the inscription on the dial the Consul General nearly fell at my feet, exclaiming, 'The King gave you this!' Nearly 35 years have elapsed since I received the watch and I am still using that watch which, I am told, could well be a passport to enter Saudi Arabia any time!

Whilst at Jeddah, we were treated to a proverbial Royal Banquet one evening. We were duly briefed by Shri M.K. Kidwai, the then Indian Consul General there, and were told that, in the Arab world, true friendship was judged by the amount of food one ate! The sit-down banquet table had been laid in a manner befitting a visiting monarch or head of state. The delectable and sumptuous fare included culinary delights from several countries - Arabian, European and South East Asian - and this had been made possible by flying in experienced chefs and cooks from various parts of the globe for this particular occasion.

It was during this banquet that we learnt that roasted baby camels were a delicacy in the Arab world. The huge table, therefore, proudly displayed, on giant dishes, roasted baby camels and, alternately roasted baby sheep! In typical Arab fashion we had to eat with our fingers and, not being familiar with most of the dishes placed before us, tried to play safe by gorging on what we had already savoured and liked during our visits to other Arab countries in the region. Fortunately, being the junior most of the three commanding officers, I was lucky to have a sheep in front of me. Poor Inder (Lieutenant Commander Inder Singh, Commanding Officer of *Gomati*) was not fortunate, and was confronted with a dish containing a roasted baby camel! The grand finale of the banquet was that at the end of the repast we had to wash our hands with perfumed soap and water following by rinsing them in Ming ceramic bowls containing Chanel No. 5! The Executive Officer of the *Ganga*, Lieutenant Commander (later Vice Admiral) V.E.C. Barboza, adds:

The presentations to our ships included wrist watches for each officer, a hefty donation of money to the ships' welfare funds, imported American rice and fruit and, to our amazement, forty live sheep. There was no way of embarking the animals except as carcasses - and that was discreetly arranged before we left.

After an eventful four-day stay at Jeddah, the ships sailed out of the Saudi Arabian port on September 18, 1953 and reached Cochin on September 21, 1953.

The setting up of the 22nd Destroyer Squadron comprising the three escort destroyers *Godavari*, *Ganga* and *Gomati* with *Godavari* as the senior ship of the squadron and the designation of her Commanding Officer as the senior Officer of the Squadron - Captain (D) abbreviated to D22 - were formalised on May 4, 1954.

Fleet Tanker

In November 1953 the Indian Navy acquired her first Fleet Replenishment Group tanker, *Shakti*, from Italy as an important constituent of the fleet train (a group of support ships) that was being set up for the logistic support of the fast-expanding Indian Fleet at sea. The tanker had a displacement of 3,500 tons, dimensions of 323 feet (length), 44 feet (width) and 20 feet (draught) and her diesel powered propulsion machinery gave her an economical speed of nine knots and a maximum speed of 13 knots.

The Second Cruiser

The requirement of cruisers for the Navy having been reduced from three to two, the naval authorities had been looking around for a suitable second cruiser since the time the *Delhi* was acquired in 1948 and the search ended when it was decided to transfer the Colony class Royal Navy cruiser *HMS Nigeria* to the Indian Navy.

The *Nigeria*, originally built by Messrs. Vickers-Armstrong at Walker-on-Tyne, had been completed on September 23, 1940 though she had already been commissioned into the Royal Navy on August 3 the same year. Her keel had been laid down on February 8, 1938 and she had been launched on July 18, 1939. After her commissioning as a ship of the 10th Cruiser Squadron she had taken part in a number of operations during World War II and had won Battle Honours twice in 1941 (in Norway and the Atlantic), twice in 1942 (in the Arctic and Malta

Convoys), once in 1944 (at Sabang) and once in 1945 (in Burma). In 1941 she had raided the Lofoten Islands in Norway, sunk a German trawler and damaged several enemy vessels; in 1942 she had taken part in convoy escort operations and had been torpedoed by a U-boat near Gibraltar; in 1944 she had carried out raids on the Norwegian coast and had taken part in attacks on Sabang along with the battleship *Queen Elizabeth*; in 1945 she had taken part in the bombardment and capture of Akyab and Cheduba Island, had assisted in the sinking of the Japanese heavy cruiser *Hnguro* near the northern end of the Malacca Strait and had bombarded the coastal defences on Nicobar Island which was at that time under Japanese occupation.

After the hostilities ended, the *Nigeria* had taken part in several goodwill cruises and exercises and in September 1950 she had been placed in reserve. In 1952 she had become an accommodation ship for the Royal Naval personnel at Rosyth.

The sale of the *Nigeria* to India at a cost of 300,000 pounds was announced on April 8, 1954. She thereafter underwent extensive refit and tropicalisation and several additions and alterations were made to her weapons and weapon systems, equipment, sensors, control systems, etc. She was reconditioned and modernised at the Birkenhead, Liverpool works of Messrs. Cammell Laird & Co., Ltd. She was finally commissioned as *INS Mysore* on August 29, 1957 when she was formally handed over by Lord Selkirk, First Lord of the Admiralty, to Shrimati Vijaya Lakshmi Pandit, the then Indian High Commissioner in the UK.

The Mysore

The Indian Navy's second cruiser, which was assigned Pennant No. 60, had a standard displacement of 8,700 tons (full-load displacement of 11,040 tons) and her dimensions were 555.5 feet (length), 62 feet (width) and 19 feet (draught); she had a weapon package comprising nine 6-inch antiship guns (she originally had twelve such guns but one triple-barrel gun turret was removed during refit), eight 4-inch guns which could be used against both surface and aerial targets and twelve 40-mm Bofors antiaircraft guns; her propulsion system comprised four-shaft Parson's geared turbines with a shaft horse power of 72,500 at a maximum speed of 31.5 knots and a complement of 800. The modifications that the ship had undergone during her extended refit included the replacement of tripod masts with stepped lattice masts, removal of one triple-barrel 6-inch gun turret as mentioned earlier, and six 21-inch torpedo tubes and replacement of all electrical equipment.

The pentagonal crest of the *Mysore* depicted the legendary double-headed eagle which, like the Romanoffs of Russia, was the family emblem of the Wodeyars, the hereditary rulers of the Mysore State. The motto below the crest was *No bibheti kadachana* (is never afraid).

When the *Mysore* later visited Vietnam in 1958, recalls Vice Admiral M.P. Awati, who was then the cruiser's Signal Communication Officer as a Lieutenant Commander:

Everywhere the *Mysore* went she was besieged by curious and admiring throngs from littoral East Asia, come to see the new Indian Navy. The ship and her ship's company were lionised. No mean distinction for us and for India which until just ten years before was a thralldom. When we translated the ship's motto under the wings of her double-headed eagle into Vietnamese through an interpreter, they applauded. 'Like the Vietnamese', they chorused. "We are not afraid of anyone or anything. We *are* going to win.' One wishes, with hindsight, that the world had taken note of this Vietnamese determination back in 1958.

Reminisces Vice Admiral M.R. Schunker, who was the Vice Chief of the Naval Staff at Naval Headquarters before he retired in 1982 and who was the cruiser's first Gunnery Officer as a Lieutenant Commander, on the *Mysore*'s commissioning ceremony:

Having spent a sizable period in Blighty as Course Officer, Long Gunnery Course, here I was on a bleak Liverpool jetty.. the Union Jack fluttered lazily at the jackstaff of the imposing warship behind me, possibly aware that soon the Indian tricolour would supplant it. The day was 29th August 1957 and the occasion was the last day of *HMS Nigeria* and the first of *INS Mysore*. As the cruiser's commissioning Gunnery Officer, I was a proud man indeed for, by tradition and regulation, I was responsible not only for the lethal firepower of the ship but also for the pomp and pageantry, the rituals and ceremonials which would be a part and parcel of this mighty warship's

life.

There were a host of dignitaries present, from our gracious and charming High Commissioner, Madam Vijaya Lakshmi Pandit, to a galaxy of Royal Navy brass. One of them was Rear Admiral N.V. Dickinson who had earlier been the Flag Officer Commanding the Indian Flotilla. I was thrilled, as a young Lieutenant Commander, to also meet a former Chief of the Royal Indian Navy - Vice Admiral Sir Herbert Fitzherbert - who headed the Service from 1937 to 1943.

As regards the ship's weapon system, Vice Admiral Schunker recalls:

When *Mysore* was acquired in 1957, she was by far the most powerful unit to grace the fleets of any one of the states on the Indian Ocean littoral. The Medium Range System Mark 6 was the most modern fire control system in the world at that time. Decades later, in the missile era of the eighties, maybe, she had become an anachronism but in the late "fifties" *Mysore* was indeed the sword arm of the Navy, the bulwark on which India's maritime interests rested. An idea of her awesome firepower can be obtained by a simple mathematical calculation. A six-inch shell carries a 51-kg warhead: nine of *Mysore's* barrels could thus spew out 459 kg of destruction in a single broadside. With 4.5 broadsides per minute as the accepted rate of fire, *Mysore* packed a punch of over two metric tonnes of explosive a minute. Such fury of gunfire was just not available with anybody else. And I, as the 'Guns' (Gunnery Officer), took justifiable pride in this fact!

Our 'work-up' at Malta was a Gunnery Officer's dream come true. So possessive was the crack gunnery team of its charge and its reputation that they would not let even the dockyard personnel anywhere near the guns. It must be mentioned in eternal tribute to this team that photographs of *Mysore's* 6-inch gun-firing were proudly displayed in the office of the Fleet Gunnery Officer attached to the C-in-C (Mediterranean) as a model for the Mediterranean Fleet.

Shrimati Vijaya Lakshmi Pandit also takes a journey down memory lane and remembers *Mysore's* commissioning day:

I had never commissioned a ship before and was rather nervous about the formal ceremony involved. The fact that I had a severe cold did not help and seeing so many distinguished people around me, I looked rather helplessly at my Naval Adviser, Captain (later Admiral and Chief of the Naval Staff) S.N. Kohli, for help. But he was very much on duty and I received no friendly glance from him. He and the ship's Commanding Officer, Captain S.M. Nanda, were obviously full of the importance of the occasion and their own part in the ceremonies. I felt somewhat forlorn and thought I would not be able to say the right thing! However, since there is a destiny which shapes our ends, I managed to get through the commissioning ceremony as well as the speech after the formal luncheon which followed. Once the formalities were over the world looked bright again and I could enjoy the occasion. The beautiful brooch I received is a reminder of this

historic occasion.

After her commissioning on August 29, 1957 when she was formally handed over by the First Lord of the Admiralty, Lord Selkirk, and accepted by Shrimati Pandit, the cruiser carried out her acceptance trials for a month and was formally accepted into the IN at anchorage off Holyhead on September 29, 1957. She soon completed her work-up at Portland and was inspected by the First Sea Lord, Lord Louis Mountbatten. While on her passage to India, she visited Malta and the Yugoslav port, Split, and finally reached Bombay on December 31, 1957. While the first Commanding Officer of the cruiser was Captain S.M. Nanda, her first Executive Officer was Commander K.M. Nanavati.

Admiral Nanda Reminisces:

The arduous days of work-up having ended satisfactorily, we were on our way back to India. The grey forbidding waters off the English shores gave way to the deep blue of the sunny Mediterranean. By now I had the total grip of the ship and with a recklessness almost bordering on audacity invited the Commander-in-Chief of the Mediterranean (at Malta) to put the ship through her paces and tell us our weak points, if any. The C-in-C (Med) must have been intrigued by the gumption of the young Indian Cruiser Captain, as he ordered the entire Mediterranean Fleet to put to sea - an awesome armada of two Royal Navy cruisers, some five or six destroyers and a couple of submarines. We came through with flying colours and, I daresay, better than most of the Royal Naval ships!

More prestigious events were in store for us. Soon after parting company with the Mediterranean Fleet, Mysore steamed into the Adriatic port of Split. Those were the days when the Nehru-Nasser-Tito charisma was at its peak and the official visit of an Indian warship to a Yugoslav port was an apt enough occasion to cement the bonds of friendship between the two countries. We were feted all the way during our stay in Split and I was even accorded the unique honour of an audience with President Tito. In fact, the genial Marshal sent a special aircraft for our ambassador, Shri Rajeswar Dayal, and I to be taken to his private Presidential villa on the isle of Brtoni. What made the gesture more significant was the fact that just a week before, an American admiral, flying his flag on a destroyer which called at Split, had been denied the opportunity of even calling on the President.

The return home was as memorable as it was magnificent. The whole Fleet sailed out to meet us and the flag of Rear Admiral Katari was transferred from the *Delhi* to the *Mysore*. Later we triumphantly tied up at Baliard Pier. The Defence Minister who was at Bombay to receive us wasted no time in formalities and we were out to sea on the morrow with Shri V.K. Krishna Menon embarked.

Thus the *Misore* replaced the *Delhi*, flying the flag of Rear Admiral R.D. Katari, the first Indian Naval officer to have risen to flag rank and commanded the Indian Fleet.

Six Minesweepers

While the acquisition of major ships such as cruisers and destroyers was in progress, the need for the refurbishing of the units of the minesweeping fleet and in some cases replacing them had also acquired considerable urgency and had been considered by the naval authorities. As a result of negotiations held earlier, it had been decided to acquire six minesweepers, two inshore ones of the Ham class and four coastal ones of the Ton class, from the UK.

Minesweepers are small vessels, sparsely armed, and do not impress visitors as they are not equipped with the destructive power or manoeuvrability of other warships. But they have a vital role to play - they are specially designed and equipped to sanitise or clear the coastal waters, sea lanes or approaches to enemy territory of defensive or offensive mines. The fact that the passage of over four decades after World War II has in no way diminished their importance or utility was highlighted recently during the Gulf War when the absence of minesweepers adversely affected the operations of the US task force and the American Government had to send several distress messages to the UK, requesting the latter for the immediate loan of a squadron of minesweepers.

An inshore minesweeper of the Ham class had a standard displacement of 120 tons (full load 170 tons) and dimensions of 107 feet (length) 22 feet (width), and 62 feet (draught); she had weaponry comprising one 20-mm Oerlikon anti-aircraft gun, a propulsion system of twin Paxman 500 brake-horse-power diesel engines giving a maximum speed of 14 knots, and a complement of 16 officers and men. The first inshore minesweeper of the Ham class, *EMS Littleham* had been built by Messrs. Brooke Marine Ltd., Oulton Broad, Lowestoft and launched on May 4, 1954. She was commissioned into the Indian Navy as *INS Bnssein* with Pennant No. M2707 on June 14, 1955 with Lieutenant Commander (later Commodore) B.R. Kapoor as her first Commanding Officer. The other inshore minesweeper, *HMSH Uder-shnm*, had been built by Messrs. Vosper Ltd., Portsmouth and launched on February 5, 1954. This ship was rechristened *INS Bimlipctcim* with Pennant No. M2705 on her transfer to the Indian Navy on the same date, June 14, 1955 with Lieutenant (later Commodore) L. Gomes as her first Commanding Officer.

The four Ton class coastal minesweepers of wooden construction built for the Royal Navy were *HMS Whitton*, *Durweston*, *Wennington* and *Overton*. *Whitton* had been built by Messrs. Freeland's Shipyard Ltd., Gosport, and launched on January 30, 1956. It was commissioned into the Indian Navy as *INS Cannanore* with Pennant No. M1191 on August 21, 1956 and with Lieutenant (later Vice Admiral) S.L. Sethi as its first Commanding Officer; *Overton*, built by Messrs. Camper and Nicholson Ltd., Gosport and launched on January

30,1956 was commissioned and transferred to the Indian Navy on August 28, 1956 as *INS Karwar* with Pennant No. M1197 and with Commander (later Commodore) J. Chatterjee as its first Commanding Officer and Senior Officer of the Squadron; *Wennington*, built by Messrs. J.S. Doig Ltd., Grimsby was rechristened *SNS Cuddalore* with Pennant No. M1190 on August 30,1956 with Lieutenant (later Lieutenant Commander) S.S. Dighe as her first Commanding Officer; *Dunveston*, which was built by Messrs. Dorset Yacht Co., Ltd., Hamworthy, was commissioned as *INS Kakinada* with Pennant No. M1201 on August 17,1956 with Lieutenant (later Commander) N. Rajagopal as the Commanding Officer.

Named after minor ports in India, all six minesweepers initially constituted the 18th Minesweeping Squadron but on September 1,1956 they were split into two squadrons, the two inshore minesweepers constituting the 239th Minesweeping Squadron with *Bnssein* as the senior ship and the four coastal minesweepers constituting the 149th Minesweeping Squadron with *Kanvnr* as the senior ship.

Each of the coastal minesweepers had a standard displacement of 360 tons (425 tons full load) and dimensions of 153 feet (length), 28.75 feet (width) and 8.25 feet (draught). The weapon package of each minesweeper consisted of one 40-mm Bofors and two 20-mm antiaircraft guns and the propulsion system comprised twin-shaft Napier Diesel engines developing 1,250 brake horse power at a maximum speed of 15 knots and a complement of 40 officers and men.

After a brief work-up with the Royal Navy, the two Ham class inshore minesweepers reached India before the end of 1955. The four Ton class coastal minesweepers which were commissioned in August 1956, soon proceeded to the Royal Naval minesweepers base at Hythe, situated across the river from Southampton, where they worked up under the guidance of Royal Naval personnel.

Mixing business with pleasure has been the hall-mark of all sailors, be they of any navy, and this was confirmed once again at Hythe when a 17-year-old junior sailor, Engine-room Mechanic Class II Iqbal Singh, a professional 'pop' dancer and 'rock and roll' specialist (Iqbal could imitate Elvis Presley, the world famous hip-swinging dancer-crooner better known as Elvis the Pelvis) was in great demand at the Fort town's social gatherings. Iqbal soon walked away with the first prize at the South of England Rock and Roll Championship!

Lieutenant S.P. Govil, a sword of honour awardee (now Vice Admiral and Vice Chief of the Naval Staff) who is the only serving officer from the original commissioning crew of the Coastal Minesweepers and who has served in Cannanore reminisces:

It was a great day for all of us undergoing the Sub Lieutenant's technical courses in the UK when we received our appointment letters appointing us to the four Coastal Minesweepers. From RN Gunnery School, Chatham, where we completed our last course, we proceeded to join our respective ships at Hythe on 06 Oct 1956.

The few months we stayed at Hythe gave us a good grounding in handling these ships and operating the Minesweeping gear, which was then the latest in the IN inventory.

We were given a touching farewell at Hythe by Captain S.N. Kohli, then our Naval Adviser in London, and his staff along with members from the Admiralty. At Plymouth, we were wine and dined by Admiral Sir Mark Pizey at the Admiralty House who on return from India as C-in-C Indian Navy had taken over as the Commander-in-Chief Plymouth. He along with Lady Pizey came out in the C-in-C's barge to see us off at the Plymouth Sound.

After a brief stop over at Gibraltar we arrived in Malta where we had to cool our heels for a few months as the war clouds brought about the closure of the Suez Canal. This period was professionally the most satisfying as Captain Inshore Flotilla (RN) and his staff put us through our paces. We participated in joint manoeuvres, formation anchorings, major minesweeping exercises with the Royal Navy and played tactical games at the RN Tactical School, Malta.

After cessation of hostilities, our's were the first ships to transit through the Suez Canal and one could see the extensive damage that had been done. We reached Bombay in May 1957 and our ships berthed alongside the Challanor steps, one alongside the other where we were received by the Defence Minister, Shri V.K. Krishna Menon, Admiral Sir Stephen Carlill, the then Chief of the Naval Staff and the Commodore-in-Charge Bombay - a great home coming for all of us indeed.

Six Seaward Defence Boats

Four Seaward Defence Boats (SDBs) were acquired from Italy during the period 1957-58. Constituting the 322nd Seaward Defence Boats Squadron, these four boats were *INS Subhadra*, *Suvarna*, *Sharayu* and *Savitri*. The *Subhadra* was commissioned on August 20, 1957 with Pennant No. SDB3130 and with Lieutenant (later Commander) P. D'Souza as her first Commanding Officer; the *Suvarna* with Pennant No. SDB 3131 and Lieutenant (later Commander) V. Bhushan as her Commanding Officer when she was commissioned on August 28, 1957; the *Sharayu* with Pennant No. SDB3129 was commissioned on October 28, 1957 with Lieutenant (later Commander) S.C.M. Chitale in command and the *Savitri* with Pennant No. SDB3123 was commissioned on February 6, 1958 with Lieutenant (later Commander) C.R. Menon as her first Commanding Officer. These boats had a displacement of 63 tons and dimensions of 90.25 feet (length), 20 feet (width) and 5 feet (draught). They carried small arms for defence and were powered by two twin-shaft diesels developing 1,900 brake horsepower at a maximum speed of 21 knots. The *Sharayu* was the leader of the Squadron.

These four craft had actually been acquired by the Central Board of Revenue (CBR) but were manned, maintained and operated by the Navy and hence were known as CBR craft. They were placed under the operational control of the Flag Officer, Bombay and their operations were coordinated by the Staff Officer (CBR craft) in liaison with the Central Revenue Intelligence organisation. These craft were essentially meant

for gathering revenue intelligence and anti smuggling operations and hence had Central Excise inspectors on board during operational sorties. Since the operation of these craft in adverse sea conditions was fairly hazardous and the only navigational aid fitted on board was a magnetic compass, they could only be used in fair weather, i.e., between the months of September and May, and were brought back to their safe anchorage at Bombay before the onset of the monsoons.

Two Seaward Defence Boats were also acquired from Yugoslavia. These were the *Sharada* with Pennant No. SDB 3133 and the *Sukanya* with Pennant No. SDB 3132 which were respectively commissioned on December 5, 1959 and December 12, 1959 with Lieutenant (later Rear Admiral) P.P.I. Sivamani and Lieutenant (later Lieutenant Commander) S.K. Kulshreshtha as their Commanding Officers. These boats had a displacement of 86 tons, an overall length of 103.25 feet, carried small arms for self-defence and were powered by diesel engines. These two boats were originally included in the 322nd Seaward Defence Boats Squadron but were later separated and formed into the 324th Seaward Defence Boats Squadron with the *Sukanya* as the senior ship.

Three Antisubmarine Frigates

As regards modern frigates, initially it had been proposed to acquire six antisubmarine vessels of the Blackwood class but later it was decided to restrict the number of these frigates to only three for the time being. The three ships acquired, *Khukri* (the Khukri is the Gurkha broad-bladed knife), *Kirpan* (the Kirpan is the Sikh sword) and *Kuthar* (the Kuthar is an axe) were similar to the British frigates of the Blackwood class but were slightly modified to suit Indian **requirements by removing the** four 21-inch torpedo tubes which had earlier been proposed to be fitted but were later omitted.

Each antisubmarine frigate has a standard displacement of 1,180 tons (1,456 tons full load) and dimensions of 310 feet (length), 33 feet (width) and 11 feet (draught). The weapon package comprised three 40-mm Bofors guns for anti-aircraft defence and two Limbo triple-barrel depth charge mortars for antisubmarine operations. Each ship was propelled by one set of geared turbines delivering 15,000 shaft horse power at a maximum speed of 27.8 knots and had a complement of 150 officers and men.

Built by Messrs. J. Samuel White and Co. Ltd., Cowes, Isle of Wight, the *Khukri* was launched on November 20, 1956 and completed and commissioned into the Navy on July 16, 1958 with Pennant No. F149 and with Commander (later Vice Admiral) S.H. Sarma as her first Commanding Officer. The *Kirpan*, whose first Commanding Officer was Commander (later Captain) K. Gopinath, and which was built by Messrs. Alex Stephen & Sons Ltd., Govan, Glasgow, was launched by Shrimati Beryl Shri Hari, wife of Air Commodore Victor Shri Hari, Air Adviser to the High Commissioner for India in London on August 19, 1958 and completed and commissioned on July 01, 1959 with Pennant No. F144. The third ship, *Kuthar* was launched on October 14, 1958 by Shrimati Usha Rajwade, wife of the Military Adviser to the Indian High

Commissioner in London and completed and commissioned at the shipbuilding yard of Messrs. J. Samuel White & Co. Ltd., Cowes, Isle of Wight on July 15, 1959 with Pennant No. F146 and with Commander (later Commodore) S.S. Sodhi as her first Commanding Officer.

Three Antiaircraft Frigates

Three Type 41 antiaircraft frigates (similar to the British Leopard class and modified to suit Indian conditions) acquired from Great Britain were *Brahmaputra*, *Bens* and *Betwa*. The *Brahmaputra* being the first major warship to be built in a British yard for the IN since India became independent. Each of the ships had a standard displacement of 2,251 tons (2,515 tons full load) and dimensions of 339.25 feet (length), 40 feet (width), and 12.5 feet (draught); the ship's weapon system consisted of four 4.5-inch antiship and antiaircraft medium range guns in twin turrets controlled by the recently developed weapon control system, Fly Plane System Mark 5, and four 40-mm Bofors antiaircraft close-range guns controlled by another recently developed weapon control system, Medium Range System Mark 8 the antisubmarine weapon fitted on board was the Squid triple-barrel depth charge mortar, the propulsion system comprised twin-shaft standard range diesels developing 12,380 brakehorse power at a maximum speed of 25 knots while the complement of the ship was 210 officers and men. The three Type 41 frigates were also the first to be fitted with controllable pitch propellers.

The *Brahmaputra* had originally been ordered as the *Panther* for the Royal Navy on June 28, 1951 but was later offered to the Indian Navy as her first state of the art antiaircraft frigate. Built by Messrs. John Brown & Co. Ltd., Clydebank, she was the first major warship to be built in Great Britain for the Indian Navy after Independence and was launched on March 15, 1957 by the Indian High Commissioner Shrimati Vijaya Lakshmi Pandit. She was completed on March 28, 1958 and commissioned into the Indian Navy on the same day by Lady McNeil wife of Sir James McNeil, Managing Director of the shipbuilding company (Shrimati Pandit was also to commission the ship, but, due to last minute indisposition, she could not undertake the journey to Glasgow for the commissioning ceremony), with Pennant No. F.31 and with Commander (later Commodore) K.K. Sanjana as her first Commanding Officer. The shipbuilders, John Brown, prided themselves in having built the world's largest ocean liner - the *Queen Elizabeth*.

Built by Messrs. Vickers-Armstrong Ltd., Newcastle-on-Tyne, the *Beas* was launched on October 9, 1958 and completed and commissioned on May 24, 1960 with Pennant No. F 137 and with Commander (later Commodore) B.R. Kapoor as her first Commanding Officer.

The third ship, the *Betwa*, was launched on September 15, 1959 and completed and commissioned on December 8, 1960 with Pennant No. F139, her first Commanding Officer being Commander (later Vice Admiral) R-K.S. Ghandhi. The three frigates later formed the 16th Frigate Squadron with the *Brahmaputra* as the leader and her Commanding Officer the Senior Officer of the Squadron (F16).

Commodore K K Sanjana takes a journey down memory lane and reminisces:

A fortnight after commissioning, we sailed for Plymouth to embark ammunition etc., before proceeding to Portland to undergo an extensive work-up programme under the command of the Flag Officer Sea Training (FOST). The *Brahmaputra* spent nearly four months at Portland, undergoing very severe and strenuous operational exercises. After a very critical final inspection by the Flag Officer Sea Training and his staff, she was certified as 'operationally ready in all respects'.

Out of the many evolutions and exercises conducted by the FOST and his staff, I remember very well a rather amusing incident. For a boarding party exercise, the officer-in-charge of the boarding party was Lieutenant Jeremy Black, a Gunnery Specialist, who was Staff Officer (Gunnery) with FOST. Before the boarding party, comprising a complete Royal Navy crew, could board the *Brahmaputra* I had passed orders on the ship's intercom that no one on board was to claim any knowledge whatsoever of English. We could only speak Hindi, Malayalam or Telegu! Lieutenant Black and his men, after boarding the ship, were totally flabbergasted as the Boarding Officers Handbook, perhaps issued by the Royal Navy in the days of Nelson, had no translations for any of the Indian languages: young Black put his hands up and admitted defeat. This young officer of 1958 is today Admiral Sir Jeremy Black, at present serving as the Vice Chief of the Defence Staff in the United Kingdom. [I know for a fact that whenever he meets any Indian officer today, even after 30 years, he is the first one to relate this incident.

Khukri joined us in August and a non-composite squadron of ships was formed as the 14th Frigate Squadron of the Indian Navy, comprising the *Brahmaputra* (Senior ship) and the *Khukri*. Both the ships finally sailed from Portland in the middle of October 1958.

On our passage home, we paid an operational call at Malta for refuelling and rations. We left Malta for Port Said -again for refuelling and rations. After leaving Port Said on October 27, 1958, we passed through the Suez Canal on our passage to Aden, where we were scheduled to pay a formal visit. However, on reaching Aden, we found that there were some disturbances in the city and Aden had been placed under a curfew.

To undertake the final long passage home from Aden to Bombay, both the ships, especially the *Khukri* needed fuel very critically. Thanks to the staff of the oil company responsible for our refuelling, we did manage to get some, under the noise of small-arms fire outside the harbour precincts. Since the situation in Aden was getting worse and somewhat out of control, I was advised to get out of the harbour with the *Khukri* as quickly as possible. Under these circumstances, we could not receive the full quantity of fuel that we both needed,

On leaving harbour, the *Khukri* signalled to me that she did not have enough fuel to make the passage to Bombay. The *Brahmaputra* class of ships had a tremendous endurance and as such she had

enough fuel on board even though not to her full capacity. Since we were required to keep to our schedule to reach Bombay on November 7, 1958, and as I was not happy with the thought of having to tow the *iCfewfriunceremoniously* into Bombay Harbour, I decided to take her in tow at sea. The *Brahmaputra*, therefore, towed the *Khukri* for nearly 36 hours of the passage to enable her conserve her fuel and enter Bombay ceremoniously on her own steam.

On entering Bombay Harbour, the two ships anchored off the Gateway of India and, a few hours thereafter, we had the honour of receiving Vice Admiral R.D. Katari, who was then the Chief of the Naval Staff, and had specially come to Bombay to receive us.

Recalls Vice Admiral Gandhi, who was then commanding the *Betwa* and who later became the Governor of Himachal Pradesh:

Betwa was launched at Vickers Armstrong Shipyard at New Castle Upon-Tyne on September 15, 1959 by Mrs Kakkar, wife of the Commercial Counsellor at the Indian High Commission in the UK.

The ship was due to be completed on December 6, 1960 and was to be handed over on that date to the Indian Navy, but because I had handed over *Cauvenj*, which had been an extremely lucky ship for me, on December 8, two years earlier, I deferred the formal commissioning by two days and commissioned *Betwa* on the morning of December 8, 1960. It was a bitterly cold but bright day. The chief guest was the Lord Mayor who happened to be a Lady at the time.

Speeches were made by the Naval Adviser, who also read out a message from the First Sea Lord, Lord Mountbatten. He was due to attend the commissioning ceremony but this had to be cancelled as he was away on tour at the time. The Chief Constable of Newcastle made a witty little speech and presented me with a policeman's baton saying that this symbolised authority without any need to wield it.

I read out the Commissioning Warrant, proceeded onboard to the strains of the traditional bosun's {'bosun' is the abbreviation for boatswain) pipe. The Officer of the Day was Lieutenant (later Commander) M S Rawat. I received Commodore Marsh, the Commodore Superintendent, Contract-Built Ships, who inspected the guard of honour,

commanded by Lieu tenai 'R.P.Sawhney (later Vice Admiral). After commissioning, we went down to Portsmouth for what was called Part II Trials and thence to Portland for our work-up. I think *Betwa* was the only ship that carried out the full four-month work-up at Portland under the Flag Officer Sea Training, who then happened to be Rear Admiral Peter Gretton - a firebrand officer of World War II fame.

Whilst we were at Portland, because Admiral Mountbatten could not come for my commissioning ceremony, he paid us a visit, inspected the ship at Divisions (a ceremonial parade), made a thundering speech to the sailors and was highly impressed by the decor and the fittings of *Betwa*. The work-up was intense and severe and taught not only the Captain but down to the last Seaman Boy how to set about seamanship and other drills in the foulest of foul weather. After a time, I just stopped reading the weather reports because they always mentioned gales, snow and sleet with force 8 and 9 winds. On more than one occasion, we had to secure to buoys in the middle of the night in the freezing cold and I have no hesitation, in saying that my buoy jumpers (sailors who secure ships to buoys) were superb.

After a successful Flag Officer Sea Training's inspection, when I was absolutely exhausted after he had ordered me to do a 360 degree turn alongside a tanker at sea, in his summing up note, he told me that my Chief Petty Officer (Telegraphist) Masih and Lieutenant M.S. Rawat were the outstanding crew members of *Betwa*.

After our work-up, the plan was that *Betwa* would act as crash boat (ship used for rescuing the crew of crashed aircraft) to *Vikrant*, but because the *Vikramt* was delayed in her commissioning, we were ordered to return home and the highlight of our return journey was a visit to Monte Carlo. I called on Prince Rainier, the sovereign of Monaco, and he invited me to lunch with my ADC. Lieutenant Ravi Sawhney was appointed ADC for the day and he and I trooped off to the palace for lunch with the adorable Princess Grace of Monaco. On return back home, the wives were anxious to find out from us what Princess Grace ate for lunch that day and what she looked like and whether she was really very beautiful.

For the interest of readers, whilst we had a full five-course meal, Princess Grace only had fruit and raw vegetables, and on my inquiry, told me that two or three times a week, she had this for lunch; and on my questioning her reason for this, she said, it is good for my complexion. It is all part of history now, but 'Betwa', when back in India, rode the waves strongly and I think I am right in saying that we captured every single trophy in 1961, including the Regatta Cock and the sinking of the Portuguese destroyer *Afonso de Albuquerque*.

Two Surface Escort Frigates

Two surface escort frigates of the Whitby class which had been tropicalised so that they could withstand the Indian coastal conditions, mainly high temperature and high humidity, were the *Talwar* and *Trishul*. Each of these ships had a standard displacement of 2,144 tons (though the full load displacement was different - *Talwar* 2,545, tons and *Trishul* 2,557 tons) and dimensions of 369.5 feet (length), 41 feet (width) and 12 feet (draught); the weapon package included two 4.5-inch medium range anti surface and anti-aircraft guns

controlled by Fly Plane System Mark 5 and two 40-mm Bofors close range anti-aircraft guns controlled by Medium Range System Mark 8 and anti-submarine weapons comprising two Limbo three-barrel depth charge mortars; the propulsion machinery consisted of two sets of twin-shaft geared turbines delivering 30,430 shaft horse power at a maximum speed of 30 knots and the ship's complement was 231 (11 officers and 220 sailors). The original design for this class of frigates had provided for twelve 21-inch torpedo tubes but, once again, these were not fitted.

The *Talwar* was launched on July 18, 1958 from the shipbuilding yard of Messrs. Cammell Laird & Co., Ltd., Birkenhead, and completed and commissioned on April 26, 1960 with Pennant No. F140, with Commander (later Commodore) B K Dang as her first Commanding Officer. The other frigate of this class, the *Trishul*, was launched on June 18, 1959 at the shipbuilding yard of Messrs. Harland and Wolff Ltd., Belfast, and completed and commissioned on January 13, 1960 with Pennant No. F143, her first Commanding Officer being Captain (later Vice Admiral) V A Kamath. The two ships formed the 15th Frigate Squadron with the *Trishul* (F15) as the leader.

The Navy's First Indigenously-Built Craft

The honour of being the first vessel to be built indigenously for the Navy after Independence goes to *Ajay*, a Seaward Defence Boat built by the Garden Reach Workshop (now Garden Reach Shipbuilders and Engineers), Calcutta. The other two boats of this class, *Abhay* and *Akshay*, were, however, built by Messrs. Hooghly Docking and Engineering Co., Ltd., Calcutta. These boats had a standard displacement of 120 tons (the full-load displacement was different: *Ajay* 146 tons and *Abhay* and *Akshay* 151 tons) and dimensions of 117.25 feet (length), 20 feet (width), and 5 feet (draught); one 40-mm Bofors close-range anti-aircraft gun was the only weapon fitted and twin diesels provided propulsion, giving a maximum speed of 18 knots. The *Ajay* was commissioned on September 21, 1960 with Lieutenant Commander (later Commander) A.S. Bhat as the Commanding Officer; the *Abhay* had Lieutenant Commander (later Commander) P M Verghese in command when she was commissioned on November 13, 1961 and the *Akshay* was commissioned on January 8, 1962 with Lieutenant Commander (later Commander) G.S. Saini as the first Commanding Officer.

Logistic Support Ship

Another ship that was acquired for logistic support at sea at this time was ***Dharini*** which was formerly, the *SS Hermine*, a cargo ship, and was rated a repair and store ship as a constituent of the Fleet Train after her commissioning on April 2, 1959 with Commander G.S. Gupta as her first Commanding Officer. Her displacement was 4,625 tons, dimensions 328 feet (length), 46 feet (width) and 19 feet (draught) and she was powered by a triple expansion engine.

The tanker, *Shakti*, and the repair and store ship, *Dharini* were to be the nucleus of the Fleet Replenishment Group for the 'balanced naval force' that the planners were proposing to set up for the defence of India's seaboard and coastal waters.

First Indigenously Built Hydrographic Survey Ship

The commissioning of *Dnrshak*, a hydrographic survey vessel built indigenously for the Navy's surveying fleet, on December 28, 1964 marked a new stage in Indian shipbuilding for she was the first major ship to be built by an Indian yard for the Navy. She was also the first private ship (a warship smaller than a cruiser) of the Navy to carry a helicopter.

The keel of the *Darshak* was laid down at the Hindustan Shipyard Vishakhapatnam on October 14, 1957, India's first privately-owned yard, later taken over by the Government of India. The hull was launched on November 2, 1959 and the ship was commissioned on December 28, 1964 with Captain (later Commodore) D.C. Kapoor as her first Commanding Officer. The ship displaces 2,790 tons and her dimensions are 319 feet (length), 49 feet (width) and 28.75 feet (draught). She carries a helicopter for marine survey of India's coastline and harbours and is fitted with the latest surveying and navigational equipment. She is propelled by two diesel-electric plants developing 3,000 brake horse power at a maximum speed of 16 knots and she has a complement of 180 officers and men.

Vikrant Joins the Fleet

The most significant event in the Fleet during the period from 1950 to 1965 was the acquisition of India's first aircraft carrier, *Vikrant*, which was commissioned into the Navy on March 4, 1961 not only to usher the era of naval aviation into South East Asia but also to complete the process of setting up a 'balanced naval force' in the region for the first time. While the light fleet carriers' acquisition has been discussed in detail elsewhere in this book, it must be emphasised that K.M. Panikkar's prognostication and justification made in 1945 for establishing a fleet air arm as an integral part of the Fleet, was adequately vindicated when the Pakistan Navy's Fleet was kept at bay during the 1965 operations and the Pakistan Navy units in the erstwhile East Pakistan were totally annihilated by *Vikrant* aircraft during the 1971 conflict.

The Fleet's Birth Pangs

Vice Admiral V.E.C. Barboza, who retired as the Navy's Flag Officer Commanding-in-Chief of the Western Naval Command in 1981, had held many staff appointments at Naval Headquarters and reminisces on the growth of the Navy's fleet during the fifties and the sixties

I was Staff Officer (Plans) at Naval Headquarters from April 1950 to May 1952. When I joined duty, Indo-Pak relations had reached the brink of war and I was soon in the thick of all the urgent, extensive

preparations to tackle the 'emergency' as it was referred to at the time. Our war plan included an attack on Karachi Harbour by *Delhi* and the three Rs (*Rajput, Rana and Ranjit*) - and Rear Admiral G Barnard (the Fleet Commander) had lost no time in working up his ships for this as well as other vigorous actions at sea. At Naval Headquarters, all of us were learning fast, gaining much from the experienced counsel of Admiral Sir Edward Parry (the Navy's C-in-C) and Commodore Peter Drew (Chief of Staff, the equivalent of the present Vice Chief). It was agreed by the respective Governments that, if hostilities broke out, all British Officers would instantly hand over their duties to nominated Indian officers and withdraw from the scene. This eventuality was borne in mind and faced with firm confidence. Though the Nehru-Liaquat Pact averted an armed conflict between their countries which I think we were well braced to win - the experience we gained in preparing for it was immeasurable. Recalling the bureaucratic obstacles the Naval Headquarters had to negotiate in its efforts to develop the Service and its fleet, Vice Admiral Barboza says:

When Indo-Pak tension appeared to ease, the Government directed its energies to mapping out its strategy for economic development in greater detail, with immediate emphasis on the Five Year Plan. A Committee headed by a bureaucrat, Shri B.B. Ghosh, was appointed to examine the Armed Forces development plans to see how they could best be meshed with the National Plan. Not surprisingly the Committee soon encountered the tricky problem of balancing our defence needs against the estimates of available financial resources. When Shri Ghosh seemed to veer to the view that the way to match defence demands and inadequate funds was to have a smaller Army, the soldiers were understandably alarmed. They regarded the idea of restricting the Army's strength to a couple of hundred thousand - teeth, tail and all - as a formula for fatal emasculation. And their consternation peaked when the Prime Minister reportedly made a passing remark in Parliament about scaling down the Army's force levels.

By contrast the Navy was too diminutive to admit of any whittling of its strength: so our anxiety centred really on the volume and pace of expansion the Committee would recommend. A tow gear crawl towards inconsequential goals would have made a mockery of naval development and enlarged the very problems it was supposed to solve.

As things turned out, however, some armed skirmishes along the Indo-Pak border (which were seen as proof of Pakistan's implacable belligerence) as well as other political and economic factors, conspired to undermine whatever the Ghosh Committee was endeavouring to achieve and its work seemed to dissolve into a blur. The Army's strength was never run down and as time went by, it expanded to gargantuan proportions. What was nearly over killed, **survived** to become overgrown. I wonder whether the Ghosh Committee papers are traceable today. Perhaps they are all moth-eaten - unless the mothstoo found them unpalatable.

Though the Navy did not have to wage too intense a crusade to have its *raison d'être* accepted, it faced heavy odds when it came to securing sufficient funds for its growth. As an equipment-oriented Service, the cost of its build-up was high—a cost that could not be met by the small change of niggardly budget allocations. Yet, since the continental threat bulked large in the Government's strategic perspectives, it seemed that the Navy would have to be content with the thin beer of a watered-down development. But if there was anything that the Service could count on it was the enlightened maritime vision of leaders such as Prime Minister Nehru and, as long as he lived, Sardar Patel. Their positive confidence-generating understanding of the seas' importance did much to make the Navy's growth in the 'fifties gratifyingly sure and steady. True its budgets slumped immediately after the Chinese aggression; **but** the ensuing lean years were wisely (and stoically) used to consolidate previous gains and prepare for the inevitable turn of the tide.

India Turns to the USSR for Submarines

It was in 1965 that, having failed to obtain any submarines from the UK, India turned to the USSR and thus came to an end the flow of ships, equipment, weapons and technical expertise from the British Admiralty to the Indian Navy, which now began looking around for other sources for state-of-the-art naval hardware. While India had wanted Oberon or Porpoise class submarines from the Admiralty, the latter was prepared to offer only obsolescent 'A' class submarines of World War II vintage and in return for the request for Daring class destroyers, it offered to supply Battle and Weapon class destroyers which were also about to be consigned to the shipbreaker's yard. James Goldrick feels that this watershed in the Indian Navy's acquisition programme was inevitable: "The conclusion which can be drawn from the abortive submarine negotiations" he says, "is that the British were determined to make a profit from any arrangements with India. From 1965 onwards, relations between the Indian and Royal Navies, however cordial, were marked by an emphasis on commercial advantage. India could have British equipment if it was willing to pay for it.

The announcement on the purchase of Russian submarines thus marks the end of an era for the Indian Navy in several ways. Despite the difficulties over naval aviation and the British reservations on strategic issues, the Admiralty provided a measure of support for the Indian Navy which had both material and personnel advantages for India. It may be argued that the RN (Royal Navy) deliberately restrained Indian naval development but there was sufficient realism in British judgments as to the effect of rapid expansion upon fighting efficiency for it to be suggested that such restraint was no bad thing.

Certainly, Britain helped India acquire cheap warships at a time when the Indian Navy was the lowest Service in Indian defence priorities - and budgeting. Equally certainly, the majority of ships which India received would not have looked out of place as active Royal Navy units.

But the close relations could not last and it is perhaps most significant that they were sustained until 1965. Perhaps this was due as much to enthusiasm for naval activity for its own sake on the part of both the Admiralty and Indian Naval Headquarters as to any other single factor. "In fact the 'other single factor', as viewed by senior Indian Naval planners in retrospect, was the British policy of maximising its commercial benefits by turning its 'lame ducks' into potential money spinners. Ships, like destroyers of the Battle or the Weapon class, and submarines of the 'A' class would certainly have looked out of place as active Royal Navy units during the 'sixties' and 'seventies'. The fact that India acquired a large number of ships of various classes with reasonable seaworthiness and effectiveness of weapon systems at fairly moderate costs to the Indian exchequer was largely due to the influence of Lord Louis Mountbatten, who wished to see the Indian Navy quickly expand to a size commensurate with its tasks and responsibilities, to the efforts made by the British Chiefs of the Indian Navy and by Shri V.K. Krishna Menon, both as India's High Commissioner in the UK and, later, as India's Defence Minister. And the suggestion that 'the Royal Navy deliberately restrained Indian naval development because there was sufficient realism in British judgments as to the effect of rapid expansion upon fighting efficiency' appears to be a facile defence of the British policy of preventing a 'dominion' from developing its coastal flotilla into a 'balanced naval force'. The fact that British global naval policy, at least until recently, was structured around a British bluewater navy, supported by the brownwater navies of its 'dominions' in their respective coastal areas and perpetually tied to its apron strings, was evident even during World War II when, in 1944, the British Prime Minister, Winston Churchill, suggested that it be declared that 'the greater measure of cooperation that political parties in India give, the earlier the change-over is likely to be' with a 'promise of modern ships for the Indian Navy at the end of the war'. It was even at that time no better than a mere *quid pro quo*.

Alternative Sources for Naval Hardware

Severing the British umbilical and then the apron strings during the mid 1960s, turning to other sources for naval hardware in 1965 and finally indigenously constructing and developing designs for warships and ship-borne weapons and equipment has, after a brief period of gnawing doubt, turned out to be a blessing in disguise. The degree to which ships of the Indian Navy were dependent on the Admiralty during the earlier decades of India's independence is evident from the following reminiscences of Vice Admiral M.P. Awati, who retired as the Flag Officer Commanding-in-Chief of the Western Naval Command in 1983: I clearly recall an incident in early 1951 when, as a Lieutenant in *Ranjit*, I had been told by my First Lieutenant (Second-in-Command) to chase up a consignment of paint buckets with the Naval Store Officer. That officer, whose office used to be in the Naval Dockyard, Bombay in 1951, told me that he was awaiting the galvanised iron buckets from the United Kingdom! At that time the country's industrial base was no doubt small and

somewhat primitive. But India had been a manufacturer and supplier of an extensive range of war material by 1945. For her to require naval paint buckets to be supplied all the way from England in 1951 was a little bizarre. It was an example of the Navy's insistence on 'quality' and reliance on the 'Admiralty Pattern' for everything from paint pots to peg measures, from caps to coverlets, from guns to gunny sacks! The Navy could not as yet trust itself to indigenous items of stores. Substitution could not even be contemplated!

This was one of several examples of sheltering under the umbrella of the Royal Navy. In 1951 it would have been unthinkable to break away from its protective tutelage. Only a year before, at the beginning of this period the great ex-Viceroy, now commanding a cruiser squadron in the Mediterranean (Lord Louis Mountbatten), had personally designed the new Republican insignia of the Indian Navy. The Ashokan capital atop the Admiralty fowl anchor on the cap badge and buttons (of India's Naval uniform) could readily stand in for the erstwhile Royal Crown of the United Kingdom of England, Scotland and Northern Ireland! The white ensign too had been retained with the National Tricolour substituting the Union Jack in the left upper canton. The language and organisation of the Service, its manners and deportment, both afloat and ashore, remained very English or British. The pre-lunch gimlet and the post-prandial port would have been missed in the Wardrooms (officers' messes) had they been absent, and the President's health continued to be drunk seated - as it continues to be today - in Wardrooms afloat. But the change from port to the similarly-tinted aerated cola beverage for drinking the Loyal Toast had come almost on the heels of the Republic. An officer from the Royal Navy would not have found himself in an alien environment in the Indian Navy of 1951.

Indigenisation of not only the procedures for parades, ceremonies, rituals, traditions, etc., but also of ships, weapons and equipment was slow but deliberate and hence had no adverse effect on the naval ambience or its operating efficiency. Vice Admiral Awati feels that:

The slow progress towards Indianisation has helped the Navy to lay a firm foundation of its training and discipline. The switch from the old traditions to the new ones has been almost imperceptible, so imperceptible in fact that we came to believe that things were always done that way. A tradition is as important to a fighting service when moving from an older format to a new order as mother's milk is to a child which is growing from a crawler to a toddler. Bereft of either, the Service or the child would have grown up ill-founded and incapable of facing the strains and stresses inherent in their respective growth to maturity. I do sincerely believe that the years of upheaval which followed Mr. Nehru's departure from the national scene, and which were inevitably reflected in the Navy, caused virtually no damage to the fabric of discipline and good order in the Navy.