

THE MEN BEHIND

THE MACHINES

Personnel

One of the grave inadequacies the fledgling Royal Indian Navy faced during its formative years after Independence was the inadequacy of personnel, especially in the senior cadres, and serious imbalances in its personnel structure. Much of this had stemmed from the policies followed by the British in respect of service in the RIN during the decades preceding Independence. Until 1947 our naval forces, such as they were, comprised virtually a navy of mercenaries led almost entirely by British officers. Britain, whose own navy was the instrument through which she wielded influence and enforced her policy around the globe, had no need for another navy of any consequence which might even remotely challenge its authority at a future date. All she wanted was a substantial bulk of manpower on shore which the British Indian Army provided most effectively. This probably explained why the Navy was the last of the Services to which Indian officers were admitted.

Another major problem that faced the Royal Indian Navy on Independence arose from the fact that the bulk of recruitment into the sailor rank was from among the Punjabi Muslims. Thus, when partition came, an alarmingly large number of senior sailors went over to Pakistan leaving a gaping void in the hierarchical structure of the truncated Navy.

While the imbalance in the officer cadre caused by the partition of the country was tided over by resorting to a deliberate policy of borrowing officers from the Royal Navy/ particularly in the senior ranks, until the comparatively junior Indian officers could gain the necessary experience, a crash programme of recruitment and intensive training of sailors was also undertaken, and was particularly aimed at filling the gaps in the senior ranks.

At the time of partition about 21 per cent of the officers of the undivided RIN opted for Pakistan but in the case of sailors no less than 47 per cent were transferred to the Pak Navy. By 1950, however, the officers' strength had increased by 59 per cent to 720. In 1955 the borne strength was 999 which was an increase of 39 per cent. By 1960 the borne strength had gone up to 1425, i.e. a substantial increase of 43 per cent and by 1965 the strength was increased to 1934, i.e., an increase of 39 per cent. Various schemes of recruitment including direct entry had been initiated and these brought in an adequate number of officers into the various branches. Foundations were thus

firmly laid for sustaining a personnel cadre that could man and handle diverse specialist tasks, ashore and afloat, in the Navy of the future.

With regard to the strength of sailors which, as stated earlier, had been reduced by nearly 50 per cent of the undivided RIN's complement at the time of partition, was increased in 1950 by about 40 per cent of the truncated RIN's complement with the strength being raised to 6,950. By 1955 the sailors' strength had increased to 9,609, i.e., an increase of 38 per cent, and in 1960 the sailors' strength was further raised to 12,822 which was an increase of 33 per cent. In 1965 the sailors' strength was 16,933 i.e., an increase of 32 per cent. Here also a firm base was progressively created for the vital sailor structure to meet the increased requirements of multiplying skills in the different disciplines of an expanding Service.

The training establishments, which had been geared up to ensure effective training of a very large number of naval personnel, did a commendable job to meet all the commitments for the different branches of the Services without allowing any fall in standards. By this time the Navy had not only made up the steep fall in its officer and sailor cadres caused by the partition of the subcontinent but had also created a sizeable skill-bank, i.e., a nucleus of officers and sailors with considerable experience in their specialisations and subspecialisations and capable of reaching high levels of proficiency in the various operational, maintenance, logistic and shore-support disciplines required to run a viable naval force with state-of-the-art equipment, technology and strategic and tactical manoeuvrability.

Officers

On August 15, 1947 all British officers of the RIN and its Reserves (Royal Indian Navy Volunteer Reserve and Royal Indian Navy Reserve) were compulsorily retired. They were paid compensation for the 'loss of career' and were granted full or proportionate pension based on the length of service. As regards the Indian officers, Muslims residing in India and non-Muslims from areas in Pakistan were given the option to elect service with either of the two new navies while Muslims from Pakistan could only opt for service with the Royal Pakistan Navy and non-Muslims residing in India could serve only in the Royal Indian Navy.

British officers released from the RIN were invited to volunteer for service in the Armed Forces of India and Pakistan and those who volunteered were transferred to a Special List of the Royal Navy and were placed under the administrative control of the Deputy Supreme Commander (Navy) who assigned them to the RIN or RPN. A number of these officers opting to serve with the RIN were granted commissions in the Service on a contract basis with effect from 1 January 1948. In addition, it was decided to obtain the services of 88 commissioned officers and 61 warrant officers of all branches on loan from the Royal Navy to meet the manning requirements as a stop-gap arrangement.

In order to cater for the expansion of free India's Navy, it was decided to step up the annual recruitment of Cadets from 24 to 46 and to resort to direct recruitment of commissioned officers in all branches of the Navy.

By the end of 1950, the number of Royal Navy and Royal Navy (Special List) officers in the RIN had

respectively gone up to 61 and 8 with an outstanding demand for 19 more officers. In addition, 33 Special-Entry Cadets, 30 Joint-Services-Wing-Entry Cadets and 48 Direct-Entry short service commission officers had been recruited into the Navy. Besides, as many as 33 officers were reputed to undergo various courses with the Royal Navy.

During the following two years, 1951 and 1952, two senior appointments, viz., Captain Superintendent, Naval Dockyard, Bombay, and Naval Officer-in-Charge, Vishakhapatnam, were nationalised, the number of British officers on deputation was reduced to 50, initial training of junior officers of the Executive and Supply and Secretariat branches was initiated in India, 60 Naval Cadets, 10 Special-Entry Cadets and 66 commissioned officers were recruited to the various branches and 82 ex-Reserve officers were granted permanent commissions in the Navy.

By 1958 a number of senior appointments had been Indianised. These were: Chief of Staff and Deputy Commander-in-Chief, Indian Navy; Commodore-in-Charge, Cochin; Commander-in-Charge, Bombay; Chief of Material, Naval Headquarters; Director of Engineering, Naval Headquarters; Officer-in-Charge, Torpedo Antisubmarine School; Staff Officer, Education, at *INS Vendxiruthy*; Chief Instructor (Navy), Defence Services Staff College, Wellington; Chief Hydrographer; Flag Officer Commanding, Indian Fleet; Director of Naval Education, Naval Headquarters; Director of Music, Indian Navy; Chief of the Naval Staff.

During the five years from 1954 to 1958 as many as 200 Regular-Entry Cadets, 59 Special-Entry Cadets, 50 permanent regular commissioned officers and 41 short-service commissioned officers were recruited in the Executive, Supply and Secretariat, Engineering, Electrical and Constructor branches of the Navy. In 1956 the use of the distinctive colour lace between the rank stripes of officers of the Indian Navy worn on their sleeves or epaulettes was abolished. (Executive - no colour, Supply and Secretariat - white, Engineering - purple, Electrical - dark green, Education - blue, and Special - light green).

Until 1957 promotion to the rank of Commander was only by selection. In 1958 officers became eligible for promotion to this rank by time-scale as well. Substantive Lieutenant Commanders who had completed 24 years of reckonable service before attaining the minimum age of compulsory retirement and who were considered fit for promotion were now eligible for promotion to the rank of Commander by time-scale. Also, the existing age of compulsory retirement, viz., 45 years, for officers of the rank of Lieutenant Commander was raised in 1958 to 48 years.

By this time there were only two Royal Navy officers left with the Indian Navy - the Chief of Naval Aviation and the Deputy Director (Flying) at Naval Headquarters.

In 1959, on the institution of the scheme for granting honorary ranks in the Navy, His Highness the Nawab of Palanpur was the first to be granted the honorary rank of Lieutenant Commander in the Navy, one Senior Commissioned Officer (equivalent to the rank of Sub-Lieutenant) was granted the honorary rank of Lieutenant on the Active List and three Chief Petty Officers were granted the honorary rank of Commissioned Officer on the Retired List. The year also saw the recruitment of 34 Regular-Entry Cadets, four Special-Entry Cadets, 12

permanent regular commission officers and 27 short service commission officers. Eighteen ex-Reserve officers were also granted permanent commissions during the year.

It was also during 1959 that, due to poor response to advertisements for the selection of Direct-Entry officers in the Electrical Branch, the University Entry scheme was launched, a scheme under which students in the final and pre-final years of the degree course in electrical engineering at various technical institutions were selected and were screened by a selection board before being recruited into the Navy in the rank of Acting Sub-Lieutenant in the final year while continuing their studies. Under this scheme 16 candidates were recruited in 1959.

During the year 37 officers were deputed to the UK for undergoing various courses including those of Electrical Acquaintance, Constructor, Advanced Aeronautical Engineering, Observers, Advanced Marine Engineering, Advanced Armament Inspection, Advanced Air Engineering, Air Electrical Engineering, Survey, Atomic, Bacteriological and Damage Control, Air Weapons and Engineering Specialisation, Navigation and Direction and attachment to aircraft carriers and aircraft manufacturers.

In the course of the next six years, 499 officers comprising 268 Regular - Entry Cadets, 47 Special-Entry Cadets, 10 Naval Aviation Cadets, 15 University-Entry officers for the technical branches, 90 permanent regular commission officers and 69 short service commission officers were recruited into the Navy. By the end of 1965 the total strength of officers had risen to 1,940. (Executive Branch - 921, Engineering Branch - 312, Electrical Branch - 215, Supply and Secretariat Branch - 237, Instructor Branch - 117 and Medical Branch - 138). The number of officers holding commissions in the Indian Naval Volunteer Reserve (INVR) and Indian Naval Reserve (INR) was 90. Ninety two officers had been deputed to the United Kingdom for the new ships that were being acquired for the Navy and 24 officers were deputed to the UK and USA for various specialist courses. The awards made to officers of the Navy comprised: 1960 - one Naosena Medal; 1961 - One Vishisht Seva Medal Class I, two Vishisht Seva Medals Class II, two Vishisht Seva Medals Class III, one Naosena Medal; 1962 - three Ashoka Chakras Class II, one Vishisht Seva Medal Class II, four Ashoka Chakras Class III, five Naosena Medals and four Mentions-in-Despatches.

Indianisation of the Navy's officer cadre was completed in 1962 when the last British officer still on deputation to the Service - Commodore (later Admiral) D.W. Kirke, Chief of Naval Aviation - returned to England. Sailors With the cessation of hostilities in August 1945 recruitment of sailors had been suspended and a number of Naval recruitment camps had been closed down. The policy of recruitment had been revised and the eligibility for enrolment in the RIN had been restricted to, firstly, Indians who were British subjects or subjects of an Indian State and who were either domiciled in British India or Indian States, secondly, Anglo-Indians who were domiciled in British India or Indian States, and thirdly, Goans (it will be recalled that Goa was under the Portuguese at this time) who had taken out naturalisation papers under either the British Nationality and Status of Aliens Act, 1914, or the Naturalisation Act, 1926.

Plans had also been finalised for lowering the strength of sailors to approximately 11,000 by June 1946 and the process of demobilisation had been stepped up. In the first phase about 6,000 sailors including ex-Army personnel,

Hostilities Only (H.O.) sailors, pensioners, supernumeraries and reservists recalled during the War and recruits under training had been released from service by the end of 1945. Some of the temporary substantive branches of sailors such as Security, Coder and Signalmans (A/M) had been abolished. A number of sailors of higher ranks of branches or categories declared surplus such as the Landing Craft Wing and Hostilities Only category had, however, been transferred to the other branches and retained in service.

A demobilisation centre had been opened at *Kakauri* at Versova, Bombay immediately following the end of the War but since it could not handle the large number of sailors scheduled for release, another demobilisation centre had been opened at *Cetea/ia Trombay* in January 1946. By December 1946, 16335 sailors had been released from service.

After Independence, in order to make up for the sudden loss of nearly 50 percent of the Navy's lower-deck manpower, recruitment of sailors was once again commenced and a large number of sailors deputed to the UK to undergo various courses such as Telegraphist/Signal Boatswain, Quarter Armourer, Electrical Artificer (Radio), Electrical Mechanic and Torpedo Detection. A number of new Part II Qualifications (specialist qualifications) were also introduced. The RIN Guards used for the security of shore establishments were disbanded and were replaced by personnel from the Ministry of Defence Security Corps. Boys and Artificer Apprentices continued to be recruited as before.

The recruitment of direct-entry sailors had soon to be stepped up further in order to make up for the sharp fall in the personnel strength at the time of partition and the deputation of a large number of sailors to the Royal Navy establishments in the UK for specialist courses in communication, gunnery, store-keeping, hydrographic survey, torpedo and antisubmarine warfare, radar control, shipwright, aircraft technology and all disciplines of engineering - mechanical marine, electrical and radio. The C.W. (Commission-Worthy) Scheme - also known as the Upper Yardmen Scheme - was used to select suitable candidates from the lower deck for promotion to the rank of Acting Sub-Lieutenant in all branches. Consequent on the introduction of naval aviation, several categories of sailors were introduced for aviation duties.

By 1951 the manning situation had considerably improved and hence the direct-entry recruitment of sailors was stopped except for the 'Domestic' branch comprising Cooks, Topasses (sailors responsible for the sanitation of ships' living and working spaces), Musicians and Sick-Berth Attendants. By 1953, in order to meet future shortages, recruitment to the Communication, Writer, Stores and Steward Branches was resumed. A large number of sailors, who had qualified in the selection tests for officers, were promoted to the Commissioned Rank (Branch List), the new nomenclature for the erstwhile Warrant Rank.

The education tests for advancement to higher ranks or for promotion to commissioned rank, the Educational Test 1 (ET1) and the Higher Education Test (HET) respectively, were revised to suit the changing requirements of the Navy. In addition, a modified test called Educational Test 1 -U1(M) - was introduced in 1954 for Cooks and Stewards for advancement to the rank of Leading Cook and Leading Steward. In 1961 the designation of Sick-Berth Attendant was changed to Sick-Berth Assistant with the acronym remaining unaltered - SBA.

In 1963 the nomenclature of the Commissioned Rank (Branch list) was changed to the Special Duties (SD) List and the rules for promotion to higher ranks for this category of ex-lower-deck officers suitably revised to improve their career prospects and retirement benefits.

By 1965 the annual intake of Boys had gone up to 800, that of Artificer Apprentices raised to 160 and the number of direct-entry sailors recruited had been stepped up to 1500. As many as 40 sailors were promoted during the year to commissioned rank in the Special Duties List and six sailors were granted the rank of Acting Sub-Lieutenant in the General List under the Upper Yardmen Scheme. A Batch of 40 sailors was deputed abroad for manning new ships being acquired for the Navy.

The awards made to sailors during the period from 1951 to 1965 included Commendations by the Chief of the Naval Staff, Long Service and Good Conduct (LSGC) Medals with or without gratuity (the amount of the gratuity paid was initially Rs 25 but was later raised to Rs 100), Meritorious Service Medals (MSM) with or without annuity (initially a sum of Rs 25 was paid per annum as annuity but this was also later raised to Rs 100 per annum), Ashoka Chakras Class III and Naosena Medals (NM). The numbers of the awards made are given in Table 8.1

Table 8.1 Awards made to sailors from 1951 to 1965

	<i>Commendation</i>	<i>LSGC</i>		<i>MSM with Annuity</i>		<i>Ashoka Chakra Class III</i>	<i>Naosena Medal</i>
		<i>with Gratuity</i>	<i>without Gratuity</i>	<i>with Annuity</i>	<i>without Annuity</i>	<i>Class III</i>	
		2	3	4	5	6	7
1951-52	8	-	-	-	-	-	-
1953	11	-	-	-	-	-	-
1954-58		93	9	-	41	1	
1959		26	13		3	1	
1960	2	28	14		5		
1961		31	16		3		
	1	2	3	4	5	6	7
1962		32	16	4			
1963	5	36	18		6		
1964	10	38	19	5			
1965	20	42	21	8	-	-	-

An impressive pace of development of the Navy's personnel structure had thus been built up by 1965 which enabled the Service to continue to meet its manning requirements during the following decades and to provide suitable personnel for the new acquisitions of the 1970s and 1980s.

Phasing out the British Presence

When partition came on August 15, 1947, the Indian Navy was a Service most of whose top echelons were occupied by British officers with the seniormost Indian officers, Ram Das Katari (later Admiral) being only a Captain. The sudden, though unavoidable, large-scale retirement or 'repatriation' of British officers to their parent Services in the UK and of Muslim officers from the areas allotted to Pakistan to that country, thus left a sizeable void at the senior levels of the Navy's hierarchy.

British officers of the undivided Royal Indian Navy and its Reserves were compulsorily retired, regular officers being granted compensation for premature retirement and officers not qualified for full pension paid proportionate retirement benefits. Some of these British officers who volunteered for Service in the Armed Forces of India and Pakistan were transferred to a Special List of the Royal Navy and were placed under the Deputy Supreme Commander (Navy) for service with the Royal Indian Navy and Royal Pakistan Navy. The Supreme Commander's office was closed down on December 31, 1947 and because of the persisting acute shortage in the cadre of officers, especially in the senior ranks, a number of British officers who had volunteered were selected for extended service with the RIN on a contract basis for three years from January 1, 1948. The services of a few senior officers were, however, obtained on loan from the Royal Navy for the seniormost appointments in independent India's Navy, the total number of Royal Navy personnel attached to the RIN being 149 (88 commissioned officers and 61 warrant officers).

Thus on August 15, 1947 Rear Admiral J.T.S. Hall, RN was selected by the Government of India to command and reconstitute independent India's Royal Indian Navy and was designated the Flag Officer Commanding, Royal Indian Navy (FOCRIN); Commodore M.H. St. L. Nott, RN was appointed the Chief of Staff at Naval Headquarters, the appointment of Flag Officer, Bombay was abolished and Commodore H.R. Inigo-Jones, RN assumed the duties of Commodore-in-Charge, Bombay in lieu. All these officers belonged to the Special List of the Royal Navy (undivided Royal Indian Navy). They were later joined by a few senior officers on loan from the Royal Navy who included Commodore H.B. Ellison, who was appointed the Commodore-in-Charge, Cochin.

A number of British Officers from the undivided Royal Indian Navy opted to serve in the post-partition Royal Pakistan Navy. Out of these officers, Captain J.W. Jefford was promoted to the rank of Rear Admiral and became the Flag Officer Commanding, Royal Pakistan Navy after partition. Having later become a Vice-Admiral, he was the only regular British officer of the old RIN ever to reach this rank.

Besides Rear Admiral Hall, Commodore Nott and Commodore Ellison, the other senior British officers who served in the Indian Navy with distinction were Vice-Admiral Sir Geoffrey Miles, who had taken over as the FOCRIN from Vice Admiral J.H. Godfrey in March 1946 and was appointed the Deputy Supreme Commander (Navy) after Independence. Vice-Admiral (later Admiral Sir Edward) E.W. Parry, Vice-Admiral (later Admiral Sir Mark) M. Pizey and Vice Admiral (later Admiral Sir Stephen) S.H. Carlill, all four of whom served as the Naval Chief in succession between 1947 and 1958, Commodore H.N.S. Brown, who was the Commanding Officer of *Delhi* and the Commodore Commanding the Indian Naval Squadron (COMINS), Commodore (later Rear Admiral) G. Barnard

who commanded the Indian Fleet as the COMINS and later RACINS (Rear Admiral Commanding, Indian Naval Squadron), Commodore H. Drew and Commodore (later Rear Admiral) G. A. French who served as the Deputy Commander-in-Chief and Chief of Staff to the Naval Chief, Commodore E.G. McGregor and Commodore A.D.H. Jay who in turn succeeded Commodore Ellison as Commodore-in-Charge, Cochin, Commander A.J. Petrie Hay and Captain R.M. Garside who served as the Naval Secretary at Naval Headquarters; Captain J.E.M. Glennly, Captain A.H.F. Hunt and Captain I.F.M. Newnham who served as the Chief of Material at Naval Headquarters; Rear Admiral N.V. Dickinson, Rear Admiral F.A. Ballance and Rear Admiral St. John (Rear Admiral Sir St. John) R.J. Tyrwhitt, Baronet, who succeeded Rear Admiral Barnard as the Fleet Commander designated as Flag Officer Flotilla, Indian Fleet (FOFIF), Captain R. Jessel who was the Chief Instructor at the Defence Services Staff College at Wellington in the Nilgiris and Captain H.C. Ranald, Captain J.E. Smallwood, Captain R.H.P. Carver and Commodore (later Rear Admiral) D.W. Kirke who held the appointment of Chief of Naval Aviation. All these officers had had adequate experience in their field of specialisation and command and were inducted into independent India's fledgling Navy, notwithstanding the general policy of nationalisation and the winds of self-reliance and indigenisation of all professions blowing across the nation to prop up an unbalanced cadre and to provide adequate experience to senior Indian officers in discharging their functions efficiently. Over the years the number of British officers on loan from the Royal Navy gradually diminished but the majority of senior appointments were held by them for nearly a decade after Independence.

The standard of performance of these officers, their willingness to adopt and adjust, their diligence and keenness to convert their areas of responsibility into set-ups that were far more than 'well-oiled machines' is widely acknowledged by Indian officers who served with them at that time. Admiral R.D. Katari who, as the first Indian Naval Chief, took over from Vice Admiral S. Carlill in 1958, says in his *A Sailor Remembers*,

With a few exceptions, the Indian Navy of the post-Independence years was served well by the officers that were lent to us by the Royal Navy. This is particularly true of the three senior officers lent to us to head the Service - Vice Admirals Parry, Pizey and Carlill. Each one was different in his own way, but looking back, I believe each one's different personality and special capacities were projected on to the Service at the right stage in its development. Parry's balanced personality and high administrative ability were just what were needed in the immediate post-Independence years when the Navy was still recovering from the imbalances introduced by the mutiny and partition. Pizey's bubbling enthusiasm and operational experience had their impact on the Service just as it was settling down into some sort of personnel stability and needed operational skills injected into it. Carlill's sincerity and genuine identification with the aspirations of the Navy and his attitude of goodwill towards all men and malice towards none was just the right medicine to get the Navy on its way to sound adult health. And it made for a smooth transition from British into Indian hands at the apex.

While analysing the personality traits of the three British Chiefs of the Navy, Admiral Katari adds,

In October 1951, we also had a change in the higher direction of the Navy. Admiral Parry returned to his parent Service and was replaced by Vice-Admiral Mark Pizey. Parry did an excellent job of bringing stability to a rather unsettled Service. His experience and maturity enabled him to bring a calm, sober approach to the many problems created for the Navy by recent events. His leadership and understanding guidance to me in my efforts to sort out the complicated personnel situation was an immense boon to me. It is probably not generally known that it was he, sometime in early 1951, I think, who gave us the first reports of the Chinese construction of the Aksai Chin Road. Having been the Director of Naval Intelligence in the Admiralty, he still had contacts in the Department which passed on this tidbit to him. His successor was an equally experienced officer, but their personalities and methods of functioning were as different as chalk from cheese. Whereas Parry was a tall, angular person with a matter-of-fact, no-nonsense way of dealing with things, Pizey was somewhat rotund and round-faced. His enthusiasm and energy often left one groping when trying to follow his thinking. His past experience made him more of an operational man which was probably the right emphasis to introduce into this service at that stage

Indian Navy along in its formative years after Independence. Admiral provided a happy mix of operational and administrative ability and, in the execution of his responsibility, displayed much wisdom and marked sincerity. Indeed the latter quality was one of his outstanding attributes which impressed all with whom he came into contact, from Pandit Nehru downwards, and endeared him to the rank and file of the Service. So much so that when Carill left, it was at the Prime Minister's initiative that he was given the honorary rank of Vice-Admiral in the Indian Navy, a fitting honour to the last of the British Admirals who nursed the Six British officers headed the Navy's Fleet after Independence - Hall who held temporary charge after handing over to Vice-Admiral Parry as the Flag Officer Commanding, Royal Indian Navy, Brown, Barnard, Dickinson, Ballance and Tyrwhitt. Commodore Brown took over from Rear Admiral Hall and was designated the Commodore Commanding, Indian Naval Squadron (COMINS) besides holding the command of Indian Navy's first cruiser, *Delhi*, since her commissioning. Admiral Katari says that though Brown was a total stranger to the Indian Navy, it was remarkable how he identified himself with the aspirations of his Indian ship's company and established a mental rapport with his Indian shipmates. He was deceptively stern-faced but, in fact, an amiable, human person. He thoroughly deserved the CBE he was awarded and it was a pity that the luck of the draw denied him promotion to flag rank in his own service.

Another officer who had served on the secretarial staff of Commodore

Brown when he was the Squadron Commander, reminisces,

I had the good fortune to come in fairly close contact with Commodore Brown, the first Commanding Officer of *Delhi*. As no Indian officer had so far had the experience of commanding a cruiser, it was decided to entrust the job to a suitable officer of the Royal Navy. And what a suitable officer he proved himself to be! Though not very tall in height, his poise, dignity, rectitude and thorough professionalism gave him a stature which I have not seen any other

commanding officer to equal, before or since. The officers and men respected and adored him. He neither sought cheap popularity nor was a regressive disciplinarian and the personal example he set was high and immaculate. Once, during a flag-showing cruise along the East African Coast, a local British group invited him and other British officers in the ship for an evening's entertainment. Commodore Brown replied: 'It's either all officers or none'. The invitation was then extended to all officers. On another occasion, following a slight administrative error in the ship's office, he received a letter from a shore authority who, not being content to point out the mistake, urged him to 'take necessary disciplinary action against the persons concerned, to avoid unnecessary correspondence' in future. Not even bothering to call his secretary to ascertain the facts, Commodore Brown pencilled the following instruction at the bottom of the offending letter: 'Reply: Internal corrective action will be taken without external request. Your letter comes under your own heading of unnecessary correspondence.'

Commodore (later promoted to the rank of Rear Admiral and knighted) Geoffrey Barnard, who excelled himself during the entire period of his tenure as the Fleet Commander, relentlessly, pursued the goal of reaching the highest rung of operational efficiency and by the time he returned to England, the Indian Fleet could effortlessly outmanoeuvre the other Fleets during the annual Commonwealth naval exercises known as the Joint Exercises off Trincomalee (JET). Rear Admiral Krishan Dev, who served on his staff, recalls,

'His sole aim was to lick the Indian Squadron into a strong, well-knit fighting unit and train the Indian personnel to work together in all aspects of warfare at sea. During the early years of Independence when intense anti-India propaganda in Pakistan led to a sharp deterioration of relations between the two countries and a conflict seemed possible, Barnard prepared detailed operational orders and 'worked up' the Fleet to a high pitch of operational efficiency in order to face any such eventuality. Air Commodore Arjan Singh, AOC Operational Command (later Air Chief Marshal and Chief of the Air Staff) who attended the Fleet Exercises during Barnard's period as Fleet Commander, reminisces: 'I spent 3 or 4 days in the Indian Ocean as a guest of Barnard on Delhi. Barnard was a very inspiring Commander. He hardly left the bridge of Delhi even though during the last day or so he had visibly swollen ankles. He had amazing stamina and the Indian ratings and officers appeared to adore him!'

He indeed was one of the best 'acquisitions' from the Royal Navy as the Fleet Commander and his conduct of the Fleet exercises and goodwill cruises was legendary.

Barnard was succeeded by Rear Admiral N.V. Dickinson who also made his contribution to the maintenance of a high standard of Fleet operations. Popularly known as Uncle Richard, Admiral Dickinson ran a well-synchronised Fleet with high efficiency, both operationally and administratively. As Admiral Katari describes him, 'He was something of a rough diamond but very human and a good practical seaman.' He was a stickler for the highest standards in ships' 'turn-out' (appearance) and ceremonials which earned the Indian Fleet high praise from Admiral Mountbatten during the Coronation Commonwealth Naval Review at Spithead, Portsmouth in June 1953.

The fourth British officer to command the Fleet was Rear Admiral F.A. Ballance who was a specialist gunnery officer and laid considerable emphasis on the gunnery efficiency of the ships of the Fleet as guns were the prime weapons at sea

during the early 1950s and the difference between immobilising or sinking the enemy and getting immobilised or sunk lay on the relative gunnery efficiency of the combating fleets. An Indian contemporary gunnery specialist says that during Admiral Ballance's command of the Fleet it was 'gun drills and more gun drills and firings and more firings. It is absolutely right to say that the gunnery efficiency of the Fleet, particularly of cruiser *Delhi* and the three Hunt class destroyers, *Ganga*, *Gomati* and *Godavari*, was at its height with Ballance in command.'

Rear Admiral St. John (Rear Admiral Sir St. John) R.J. Tyrwhitt, Baronet, blended into one the qualities of the four Fleet Commanders that preceded him - Brown, Barnard, Dickinson and Ballance. His main contribution to the operational efficiency of the Fleet was that he was a master tactician and effectively raised the level of gunnery and antisubmarine tactics during exercises besides having one of the keenest seaman's eyes which enabled him to monitor ship's movements and evolutions without having to take recourse to referring to the radar scan or other navigational displays. He encouraged, ships' commanding officers to develop their initiative, boldness and the offensive spirit and he 'hated half-heartedness, tardiness and being chicken-livered.' A befitting farewell was accorded to the last British Commander of the Indian Fleet when Admiral Tyrwhitt was given a rousing ceremonial send-off at Ballard Pier, Bombay after he had handed over to the first Indian Fleet Commander, Rear Admiral Katari, on October 2, 1956 - a watershed in the history of the Indian Fleet.

A term-mate of Admiral Mountbatten, Commodore (later Rear Admiral) Godfrey French, a specialist in navigation, had served in the Royal Indian Navy's Directorate of Training during and after World War II as a deputy director from 1944 to 1946 and was later recalled from retirement to serve as the Indian Navy's Deputy Commander-in-Chief from 1953. He was also a proficient naval historian and wrote entertainingly on naval life in England and India.

An acclaimed hero of the Malta and Arctic Convoys, with a Distinguished Service Cross and bar, three Mentions-in-Despatches, a DSO and Knighthood 1st class of the Order of St. Olav, Captain Richard Jessel was a destroyer captain of outstanding dash and bravery during World War II and had served on the Directing Staff of the Royal Naval Staff College at Greenwich before being picked up by Admiral Mountbatten in 1953 to teach naval strategy and tactics to the Indian Services at the Joint Services Staff College, Wellington as its Chief Instructor (Navy). He was held in **high esteem** at the Staff College by all the three wings and a whole generation of Indian officers regarded him as a 'guru'. Vice Admiral R.K.S. Gandhi (as also the author) was a student of Captain Jessel at the Staff College and says:

Dick Jessel served for three years in that assignment and those were the great days of the College, with giants such as General Lentaigne as Commandant, Brigadier (later Lieutenant General) Bhagat as Chief Instructor (Army) and Group Captain Moseby, an officer of the Royal Air Force, as Chief Instructor (Air). Even amongst such a distinguished and brave band of brothers, Dick stood out - whether it was on the golf course) or the officers' mess or the syndicate room when recounting the Battle of the *Scharnhorst* for three hours before a huge chart, without a single note in front of him.

He was an inspiration to all students and I well remember many little stories about him, particularly when we would rush to see his comments on our exercises. Dick Jessel commented very little and we all aspired to get the three magic letters from him - VGI (Very Good Indeed) - the less he wrote on one's exercises, the better it was. He taught us to be bold and ingrained in us the offensive spirit though he himself was a gentleman to the core.

Commodore M.H. St. L. Nott, RIN a signals specialist, had been associated with the Royal Indian Marine and latter the Royal Indian Navy since 1928 and had commanded four RIN ships, *Ramdas*, *Investigator*, *Pansy* and *Narbada*, had served in naval training establishments and as Naval Officer-in-Charge in Karachi, Staff Officer (Plans) at Naval Headquarters and Chief Staff Officer to the Flag Officer Bombay during World War II. He had also drawn up detailed plans for the sea-borne assaults which led to the immobilisation of the Persian Navy and the capture of Bandar Abbas and the German and Italian ships sheltered there during the war, his 'masterminding these operations with outstanding ability' winning him an QBE and a Mention in Despatches. When partition came, having lost the Naval establishments in Karachi, the need for independent India's navy to develop new training establishments became urgent and hence Nott, with his varied experience in training naval personnel, was appointed the Naval Officer-in-Charge, Cochin in 1947 for developing the establishment as a combined training base. Within a few months he was shifted to Naval Headquarters as the Chief of Staff and Deputy Chief of the Naval Staff to the Flag Officer Commanding, Royal Indian Navy where his most important task was planning a balanced navy for independent India.

Nott applied himself to his task with indefatigable keenness and energy and his sustained efforts bore fruit in the shape of plans prepared with masterly expertise and erudition which led to the Indian Navy evolving its fleet into a balanced yet formidable force at sea in South East Asia within a decade. He, along with his wife and son, was tragically killed in an air crash off Corsica while proceeding to the UK on deputation in March 1948.

In his assessment of the British officers who served in the Indian Navy, only a few of whom find a mention here, Vice Admiral M.P. Awati lauds their contribution,

I believe it has been essentially a beneficial association. 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 new ones has been almost imperceptible, so imperceptible in fact that we came to believe that things were always done the way they were. 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 progressing from being a crawler to becoming a toddler. Bereft of either, the Service or the child would grow 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 that followed the upheaval attendant on the struggle for independence caused virtually no damage to the Navy's fabric of discipline and good order the Service holding fast through the vicissitudes of the post-partition years, thanks

to what had been so well-imbibed from a very worthy mentor.'

Reinforcing the Sinews of War - Training

The partition of the subcontinent left very few training establishments with the truncated Royal Indian Navy and the severance of the Royal Navy's apron strings, to which the RIN had been tied for nearly three and a half centuries, made it imperative for independent India's Navy to, firstly, indigenise expeditiously all operational training both for officers and sailors, secondly, to expand and update the training facilities in the existing training establishments and/thirdly, to set up new training establishments in disciplines which had not so far been catered for.

A Directorate of Naval Training and Education had been functioning at Naval Headquarters, New Delhi since July 1943. This Directorate not only planned the contents and schedules for the various courses conducted by the naval training establishments and training ships but also oversaw and monitored the progress of the courses by these training agencies. In 1948 the Directorate had been split into two directorates, the Directorate of Weapons and Training and the Directorate of Education. In 1952 a separate Directorate of Training started functioning at Naval Headquarters and the appointment of Commodore Superintendent, IN Training Establishments was abolished.

Consequent on the loss of the Boy's training establishments at Karachi, *Bahadur* and *Dilawar*, to Pakistan in 1947, a temporary training establishment was set up at *Akbar*, Bombay and shifted to *drears* at Vishakhapatnam in December 1947. The training schools at Cochin, viz., the Communication School, the Antisubmarine School (the last having been set up soon after Independence), the Supply and Secretariat School and the Cookery School, the mechanical training establishment at Lonavala, *Shivaji*, and the Torpedo School at Jamnagar, *Valsura*, were found to be totally inadequate for undertaking the training commitments of free India's fledgling but fast-expanding Navy. In addition, it was felt necessary to discontinue deputing officer trainees to Royal Navy establishments for basic and specialist training and to initiate the creation of training facilities for officers in India.

As regards the training of officers, the number of cadets recruited annually was increased from the pre-Independence figure of 24 to nearly double that figure to 46 each in 1948 and 1949 and to 47 in 1950 besides deputing 21 cadets to the Royal Naval College at Dartmouth in England in 1948 and 25 in 1949. In order to make up the acute shortage in the various cadres of officers caused by the partition of the subcontinent and the consequent resignation, retirement and repatriation of British officers of the RTN, a scheme was introduced for the recruitment of officers on short service commission of seven years' duration and some of the officers who had been released earlier were recalled.

The first experiments in inter-Service basic training of officers in India were made at the Inter-Service Pre-Cadet College (ISPCC) at Nowgong and then at Almora, where officers and NCOs of the Army, Navy and Air Force worked together to train possible future officers for the three Services. These cadets were the applicants for commissions, both from civil life and from non-commissioned members of the forces, who were screened by

selection boards to ensure their suitability for military service. The training schedule and course contents were largely based on that imparted at the Highland Field Craft Training Centre in the UK.

The experiment at the ISPCC had been watched with interest by officers of the three Services. As Chairman of the Indian National War Memorial Committee, Field Marshal Sir Claude Auchinleck, the then Commander-in-Chief of the three Services, later recommended, as a War Memorial, the establishment of an Academy to train officers of all the three Services. The proposal was accepted by the Governor General-in-Council and a Committee, set up to examine the project in detail, advised that it should be equivalent to a degree in arts or science and that residential schools were to be established as feeders to the Academy.

The partition of the subcontinent delayed the implementation of the scheme and the Chiefs of Staff Committee suggested, as an experimental and interim measure, the setting up of a Junior Inter-Service Wing (KW) at Clement Town, Dehra Dun while planning for the Indian National War Academy at Khadakvasla, Pune proceeded. In January 1948 the Defence Minister's Committee approved of this. The ISW was to start functioning in January 1949 and, with the Indian Military Academy at Dehra Dun to be renamed the Military Wing, was to form the National War Academy or Armed Forces Academy.

Later there were changes in nomenclature. What started as the Inter-Service Wing (ISW) became known as the Joint Services Wing (JSW). The Armed Forces Academy became the National Defence Academy and the Military Wing reverted to the Indian Military Academy which remained at Dehra Dun while the National Defence Academy was moved to Khadakvasla.

The aim of ISW training was to encourage co-operation between the Services and with the civil administration which had, for various reasons, been considered inadequate. It was hoped that those who spent two or more of their formative years as Cadets in an inter-service atmosphere, having been trained together and formed associations overlapping the boundaries of the different Services, would, when they became senior officers, meet each other in staff conferences and other common platforms in an atmosphere of greater understanding than those who had seen and known little of each other before.

Entrance to the ISW was to be through an examination conducted by the Union Public Service Commission followed by tests conducted by the Services Selection Boards. At that time the Navy was the Senior Service and for a month after they joined, the Naval cadets put on the RIN uniform and then switched over to the common uniform which has continued to this day.

The inauguration ceremony of the ISW in January 1949 was performed by Sardar Vallabhbhai Patel, the then Home Minister, and was attended, amongst others, by the three Chiefs of Staff, Vice Admiral Sir Edward Parry, General K.M. Cariappa and Air Marshal Sir Thomas Elmhist.

The inter-Service seniority, however, as is well known, underwent a change when, on January 26, 1950, the Indian Army became the senior Service and the Navy occupied the middle berth.

For the first few courses, the duration of training at the ISW was two years on completion of which the Army Cadets went to the IMA, Naval Cadets were sent to the UK for further training for one year as Cadets and the Air Force

Cadets proceeded to the Air Force Academy at Jodhpur.

Naval Cadets of the First Course proceeded to the UK for one year's training as Cadets in the Royal Navy's ships and establishments in March 1951. They returned to India in April 1952 and joined *Tir*, the then Midshipman Training Ship, in May 1952. This was the first time that Midshipmen's training was being conducted in India. After completing eight months' training on board the *Tir* and another eight months on board other ships, these officers again proceeded to the UK where they were commissioned on September 1, 1953 and underwent their Sub-Lieutenant's professional training of 16 months' duration.

The 4th Course (1st Course JSW) was the first to spend three years at the JSW, out of which the first four terms lasting two years were devoted to common training and the last two terms lasting one year on naval training. Cadets of this course then joined the *Tir* for six months' training as Cadets followed by six months' training as Midshipmen. Thereafter the Midshipmen were transferred to other ships for further sea training for six months and then proceeded to the UK for 18 months' professional training as Sub lieutenants.

This was the last batch to proceed to the UK for, with the 5th Course, the entire training syllabi were covered in India - as Cadets, Midshipmen and Sub-Lieutenants - with the duration of Sub-Lieutenant's training reduced to one year. Thus, by 1954-55, the entire training commitments from the basic training at the National Defence Academy to the professional training courses at the various training establishments were being met by the Indian Navy's training ships and establishments and hence the deputation of officers to the UK for undergoing basic courses was discontinued. Besides, the duration of the course conducted at the NDA had been increased to three years, that of Midshipmen reduced from 16 months to 12 months and the time as Acting Sub-Lieutenant reduced to one year. -

The National Defence Academy was shifted to Khadakvasla in January 1955 with Major General E. Habibullah continuing as its Commandant and with Shri Morarji Desai, the then Chief Minister of Bombay taking the salute at the colourful inaugural parade. The 8th Course Cadets completed their training for the sixth term and were the first course to pass out of the Academy at Khadakvasla in June 1955 when Prime Minister Jawaharlal Nehru took the salute at the passing out parade. The pattern of sea training of these officers remained the same, i.e., six months' training as Cadet and six months' as Midshipmen on board the *Tir*, three months on board the *Delhi* and another three months on other ships of the Fleet.

This pattern of training remained unchanged until January 1974 when the duration of sea training for Midshipmen was reduced from one year to six months.

During the early 1960s it was realised that the turnover of the National Defence Academy of approximately 40 Naval Cadets every six months would not meet the requirements of the expanding Service and hence it was decided to set up an academy for training Naval Cadets at Cochin and to introduce a revised special entry scheme. Accordingly a Naval Academy was commissioned at Cochin in January 1969 with Commander (later Admiral) L. Ramdas as its first Officer-in-Charge. The first batch of Cadets of the Academy completed its training in December 1970 when Rear Admiral (later Vice-Admiral) V.A. Kamath, who was the Flag Officer Commanding the Southern Naval Area at that time, took the salute at the passing out parade.

It was later decided to shift the Academy to Goa because adequate accommodation for a training institution of its kind with all attendant facilities was not available at Cochin. However, after a countrywide search, a suitable site for permanently locating the Academy has been found at Ezhimala in Kerala where it is expected to start functioning in the mid-1990s.

In 1955 it was decided to use two ships for training, *Kistna* (later *Krishna*) and *Tir*, one as the Cadets' Training ship and the other as the Midshipmen's training ship for the first six months of their sea training period. This was done to remove congestion from the only ship that performed dual roles. Later, with the arrival of *Mysore* in 1958, Midshipmen's training began to be carried out exclusively on cruisers.

Deputation of Engineering and Electrical Cadets to the UK for training was stopped in 1955 and Midshipmen of the Electrical Branch were admitted to the Victoria Jubilee Technical Institute, Bombay for a degree course in Electrical Engineering. This arrangement, however, proved to be unsatisfactory and hence an Engineering and Electrical College was started at *Shivaji* in 1957 as a permanent measure for training in these two disciplines.

Consequent to the partition of the sub-continent, the Defence Services Staff College at Quetta went to Pakistan and hence the requirement was immediately felt for setting up a similar institution in India. It was thus that India's Defence Services Staff College was set up in 1948 at Wellington in the Nilgiris with Major General (later Lieutenant General) Joe Lentaigne as its first Commandant and Brigadier (later Lieutenant General) Shiv D. Verma as its first Chief Instructor. The first course, of six months' duration and conducted during the period 1948-49, had a strength of 50 officers including two from the Indian Navy, Lieutenant (later Commodore) B.K. Dang and Lieutenant (later Commander) R. Aibara. It must be mentioned here that three officers of this course later rose to the top rungs in their respective Services - General T.N. Raina, General O.P. Malhotra and Air Chief Marshal H. Moolgavkar.

In 1958 specialist courses, better known in the Navy as 'long courses', which had so far been held in the UK started being conducted in India. These courses required a thorough study of the modern equipment fitted in the Fleet ships and a very detailed knowledge of the subjects and hence needed highly efficient specialist instructional staff, which was fortunately available, and the latest equipment installed in the training schools and on board ships. The first Long Navigation and Direction Course (ND) and Long Torpedo and Antisubmarine Course (TAS) were started in February 1958, the Long Communication Course (C) in October 1958 and the Long Gunnery Course (G) in November 1958. The other major courses started during the mid 1950s were the Supply and Secretariat Advanced Course (SSAC), Physical Training Course (PT), Action Information Organisation (AIO), Meteorology Course (Met), Advanced Navigation Course (N) and Deep Sea Diving Course (D).

The courses for Commissioned Officers (Branch Rank) commenced in India during this period included the Commissioned Boatswain Course, Commissioned Boatswain (Plotting Radar) Course, Commissioned Communication Officer Course, Commissioned Gunner Course, Commissioned Gunner (Torpedo and

Antisubmarine) Course, Commissioned Electrical Officer (Power) Course, Commissioned Electrical Officer (Radio) Course and Commissioned Wardmaster Course. The Courses for sailors commenced in India included those for Gunnery Instructors, Gun Layers, Quarter Ratings, Radar Controllers, Quarter Armourers, Torpedo and Antisubmarine Instructors, Underwater Controllers, Underwater Weapons, Plotting Radar Instructors, Radar Plotters, Quartermasters and Divers.

About this time the Ordnance Branch of the Navy merged with the Engineering Branch. Officers of the Ordnance Branch were given conversion courses in marine engineering while Ordnance Artificers were given conversion courses to qualify for Engine-Room Artificers or Electrical Artificer. Because of the non-availability of specialised equipment and trained instructional staff, however, officers had to be deputed to the UK for certain other courses, viz., Constructor's Course, Observer's Course for aviators, Advanced Marine Engineering Course, Advanced Armament Inspection Course, Advanced Aeronautical Engineering Course, Advanced Air Engineering Course, Long Hydrographic Survey Course and the Atomic, Bacteriological and Chemical Damage Course.

The first batch of Engineer Officers trained at the Engineering and Electrical College at *Shivaji*, Lonavala, passed out in 1961 and with that *alma mater* was provided to the Navy's technical officers, besides totally indigenising their training.

Soon after the commencement of indigenisation of officers' and sailors' training, several foreign navies sought the assistance of the Indian Navy in training their personnel. The courses conducted included not only the basic courses for officers and sailors but also technical and specialist courses at all levels and the countries from Asia and Africa who deputed their personnel for training were Burma, Sri Lanka, Indonesia, Malaysia, Iraq, Iran, Egypt, Ethiopia, Ghana, Sudan, Mauritius and Nigeria. The specialist courses conducted for the officers from these countries included the Long Gunnery Course, Long Navigation and Direction Course and the Long Hydrographic Course.

During this period a number of inter-Service courses began to be carried out. The courses conducted by the Navy for the other two Services were the Maritime Antisubmarine Course for IAF officers at the Torpedo and Antisubmarine School at Cochin, attachment of Army officers undergoing the Technical Staff Officers Course at the College of Military Engineering (CME), Kirkee, to the Gunnery School at Cochin, Diving Courses for Army and civilian personnel, Technical Courses of short duration for student officers of the Defence Services, Staff College, Wellington, and courses in Mine Warfare as a part of the IAF's Fighter Controller Course. The courses conducted by the other two Services for Naval personnel were the Bomb and Mine Disposal Course at CME, Kirkee, Diving Instructor Course at the Corps of Military Police at Faizabad, Security and Intelligence Course

at the Army Intelligence School at Pune, Selection of Personnel Course at the Psychological Research Wing School at New Delhi, attachment of naval personnel to the IAF for Jet Interception Training, the Meteorological Course at Pune and the Junior Commanders' Course at the Army School of Infantry, Mhow, for officers undergoing the Long Gunnery Course.

The new training establishments and schools opened during the period included the Supply and Secretariat School at *Hamla*, Bombay in November 1953, the Tactical School at *Venduruthy*, Cochin in October 1954, the new Electrical School at *Vakura*, Jamnagar in 1955, the Torpedo and Antisubmarine School at *Venduruthy* in 1956 and the Signal School at *Venduruthy* in March 1958.

For some time the necessity was being felt for bringing out a thought-provoking magazine in the Indian Navy on the lines of the *Military Digest* or the *Air Force Digest*. In order to fill this gap, a biannual magazine called the *Naval Dispatch* was started in February 1957 with the specific objective of encouraging thought and discussion on such subjects as strategy, tactics, naval operations, staff work, administration, organisation, command, discipline, education, naval history and other disciplines affecting the operational and maintenance efficiency of the Navy.

Another periodical, the *Varuna*, containing articles, poems, short stories, sketches, cartoons and reports on goodwill cruises and exercises also started being published biannually early in the 1950s.

The training establishments and units that came into being during 1959 were the Naval Hydrographic Training Unit at *Angre*, Bombay for conducting survey courses for officers and sailors, a Basic and Divisional Training Unit at *Hamla* for the training of personnel of the Supply and Secretariat branch and *Sanjivani* at Cochin as an authorised training establishment for Sick-Berth Attendants.

It was during the 1950s that the Naval Wing of the National Cadet Corps (NCC) came into being and the Sea Cadet Corps (SCC) was activated. Regular pre-commission and refresher courses for the NCC Cadets began to be conducted at *Venduruthy*, Cochin. Besides, combined annual training camps for both Senior and Junior Division Wing Units at Bombay, Cochin, Vishakhapatnam and Jamnagar and within their respective circles provided adequate exposure of life at sea to the officers and cadets undergoing training at these places.

As a voluntary organisation based at Bombay and Madras, the aim of the Sea Cadet Corps was to develop qualities of good citizenship and to help boys from schools, wishing to make their career at sea, to achieve their ambition. The Navy provided the necessary facilities to the Corps for the sea training of SCC Cadets on board naval ships during the passage of the Fleet between Bombay and Cochin.

In 1960 a 16-mm film, entitled *Fire-fighting at Sea*, was produced by the Films Division of the Ministry of Information and Broadcasting. The object of the film was to demonstrate the correct techniques of fire-fighting on board ships with particular emphasis on first-aid and the appliances used in the Navy and their maintenance. The Films Division later produced two more films entitled *Damage Control on board a Ship* and *As a Sailor in the Making* depicting the damage control organisation, equipment, etc., onboard a ship and life on board a ship at sea respectively. The Armed Forces Film and Photo Division produced a number of film strips for training in the Navy.

After World War II a Petty Officers' Leadership School was set up at *Venduruthy*, Cochin for imparting training in leadership to senior sailors. In 1961 this school was shifted to West Hill Barracks, Kozhikode and commissioned as *Varakkal*. In the same year the Hydrographic Training Unit was shifted from Bombay to Cochin. The Petty Officers' Leadership School was shifted to Coimbatore on April 22, 1965. On September 18, 1965 this school was amalgamated with the Naval Detachment, the Rifle Range and the Aircraft and Engine Holding Unit at Sulur with the new nomenclature,

Agrani.

Because of the inadequate scientific background of Cadet-Entry officers selected for specialist courses, it was decided in 1962 to depute such officers to the Institute of Armament Studies (IAS), whose nomenclature was later changed to the Institute of Armament Technology (IAT), at Kirkee for a Naval Scientific Orientation Course (NSOC) of about 22 weeks' duration before proceeding to *Venduruthy*, Cochin for undergoing the 'long courses' in Navigation and Direction, Gunnery, Torpedo, Antisubmarine and Communication. Consequent to the introduction of this course the duration of Long Courses was suitably reduced by deleting instruction in scholastic subjects previously covered during these courses.

As regards sailors, soon after independence, the training establishments initiated the conduct of specialist courses for junior sailors at Cochin. These courses included those for Radar, Plotting, Radar Control, Gunnery, Quartermaster, Communication, Aircraft Artificers, Leading Patrolmen and Writers. Arrangements were also made to standardise the conduct of educational examinations for senior and junior sailors - the Higher Education Test (HET), which had been officially recognised as equivalent to the matriculation examination and which qualified sailors for commissioned rank and the Education Test 1 (ET 1) which qualified junior sailors for promotion to senior ranks.

Soon thereafter specialist courses for senior sailors were also introduced at the various training schools at *Venduruthy*. By 1952 an Atomic, Bacteriological and Chemical Damage Control (ABCD) School for officers and sailors was set up at *Shivaji*, the mechanical training establishment at Lonavla, which had already been conducting mechanical and marine engineering training courses for sailors for many years. The permanent Navigation and Direction School and Gunnery School had started functioning at Cochin and plans for the future development of the various other training schools had been worked out. Work on the new Electrical School at *Valsura* at Rozi in Jamnagar had also commenced. Reference libraries were set up in ships and establishments and a compulsory Hindi test was introduced for all Service personnel.

In 1953 new courses were started at Cochin for Torpedo and Antisubmarine sailors and Navigator's Yeomen and, for the first time in India, five sailors undertook the qualifying course for promotion to the rank of Commissioned Boatswain.

In November 1953 the Supply and Secretariat School was shifted from Cochin to *Hamla* at Marve, Bombay and construction was commenced for the Torpedo and Antisubmarine School and the Tactical School at Cochin.

During the course of the next five years, the Torpedo and Antisubmarine School (1956), the Tactical School (1954), the Signal School (1958), the Diving School (1958) had also started functioning at Cochin and courses, were commenced at these schools for Gunnery Instructors, Gun Layers, Quarter Rating, Quarter Armourer, Torpedo and Antisubmarine Instructor, Underwater Control, Underwater Weapon, Radar Plotting Instructor, **Deep** Sea Diver and Shallow Water Diver sailors. The new Electrical School at *Valsura* was opened in 1955 for the training of officers as well as sailors. In **1959** a Basic and Divisional Unit commenced operating at *Hamla* for training personnel of the Supply and Secretariat Branch and *Sanjivani*, the naval hospital at Cochin, began training Sick Berth Attendants for naval hospitals, ships and shore establishments.

In 1954 Naval personnel began to undergo courses in mountaineering, both basic and advanced at the Himalayan Mountaineering Institute, Dar-jeeling.

INS Shivaji

Bearing the name of one of the most illustrious sons of India who had converted the Sahyadri ranges into the launching pads for his daring exploits against the invaders, *Shivaji*, situated at a height of 630 metres above sea level and only 8 kilometres away from Maharashtra's popular hill resort, Lonavla, has been the *alma mater* of officers and sailors of the navy's engineering branch for several decades. The crest of the establishment depicts a hand, holding a mallet, rising from the sea thus signifying the tasks of engineering personnel at sea with the logo *Karmasu Kaushalam* (skill in work) below it.

This Mechanical Training Establishment, as it was referred to earlier, was commissioned *as Shivaji* on January 8, 1945 for undertaking the training of sailors and artificers of the engineering branch. The first Indian Officer to command the establishment was Captain (later Vice-Admiral) D. Shankar who took over from his British predecessor on January 26, 1950. This training establishment was entrusted with imparting technical training to Stokers, Mechanics, Boys, Artificers and senior sailors such as Leading and Petty Officer Mechanics and Mechanicians.

During the period from 1950 to 1965 the average number of Artificer Apprentices recruited annually varied from 48 to 90; besides 66 Artificer Apprentices from the Sri Lankan Navy and 15 from the Indonesian Navy underwent training at *Shivaji*.

The Atomic, Bacteriological, Chemical and Damage Control (ABCD) School started in 1952 at *Shivaji* was assigned the nomenclature *Avinash* in November 1953. From a modest beginning made with a few firetrays and hand-held fire-fighting appliances, the ABCD School progressively grew into a self-contained specialist organisation for imparting training in fire-fighting and damage control to Naval personnel and on occasions, to those of the other two Services. The first course for officers was conducted in 1954 and for sailors in 1955. About a decade after its establishment this institution came to be known as the Nuclear, Bacteriological, Chemical, Damage Control and Fire-Fighting (NBCD) School.

INS Valsura

Before World War II all electrical equipment were looked after by personnel of the Engineering Branch on board ships of the RIN. However, owing to the development and installation of several electrical and electronic equipment during the War, it had become necessary to establish a separate electrical branch. Subsequently, as more and more modern ships with high-resolution radar and sophisticated weapons, weapon control systems, Asdics, wireless and minesweeping equipment were acquired, the Torpedo Branch came into being for the maintenance of torpedoes, depth-charges and all shipboard electrical equipment and a Torpedo School was established in the Naval Dockyard, Bombay on December 28, 1941.

War conditions and paucity of space in the Dockyard necessitated a search for a more suitable site for this school.

His Highness Shri Digvijay Sinhji Jadeja, Maharaja Jamsahib of Nawanagar, donated the land for the School at Rozi, near Jamnagar, and built the training block which was named the Digvijay Block. It was on August 15, 1942 that the new establishment was commissioned as *Valsura*.

After Independence, a considerably large quantum of electrical and electronic equipment was acquired for the Navy and this establishment was consequently subjected to a major expansion programme between 1950 and 1965. His new school, the foundation stone of which was laid by the Jamsahib on November 15, 1952, was inaugurated in April 1955.

While the courses conducted at *Valsura* during the 1940s were essentially utilitarian in nature and concept, the vast technological advances made during the later years made it imperative to reorient the training courses. Over the next two decades all courses for officers and sailors were Indianised and no need was felt for deputing electrical personnel abroad for training in electrical or electronic technology. Several trainees from Nigeria, Ghana, Mauritius, Sri Lanka, Sudan, Malaysia, Bangladesh, Iraq and Iran were also trained at this establishment.

INSHamla

Originally *Hamla* comprised four establishments - *Hamlawar* and *Marve*, the Indian and British wings respectively of the Combined (Amphibious) Operations Training Centres at Malad, Bombay and two similar centres, Ham/a /at Malir, Karachi and *Hamla* //at Versova, Bombay. On January 15, 1946 all these establishments were amalgamated into one establishment, *Hamla*, at Malad.

When the hostilities ended all Combined Operations activities were terminated and the establishment virtually went into hibernation. And on January 6, 1954, this establishment became the training establishment of the Supply and Secretariat Branch when the Supply and Secretariat and Cookery School was shifted from its temporary accommodation at Cochin to Malad.

The establishment was made responsible for the professional training of sailors of the Supply and Secretariat and Domestic branches such as 'Writes, Store Assistants, Stewards, Cooks, Topasses and even Sick-Berth Attendants; the training responsibilities of the last branch was later transferred to *Asvini* at Bombay. An added assignment for *Hamla* was to conduct the Supply and Secretariat Advanced Course, for which officers had hitherto been deputed to the United Kingdom, which was commenced in 1954.

Torpedo Antisubmarine School

With the development of the offensive capability of submarines during the interregnum between the two wars and the installation of the ASDIC technique of submarine detection, it was felt necessary to commence 'antisubmarine training in India. An Antisubmarine (A/S) school was thus opened on the ramparts of the Castle Barracks, Bombay on December 17, 1941 followed by the establishment of a Torpedo School at the Naval Dockyard, Bombay. As stated earlier, the Torpedo School was shifted to Rozi near Jamnagar on December 15, 1942 and commissioned as *Valsura*. The Antisubmarine School was shifted to Versova, Bombay on December 26, 1942 and was commissioned as the

combined Royal Navy and Royal Indian Navy Antisubmarine School with the name *Machlimar*. In 1946 this establishment was paid off and the Antisubmarine School was shifted to *Venduruthy* at Cochin. A year later the Torpedo School was also shifted to *Venduruthy* and on September 20,1947 these two Schools were combined to constitute a Torpedo Antisubmarine School for the RIN. The School shifted to its new building in November 1955. It wouldn't be out of place to mention here that this school was renamed the Antisubmarine Warfare (ASW) School on October 1,1985. The courses conducted by the School include Specialist Long Antisubmarine Warfare Course, technical courses for officer trainees, professional courses for sailors selected for commissioned rank, Antisubmarine Warfare Instructor's Course, professional courses for sailors assigned to the disciplines of Underwater Warfare and Underwater Control and shallow -water and deep-sea diving courses for officers and sailors.

Signal School

A Signal School was set up at *Talwar* at the site now occupied by the Motor Transport Pool at Bombay in April 1941 for the training of officers and sailors of the Communication Branch in encryption and decryption of messages, semaphore signalling by light and wireless telegraphy and processing incoming and outgoing signals of various categories. The School was later shifted to *Venduruthy* at Cochin where the foundation stone for this School's permanent building was laid by the Chief of the Naval Staff, Admiral Sir Mark Pizey.

The School, whose new building was inaugurated by Vice Admiral Sir Stephen Carlill, Chief of the Naval Staff, on March 8,1958, undertakes several courses for officers and sailors including the Specialist Long Communication Course for officers, technical courses for officer trainees, professional courses for junior and senior sailors and those who are selected for promotion to commissioned rank.

School of Naval Oceanology and Meteorology

Meteorological training in the IN began with the deputation of Lieutenant (later Captain) I Chawla to the UK for a course in naval meteorology early in 1949. By this time the crucial role played by meteorology towards the successful conduct of sea and air operations, as exemplified by a number of sea battles during the two World Wars, had been adequately appreciated and a beginning was made by incorporating it in the factors that go into tactical planning and by imparting meteorological training to four officers of the Education Branch and four sailors in 1952.

Initially the main emphasis was laid in imparting instruction to sailors of the Aviation and Seaman branches on the intricacies and compulsions of weather-watching. While Air Handlers were trained in detecting the technical variations in weather data and their effect on aircraft operations, the Meteorological Observers were taught to keep a continuous weather-watch, record and disseminate meteorological observations to air traffic controllers, pilots and ships, code or decode weather messages and to issue weather warnings.

A training cell, located in *Garuda*, Cochin had started functioning in the early 1950s and gradually grew into a full-fledged Meteorological Training Section in 1968. Later it was assigned the new nomenclature - School of Naval

Oceanology and Meteorology (SNOM).

Gunnery School

It was *Himalaya* at Manora Island, Karachi which undertook the training of junior sailors of the Gunnery Branch before Independence. With the loss of this establishment to Pakistan at the time of the country's partition, training of sailors of the Gunnery Branch was suspended for about a year but was resumed on October 12, 1948 when a Gunnery School was set up in an improvised building near the Command Parade Ground at Cochin. And it was on October 30, 1952 that the training of Gunnery sailors was shifted to its permanent premises, viz., the Gunnery School in *Venduruthy*.

Initially this school imparted professional training to the Third Rate, i.e., junior most sailors of the Gunnery Branch, the senior sailors and officers being sent to *Excellent*, the RN gunnery establishment at Whale Island in Portsmouth, England. With the 1950s heralding an era of indigenisation in the country, however, this School soon began to conduct these courses in India. Resources and equipment soon began to be mobilised and the courses introduced between 1952 and 1958 included those for Second-Rate sailors (1952), Cadet-Entry Sub-Lieutenants (1952), First-Rate sailors (1954), Senior Sailors selected for promotion to commissioned rank (1955), Gunnery Instructors (1957) and Specialist Long Gunnery Course for officers (1958).

Prior to 1957 the sailors of the Gunnery Branch used to be sub-divided into five specialist trades - Quarter Armourer (QA), Quarter Rate (QR), Layer Rate (LR), Anti-Air (AA) and Radar Controller (RC). In 1957, however, the LR and AA trades were merged into one trade known as Gun Layer (GL), Similarly the QR trade was merged into the QA trade. Later the GL trade was also abolished and the existing sailors of this trade were converted into the RC and QA trades.

During this period the theoretical aspects of the various courses were covered at the Gunnery School while for practical tracking and firing, the trainees had to be forcibly transported to the Naval Battery and Coast Battery at Fort Cochin. This resulted in considerable wastage of training time and resources. Hence a new establishment for conducting all aspects of gunnery training was set up at Fort Cochin during the 1970s and commissioned as *Dronacharya*, named after the wise preceptor who trained the great warriors of the Mahabharata in the art of weaponry.

Naval Police and Regulating School

The Naval Police and Regulating School, which also incorporates the Motor Driving School, came into being in 1943 for training Petty Officers and sailors of higher rank of the Regulating Branch, i.e., the Naval Police-Branch for promotion to the rank of Master-At-Arms at Df/ftoMSie(now M^{rc}) Bombay. In 1948 this School was shifted to the Naval Provost Barracks, Old Talwar Camp, Colaba, Bombay where courses for Leading Patrolmen were commenced in 1950. In July 1954 the School was shifted to the Navy's provost establishment, *Kunjali* in Colaba, Bombay.

Kunjali soon was entrusted, besides running the Naval Police Regulating School, with the responsibility of managing the training courses at the Motor Driving School, the administration of the Music Branch and the Detention Quarters and the training of Naval Bandsmen.

Indigenisation of Training Complete

When Independence came other than the basic training of sailors and short courses in operational training for junior officers, all courses for officers and sailors were conducted abroad. But by 1965 besides setting up training facilities, acquiring training equipment and commissioning a large number of training schools and establishments, both operational and technical, the high standard of training for the entire gamut of training from basic and divisional courses for sailors to specialist courses for officers earned enough kudos from foreign navies to attract student officers and sailors from as many as 12 countries. This also led to the formation of a sizeable skill-bank of instructors in the categories of officers and senior sailors.