



# *Quarterdeck*

NAVY FOUNDATION MAGAZINE

2018

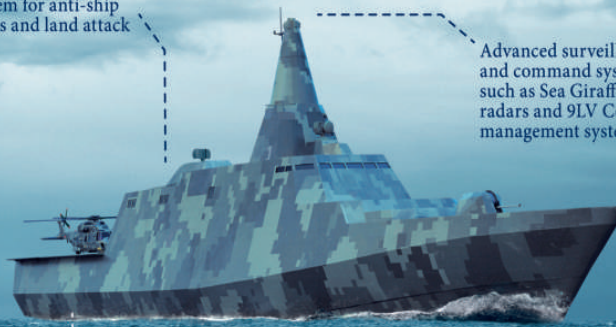
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Opinions expressed are those of the authors. They do not reflect the views of IHQ MoD (Navy), Navy Foundation or the Editor.





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पी वी एस एम, ए वी एस एम, ए डी सी  
नौसेनाध्यक्ष  
**Admiral Sunil Lanba**  
PVSM, AVSM, ADC  
Chief of the Naval Staff



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### MESSAGE

'Quarterdeck' has built an impressive reputation for itself over the years and enjoys wide readership both among serving and retired fraternity, due to its fine literary content and interesting articles. Copies of this magazine are considered a treasured possession.

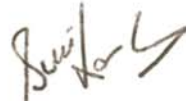
This year also marks a significant milestone of *three decades* in the journey of *Navy Foundation*. I am indeed pleased to note the Foundation has fulfilled the aims and objectives set out by its worthy founders. Various initiatives taken by the Chapters of the Foundation have not only enriched the lives of our veterans and *Veernaris*, but have also benefitted the society at large. We in the Navy continue to gain from the collective wisdom and experience of the members of the foundation. The true blue water Indian Navy of today is testimony to the farsightedness and planning of our senior veterans. It is a tribute to the worthy veterans of yesteryears that a majority of the platforms that we operate today are indeed 'Made in India'.

The 2018 edition of the magazine commemorates the *Golden Jubilee of ENC, decommissioning of INS Viraat, Sea Harriers, TU 142 M* and Navy's quest for *self-reliance through indigenous shipbuilding*. I am sure the current edition will be an interesting read for both the serving as well as the veteran community.

I also place on record my appreciation for the stellar role played by *Mrs Shirley Ramsay* as the Editor of this popular magazine for a record *ten editions*. I convey my felicitations to the new editorial team of *Quarterdeck* and hope the magazine will continue to enrich our lives through exchange of ideas and thought.

I wish the readers a very happy and prosperous 2018.

Śaṃ no Varuṇaḥ. Jai Hind.

  
(Sunil Lanba)  
Admiral  
Chief of the Naval Staff







# Editorial

It is a great honour and even greater responsibility to take over from Mrs. Shirley Ramsay as editor of the Quarterdeck. I begin by acknowledging the tremendous contributions made by Mrs. Shirley Ramsay, the most accomplished editor of the magazine for the past decade. The writers and readers of Quarterdeck express their appreciation of her outstanding stewardship of the publication. She has tended the soul of the magazine and given it a unique character. She inspired so many veteran and budding writers to narrate their little stories of adventures at sea. Her inspiring voice in print and steady leadership at the helm will be missed.

In the pages that follow, readers will find a wealth of information about one of the most unique institutions in India and anywhere in the world. The Indian Navy exists to protect India's maritime interests. It nurtures future naval leaders whose contributions in the national security arena are unparalleled. You will locate here tales of valour and adventure; stories of naval ethics and leadership. You will also find here the saga of Indian Navy's endeavours towards indigenisation and innovation.

This issue of the Quarterdeck begins with articles about the 50 glorious years of the Eastern Naval Command, India's premier Naval Command that builds and operates top-class conventional and nuclear maritime assets.

The Command has been assiduously built by the visionary leadership and the dedication of the officers and men who served her. The history of the Command as narrated by veterans highlights the leading role that it has played in defending India's freedom in the Indo-Pacific. Strategically located in the Bay of Bengal, the Eastern Naval Command has been continuously engaged in shaping national maritime affairs for more than fifty years, both in times of peace and conflict. Its accomplishments and contribution in maintaining the maritime order in the Indian Ocean Region is widely recognised.

The most formidable arm of the Eastern Naval Command is its submarine fleet. It was a proud moment for the Command when the Indian Naval Submarine arm celebrated its Golden Jubilee in 2017 on a grand scale at Vizag. Special narratives on the history and evolution of the submarine force in India are a treat to read.

The Command bid adieu to TU 142M, its workhorse, its eyes and ears in the Indo-Pacific for the past thirty years. The story of the end of TU era and the beginning of P8I era in maritime reconnaissance arena is wonderfully narrated in the magazine by naval flyboys. This issue has also captured the de-commissioning of INS Viraat, and the numerous memories associated with the mighty carrier of the India Navy.

I express my gratitude to Commodore Vivek Karnavat, PDESA, Commodore Sanjay Nirmal, Captain S Mukherji, Cdr Swanuj Harshvardhan and the entire team of DESA who guided me in my maiden attempt at editing the Quarterdeck.

My special thanks to the contributors who have enriched this issue with their rich reminiscences. I am sure that in the coming years, the readership of the magazine will grow by leaps and bounds to create greater maritime awareness in the country.



# THE EASTERN NAVAL



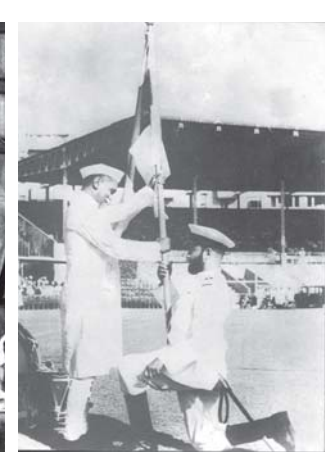
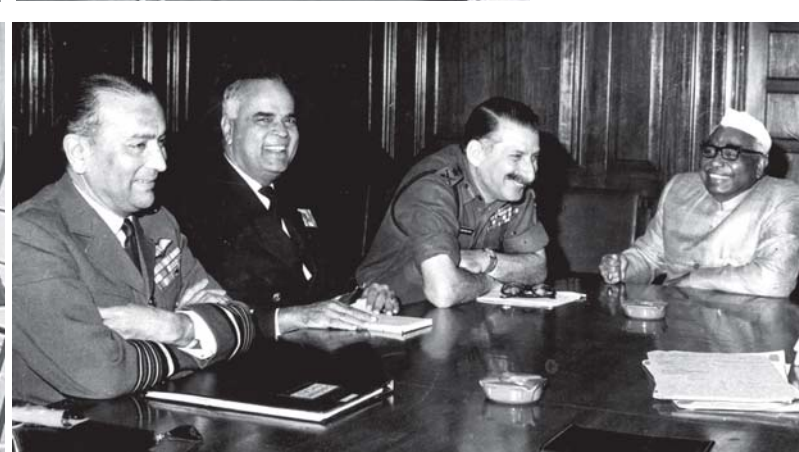
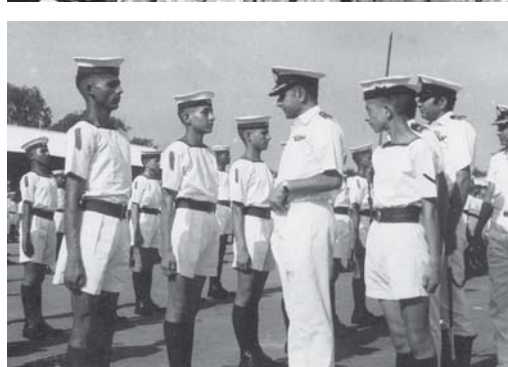
The Eastern Naval Command, the largest geographical command of the Indian Armed Forces, celebrated its Swarn Varsh in 2017. The monumental story of its growth has been made possible by the visionaries that led and guided the Command to glory. Its success is a reflection of our country's maritime resurgence. The Command extends from the Sunderbans in the north, to the Gulf of Mannar in the south. It is the only Armed Forces Command that operates nuclear propelled platforms.



# COMMAND - INDIA'S PRIDE









# HISTORICAL PERSPECTIVE AND SOME REMINISCENCES

Commodore KK Garg (Retd)

The English settlement at Vizagapatnam (now Vishakhapatnam) was founded in 1682. By 1685, the East India Company had the right to collect taxes from the area. In 1794, Vishakhapatnam was under full British control. The development of Vishakhapatnam port was sanctioned by the Secretary of State in 1925 as the other two ports on Andhra coast, Coconada (Kakinada) and Bimili (Bhimlipatnam), were considered inadequate.

The entire area was nothing but a swamp and the main activity was fishing. Vishakhapatnam port was strikingly similar to Durban port. This led to scuttling two ships, Janus and Wellsdon, South of the entrance channel, to form the breakwater to provide protection to the port. This arrangement was cheaper than building a wall. The port was under the War department, then the Commerce department, and later under the Bengal Nagpur Railway, which revived the proposal to build sheltered harbour in 9600 acres of area, at a cost of Rs 378 lakhs. Initially three berths were commissioned.

The first commercial ship, Jaladurga, entered the port when it was opened in 1933. As the maritime activity increased, it became imperative to cater to the defence of these maritime assets.

The Bombay harbour on the west coast was the main center of naval activity during the British rule. A squadron of six escort vessels of the Royal Indian Navy were based here under the Flag Officer Commanding Royal Indian Navy (FOCRIN) for local defence. The RIN came into being in 1934. As the size of the RIN fleet increased, and its burden multiplied, several new naval establishments came up. Senior naval officers were positioned at Madras, Kakinada, Vishakhapatnam and Calcutta to ensure local defence of the East coast. The geographical advantages offered by Vishakhapatnam made it an important convoy assembly point for military operations.

HMIS Circars came into being on 12 Dec at 1939. Besides housing the office of the senior naval

officer, the establishment also had some repair facilities. Operational facilities were confined to enable exercise of naval control of shipping and provide local defences. A few wooden-hulled seaward patrolling crafts fitted with an anti-aircraft gun were based here for this purpose. A Naval Inspection Organisation was set up at Calcutta and Vishakhapatnam. Further, in order to make up for wartime losses of the merchant marine, Scindia Steam Navigation Company took the initiative of setting up Hindustan Shipyard here, which subsequently became a Public Sector Unit building warships.

Admiral S. N. Kohli in his book '*Sea Power and the Indian Ocean*' brings out how Ceylon and entire eastern coast of India were at the mercy of the Japanese during the war. The Japanese sank the British navy cruisers, Cornwall, Dorsetshire and small aircraft carrier Hermes in the Bay of Bengal in 1942 but failed to exploit their success. America's Pacific fleet, after recovering from the disaster at Pearl Harbor, defeated the Japanese in the naval battles of the Coral Sea and Midway Islands, and the Japanese were deterred from any further activity in the area.

Vishakhapatnam, a natural harbour was considered suitable for creating additional naval training facilities on the East coast. The naval base Vishakhapatnam, saw the emergence of Base Training Establishment (BTE) where training for boys commenced in December 1947.

Roughly a third of the navy and many shore establishments in Karachi had gone to Pakistan after partition. Lord Mountbatten had supported the view of the Government of India that to ensure full freedom of the seas for Indian Shipping in the surrounding waters, the naval strength had to grow sufficiently and ships modernized on the basis of emerging concepts of war at sea. A strong fleet air arm was to be developed by training sufficient personnel and by acquiring an aircraft carrier by 1955. However due to extreme budgetary constraints the naval expansion plan was delayed.

Admiral A. K. Chatterjee, as DNP, subsequently prepared the first plan paper envisaging force levels for a three-dimensional navy.

The growth in the importance of the Indian Ocean and the need to maintain it as a zone of peace, necessitated that all activities along the East coast be controlled and coordinated by an administrative authority under whom the NOICs positioned on the coast could function. Vishakhapatnam was considered as the most suitable port for establishing the office of Commodore-in-Charge East Coast (COMEAST) because it provided berthing facilities to commercial and naval ships. It also had a shipyard. NOIC Vishakhapatnam, the Commanding Officer of INS Circars was upgraded to COMEAST in the mid fifties. The only fully commissioned craft based here were INSPCs 3112 and 3118, which I, as a young Lieutenant, had the unique privilege to command in 1960. The naval jetty was mainly used by these craft, except occasionally by some visiting naval ships based at Mumbai under operational control of the Flag Officer, Bombay. After having outlived their active service, the SPCs were sailed to Mumbai in 1961 and were converted into logistic boats for conveying libertymen and rations for ships at anchorage.

The jurisdiction of the COMEAST extended to various ports on the East coast, major ports being Madras and Calcutta which had NOICs, and the Andaman and Nicobar group of islands, where Fortress Commander had been established. As the Eastern seaboard was playing a big role in overall security, a full-fledged command was created by upgrading COMEAST to FOC-in-C (East) on March 1, 1968. Vice Admiral KR Nair as the first FOC-in-C (East) was a great leader who trusted his team. He was a modest person with a great sense of humor. As the number of ships and submarines based at Vizag increased the Admiral felt that the families of men out at sea had to be looked after. I as NPM of the establishment was appointed Staff Officer (Abandoned Families).

The other officer in the command were: Commander S. Jain (later Vice Admiral), the first COPO of the command; Lt Cdr AK Sharma (later DIG Coast Guard) was SO (Gunnery); Captain OS Dawson (later CNS) was CO INS Circars; Captain MP Awati (later Vice Admiral) was P 31, Commander MS Ratra (later DIG Coast Guard),



Cdr Arun Auditto (later Rear Admiral) Officer-in-Charge, Submarine Headquarters, and later CO Virbahu, were some of the other officers with whom there was interaction. Good humor was the order of the day during staff meetings with witty exchanges, especially between P31 and the FOCINC.

Things began to hot up after Vice Admiral Krishnan took over the Command. He had the reputation of being an action oriented leader. In a speech which he gave in the city, where his father had owned the first car, he held the audience spell bound. His favorite statement was, 'Every problem has a solution. If there is no solution then the problem ceases to exist', was a hit. The Admiral's deputy, Commodore MS Grewal (later Rear Admiral) was a soft-spoken man with a lot of common sense. He provided the Admiral with the right inputs to formulate a sound plan of sending INS Rajput as a decoy (acting as INS Vikrant off Vishakhapatnam) to lure PNS Ghazi in its trap. He also suggested positioning INS Vikrant off East Pakistan maintaining complete silence. This plan worked beautifully and resulted in the sinking of PNS Ghazi and INS Vikrant successfully achieving a complete blockade of ports in East Pakistan.

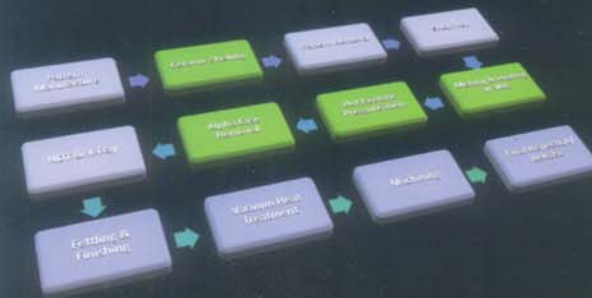
After playing a pivotal role in the liberation of Bangladesh and in containing piracy in the Strait of Malacca in 2004, the Command has grown into a force to reckon with. The biggest command of the navy with number of surface and sub-surface and aerial assets is committed to safety and security of the Eastern seaboard and implement the government's 'Look East' policy.





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A large submarine is being hoisted by a crane on the deck of a ship. The submarine is dark grey and has a red stripe along its side. It is being lifted by a large metal hook and chain system. Several crew members in blue uniforms are visible on the deck, some standing and some crouching near the submarine. The ship's deck is visible, showing various equipment and structures. The water is calm and reflects the ship and the submarine.

# Musings of the Eastern Naval Command

**Commander S Roy Choudhury (Retd)**





Somewhere in the third quarter of 1971, a young Lieutenant reported to the Eastern Naval Command, Vishakhapatnam to perform the duties of Staff Officer (Electrical). The Command Electrical Officer's office, in the last room of the Headquarters, Eastern Naval Command, was then housed in the barracks facing the jetty inside INS Circars. Fresh after completing a specialisation course, the officer was bubbling with ideas to improve the operational efficiency of ships.

The war clouds hanging since the summer of '71, crackled and war began on both the eastern and western borders with Pakistan. Operational ships were loaded with war ammunition and ships under refit were prepared as quickly as possible to face any eventuality. Leave was cancelled, personnel were recalled and everybody was required to be in uniform at all times.

The war was over within two weeks. A new country was born. Late Vice Admiral Nilakanta Krishnan came back from the surrender ceremony and gave an insightful lecture to all his staff officers.

In the middle of 1972, I was posted to the Torpedo Preparation Workshop (TPW) where all torpedoes (both steam-gas and electric) for Petyas and submarines were made ready and attached with warheads prior to their loading on ships/submarines. During my three-year long tenure, apart from preparation of torpedoes, I translated the torpedo preparation manuals from their Soviet-English version to simple English version so that it was easy for our sailors to follow. During this period I also got married with only four days of leave.

Then followed the accommodation merry-go-round, shifting from one house to another in Naval Park, when the actual allottees were on leave. We finally got our own in OSH area in a building which must have been an ammunition store with 25 inches thick walls and concrete ceiling more than 2 feet thick. It was after a considerable wait we finally got our place in the Naval Park.

Then came the mandatory sea time that took me to INS Kavaratti, one of the Petyas, as Electrical Officer. I had wonderful time on board with a great Commanding Officer (then Cdr KK Wadhwa). My

ideas of leadership were honed under him. Since the ship was operational we sailed a lot. We also had a great FOCEF – Vice Admiral RKS Ghandhi. For the ship's annual inspection, apart from Part 1 (Harbour) and Part 2 (Sea) he started a Part 3 in which he would give a task, which the ship was expected to perform in 24 hours.

For our Part 3 inspection the Signal from the FOCEF came at about 1000 hrs. Our ship was tasked to host a Sheikh and his wife on the verge of delivering a baby. We immediately got into action, rigged the awning on the quarter deck, covered the hatches and spread 2 trucks full of sand over that. A makeshift tent with 3 partitions was also put up. All these arrangements were made the same day. Next day after lunch FOCEF arrived dressed as a Sheikh. He was taken into the tent where air cooling arrangements were organised. One of our sailor's one-week old child was brought and presented to him after a while as the new born baby. Though we got Bravo Zulu it took 3 days to clear the sand from the quarter deck.

After sea time, I was back in HQENC as SLO (Staff Electrical Officer). In this tenure I always accompanied the FOC-in-C East for his inspections of outstation establishments. During one such trip to Port Blair for inspection of INS Jarawa, we (V Adm Swaraj Prakash, FOC-in-C and all accompanying staff officers) were going in an Avro provided by the com-squadron of the IAF. The flight time was 3 hours. Half-way through, the aircraft cabin got filled with dense smoke and we couldn't even see the person sitting opposite. All conversation stopped and I thought that may be this is it. To everyone's relief the smoke cleared in about 5 minutes. It was a nerve wracking experience and those were the longest 5 minutes. The pilot decided to return to Vizag. The smoke was due to a jammed air-conditioning plant bearing because of non-lubrication. We went two days later after the spares arrived from Allahabad and completed the inspection.

During my posting at HQENC, I was deputed to Poland for a short period to scrutinize the documentation for LST(M)s which were being supplied by the shipyard in Gdansk. Here I had a chance to meet Mr. Lech Walesa, who was then working in the shipyard in Gdynia. He later became



the President of Poland.

After two years in base, it was time to be back at sea. This time it was INS Katchall, another Petya. These were great ships- the Soviets had put full punch in them. Though smaller in size (1000 tons) they had more sensors and weapons (even more sophisticated) than the 2200 ton Leander class of ships.

Once when we were on duty as the Search and Rescue (SAR) ship of the fleet, we sailed to rescue a merchant vessel, which was floundering about 100 nautical miles SE off Vizag. But, within two-and-half hours after cast-off we were caught in a cyclonic storm that required the ship to head continuously into the wind. Sea state was 5+. The sea was so rough that about 90 out of 120 officers and sailors were badly sea sick. The rest of us survived on bread and prawn balchow. This went on for about 2+ days. Fortunately, electrical and all machineries were working. Had there been any defects it would have been impossible to repair them in those rough sea conditions. When we came out of the storm we were about 35 NM off Madras (now Chennai) and we limped to the port for necessary repairs. So instead of rescuing another ship we ourselves needed attention due to nature's glory (fury?). Those were three days to remember!

I bid adieu to ENC after a continuous stay of 8 years. I look back at those years as my formative years in the Navy as it gave me a chance to experience staff job, dockyard job and sea time all in one cluster. On completion of my tenure on Katchall I was posted to Naval Headquarters at New Delhi.





# RANK

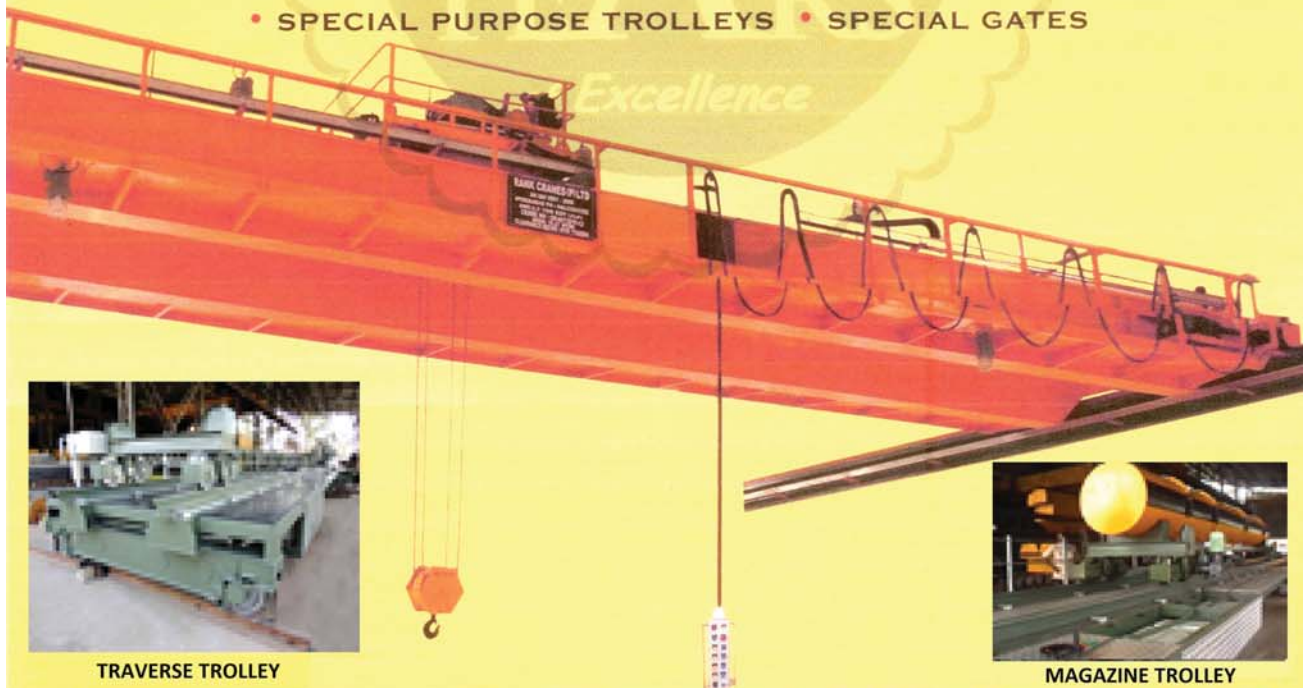
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# Reminiscences of Rigours of Training at Riga

Commander VC Pandey (Retd)



**A**lmost 50 Years ago I read about the TU-142 in the Jane's Fighting Aircraft. The TU-142 were then stationed in Murmansk, Cuba and Vietnam by the Soviets. I was fascinated to learn how the Russian aircraft tracked US nuclear submarines that remained underwater for almost six months after departing the harbour. I was keen to know as to how a turboprop aircraft flew at 0.85 percent of the speed of sound. I wished to fly this

aircraft. My dream came true on 12 October 1987, the day I became the first Indian Naval Pilot to fly and operate this beautiful airplane.

Strange things do happen in human life but destiny cannot be changed. In 1986 my dreams were shattered on learning that I was to proceed on transfer as Executive Officer, INS Amba, and someone else was nominated for induction of the



TUs. However, after a while, things took a positive turn, my appointment to the ship was cancelled and I was appointed as officer-in-charge of Project “VPMK” in Riga, Latvia, then in the USSR.

I was also a part of the IL-38 commissioning crew in Riga, in 1976. The earlier experience of flying in Riga was useful in successful completion of Project VPMK. I was fortunate to have officers like

V Adm Dilip Deshpande (Retd), Captain SJS Gill, Cdr Vinod Punera, Cdr PK Sinha, JT Jaya, to name a few, in my team. My team consisted of highly motivated professionals with a high sense of Integrity and patriotism.

Civilian personnel from NAD, Inspection & Training teams from NAIS & NATS, AE, AL& AO trade officers and sailors, pilots, observers, flight engineers, flight and a newly inducted cadre of flight gunners were also part of my team. Logistic support personnel were not sanctioned for the project. It was indeed a difficult task to manage such a vast and specialised set of professionals in the constrained environment and extreme weather conditions.

Officers and men were accommodated at different floors in the same building inside the Russian Naval Aviation Training Center, Skulte at Riga. The same building was used during our IL-38 training. However, two stories were added in the building to accommodate the bigger contingent of TU -142 personnel. The dining hall and the quality of food was the same for officers and sailors.

Submariners were also trained in Riga. We were based in Skulte near the Airport. The submarine crew of our Navy were in Boldurai, next to Riga harbour. The officers of submarines were allowed to bring their families, as their duration of stay was slightly longer.

I strictly followed the good old traditions of our Navy. Both watches, divisional system, request-men and defaulter, pipe down, etc. were zealously observed. It is pertinent to mention that there was no defaulter during our entire stay in Riga, nor any officer or sailor was ever involved in any civilian case in or out of the campus. In first three months the menu for breakfast, lunch and the dinner was standard-chicken, eggs, rice, bread, milk, cake and biscuits. Vegetarians had limited choice. Life became much better with the arrival of a consignment of dry provisions, including condiments, from India via Odessa. In consultation with senior sailors, from different parts of our country, volunteers were selected to explain to the Russian cooks about the preparation of various north, south, east and western Indian dishes.



Ground training was completed successfully. It was time for our technical officers and men to start their practical training on the aircraft. Vice Admiral Dilip Deshpande (Retd) has beautifully narrated this part of story in “How the North Pole was won”. He was my number two in the detachment. It was snow all over the fuselage and wings were completely covered with thick ice. The dispersal was also covered with almost 2-3 feet of ice. Riga is close to the region of “midnight sun”, where the day has almost 20-23 hours of darkness in the winter season. Our technical officers and men had to learn and work under most difficult conditions. Whilst working in those extreme conditions, Dilip Deshpande slipped and fractured his leg and was hospitalized. The temperature that day was only -20°C.

I had almost 2500 hours of flight experience of IL-38. This experience was accumulated over a span of almost ten years from 1976 to 1985. In the IL-38 squadron, I evolved from a co-pilot to a pilot to Senior Pilot and then to Squadron Commander. Most of the pilots and the observers of my project had the experience of flying IL-38s, they were familiar with four-engine Russian aircraft and the metric system of instrumentations.

The TU-142s arrived Riga in first week of October 1987, when severe winter had set in this part of the world. My dream of 1967 came true on 12 October 1987, when I undertook my first flight of TU 142 (IN-314). On the night of Christmas, in 1987, the Russian chief pilot and Training in-Charge, Colonel Korpus tested my night-checks and thereafter I flew my first, 31- minute long, night sortie with a Russian co-pilot. The flight training was completed successfully without any incident on 26 March 1988.

It was decided to ferry fly the TU-142s direct to Goa without the Russian crew. The entire crew flew a 12 hours flight on 02 March 1988 to simulate the ferry flight conditions. Lt S Ghei, my co-pilot on board IN-311, and the Russian crew were also present on board. We flew very close to the North Pole and did carry out some approach and low overshoots in Murmansk. On 10 March 1987, I carried out the air test of IN-311 and thereafter it was handed over to the ground personnel to prepare it for the ferry flight.

Aircraft were positioned in Simferopol, Ukraine







on 28 March by the Indian ferry crew prior to departure for Dabolim. On 30 March 1988, at about 0700 local time (India time 0930 hours), Lt NP Bhagat, my flight engineer, advanced all four throttles to take-off power on my command. On his call  $V_1$ , I removed my right hand from the power levers, lifted off at  $V_R$  to commence a journey unforgettable in my life time. Gill and Jasbir followed us in IN312 and IN313.

Project VPMK was completed successfully. Good bye Russian Instructors.

The time now was to prepare for the 12 hours of nonstop ferry flight by single crew from Russia to India. The gist of this as per my memory is narrated below,

On 30 March 1988, the non-stop ferry flight of TU-142 from USSR to India by Indian Naval Aircrew was completed in 08 hours and 55 minutes. The route followed was Simferopol - Ankara - Larnaca- Cairo -Jeddah - Aden - Bombay- Goa.

The rate of fuel consumption increases significantly when airplanes are flown at lower altitudes. Therefore, for this long flight, it was necessary to plan the flight at or above 30,000 feet. The service ceiling of this aircraft is around 40,000 feet, therefore cruising eastwards at 31/33/35,000 feet were the most ideal flight levels.

Those days, however, cruising in various international Flight Information Regions (FIR) at those altitudes required a compulsory Radial and DME from a specified VOR station of that country. VOR/ DME instrumentation was not available on board our TU-142s. However, the aircraft was equipped with a Russian equivalent of VOR/DME known as Short Range Navigation System (RSBN). The accuracy of this system was in 100s of meters and bearing in 01 degree, however this system was not available after departure from Simferopol due lack of compatible ground stations. Today, RNP, RNAV & RVSM compliance has come in force in these highly congested routes, if flight has to be undertaken under IFR rules at those levels.

Our entire route was flown from beacon to beacon of NDBs and by map reading by four observers on board. Route and approach charts of JEPPSON required for precision and non-







precision approaches of the overflying countries were not available on board. Submission and clearance of the flight plan of ferry flight was done by the Russians. Permissions to overfly each country (Yankee number) was obtained by our authorities and made available to us.

Global Positioning System (GPS) based on Satellites or Inertial Navigation System (INS) was not available on board the TU-142s earmarked for the Indian Navy. Instead the aircraft was equipped with a 'Star Navigation System'. This system has its own limitations, though position accuracy was almost 50 meters.

TCAS (Traffic Control & Avoidance System), GPWS (Ground Proximity Warning System), Transponders and ACARS (Aircraft Communications, Addressing and Reporting System) were not available on the TUs. Our aircraft had a Russian version of ACARS known as 'Data Link System'. It was of very limited use in our environment of flight operations. I remember, recovery of an airborne TU-142 in Dabolim in bad weather in the monsoon of the year 1989 by exploiting this Data link system operated by another TU-142 positioned in the dispersal.

Avoidance of Cumulo-Nimbus clouds is very important from the points of view of flight safety. These clouds would be best detected and avoided by an X-band airborne weather radar, which was lacking on board the TUs. It is important to understand that "Cb clouds are not to be penetrated but only avoided" due flight safety reasons. Many lives and aeroplanes have been lost, when pilots have tried to penetrate these Cb clouds.

During the take-off phase of flight, all heavy twin and multi engine aircraft are required to strictly follow the



Decision, Rotation and Safety speeds, also known as  $V_1$ ,  $V_R$  and  $V_2$ .

During the take-off run, if an engine fails or a serious emergency develops before  $V_1$ , take-off has to be rejected. If the speed  $V_1$  has been passed, take-off has to be continued and aircraft lifted off the runway at  $V_R$  and thereafter  $V_2$  speed is to be maintained till reaching a safety height. There was no simulator for the TU-142 and we were not given actual/virtual training on engine failures at and after  $V_1$  speeds.

As true sailors, we accepted these limitations and challenges. We completed the ferry flights safely. I led in 311, followed by SJS Gill in 312 and Jasbir Singh in 313. We had no problem overflying Ankara in Turkey, Larnaca in Cyprus and Cairo in Egypt.

As the aircraft weight reduced due consumption of fuel, we were very well settled at flight level of 34,000 feet approaching UAE. Soon after contact with the Air Traffic Controller of UAE, all hell broke loose. Traffic controller requested our Radial and DME from a particular VOR beacon. Unable to comply, we were asked to descend immediately to a height of around 15,000 feet and proceed further with ground visual references. This must have lasted for about thirty minutes. Controller of Yemen FIR was very helpful and cleared us to climb back to 33,000 feet and to report over Aden. After overflying Aden, it was supposed to be a quiet and long flight over the Ocean but it became the most interesting part of our flight and kept us on our toes.

Auto pilot on, clear skies, handed over the stick of Auto pilot to Lt S Ghei and tried to take a bit of rest. Lo!, suddenly out of blue, two American fighters were on our wing tips. These aircraft were fully loaded with various rockets and other weapons. They photographed each and every aerial protruding out of our aircraft. We remained silent spectators. Loss of an AN-32 under similar condition and in the same area was fresh in my mind. Once the aircraft came so close to the tail gunner that his voice became panicky. I asked him to relax, not to move the guns and keep cool, so as not to be provocative. Hats off to my flight gunner, keeping cool in these life threatening scenarios. We were cruising at about 0.70 Mach, these American Fighters would give us company for about 30 minutes thereafter do a vertical climb with after burners right ahead of our cockpit and



*Cdr VC Pandey (Retd ) with CNS during de induction of TU-142 in Arkonam in 2017.*

disappear in the blue. The company of these American fighters continued till 150 nautical miles from Mumbai. After this show by American fighters, I was convinced that a new era had begun in the history of Indian Naval Aviation after induction of these aircraft.

Simferopol maintains UTC+3, and Goa is at UTC + 5.5. After 08 hours and 30 minutes of flight we came in contact with Dabolim. We were told that Radar and ILS was not available due operational reasons. I must admit the fact that I was comparably less comfortable with visual approaches. Till now, all recoveries of the TUs in Riga were radar-vectorled followed by a precision approach and landing due weather conditions. I was apprehensive about the maiden landing off a visual approach in night time in Dabolim. We called direct downwind runway 26 left hand, handed over the circuit navigation to my flight navigator. He did a good job and IN-311 touched down safely at around 1830 hrs local time. It was followed by IN-312 and IN-313.

Mrs. Reena Pandey ( First Lady of TU -142 family) climbed a ladder and welcomed IN-311 in the typical Indian traditional way by putting a garland on the air refueling probe. Cdr S Jayaraman, Executive Officer INS HANSA broke a coconut on the nose wheel, red tilak was applied to the aircraft, thereafter we were allowed to disembark from the aircraft. Rear Admiral S Ramsagar (FONA) and Captain FR Clarke (CO, INS Hansa) welcomed us back home. 11 months of exile came to an end. History was created, yet we knew that it was only the beginning and we had a long way to go in integrating the TU-142s with the Indian Navy.



# Passing The Baton TU 142M to P8I

**Lieutenant Commander A Avinash**

*The de-induction of the iconic TU 142M in March 2017 grabbed the attention of everyone. Its increasing maintenance costs, obsolescence related issues and the induction of P8I ensured that the 'Big Bear' hung its boots after serving the nation for 29 years. TU 142M has been the most feared aerial predator in the Indian Ocean and has been one of the world's most iconic and recognisable submarine hunters. The induction of the P8I is the ideal replacement for the mighty bird.*







Maritime surveillance is a layered capability of collecting information at a variety of levels. The need for credible surveillance over the high seas forms the bedrock and foundation of infallible maritime security. The responsibility of maritime surveillance and reconnaissance of the Indian waters shifted to the Indian Navy from the Indian Air Force when five 'Super Constellation' aircraft were taken over by Indian Navy in November 1976. The first multi-engine, long-range MR aircraft squadron consisting of five Super Constellations was commissioned as INAS 312. The Super Connies served the country for eight years in which time the Navy realised the value of long range, multi-engine aircraft. It started considering a long-range maritime reconnaissance and anti-submarine warfare aircraft for its Naval Air Arm.

**Era of the 'Mighty Props'** - The agreement to purchase eight new TU-142Ms was signed with the Soviet Union in December 1984. The TU-142M is a maritime reconnaissance and anti-submarine warfare aircraft derived from the TU-95 turboprop strategic bomber designed by the Tupelov design bureau. Powered by four NK-12MP contra rotating turboprop engines, the aircraft is the fastest, highest flying turboprop powered aircraft in the world till date. On 30 March 1988, the first three Tu-142Ms touched down at the Indian Naval Air Station, INS Hansa, Goa, and on 16 April 1988, the then Defence Minister of India, Mr. KC Pant, recommissioned



INAS 312. By the end of October 1988, the last aircraft reached India to make a fleet of eight TU-142Ms. With a tremendous reach of around 4000 nm and a potent maritime reconnaissance and anti-submarine capability, the aircraft became the eyes and ears of our Navy.

The aircraft participated in Operation Cactus in Maldives and in Sri Lanka, to name a few. TU has been an integral part of all major exercises of the Navy. It has been a part of all major international exercises and air displays that the Indian Navy has been a part of. The squadron pulled off a miracle by flying five aircraft in close formation to showcase the might of the aircraft. Over the years the mighty bird has rendered yeoman service to the Navy and the nation. The squadron was recognised for its professionalism and hardwork through various awards, such as the Unit Citation by CNS, best frontline Squadron, CNS Flight Safety trophy, to name a few.

**Dawn of the P8I.** As the TU 142M grew old with very little scope to upgrade it with latest avionics. India began looking out for a potent and suitable replacement. It received a proposal of export version P8I from Boeing. Taking into consideration the advantages of employing a reliable 737-800 airframe aircraft in the maritime domain, India signed a \$ 2.2 billion deal for eight P8I on 01 January 2009. P8I aircraft is a long-range anti-submarine warfare, anti-surface warfare, intelligence, surveillance and reconnaissance aircraft capable of broad-area, maritime and littoral operations.

The setting up of the P8I cell in India marked the official beginning of a new era. With limited resources, the cell handled high quantum of work, which included coordination for the arrival of the first aircraft, infrastructure installation, organising training facilities and preparing FLATs schedules. The best crew from existing squadrons came together to form a formidable unit. The arrival of the first P-8I aircraft on 15 May 13, solemnised the first ever timely conclusion of a contract in the history of the Indian Armed Forces. The P8I cell transformed into IFTU P8I. In spite of all the limitations the pioneers laid a strong foundation of the elite squadron.

The fitment and integration of indigenous equipment was undertaken post arrival of the modern and sophisticated aircraft. Training on the aircraft system and its operations was given equal importance along with meeting the deadlines of all trials and clearances. With all the requisite clearances and training the aircraft got airborne for the trials, steadily becoming mission ready to embark on a long journey.

**Passing the Baton.** Induction of the P8Is came at a time when the Navy was operating only vintage LRMR aircrafts and with this acquisition the capabilities of the Navy increased manifold. The aircraft passed the litmus test during its IFTU phase when it was slotted for Tropex 14.

It was breathtaking to witness the legacy and undisputed champion of the reconnaissance arena, the TU 142M, flying for the last time, operating alongside the P8I, the most modern and sophisticated LRMR aircraft, during the Tropex 17.

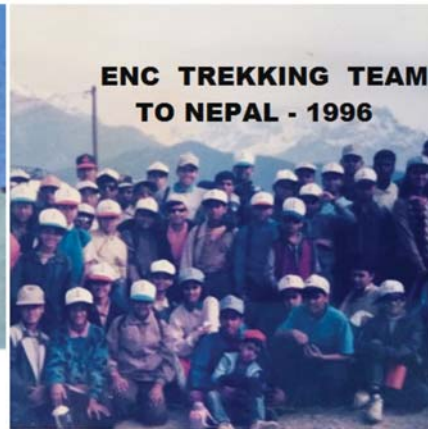
From then on the aircraft became an integral part of all the major exercises including the Inter Service exercises. The aircraft enhances the maritime domain awareness and reach of the Navy resulting in detecting and tracking warships at locations as diverse as the North African coast, Gulf of Aden, Six Degree Channel and off Sunda Strait. Barely two years old, P8I broke into the traditional Indian Air Force fortress by participating in the Republic Day Flypast over the Rajpath in January 2015, the last such occasion being when a naval aircraft flew past the President's dias was by TU 142M in January 1999. P8I has also participated in various multinational exercises Simbex, Malabar, Ausindex, Varuna and has also operated from various friendly foreign countries such as Singapore, Malaysia, Seychelles and Indonesia.

By virtue of its speed, area of coverage, versatility, and payload, P8I is an indispensable part of India's maritime strategy. The aircraft is the eyes and ears of the Navy. It has proved to be a game changer in the maritime domain. The induction of P8I holds the key to attaining a credible blue water capability in all its manifestations.

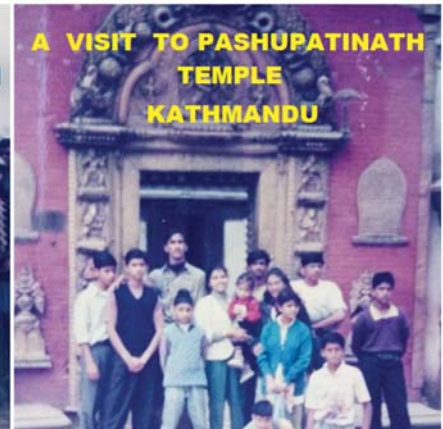




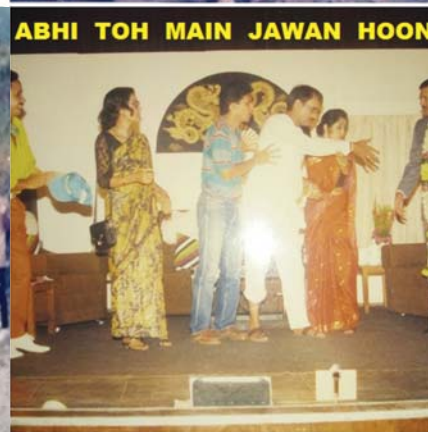
**1971**



**ENC TREKKING TEAM  
TO NEPAL - 1996**



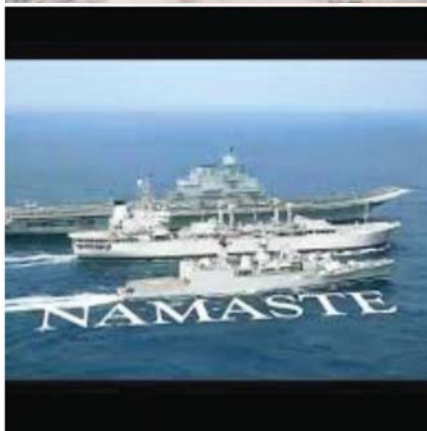
**A VISIT TO PASHUPATINATH  
TEMPLE  
KATHMANDU**



**ABHI TOH MAIN JAWAN HOON**



**HPCL FIRE-1997**



## **ENC – THE GOLDEN YEARS**

**Commander Rajinder Dutta (Retd)**

As we turn the pages of our life's album, memories, flood back of our tenure in the Eastern Naval Command from 1993-97. The Eastern Naval Command was established on 1 March, 1968. Just under four years of its existence, it was called upon by Mother India to vanquish the enemy submarine 'Ghazi'. The ENC fleet and Vikrant's Sea-Hawks

were deployed to blockade East Pakistan and assist the creation of a new nation. The ENC provides disaster relief on the East coast during devastating cyclones. When the worst ever refinery fire broke out at HPCL, Vizag in September 1997, ENC's fire-fighting teams responded expeditiously, strived day and night to contain the



disaster that could have assumed unimaginable proportions. Its fleet was deployed speedily to rehabilitate families devastated by the Tsunami on 26 December 2004, along our south-eastern coasts, Sri Lanka, Indonesia and the A&N Islands. The ENC had the honour to host India's second International Fleet Review. She was decked up like a bride, when 95 warships from 50 nations saluted our President on 06 February, 2016, in a sail-past onboard INS Sumitra. Today with a plethora of ships, submarines and aircraft under its umbrella, the ENC can thwart the designs of any invader that dares to cast an evil eye on Mother India'

I was transferred to Taragiri for sea-time in December 1983. I was excited like a kid on Christmas Eve because earlier I had only been posted at Air stations (Garuda and Hansa) on the Western Seaboard. It was our first relocation after marriage; luggage was less but excitement boundless. After marriage I was posted to the IL38 squadron. The extended honeymoon at Goa gifted us Aakash, a beautiful bundle of Joy,

Our progression from C-type mess accommodation to B-type 'Ragini' was effortless, due to 1-year A-type seniority. I was senior watch-keeper onboard, but was privileged to don the hat of second-in-command for a few stints, as the Flagship. Ours was a well worked-up ship under a cool-cat CO, Captain M R Khan, who remained calm as unruffled waters of a lake, even during ship's breakdowns. When he handed over the baton to a hot tempered submariner, it was like issue of mass Genform to ship's company from Alaska to El-Salvador (the Land of Volcanoes).

Reminiscences of our turbulent past are indeed soothing. Besides senior watch-keeping duties, I was assigned the duty of O/iC FLYCO. Being an aviator, I enjoyed handling the Helo deck operations. After completing the sea time, I side-stepped as CAVO-II, ENC. Here I had the opportunity to serve with Capt Sanjoy Gupta, the Command Aviation Officer. More importantly, I was blessed to be mentored by a principled man of absolute honesty and integrity. A true leader, Capt Gupta was a swift decision maker on aviation matters. He trusted me solely with records and returns to NHQ. I was privileged to be among the staff of FOC-in-C, Vice Adm B Guha and later Vice

Admiral PS Das. Subsequent to two years of education at the Command HQs, I was reappointed Lt Cdr (Flying) INS Dega, which was commanded by Captain DK Chandani. A challenging power-packed six months followed, prior to my transfer to my squadron.

During my formal call-on (July 1996), Captain Chandani after the formal pep-talk he told me, "Dutta, I want you to undertake a task that ENC has not executed before." My unpretentious heart skipped a beat, even as I tried to keep my smile pasted on my lips. He further elaborated, "I want you to plan, organize and execute a Naval Children's trek to Nepal of 10 days duration in mid-October. My ExO, Lt Cdr Bhalerao has done the initial spade work and shall brief you."

I planned a 5-day trek for 44 school children to Pokhara and Kathmandu after discussion with the EXO (my course-mate) and SO (Adv.) HQENC. I accounted for 8-day, to & fro journey by train from Vizag to Patna and back. From Patna we hired a 50-seater bus. We planned to stay at the Indian Army Pension Camp at Pokhara. We briefed the C-in-C, Vice Admiral PS Das, who then appointed a lady doctor, Surg Cdr Nirmala Kanan (later Surg Rear Admiral) as our team leader. A young officer from the Fleet, Lt Pavan Chauhan (now Commodore) was also included in the team.

The Admiral was kind enough to permit my wife, Meena to accompany us. The Command Daily Order asked for volunteers (8-14 yrs. old), the response was overwhelming (over 150). Only one child per family was permitted. A local trek was organized to shortlist the final 44. Regular briefings to the team fostered esprit-de-corps among young members, whom Surg Cdr Nirmala, Self, Chauhan and Meena knew by name prior to departure.

Excitement was writ large on every face at Vizag railway station during the trek launch. The journey to Pokhara by train and bus was real fun for kids. As the bus veered into the scenic Pokhara plateau at dawn, the kids shrieked in delight. We were accommodated at the pension camp that boasted of exquisite interiors. Everyday a trek was undertaken during the forenoon hours with team games planned for the pleasant evenings, followed by kids' entertainment program. A visit to Mahipal Medical College was also organized. Pokhara



accomplished, we headed for Kathmandu where the final trek of 15 kms was executed from a mountain top, descending down to 'Pheu Tal', an enchanting lake. A visit to important tourist spots including the popular Pashupatinath Temple was undertaken. The children were elated by the shopping; buy an item for Rs. 40, pay Rs. 100 (Indian Currency), receive back Rs 120 (Nepalese Currency). The conversion rate then was Rs.100 equal to 160 Nepalese rupees. I remember, one Tamilian child expressing his desire for curd-rice that wasn't in menu. Self and Pavan surveyed the streets and fetched curd for the child to relish his favourite curd rice. A daily situation report was provided to HQENC by landline. A setback awaited us at Patna. All trains to Vizag were cancelled indefinitely due to cyclonic devastation on the east coast. We got our tickets cancelled and continued our road journey with a lunch break at INS Chilka en-route. Some children suffered from Diarrhoea on the homebound leg. Like a mother, Surg Cdr Nirmala Kanan treated them. The bus reached around midnight, amidst a rousing welcome by the DSO and the eager parents. A debrief was conducted at HQs next day. It was a well-planned successful adventure activity for children that paved the way for future ventures in subsequent years.

My wife Meena contributed to NWWA activities.

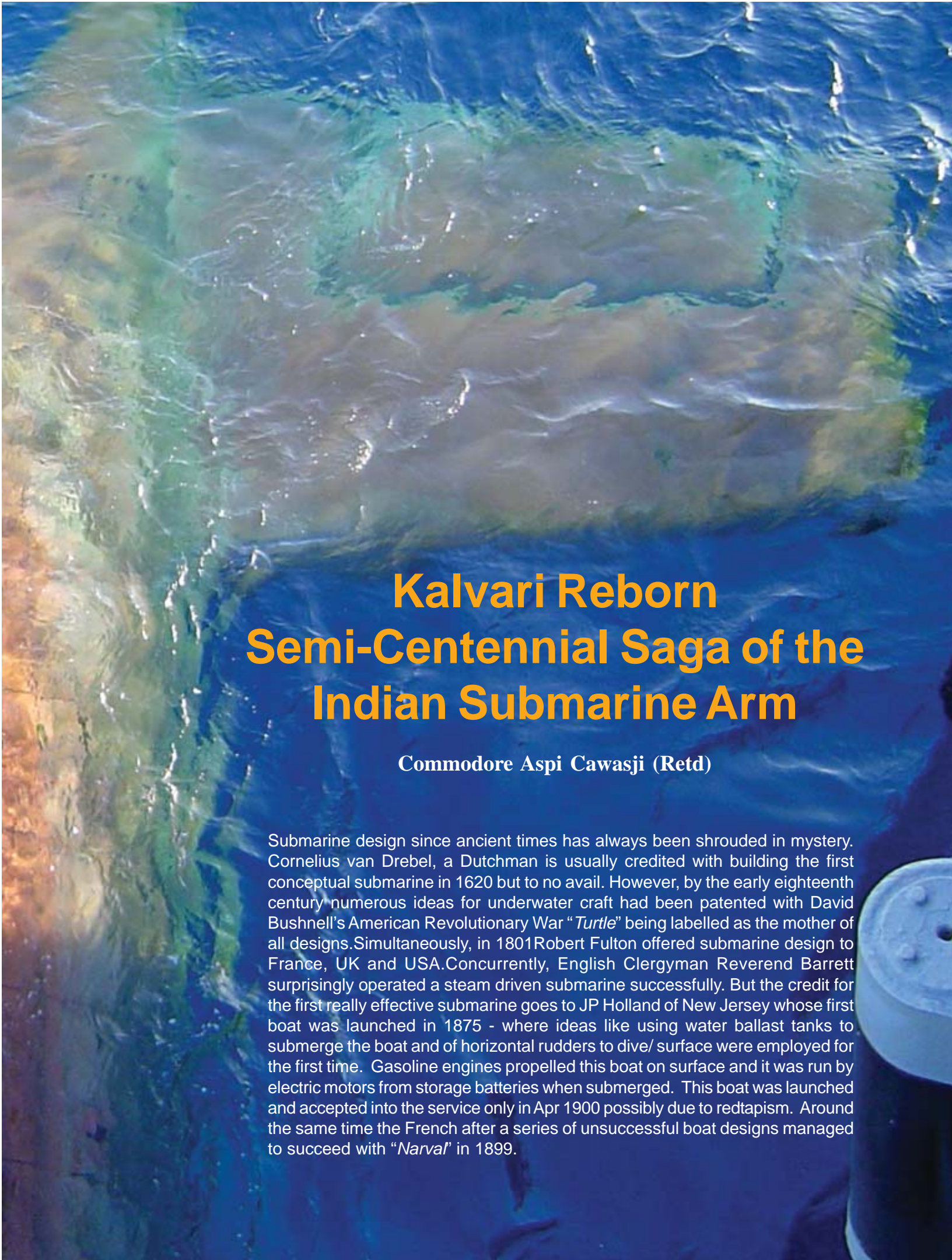
She was selected as a Command lady swimming instructor. Being the daughter of one of the first Divers of the IN (Lt Cdr VP Bakshi), she inherited good swimming skills. She was also the Principal of Ashoka Vidyalaya, being run for the children of dockyard workers. Additionally being an adventure enthusiast, she took part in water skiing and parasailing organized by the Command. She was blessed with our second baby-boy on 24 January 95. She has recently bagged two Silvers in the National Masters Swimming Championship at Rajkot.

After our return from Nepal, INS Dega was tasked to organize a farewell cultural programme for outgoing CNS, Admiral VS Shekhawat. Capt Chandani produced and directed a play 'Abhi toh main Jawan hoon'. Self, Lt Vivekananda Roy and Meena were the main lead. After two weeks of rehearsals we were on stage for the finale. The play was a success and drew great applause from the packed auditorium. The cast developed into a well-knit team during rehearsals, addressing each other by stage names, aka Bhaskar, Raghu, Manmath, Pawan, Yamini, Alakhnanda, Sheetal, etc. After every rehearsal the cast landed up for drinks and dinner. Dega contributed to preparing greens to initiate golf in the Command. Today it's a full-fledged Command Golf Course.









# Kalvari Reborn Semi-Centennial Saga of the Indian Submarine Arm

Commodore Aspi Cawasji (Retd)

Submarine design since ancient times has always been shrouded in mystery. Cornelius van Drebel, a Dutchman is usually credited with building the first conceptual submarine in 1620 but to no avail. However, by the early eighteenth century numerous ideas for underwater craft had been patented with David Bushnell's American Revolutionary War "*Turtle*" being labelled as the mother of all designs. Simultaneously, in 1801 Robert Fulton offered submarine design to France, UK and USA. Concurrently, English Clergyman Reverend Barrett surprisingly operated a steam driven submarine successfully. But the credit for the first really effective submarine goes to JP Holland of New Jersey whose first boat was launched in 1875 - where ideas like using water ballast tanks to submerge the boat and of horizontal rudders to dive/ surface were employed for the first time. Gasoline engines propelled this boat on surface and it was run by electric motors from storage batteries when submerged. This boat was launched and accepted into the service only in Apr 1900 possibly due to redtapism. Around the same time the French after a series of unsuccessful boat designs managed to succeed with "*Narval*" in 1899.



Induction of submarines into the French and American navies persuaded the British Admiralty to forego its scepticism and disdain of the submarine. The British submarine programme was launched in 1900 with full support, so much so, that by the start of WWI in Aug 1914 the Royal Navy had the largest submarine fleet of 74 boats. WWI saw the use of submarines from the very start. The Germans were the first to use the submarine as a strategic rather than a tactical weapon. In attempting to seal off the transatlantic trade routes they sank a huge tonnage of Allied shipping. The end of WWI saw no major improvements in submarine design. Follow-ons were simply larger versions of those in service at the start of the conflict. They had guns and torpedoes as weapons and were capable of limited forays underwater and were propelled by diesel electric power.

The inter-war years saw slow but steady development of the patrol type submarines with vastly improved endurance, reliability and habitability. The years between 1918 and 1939 brought some unusual submarine developments. Gun carrying and even aircraft carrying submarines were launched by the British, French and Japanese navies but with very limited success. Employment of submarines in the WW II both in the Atlantic and Pacific theatres is legendary and of common knowledge.

In the post WW II era there were three very significant breakthroughs, the first being the German discovery - that by streamlining the hull, doing away with all unnecessary protuberances and increasing battery power, much greater speeds and endurances could be achieved. These refinements coupled with that of the snorkel resulted in the first boats to be more at home under

the surface than above it and led to programmes of new boats, radically different from the old ones. The second development was that of the tear drop hull pioneered by the US Navy experimental submarine USS Albacore which made submarines capable of higher speeds and solved control problems, besides giving a large internal space. The third of course was the perfection of nuclear propulsion which – for the navies that could afford it - made submarines totally free of the surface for protracted periods.

Submarines enjoy an inherent advantage over surface vessels. The prime virtue of a submarine as a platform of war is stealth and concealment. Sound being the method of sensing beneath the sea is subject to the vagaries caused by temperature, salinity and pressure variations of sea water, which makes detection of a submarine difficult. The second virtue of a submarine is endurance. The diesel is an economical engine and fuel for a voyage of many weeks can be carried onboard. This factor is even more enhanced for nuclear propelled submarines where they can stay on patrol for periods greater than 3 months. The third virtue of a submarine is its striking power. Partly, this is a function of concealment but also as an underwater vehicle it can strike vulnerable underwater portions of ships and other submarines. Also it can carry weapons like torpedoes, missiles and sea mines of considerable weight.

The disadvantages that submarines experience are difficulty in the shore authority communicating with a submerged boat and also the disadvantage of having no discriminating weapons. Whoever heard of a submarine firing a shot across anyone's bow either with a torpedo or missile, she always fires with only an offensive intent. Stealth, which



is its primary virtue, can also be its *Achilles heel* as its location in the water, if given away, can lead to its downfall.

Till independence in 1947, strategic naval defence of India was the responsibility of the Royal Navy. The Royal Indian Navy was small and barely adequate for its coastal defence. With India's geopolitical location, large population, substantial land mass and dependence on sea borne trade, India was conceived to be undoubtedly a maritime nation and it was necessary that she possess an adequate navy capable of operating on the high seas. The new Government of India took early steps to develop a balanced Navy with sea-going ships, submarines and aircraft carriers. However, the Chinese incursions on the north and northeast just after independence had their inevitable effect in slowing naval development and none was harder hit than the submarine acquisition programme.

Even as the Indian government looked at the question of submarine acquisition in the mid 60s our traditional naval suppliers, Great Britain, refused to sell India their Oberon class submarines. The Admiralty advised the Indian Navy that submarines were not a feasible option as India had no infrastructure and no submarine background. For a service traditionally so strongly bound with the British ethos and tradition, making a clean break with the Royal Navy and accepting the long standing Soviet offer of Foxtrot class submarines was a difficult decision for the upper echelons to take. Hence, after prolonged training of the crew at Riga did the Indian Navy commission its first submarine INS *Kalvari* on 08 Dec 1967. Thus started the saga of the Indian Submarine Arm. This day is celebrated with fervour and enthusiasm by all personnel of the

Submarine Arm religiously. Induction of INS *Kalvari* was followed by quick commissioning of INS *Khanderi*, *Karanj* and *Kursura* in the next two years. To increase the reach and give a boost to the endurance of the submarine force, a submarine mother ship INS *Amba* was acquired in 1968. Later, a submarine rescue vessel INS *Nistar* was added in 1972; all acquisitions were from the Soviet Union. The Indo-Pak war of 1971 placed the Indian Navy in a superior role after having successfully blockaded the port of Karachi in Pakistan and creating substantial damage to Pakistan's war effort. Submarines saw action in the 1971 war and have written many tales of valour and courage. Due to the importance of the submarine as a platform of war and the operational necessity to cover both the Bay of Bengal and Arabian Sea, four new modernised Foxtrot class submarines INS *Vela Vagir*, *Vagli* and *Vagsheer* were acquired between 1973 and 1975. Maintenance facilities were set up at Visakhapatnam Naval Dockyard with the help of the Soviet Union for undertaking extensive refits. These facilities, with the ability to operate submarines at high seas far beyond our shores proclaimed India to be a full-fledged submarine power by 1975.

While India had been busy establishing a potent Submarine Arm the geo-strategic perspectives of the country had changed considerably both from the regional and international view points. Internationally, the power struggle in the Indian Ocean reached new heights with USA establishing military bases in the region, acquiring communication bases and use of airfields in adjoining countries which culminated in the US Navy establishing a naval and air base at Diego Garcia. This consequently was enough reason for increased Soviet naval activity in the "once peaceful Indian Ocean".

Regionally, after a successful naval war in 1971, India saw Pakistan strengthening its Submarine Arm further by adding a couple of Daphne class French submarines. Repeated reports of Chinese Submarines in the Bay of Bengal exposed us to an absolutely new threat.

Keeping in view these developments the Navy started its hunt for a new class of submarines, quieter and more deadly built to order for Indian conditions and specially designed for a submarine hunter killer role. In 1980 it was decided to conclude





a contract with HDW of Kiel, West Germany for building two submarines of the Type 1500 class (a variant of Type 209) in Kiel followed by manufacture of two submarines of the same class in India. This included a complete transfer of submarine construction, armament and pressure hull technology. The first two boats INS *Shishumar* and INS *Shankush* were delivered in 1987 and the third boat INS *Shalki* was commissioned at Mumbai in 1992 and the fourth boat INS *Shankul* in 1994 by the Mazagon Dockyard Ltd Mumbai.

With the already ageing *Kalvari* class Foxtrots at hand, the Indian Navy envisaged a submarine strength of 9 to 10 boats between 1988 and 1993 and then a fall to 4 to 6 submarines in 1995 as the Vela class submarines started to get decommissioned. To avoid another period of submarine consolidation the Indian Navy decided to acquire the latest Soviet diesel-electric submarines, the Kilo class, an advanced version of the Foxtrot class. The first of these boats INS *Sindhughosh*, joined the Indian Navy in 1986 and since then nine *Sindhughosh* class submarines namely, *Sindhurakshak*, *Sindhudhvaj*, *Sinduvir*, *Sindhuraj*, *Sindhuratna*, *Sindhukirti*, *Sindhukesari* and *Sindhuvijay* have been commissioned in the erstwhile USSR between 1986 and 1991. The ill-fated INS *Sindhurakshak* which was commissioned in 1997 met with a devastating accident in 2010 and was laid off. INS *Sindhushastra* was the latest acquisition from Russia in 2000 which carries the lethal land attack Klub missiles.

During the Indo-Pak War of 1971, US had sent the 7<sup>th</sup> Fleet led by the nuclear-powered USS *Enterprise* into the Bay of Bengal in an attempt to intimidate India. In response, the Soviet Union had sent a submarine armed with nuclear missiles to trail the US 7<sup>th</sup> Fleet. This event demonstrated the significance of nuclear weapons and ballistic missile submarines to then Prime Minister, whose foresight prompted the planners of the Indian Navy to launch a nuclear submarine construction programme in the late 70s. As part of the agreement to gain experience in operating and maintaining nuclear propelled submarines, India explored taking a Nuclear Attack Submarine (SSN) on lease from the Soviets. This culminated in India getting the

erstwhile INS *Chakra* (ex-Soviet Charlie I Class) on lease in 1987 for the purpose of gaining experience in the operations and maintenance of nuclear submarines. INS *Chakra* was returned to the Soviet Union in 1990 on completion of the lease period. In the meantime, India pursued the indigenous construction of a Ballistic Missile Submarine (SSBN). The first vessel of the class, INS *Arihant* was launched in 2009 and after extensive sea trials, was commissioned in August 2016. India thus joined the elite group of five nuclear submarine building countries in the world. By this landmark event, India completed the third leg of the nuclear triad with its *Sagarika* Submarine launched Ballistic Missile (SLBM) placing it atop the high table. India concurrently finalised a deal with Russia in 2012, in which a Nuclear Attack Submarine (ex-Russian Akula II Class) was taken on lease and thus commissioned as INS *Chakra* again.

In accordance with its long term submarine building plan, with a view to maintain a submarine force level of atleast 24 submarines, India chose the French *Scorpen*e design under Project 75 (P-75). The project was required to replace the dwindling number of *Sindhughosh* and *Shishumar* Class submarines in the Indian Navy. Construction of the first submarine *Kalvari* started in May 2009 at Mazagon Dockyard Ltd Mumbai. *Kalvari* has been commissioned in 2017, thus giving rebirth to the old INS *Kalvari* (Foxtrot) in the Golden Jubilee year of the Indian Submarine Arm. The follow-ons of the *Scorpen*e submarines being built at MDL will all be christened after the erstwhile Foxtrot Submarines and are likely to join the force with one year gaps. It has been reported in the media that India is further likely to construct indigenously six more submarines of the *Scorpen*e Class advanced version under the Project (P-75I) 'Make In India' Scheme.

Thus the saga of the rebirth of KALVARI goes on. After fifty years of blood, sweat and toil, the Indian Naval Submarine Arm will add to its quiver a modern submarine with the same name as its first born.

Submarines are never forgotten in the annals of history, ***they are remembered forever as their names live on till eternity.***

# The Changing Times


**Dulcie Suresh**

Have you noticed how fast the times are changing?  
The naughty norms, submerging standards,  
Road rage and crass behaviour?  
Lives snuffed out with frequent blasts,  
Depression, frustration and cold blooded murder?  
Where are the sons who cared for old parents?  
Or daughters arriving at festive seasons?  
The children have gone far away,  
Only slumber and silence the livelong day,  
Alzheimers has a field day!  
Where are the friendly neighbours?  
Stopping for a chat or the cup that cheers?  
Now fasten your windows and bolt your door,  
You can't really trust the neighbours next door.  
How shall we survive in our changing world?  
Not follow the blue whale  
And lose your soul,  
But follow the Rainbow  
And reach your goal.









# Kursura : The Submarine Museum

**Vice Admiral Vinod Pasricha (Retd)**

Soon after I took over as FOC-in-C, Eastern Naval Command, the question about a long-planned museum inside a submarine came up at one of my meetings. We did have a small Submarine Museum, which was located inside the Naval Base at INS Circars. However, even though this had been done very tastefully, because of its distance from the town and being located inside the base, very few civilians visited it. Also, even though it had a large number of artefacts, it was difficult for the uninitiated to visualise what a submarine looked like from inside and how difficult it was to actually live on board for long durations in her cramped spaces.

Because of a sense of history, all submariners had originally planned that our first submarine, INS Kalvari, would be moved to a suitable berth in the Naval Dockyard and put on display as a full museum. However, as her material state was quite bad, the plan shifted to using the second submarine, INS Kursura instead. As a compromise solution, we also decided that we would dismantle the fin of Kalvari and put this at a suitable place on the Beach Road. After considerable discussions with the Collector, Kalvari's fin was moved and commissioned by Commodore K Subra-Maniam, her first Commanding Officer. Since its periscope was still in place, a large number of children visited her regularly, to get a closer look at ships anchored in the outer harbour.

Separately, our plan to move Kursura continued! A number of suggestions came forward and one that seemed feasible was to cut her into ten pieces and then move these on large trailers to the beach

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and re-weld them in-situ. Although this seemed workable, there were considerable doubts about whether welding her again into a complete submarine would work! Also, there were major apprehensions on whether this submarine could be brought back to her original state after this move! The large number of cables and pipes that would have to be cut and joined again seemed an impossible task, even though HSL had done a study four years earlier and were certain that this could be achieved.



Soon thereafter, the idea of beaching Kursura and then pulling her ashore on a cradle seemed to gel. When the Director, National Ship Design and Research Centre (NSDR), Mr P Sambandan was approached, he was optimistic that this could be achieved, without even using a cradle. After considerable planning and discussions with NHQ, we decided to try this option and despite the many problems encountered, the submarine made it to her grand and imposing location on the beach. This project had to be kept on hold for over 8 months. This was whilst ENC was dealing with a court case wrongfully filed by an environmentalist, who had planted turtle eggs from another site, just to stymie the project.

The crowds that visit this submarine are enormous, with the normal waiting time in the queue of over two hours. The inside of the submarine has been kept as natural as possible. In order to cater for quick movement within, it became necessary to remove the hatches between compartments and replace them with open doors. In the original plan, it was planned to retain one hatch, so that people would be able to fully appreciate the difficulties encountered, but somehow this concept got left out. However, it was planned that the next time Kursura is closed for maintenance this would be incorporated, so that children visiting the submarine would enjoy traversing through this passage, even if some adults would find it a little difficult to negotiate.

Also, we used mannequins to help a better understanding. To simulate reality, the galley, wardroom and the torpedo spaces have remained

intact, covered by glass doors, to prevent visitors from entering. The cabins highlight the frugal and cramped spaces available to the Captain. A hammock amongst the sections and a sailor sleeping on top of a torpedo-tube also illustrate these cramped spaces. In the engine room and other machinery spaces, the top metal covers have been removed and replaced with perspex and glass covers, so that the inner machinery is easily visible to the public.

In the view of Vice Admiral AK Singh, who was also ACNS (Submarines) :-

The German WW-2 submarine museum at Kiel is an old almost empty U-Boat on the beach. The Russian WW-2 submarine at Vladivostok (S13), was commanded by a series of successful Soviet Naval officers, who reached Flag Rank and hence this museum. However, this submarine is not a complete one, with some compartments totally empty and only having photographs/memorabilia of the Pacific Fleet's submarine arm. The Russian WW-2 submarine grouted at Murmansk is similar to S13 in layout and concept and also has similar empty compartments. The Kursura museum is unique, since it shows the complete equipment fit, with mannequins of some of the commissioning crew. The many challenges that we came across whilst completing this museum included:-

We had beached a submarine which was still in commission! Thus, you can imagine the precision and procedures involved in using tugs for this. We planned this at high water during spring tides, so that the tugs could take the submarine really close

to the coastline, right up the beach. After that, the tugs withdrew.

This is the only time in history that the submarine's decommissioning ceremony was held on a beach, with Kursura's lower belly fully under sand.

We had requested Adm VS Shekhawat, the first officer of the Indian Navy's submarine arm, to do the decommissioning. The first Commanding Officer of Kursura, RAdm Arun Auditto, was also present.

For all work thereafter, I give full credit to my successors, who finally raised Kursura clear of sand.

The Navy took a joint decision with VUDA and requested them to take over the museum, but with one condition. This was that all guides, who would show people around, must be ex-submarine sailors. This was to also ensure that all guides would be in a position to answer all questions. We were also keen that they speak Telugu, for better interaction with most visitors.

Kursura is the only submarine in the world with no internal changes, except for the removal of all small hatches between compartments. This has enabled old people, ladies and small children to easily walk through an otherwise totally complete submarine.

An important aspect was that soon after we started work, environmentalists filed a case against us in the Andhra High Court. They stated that by moving the submarine, the Navy had destroyed many Olive Ridley turtle egg nests that existed on the beach, causing major environmental damage and so all work should be stopped. Fortunately, some years earlier, Professor Prasada Reddy of Andhra University had done an environment research of this entire beach and had found only three nests on this beach of over four kms. Since the submarine's length was merely 60 metres, we were able to win our case in court.

Since the court case took over eight months, because of the strong tides and wind shear the submarine started listing by over ten degrees. Had the court case continued for another six months, Kursura would probably have capsized and

become a total wreck. Thereafter, it would neither have been possible to salvage her nor convert her into a museum!

Today, Kursura is recognized as one of the best submarine museums in the world; the credit for which goes to the people involved in setting up this museum two decades ago.

Converting this submarine into a museum and placing her ashore has been unique and became an instant success, attracting a large number of visitors regularly. In fact, Kursura has recently won an award from the World Ship Trust (UK), as one of the best submarine museums in the world.

Overall, this museum is a national monument that has become a big attraction. In fact, besides showcasing the submarine arm, it has considerably boosted tourist traffic into Vizag. To serve as a motivating factor and enhance information about submarines amongst the youth, some pending tasks include a lecture-cum-movie theatre and a separate entrance from the road directly into the fin, which would help people in appreciating how a periscope dictates the operational tasks of a submarine.

Installing the submarine Museum was a very big challenge, which would not have happened but for the tenacity of the large teams, that worked both within the Navy and in NSDRC to make this project happen. Whilst it would be difficult to name each and everyone involved, the contributions of the two Chiefs of Staff and their teams, two Commanding Officers of INS Virbahu and their officers and men and three specific individuals, who were outstanding in producing miracles, were indeed invaluable. These three individuals are late Professor Sambandan of NSDRC and then Commanders Deepak Sahu and Kondal Rao. The Navy, nay the entire nation, owes them tremendous gratitude. But for their grit, dedication and determination to continue despite so many hurdles, INS Kursura may well have ended up as a shipwreck on Ramakrishna Beach, rather than as a Maritime Heritage Site, which it is today.

Recently, a very innovative plan of Vice Admiral Bisht to place a TU 142 next to Kursura has further added to the beauty of this Museum.





# A Salute to the Pioneers of the Submarine Arm

**Commodore MV Suresh (Retd)**

**Commodore KS Subra-manian : The father  
of the Indian Submarine Arm!**

The first time I met him he looked more like a temple priest, not a submariner- the underwater warrior. He was tall and slim with a pleasant smile. There was a glint in his eyes. The straight nose cascading onto his face from the forehead was intriguing. The supercilious nose belied his benevolence to those under him. His liquid eyes stared at you. Cold, ice cold, he made you sweat. He had that capability. The three horizontal lines on his forehead reflected authority. The horizontal lines and the sparkle in his eyes reflected a propensity to question established principles and their validity.

I was told of an incident at Vladivostok, where the first Indian submarine crew was trained. The Indian team was accommodated at the Rooski Ostrov, the Russian Island. The administrative building and the training centre, was at a distance of a kilometer and a half, from the hostel. The winters were terrible, the sea was frozen, the blizzard made walking from the hostel to the training centre an ordeal, a torture. You will never forget the trek, If you missed the pick and drop bus.

One day, a message came "Aftobus ne boodit", meaning that the bus will not come. The duty officer of the training centre messaged that the students were to walk to classes.

The students were, I believe, prepared for the adventure. However, K S Subra-manian, the officer-in-charge of the team, decided and declared "no one will walk". The message reached the "Dizurni". The duty-officer again conveyed the orders of Nachalnik- "orders of the boss" to the Indian team. The Indians again told Neyat Aftoobus - not coming without the bus. The duty officer was confounded. He had never heard anyone disobey the command. Captain 1 Rank Navishanko was the commanding officer, a product of the Second World War. A formidable man, a powerful personality. Navishanko, had a big nose combined with a gun-throat that delivered raw power. Disobedience of his orders meant instant punishment, solitary confinement in Siberia. My God! What are these Indians up to? The duty officer personally reported to the Commanding Officer. The CO ordered "Machina" (car), and Pirovichik (Interpreter). "The cavalcade moved in a battle formation. He barged into Subra-manian's room, without knocking.

The Indian Officers were yet not proficient in Russian language. Novishanko raised his fist, like Adolf Hitler and shouted, how dare, they not attend the class. He banged his fist on the table to reinforce the point, his authority.

Subra-manian, kept sitting. He smiled, the ice cold smile. He told the Interpreter, "please convey to your Commanding Officer, this is my Cabin, in my cabin, I alone can shout". Novishanko perplexed, could understand nothing, he glared at the interpreter. The interpreter stood vertical like a pole. Unable to comprehend the scenario and hesitating to translate Subra-manian's statement.

Subra-manian coolly told the interpreter "please translate, exactly, what I told you." The interpreter standing stiff, looked at the wall and translated, "Indian Tavarish, says, that this is his cabin, in this cabin, only he can shout." The impact was a blast, about turn, the team, marched out. The reserve bus came after 15 minutes and the Indian contingent attended the class.

The incident gives a glimpse of the mettle that the first Commanding Officer of our submarine arm, was made of. He had the nerves of steel.

The Soviets gave the submarine along with the construction and the repair documentation. However, the operation procedures were never given. The first team sat down and made the

standing orders, which form the bedrock of our submarine arm.

I narrate another incident that showed the stuff Subra-manian was made of. The submarine is required to operate at periscope depth to charge its batteries. Snorting is a delicate procedure where the submarine stays hidden underwater and only the periscope comes out, like a match stick. The snort mast looks like a floating object, in darkness; you can never make out the submarine.

Once while operating at periscope depth, INS Kalvari suddenly lost control, it went from 10 meters to beyond 100 meters. Subra-manian rushed to the control room. He saw the steep decline in depth. He assessed the situation. Not one word said. Orders flew out instinctively; he reversed the Telegraphs Motors himself. The bubble, that indicates, the trim, the inclination of the dive, under his control, perceptively indicated forward movement, the surfacing gathered momentum. The submarine came back to periscope depth - back to battery charging. Not one word of reprimand. No shouting. He smiled "next time, don't hesitate to call me." The Captain went back to his cabin. Nerves of steel! Emphatic, tranquil, sangfroid.

### **Capt MNR Samant, MVC.**

The second senior most submariner was in different mould. He was a diminutive man, who stood five feet tall. In the crucible of fire, he churned and metamorphosed into an outstanding individual. Samant was the commissioning Commanding Officer of INS Karanj. Under his command an accident occurred, which shook the very concept of submarine operations.

However, the stand that Samant took after the accident tells us about the character of the man. An exercise was planned for the scientists of the IN Physical Lab, Kochi to monitor the sound signature of INS Karanj. INS Ranjit was the escort ship, with scientists and their equipment embarked onboard. The escort ship was to lie stopped and adrift in the prevailing wind and the tide. Karanj was required to pass across the bows of Ranjit at various speeds, including snorting and in the final pass dived deep. Cdr Samant was at the periscope. At the commencement of the second snorting run he handed over the periscope to the first-lieutenant and went down to ease himself and to have a quick bite. In his absence INS Karanj collided with INS Ranjit and went directly



underneath it. To make matters worse, the OOW in the control room blew the centre group of ballast tanks. It literally lifted INS Ranjit out of water. This caused structural damage to both the ships. The periscope was twisted like noodle stick. The sturdy Russian submarine took the impact, all personnel were safe. Both the vessels returned harbour under their own power.

Possible causes of the collision were: The periscope may have dipped. Loss of visibility may have resulted in a momentary loss of control resulting in collision. INS Ranjit may have drifted. Submarine may have estimated her position incorrectly. A Japanese merchant ship, was passing close by, her presence may have distracted the CO of Ranjit. It was a fact that he was not at the scene of the accident. However to the court martial, Cdr MNR Samant, declared "I am, the captain of the ship, I take full responsibility." The Captain was the ship, the spirit, the soul, the leader. Cdr MNR Samant, was court martialed and removed from command. It was a great tragedy.

However, fate provided him another opportunity to prove himself. During the war of 1971, Cdr Samant volunteered to undertake operations in

East Pakistan. He was placed at the disposal of the Indian Army's Eastern Command, at Calcutta.

Samant, trained fishermen to carry out commando attacks on ships at anchorage in East Pakistan. The fishermen trained under the lungi clad Samant wreaked havoc, blew up the ships at anchor using improvised limpet mines. Merchant ships were sunk at Chittagong, Chalna and Mongla. The inland traffic came to a grinding halt.

Such was the impact of his operations that foreign ships refused to enter East Pakistan. The insurers refused to insure. The Pakistan army was blocked, choked, their will to fight sagged. The fierce attack by the Indian armed forces followed. The inability to escape led 93,000 Pakistani soldiers to surrender with arms and ammunition. Capt Samant, was awarded Maha Vir Chakra. Capt Samant was duly honored by the Govt of Bangladesh also. He returned to Command the premier Submarine Base INS Virbahu, at Vishakhapatnam. His honor vindicated. A legend was born. Such were the pioneers, who laid the foundation of the formidable Indian Naval Submarine Arm.

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## Ahoy Mates!

### Commander Carl Gomes (Retd)

By the time you read this, veteran submariners would have come back home from their brief tryst in Vizag with their heads held high, chests puffed with pride – and rightly so. It must have been an awesome gathering of formidable underwater warriors - well-known names like Shekhawat, Ravi Ganesh, Ravi Nair, Sodhi, Menezes, Brar, Kaps, to mention only a few, not to forget their "in-house" novelist and author Franklin; and of course the first CO of the first submarine, Kalvari and Virbahu: Cdr KS Subramanian.

The submarine arm has come a long way since that December day, half a century ago when INS Kalvari under the command of Cdr KS Subramanian made that momentous (arduous) voyage from Vladivostok to Vishakhapatnam under the escort of INS Talwar, commanded by Cdr OS Dawson. There were many hiccups - ministerial

indifference, bureaucratic red tape, turf battles, squabble for scarce funds - we should have had a much larger submarine fleet. Despite all obstacles we now have our own 'home made' nuclear submarine. Anecdotal evidence of Senior Naval Officers of that era indicates that the RN told the Indian Navy that the Indian Navy does not need a 'dedicated submarine arm' and for training in Anti-Submarine Warfare, the Royal Navy would provide/deploy their submarines to Indian waters for training as and when required. This attitude of the Brits forced the IN into the Soviet embrace, a relationship which has endured and grown since.

"Run Silent, Run Deep my Mates. May your torpedoes always run straight and true!" and to say, "Bless them all, bless them all - the long and the short and the tall"

# Nostalgia and Genesis of India's Submarine Force for the 21st Century

Vice Admiral Arun Kumar Singh (Retd)



The President of India, Shri Ram Nath Kovind, as Commander-in-Chief of the Indian Armed Forces, presented the President's Colour to the Submarine Arm of the Indian Navy, on 8 December 2017 at Visakhapatnam, on the occasion of the Golden Jubilee of this silent underwater arm of the Indian Navy. It was a great occasion for veteran submariners and their families from yesteryears to meet each other and also to interact with the

youngsters who serve in conventional and nuclear submarines of today, and also operate India's strategic second nuclear strike SSBNs. At the outset, even though this article is a personal nostalgic trip down memory lane, I wish to place on record, the great work done by our submarine pioneers who laid very solid foundations for our conventional and nuclear submarine force, and also those pioneer designers and builders involved



in building our conventional and nuclear home built submarines, with associated systems, sub systems, weapons and sensors. And last but not the least, the ongoing growth of the largely home built submarine force of the twenty first century, would not have been possible without the vision, foresight and leadership of successive Chiefs of Naval Staff.

History records, that on 8 December 1967, the Indian tricolor was hoisted on our first submarine, the INS Kalvari (Tiger Shark) at Riga (then part of former USSR, and now capital of modern day Latvia). The first, INS Kalvari, was a Foxtrot (project 641) class submarine, and was later followed by seven more 'Foxtrots'. All these venerable submarines rendered yeomen service and three of them were at sea on patrol (Arabian Sea & Bay of Bengal) during the 1971 Indo-Pak war and all have now been decommissioned. Subsequently, commencing 1986, the Indian Navy inducted 10 Soviet-Russian Kilo class (one of these, INS Sindhurakshak, tragically sank in Mumbai harbour on 14 August 2013, due to a massive explosion) and four German SSK subs ( the last two of these, INS Shalki and INS Shankul, were built in India), and between 1988-1991 also operated a Soviet Charlie class SSGN, (the nuclear powered INS Chakra, which carried our first underwater launched anti-ship missiles) on a three year lease. In 2008, India's first home built SSBN (INS Arihant) was launched and media reports indicated that it was commissioned in 2016. The first of six, indigenously built French Scorpene subs (INS Kalvari) was commissioned by Prime Minister Narendra Modi on 14 December 2017. The second indigenously built Scorpene (INS Khanderi) has commenced sea trials. Media speculation is abounds about the expected launch of India's second home built SSBN (INS Aridhaman).

As someone who was lucky enough to have been a part of the Indian Submarine Arm since joining in 1971, was part of the commissioning crew (at Riga, former USSR, now Latvia), in 1973, of our fifth Foxtrot sub INS Vela (commanded by Lt Cdr JMS Sodhi, who later retired as Rear Admiral, and was involved in the selection and induction of the German SSK subs). Subsequently I was trained in Vladivostok for 30 months (1983-86) for our first SSGN (INS Chakra), and, in 1987, I served as Chief Staff Officer to our newly created first FOSM

or Flag Officer Submarines (Rear Admiral A Auditto) at Vishakhapatnam - a great amount of important work was done by the FOSM and his successors with regard to submarine safety, submarine training, maintenance and operating schedules, operational readiness inspections etc. Next year, in 1988 I was appointed the first Captain SM (11) of the newly formed 11th Submarine Squadron) comprising our first four Kilo class subs at Visakhapatnam, followed by duties of the newly created Commodore Submarines (East) or COMSUB (East) which had both the 11th and 8th Submarine Squadrons (comprising Kilo and Foxtrot subs, and also command of the submarine base INS Virbahu at Vishakhapatnam (in 1997, COMSUB was re-designated as COMCOS or Commodore Commanding Submarines). In 1996, after promotion to 2 star rank, as the first ACNS (Submarines) at NHQ (with double hat of Flag Officer Submarines) I was directly involved in modernization of our Kilo and SSK subs, induction of the Akula SSN (inducted in 2012 as INS Chakra, on 10 year lease), induction of the Klub tube launched cruise missiles ( both 3M- 54E anti-ship and 3M-14E land attack types) was also involved from Naval Headquarters in the ATV project, and finally was the author of the government approved "30 year submarine building plan" (which was the brain child of the then CNS Admiral Vishnu Bhagwat). In between all this, I was also fortunate to have visited submarines and a submarine simulator in 1995 in Germany as part of the then CNS (Admiral VS Shekhawat) delegation. In June 1997, I visited a Japanese Submarine ("Sachishio") and a Japanese submarine simulator, followed by a visit to a South Korean 209 type submarine, as part of then CNS (Admiral Vishnu Bhagwat) delegation visits to Japan and South Korea, and later in December 1997, I dived in a 500 ton Israeli submarine for a brief one day sortie in the Mediterranean. In 1998, on an official visit to France as ACNS (Submarines), I visited a French Agosta class diesel sub and also a French Rubis class SSN, In 2005, as a three star DG Indian Coast Guard, I was invited by the then US Navy CNO (Admiral M. Mullen) to a visit a Los Angeles class SSN, while enroute to participate in the Sea Power Symposium at the Naval War College. Post retirement, I delivered the keynote speech in 2009, at the American Annual Naval Submarine League Symposium, at Washington. And now as a 70 year



old veteran, I was proud to attend the Submarine Golden Jubilee Celebrations at Visakhapatnam (5 to 9 December 2017), and witness the President's Colours presentation ceremony.

Having been trained extensively in the former USSR at Vladivostok for over 30 months (September 1983 to April 1986) on the Indian Navy's first nuclear submarine, the Project 670, "Charlie Class" SSGN (later commissioned as INS Chakra for a three year lease from January 1988 to January 1991), it was my privilege to be involved, from "day one" in the induction of our "Akula Class" SSN of Project 971 (again named INS Chakra, which was finally inducted on a 10 year lease in 2012). I must also place on record, the extremely thorough nuclear submarine training imparted to us by very experienced, professional, dedicated Soviet submariners, who ensured that we had an appropriate foundation of nuclear physics, reactor physics, radiation safety and of course specific details of the construction and systems of the "Charlie Class",

Project 670 SSGN. The class room theory was reinforced by weekly oral exams every Monday (which ensured that we studied on Sundays, after

doing the mandatory domestic chores and partying on Saturdays) and visits to the submarine, various working and static models, simulators and finally a year at sea. All this stood us in good stead when we planned for the nuclear submarine navy of the future. I must also place on record the keen interest shown on our indigenous ATV project by the then CNS Admiral Vishnu Bhagwat, and his VCNS Vice Admiral PJ Jacob, I also had the good fortune to accompany both of them, separately, on visits to the indigenous ATV project sites, where countless, dedicated and highly motivated professionals from the Indian Navy, DRDO, Public and Private Sectors, toiled to build our first SSBN, the INS Arihant, about which enough data is available on the web, and hence is being mentioned only briefly here.

Further, only distantly related to this article, but mentioned here to show the backing and foresight of successive CNS' and VCNS', in 1996, Admiral Bhagwat, directed me to put up a case for the '30 Year Indigenous Conventional Submarine Plan' which was approved by the Government in 1999 (when Admiral Sushil Kumar was the CNS, and received his full backing), and also to take up the modernization of the SSK and 877 EKM



submarines. The induction of Klub 3M-54 E, anti-ship TLM missiles in the new Kilo class (contract for two new Kilos was signed in 1998) was due to the backing of the then VCNS and CNS. Similarly, the later induction of Klub 3M-14E, land attack TLM, was cleared in 2002, by the then VCNS, who shortly thereafter became CNS (Admiral Madhvendra Singh).

I recollect, that it was on new year's eve, 31 December 1997, that I (then as a Rear Admiral wearing the twin hats of Flag Officer Submarines and also Assistant Chief of Naval Staff Submarines) was abroad on an official visit, when I received a telephone call that the then Chief of Naval Staff (CNS), Admiral Vishnu Bhagwat, desired that I attend an important meeting with him immediately on return to India. A couple of days later, I landed at Delhi airport, changed into uniform in the car while being driven to the CNS office, and then met our CNS along with the new Russian Navy Commander-in-Chief Admiral Kureodov, who had recently been promoted to four star rank, by superseding many seniors, and had been given a nine year tenure as head of the Russian Navy. This was the genesis of the new Chakra (Akula) SSN project.

Over the next few years, I was to meet the very friendly, young and jovial Admiral Kureodev, on a few occasions in Moscow, when I was part of our NHQ team, accompanying the CNS or VCNS. A few months later, In early 1998, I accompanied the then Vice Chief of Naval Staff (Vice Admiral PJ Jacob) to Russia and made my first visit to this new SSN at Murmansk (after which we also had an extensive tour of the aircraft carrier Gorshkov, later to be extensively modified, modernized and commissioned into the Indian Navy, as INS Vikramaditya in 2013)

My first and lasting impressions of the Akula SSN, after a briefing on the jetty, followed by a 'walk around' the Project 971 SSN, was that it was almost twice the tonnage of the 'old Chakra' and was a very fast, silent and deep diving SSN, with a very impressive capability against enemy ships, submarines and shore targets - no wonder, even today the US Navy respects the very silent Akula class SSN.

As an aside, I may mention, that, during a visit to

the aircraft carrier Gorshkov the VCNS insisted on checking out the ship thoroughly, and we went right down to the bilges, and the climb back up numerous decks and ladders, was truly exhausting, and I think we all, being fifty years and older, heaved a sigh of relief when we reached the flight deck.

A few months later I accompanied the then CNS (Admiral Vishnu Bhagwat) to the same project Akula SSN. During this visit, the CNS was received by the C-in-C Northern Fleet (a submariner, whose two younger brothers were also then in command of submarines), on the very powerful 19000 ton nuclear powered battle cruiser 'Peter the Great' with a guard of honour, a walk around on the mighty ship, followed by a lunch. Subsequently in 1999, I accompanied the then CNS (Admiral Sushil Kumar) for another visit to the SSN project (and a similar reception with guard of honour and lunch on board 'Peter the Great'). The final decision of course, rested with the Government of India, but I must add that all succeeding Indian Navy Chiefs of Naval Staff supported this project.

During this visit, I remember, the C-in-C Northern Fleet, humorously explaining in Russian, how the Northern Fleet was the most powerful among the seven Russian Fleets. In my younger years, having sailed with units of the Baltic and Pacific fleets, I must agree with the Russian C-in-C Northern Fleet, given the allocation of SSNs, SSBNs and nuclear powered battle cruisers, under his command, at a time when the once mighty Soviet Navy was in decline, in its new avatar as the Russian Navy.

Most of us attending the Submarine Arm Golden Jubilee Celebrations were acutely aware that this was a unique once in a life time event, where the past met the present and the future. Apart from the all-important President's Colour presentation ceremony, another important function was the seminar on submarine building which had speakers from India and many submarine building nations. The Indian Navy is today not only a builder's navy, but also a nuclear navy, with a potent Submarine Arm, which actively contributes to the nation's strategic triad deterrence.

# Silver Reunion Golden Memories

Poorvi Kunja

As we landed in the airport for papa's ex-NDA meet,  
I expected it to be stuffy, if not deadbeat,  
And little did I know I was in for a pleasant surprise,  
When papa and uncle log turned out to be pretty cool guys!

In the bus, the hooting and hollering began  
And it was clear you aren't friends, you are a clan.  
Then there was ice in the sink and beer cans in the ice  
Let's just say, I'm sure you guys had a time quite nice!

For the first time ever, I saw my dad as a child  
And I don't think *this* much he has ever smiled  
But it wasn't just my dad, it was other uncles too  
And at the end of it there wasn't a single uncle who  
Wasn't in the pool, having a blast  
Laughing and joking about things from the past  
And if anyone was reluctant, the others made sure he 'fell'  
And was drenched to the bones with his clothes on as well!

There's no doubt the aunties thought har pal  
"Arre..... Pehnungi main kyakal!?"  
But the uncles were so chill, they were so mast  
Probably thinking, "Peenekokamnahihonachahiye bas!"

Yesterday I saw NDA for the first time ever  
And you all make it clear, bonds made here will never sever,  
Because even after 25 years of being apart  
You seem so close, it's like you never left each other's hearts.

You all are definitely birds of the same feather,  
And the brothers of the band of 82 will always remain together.  
Now you're reminiscing the days when you were boisterous and loud,  
And you return knowing you made your alma mater proud.





# THE END OF A GOLDEN ERA











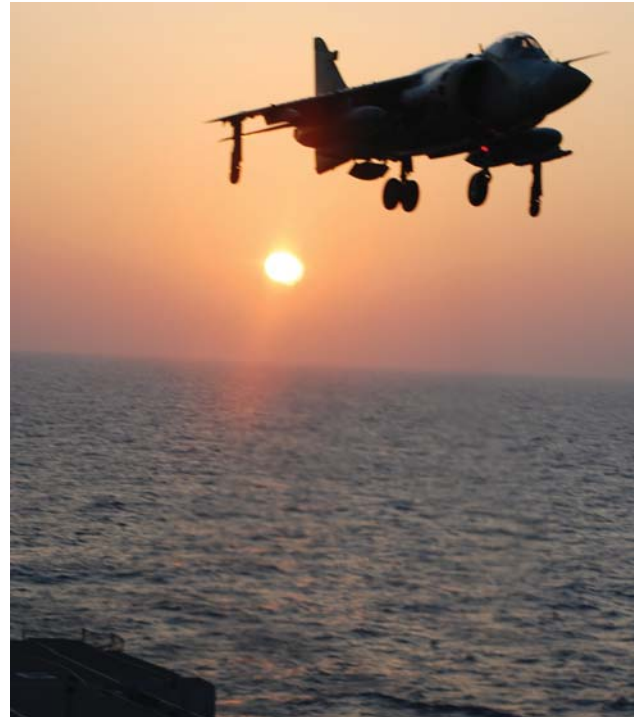
# **Adieu - Grand Old Viraat**

**Rear Admiral Sushil Ramsay (Retd)**





Post World War I, when the limitations of deploying seaplanes in the combat role was realised, the need for deploying at least one or two fixed wing fighter aircraft on board battle-cruisers was felt. This led to a pathbreaking discovery of the concept of developing aircraft carriers which could carry fighter aircraft to sea to extend its strike ranges. In one of the naval journals Admiral Arun Prakash recalls that the ninth HMS Hermes was one of the first two ships to be designed and developed as aircraft carriers. He further adds that the sixth ship in the series of Centaur class Light Fleet Carriers laid down at Barrow-in-Furness during 1944 was to be named as HMS Elephant, but construction was suspended as peace hove in sight. Taken up once again, in 1952, the ship was commissioned in November 1959 as HMS Hermes. Since her commissioning, HMS Hermes encountered fluctuating destiny to contend with. Based on the 1966 Defence White Paper, Hermes was stripped of catapult and wires and placed in the Reserve. However, in 1973 she received a reprieve and was pulled out of the Reserve to be designated as ASW carrier in order to meet NATO commitments.



He continues to recount, it was at this critical juncture that the Sea Harrier and the ski-jump made their dramatic appearance, and enabled the Royal Navy (RN) to precariously claw its way back into the aircraft carrier business. The Hermes, relegated to a helicopter operating platform, was resurrected and also given a ski-jump to make it a 'Harrier-Carrier'. Yet again, 1981 White Paper proposed halting the aircraft carrier building programme and scrapping of the Hermes. This time around it was the Falklands crisis which saved Hermes and she sailed as the Flagship of the South Atlantic Task Force in April 1982 from where she returned triumphant. Hermes in its esoteric and rarefied profile continued in her operational role as a strike carrier, embarking full complement of her Air Wing for all major exercises.

At Yeovilton during this period, Indian Navy was preparing to receive the first set of Sea Harriers as replacement for Seahawk fighters to operate from old INS Vikrant, which was being modernised in its new role as the Harrier-Carrier.

### **Arrival of Viraat**

Late Admiral RH Tahiliani in his memoirs recalled that on March 1, 1985, his counterpart in UK, the First Sea Lord, through a letter informed that Hermes was going to be placed in Reserve Fleet and whether the Indian Navy would be interested in buying her. He grabbed the opportunity and after convincing the Government of India for the need





Admiral Sunil Lanba, Chief of the Naval Staff, with Vice Admiral Girish Luthra, Flag Officer Commanding-in-Chief Western Naval Command and Rear Admiral RB Pandit, Flag Officer Commanding Western Fleet, taking post for the final sunset ceremony.

for a second aircraft carrier available off the shelf, deputed a team of experts led by the then Deputy Chief of Naval Staff, Vice Admiral S Jain to assess the material state of Hermes. The Team reported that although Hermes was commissioned a year earlier than INS Vikrant, i.e. in 1959, her material state was 10 years younger than that of Vikrant. It was entirely due to single-minded approach and perseverance on the part of Late Admiral Tahiliani that within a record time of little over two years of negotiations, acquisition and modernisation, the 1959 vintage aircraft carrier was commissioned as Indian Naval Ship Viraat on May 12, 1987, which incidentally coincided with the birthday of Admiral Tahiliani. Virata, a Sanskrit word, which means Giant, very appropriate for a largest flat-top whose timely arrival ensured that the Indian Navy prided itself by putting to sea two Air Carriers simultaneously. Close on the heel the Indian Navy very successfully executed Operation CACTUS

off Maldives. Global accolades came rushing in with New York Times splashing on the Cover Page, India, emerging Super Power.

### **Operational Role**

There were no dull moments for Viraat. Admiral Madhvendra Singh who was the second Commanding Officer recalls how impatiently he waited for the Flagship to be deployed for the ongoing Op Pawan. Finally on July 17, 1989, Viraat was called to proceed with despatch to evacuate Indian Nationals from Sri Lanka and the mission was code-named Operation Jupiter. INS Viraat was designated the Flagship of Commander Task Group 52.2, comprising Viraat, Shakti and Taragiri. He adds that 7th Battalion of the Garhwal Rifles located at Pithoragarh was ordered to move to embark INS Viraat. After undergoing extensive training, 7th Garhwal Rifle was fully transformed

into a formidable Airborne Assault formation, for the first time ever.

Old Viraat gracefully continued her march fulfilling every possible operational mission. For many decades, she remained a star performer during various exercises with the navies of France, UK, Russia, Japan, the US, etc. She participated in several Carrier-to-Carrier Exercises to ensure inter-operability with foreign navies. The first such exercise was with USS Nimitz, a nuclear-powered aircraft carrier on September 27, 2005, when INS Viraat was under the command of Captain S P S Cheema (later Vice Admiral), as part of Exercise Malabar 2005. The next Carrier-to-Carrier exercise was with the French Carrier Charles de Gaulle. Once again under the command of Captain Cheema that Viraat, while returning to Mumbai after participating in President's Fleet Review 2006, had an opportunity to carry out Passage Exercises with another nuclear-powered US Navy Aircraft Carrier, USS Ronald Reagan. A unique aspect of Carrier-to-Carrier Exercises was that Viraat based Sea Harriers were able to land on US Navy Carriers and Charles de Gaulle. Until Vikramaditya arrived on the scene, Viraat hardly missed an opportunity to be a part of Exercise Malabar and such like prestigious multi-navy joint exercises.

Viraat, attained the unparalleled distinction and holds Guinness Book of World Record of being the longest serving aircraft carrier in the world; 27 years with the Royal Navy and 30 years with the Indian Navy. She clocked eleven lakh kilometres of sailing mileage before her commissioning pendant was hauled down for one final time; what an incredible record!

### Roll of Honour

INS Viraat returned honours to several Commanding Officers and other officers who served her with distinction all through her commissioned life with the Indian Navy. What an enviable Roll of Honour; five of the former Commanding Officers and Second-in-Command rose to be the Chief of the Naval Staff; twenty other officers got elevated to the rank of Vice Admirals and eighteen promoted to the rank of Rear Admiral; besides several Commodores and Captains.



Her legacy as HMS Hermes under the Royal flag was no less, as she was commanded by 13 Captains of the RN. Her role in Operation Mercy in 1974 and the Falklands War in 1982 are now textbook references for future navies. To commemorate the unique event, Admiral Sir Philip Jones, KCB, ADC, First Sea Lord and the Chief of the Naval Staff, Royal Navy was present as the Guest of Honour at the decommissioning ceremony of INS Viraat. Adieu Grand Old Viraat.





# VIRAAT THE GIANT

**Lieutenant Commander Sachin Pandey**

2017 marked the dusk of a glorious era in Indian naval history. A befitting farewell was bid on 6 March 2017 to INS Viraat and on 11 May 2017 to the Sea Harrier fighter aircraft, the 'White Tigers' of Indian Naval Air Squadron (INAS 300).

Viraat was commissioned on 12 May 1987. The ship operated Sea Harrier, Seaking 42B & 42C and Chetak aircraft as her main air ORBAT. The arrival of V-STOL (Vertical/ Short Take-off and Landing) capability was heralded in India when the first three Sea Harriers landed at Dabolim on 16 December 1983. Such was the capability and reliance of these aircraft that the Indian Navy operated Sea Harriers for a full decade after the Royal Navy retired this variant in 2006.

During her commissioned service in *IN*, Viraat

clocked more than 22,622 flying hours by various aircraft and spent nearly 2252 days at sea covering 5,88,287 Nm/ 10,94,215 Km. This is approximately seven years at sea, circumnavigating the entire globe 27 times.

To complement the carrier, the Indian Navy procured Sea Harrier FRS Mk 51 (six single seat fighters and two T-Mk 60 trainers) in 1979. These aircraft were designed and manufactured by British Aerospace. A naval V-STOL Jet Fighter and Strike aircraft, it housed a single Rolls-Royce Pegasus Turbofan Engine with two intakes and four vectorable nozzles propelling her in excess of 600 Knots. The aircraft could undertake Air to Air Refuelling thereby extending her ROA. Sea Harriers operated from the decks of both Ex

Vikrant and Viraat, where the use of ski jump allowed them to take-off from a short flight deck with a heavier load, although they could also take-off like a conventional loaded fighter from a normal runway.

### **Operations Under Royal Navy Flag**

Viraat (*erstwhile HMS Hermes*) served as the flagship of the Royal Navy's Task Force during the Falkland Wars of 1982. Further, the Sea Harriers played major roles during various operations which include Falkland War, Gulf Wars, and the Balkans conflict. In particular, the aircraft's role during the Falkland War was decisive as it was the only fixed-wing fighter aircraft available protecting the British Task Force over 8,000 miles from their homeland.

### **Wars and Exercises Under the Indian Flag**

The first major operation in which Viraat participated was 'Op Jupiter' in July 1989. She was a part of the International Peacekeeping Mission in Sri Lanka where it carried men of infantry regiment of Garhwal Rifles and Scouts of Indian Army. She also played a major role during 'Operation Vijay' and 'Operation Parakram' in 1999 and 2001 respectively. The Sea Harrier fighters were also deployed during Op 'Vijay' and Op 'Parakram' providing the requisite offensive posture and ensuring readiness to react to any escalation by the enemy.

The ship had been the proud flag-bearer of the Navy since her inception and participated in multiple joint exercises including Malabar (with US Navy), Varuna (with French Navy), Naseem-Al-Bahar (with Oman Navy) and had also been an integral element of all major Indian Naval exercises. Her last operational deployment was for the



International Fleet Review (IFR) held at Visakhapatnam in February 2016.

### **Future of the Legend**

The second aircraft carrier of the country, commonly referred to as the 'Grand Old Lady' amongst the Naval community, Viraat spent 29 years under the Indian Flag and still holds the Guinness Record for being the oldest serving warship. Post de-commissioning, Viraat is likely to be turned into a museum. No matter what tomorrow brings for her, we all expect it to suit her splendour. 11 out of 30 Sea Harriers inducted by the Navy are presently being mothballed at Naval Air Station, INS Hansa in Goa before being distributed as museum pieces to different establishments.

The rich legacy of Viraat and Sea Harriers continues as the baton has now been passed on to INS Vikramaditya and Mig 29 Ks. The sunset on 6th March 2017, when the Naval Ensign was lowered for the last time from Viraat's deck. Although it symbolised the conclusion of the Viraat era in the history of the Indian Navy, the services of Viraat and Sea Harriers can never be forgotten in the annals of naval history and the nation for the years to come.



# 40<sup>th</sup> ANNIVERSARY

## INAS 315 WINGED STALLIONS

Commodore S C Dewan (Retd)



Over the period of years 1972-77, India witnessed increased presence of foreign Navies in the Indian Ocean for their respective strategic and economic interests. Gradually, higher number of farewell visits to ports in the region were also noted. Thanks to the development of new technologies and their application to sea-going vessels, which enabled ships, submarines and aircraft for higher speeds, increased endurance and to counter a threat at longer ranges. These capabilities added new dimensions to their tactical deployment. The fast

changing scenario at sea affected the existing maritime dynamics and its perspective. It was also the time when globalised economy was undergoing a significant change and lowering of barriers for its exploitation and to promote global supply chains. All these factors and changes in geo-politics set the winds for futuristic review of threat perception from sea and to formulate India's national maritime and conflict policies to withstand the offensives of time resiliently to protect national interests. India has economic and geo-political

interests in the Indian Ocean. The Govt. of the day looked at the entirety of the situation and initiated prudent measures to counter all possible contingencies.

First on the card was to keep the outer reaches of our focal areas under regular maritime reconnaissance (MR) to thwart any adventurism our adversaries may attempt. For the purpose of

sea. As a follow-on action Super Constellation aircraft were transferred to the Indian Navy in 1975.

This aircraft hardly had any MR equipment and fell well short of meeting the intended task. Navigation was done on DR (Dead Reckoning), hand plotting and radio compass and surveillance by eye-ball. I had an opportunity to fly in this aircraft with the Air Force No. 6 Squadron based at Pune



this article I will restrict myself to the aspect of MR. To cover such expanse of open sea area, a need was felt to augment long range maritime reconnaissance and patrol (LRMP) assets. Rightly, the charter of LRMP responsibilities were transferred to the Indian Navy from the Air Force keeping in mind the expertise required and for better operational co-ordination with other units at

in early 1971 for about two months. That time, I was borne on the books of Alize Squadron-The Cobras, fondly known as "Eyes and Ears of the Fleet". It was a great experience to fly with No. 6 Squadron. First time, I had flown such long sorties with multiple crew. Agreed, that the aircraft did not have the requisite equipment, however, it made its presence felt over the areas of our concern.



But much more needed to be done. After due considerations, contract to acquire IL-38 aircraft from Soviet Union was signed. Accordingly, a team comprising of 83 personnel left for Riga in Sept 1976 for flying and technical training under the leadership of Cdr B K Malik (later retired as Commodore). On timely and successful completion of the training, the team returned to India in Aug/Sep 77. Creation of necessary maintenance facilities (BMF) was progressed at INS Hansa, Goa. The aircraft were flown to India by the Soviet crew in the last week of Sept 1977 as per the contractual obligations. With these three aircraft, the first LRMP Squadron, in a real sense, was established and commissioned on 01 Oct 1977 at INS Hansa called INAS 315, Winged Stallions under the command of Cdr B. K. Malik. The big occasion was graced by the presence of senior aviators and other authorities. They poured out their hearts to bless the new Squadron and presented mellifluous strain to provide an enchanting ambience to the momentous occasion. A new era of MR had begun.

With the paradigm shift in LRMP operations, the most important on the mandate was to evolve required Standard Operating Procedures (SOPs) and tactical doctrines for operational exploitation of the aircraft and its integration with other frontline units to derive optimum synergy. In the absence of adequate experience in the field, an intra Squadron Committee was formed to assemble and collate necessary information on the subject from all possible sources, analyse, evaluate and formulate SOPs and deployment doctrines. The procedures so evolved, after adequate conception, were discussed threadbare, modified and evaluated in tactical exercises. It was a transitory phase which lasted for about a year or so.

Consolidation phase followed wherein additional officers and sailors were appointed for training and subsequent absorption; to build up crew strength, to meet service requirement for their career progression and for future acquisitions. The Squadron detachments commenced operating from outstation for exercises and work-up with ships and submarines. Lessons learnt during this phase helped in supplementing correctives to further sharpen the SOPs and tactical doctrines.

Thereafter, the aircraft became a potent airborne platform and filled the existing void in LRMP operations.

The Indian Navy now had the capability to keep strategically important areas under regular MR surveillance and to re-calibrate its tactical maneuvering for marine defence and to protect sea lanes, key oil routes and off-shore economic assets. The enhancement in versatility of possible endeavours enabled it to play a bigger role in the region. Being the largest country, Indian Ocean issues must be on India's focus because of its growing overseas interests and to counter expansionist designs of our adversaries. India has to maintain its readiness and presence to deal with maritime issues happening in the immediate neighbourhood and its projection at the world theatre.

With equipment and weapon fit on board, the aircraft can locate and track underwater and surface targets. When engaged in anti-submarine operations computer controlled attack is delivered with bombs and torpedoes. Flying endurance enables the aircraft to remain on task for longer hours based on the profile of flight. While I can remember many wonderful memories of those eventful years in the squadron, I will make a brief mention of one. In Mar 81 (I do not exactly remember), two aircraft detachment was operating from Kochi to participate in an anti-submarine exercise in co-ordination with Seakings. The aircraft on search and patrol detected a submarine and tracked it with the help of Seakings. Vice Admiral OS Dawson (later Chief of the Naval Staff), Flag Officer Commanding-in-Chief, Southern Naval Command, expressed his desire to fly a sortie and boarded our aircraft at Kochi. He witnessed the proceedings of the operation with great interest. After he deplaned, he wrote "*Submarines have no chance against IL-38 aircraft*". These invaluable appreciations were aptly recorded on the precious pages of the Squadron Record Book. I hope they still have it.

The four engined aircraft is comparatively more economical to operate and maintain than other aircraft of its vintage and class. Has a defining and distinctive flight safety curve. A sturdy and



dependable workhorse, with its beaked nose and radome under it, makes the aircraft stand-out.

Over the years, necessary modifications and upgrades have been under taken to keep the aircraft operationally viable to match the prevailing and emerging maritime challenges. The Squadron continued to shoulder bulk of the work-load till the induction of TU-142M aircraft in 1988. Down the years, the winged Stallions have tracked the path of professional submariners and maintained the legacy of excellence. Periodic extensions granted to the aircraft define and characterise their commitment and tangible good faith evolved over the years. Even now, when the squadron is going to complete 40 years in service on 01 Oct 2017, the aircraft shows remarkable resilience and staying power while its compatriot TU-142 M and contemporary Sea Harriers have slowly faded away. I am very sure that the Squadron must be planning to celebrate the great day of its 40<sup>th</sup> anniversary in a big way. I wish them all success.

In an unfortunate incident in 2002, the squadron lost some of its braves. My deepest sympathies

go out to their families. My prayers are with them. With all humility, I also would like to extend my whole hearted respects to other winged stallions, who have left the world for heavenly abode. Among them are Cmde BK Maik, Cmde Mohan Verghese, Cdr S Goyal, Cdr GS Saxena and Cdr P Mishra. I praise them all highly for their untiring efforts to establish the Squadron and put it on right footing. All of them were members of the commissioning crew. I had the privilege to fly with them earlier in Alizes, and with some in the 1971 war also.

What made me write their article was that I just felt like re-living my life and re-visiting my memories of the Squadron days and to continue my association with Winged Stallions.

I have intentionally kept the article short and catchy, though one could write volumes. I have the honour of being a part of the commissioning crew and thereafter Commanding Officer of this fine Squadron when it was going through the consolidation phase. Towards the end, I take this opportunity to wish the Winged Stallions a very bright future, safe flying and good hunting.





## MARCOS TRYST WITH THE MIGHTY AIR CRAFT CARRIER VIRAAT

**Captain B Suresh Babu**

As I touchdown on the flight deck of the mighty aircraft carrier, I could hear my instructor's voice resounding in my ears "Look within... leap beyond...". I am sure every free faller who carried out this landing on INS Viraat with me has a unique experience to share. I am proud to have been part of this committed free fall team which pulled off this audacious jump.

The burning desire to undertake Combat Free Fall (CFF) on the flight deck of INS Viraat had been smoldering from the time a demonstration skydiving was undertaken using sports parachutes

at anchorage off Visakhapatnam during the Presidential Fleet Review in 2006. The workup phase of Tropex-12 presented itself an opportunity to jump to rehearse this activity on 04 Feb 12.

While the Headquarters, both the Fleets and INS Dega extended their unstinted support, it was up to us MARCOS to plan and execute this precise drop. On 08 Feb 12, we boarded a Para Dornier at INS Dega donning High Altitude Parachute Penetration System (HAPPS) and combat load. The Jump Master utilised the 30 minutes flight time to reach overhead INS Viraat which was 90 miles

off the coast in the Bay of Bengal, to brief us on the exit sequence, height separations and emergency procedures.

Having settled at 7000ft, 5 miles downwind, the pilot glided the aircraft on the line of drop heading towards the Carrier Battle Group. As the Jump Master craned his neck out of the aircraft to spot INS Viraat, there was a wave of excitement filling the aircraft. Though just a spec in the ocean with a whiff of smoke, the sight of our mighty carrier steaming with her screen ships made our chests swell with pride.

#### Parachutes deployed overhead Viraat

Once overhead, with the "GREEN ON GO" light on, on the sign of the Jump Master I exited the aircraft, like a kid rushing towards its favourite candy bar. I turned to see the other six jumpers exiting and screamed with joy as I accelerated at 200 ft/sec towards the Carrier. She grew in size as I fell steadily. At 3000 ft, I waved off and deployed

my parachute and counted the remaining six parachutes deploying in succession after me.

After carrying out the mandatory stall check and turns, I commenced my lazy parachute flying, covering the length and breadth of the mighty warship which loomed below me. I could see every aircraft, every marking and every expectant face on the deck awaiting our touchdown. As I executed a circuit and glided down the final run over the wake of the Carrier, I am sure, no one on this earth could have been happier than I. Just short of the deck I flared and touch down on the deck bringing my dream come true to an ecstatic end.

*Captain B Suresh Babu is an ardent free faller, with more than 350 jumps and two Limca Book of Records to his credit for Skydiving, who yearns to be a 'Bird in the Sky'. After leading the 'Men in Black' on the Eastern Seaboard he is Commanding a naval NCC unit at Chennai motivating the youngsters to take to the sky...He is a self proclaimed peace lover...*







# Reminiscences



# VIZAG VIGNETTES

Commodore Srikant B Kesnur



A little over four years ago, around June 2013, my life was in a mess. My father, my closest friend, philosopher and guide, had passed away after three months of unexpected illness. My mother, the bearer of many infirmities, became seriously ill just the day after my dad's 13th day ceremonies (talk of timing) and had to be hospitalized in a precarious state. She was bedridden and needed a 24x7 attendant. More than four months of continuous trips to hospitals and long vigils in the ICUs was also taking its toll on me. In a tizzy, I nearly decided to request Naval HQ to cancel my impending transfer to Vizag to command a ship (the lifetime's ambition of a seafarer) and if required I was ready to give an adverse career certificate. Fortunately, some good advice from friends and well-wishers made me desist, and on a humid July day in 2013, we landed in Vizag wondering what the future had in store. Except for a brief six-month midshipman time in 1986, I had never been posted in Vizag in my then 27 years in the navy and it may well have been Timbuktu.

Today, four years later, we are looking back at one of the most memorable phases of our life. Our journey began with a house allotted in the picturesque Dolphin hill. The view from our home was to die for. The unique hill and ocean topography of Vizag was best illustrated by a vista that skimmed across a tree lined valley to give a panoramic view of the Bay of Bengal. In our balcony one could spend hours watching the

myriad moods of the sea - benign and calm, the gentle ruffle of the waves in a light breeze, the loud roar during the monsoons, and then, the most terrible of them all, the angry seas accompanied by thunder and lightning and the distant foreboding of cyclones that seem endemic to this region.

Thanks to my wife Paddy's care, the ministrations of doctors and nurses at the naval hospital Kalyani and the salubrious climes of Dolphin hill, my mum recovered miraculously and was fit to return home nine months down the line. A day later, at the Fleet Awards Evening, my ship INS Jalashwa bagged many trophies including the coveted one for the most Spirited Ship. These two events encapsulated how much things had turned around in less than a year.

Life, thereafter, moved at a comfortable canter. A fifteen month command followed by a 20 month Directorship of the Maritime Warfare Centre at Vizag marked my three years there. We went through the disaster and devastation of the super cyclone Hudhud and the highs of the International Fleet Review (IFR) 16. This period was also marked by several professional highs including my forays into the academic echelons'. But these musings are not about my work or 'achievements'. It's about Vizag and our other experiences here.

As a city, Vizag is not terribly impressive at first sight. It's not a seductress like Mumbai or an enchantress like Kochi. It's more a place of discreet





charms. While boasting of most urban amenities, star and boutique hotels, malls and multiplexes, food and drink places, a buzzing seaside promenade et al, it still has a rather unhurried air about it. There is great natural beauty, of course, and a highway spectacularly stretching for miles along the sea. Further, in the last two years she has been amongst the cleanest cities in India.

But Vizag is ultimately about its people. They too reflect the place. They are not hearty like Punjabis or garrulous like the Bengalis. But they are gentle, easy to talk to and relate with. They are not overtly friendly but polite and very approachable. A bit of Oriya touch imbues a great deal of courtesy and decency in their dealings. Despite the language barrier you know that (generally) you will not be taken for a ride. It took us time to make friends in the city but each one of them was a revelation, much like the city. A printer turned out to be a poet, editor, writer, photographer and the most knowledgeable man about town. An event manager turned out to be an entrepreneur, MC, an ex-India woman cricketer and a social worker. A political science professor was a cricket commentator of yore, a law college Principal an ex Air Force man, a writing couple were committed environmentalists, heritage activists and much else. There were many such serendipitous discoveries and each of them was unfailingly erudite, gentle and courteous.



Our associations and interactions within the naval community were also marked by similar conviviality and great deal of warmth. Despite being a huge base and having many units, there was an underlying friendliness that makes naval life what it is. There were parties and fun, mirth and merriment but we found true meaning and depth of relationships in Vizag - be it with shipmates, coursemates, schoolmates, building

mates or just somebody we encountered somewhere in the naval precincts.

Of course, in some ways we continued to remain Dolphin Hill snobs venturing out rarely and craving to return soon. The long drive up the hill was breathtaking and worth the extra 15 minutes it took to office or back. And once there, it was like a self-contained hill station. Paddy and my son Sid stayed a year more after my move to Mumbai and spent more time there, it was literally their anchorage.

For Paddy, Vizag was a place of multi-faceted experiences. Here, she made a giant leap with her photography exploits including having some exhibitions. She spent a great deal of time mapping the biodiversity of the Hill which should prove an invaluable guide for the future. She learnt a smattering of Telugu and loved its lilting sing song tone. She enjoyed roaming the outskirts of Vizag at old Buddhist sites or bird sanctuaries. Hell, for a hard-core Mumbai girl she even switched her loyalties from Alphonso (hapoos) mangoes to the Bainganapalli.

For Sid, there could have been no better place to live his teenage years. He bloomed in his own manner developing a love for many eclectic things. He had friends galore and was the pied piper to all the stray dogs in the vicinity. Like Vizag, he too never seemed hurried, gently taking in things around and revelling in the combination of the urban and pastoral that the place offered. He too, like his Mum, hated to leave the place lingering for a last tango until the very moment of our departure. This place was his cocoon and shelter and if the formative years leave the most imprints I can imagine that Vizag would be a big echo on his mind's radarscope.

Mention must also be made of the many that were a part of lives as domestics, drivers, conservancy staff, my mum's attendants and an entire range of people whose services we used. This is not politically correct speech, but the very essence of our Vizag experience. It's true that the language barrier was often a big hurdle to cross and their efficiency would rarely match that of Mumbai or Delhi. They would skip work often, and for no reason. The work ethic was, on many occasions, infuriating and betrayed a 'small-townness' to it. But you could never be angry for too long - their

politeness and lack of guile created an agreeable ambience and a unique alchemy.

In the Armed Forces the only permanent thing is lack of permanence. Constant shifting and transfers can be stressful, painful and lots of hard work. And yet, the pains of dislocation can be cushioned, and even overcome, by the experiences of new places and interactions with new people. We have been extremely fortunate in this regard and carry a bagful of wonderful memories of each of our peregrinations. Our peripatetic existence has given us fabulous experiences, great friendships and homes that reside in our hearts long after we stopped residing in them. It was, perhaps, par for course that NDA, Wellington, Nairobi, Goa, Mumbai would have much to offer but Vizag was expected to be an underwhelming experience. Today, our hearts feel heavy to leave this place and our experiences here would rank amongst our most memorable.

As we landed in Mumbai, we saw a Kenya Airways aircraft taking off for Nairobi. It reminded us of a similar journey we had undertaken almost a decade ago and underscored the fact that we naval men are itinerant travellers in our country (and abroad sometimes). We are the new age migrants and wanderers and while our wish-list may include more than a ship and star to steer her by, we try to grow roots in a nomadic existence. In that respect we are like the sequoia trees. Unable to grow our roots deep in any place, we grow them laterally and widespread to ensure we stay nurtured and nourished.

And when it's time to move, it's action replay all over again. New place, new people but many familiar ones as well. But then it's just as well that life is not merely copy and paste. We must add, move on and fare forward. In that spirit, Vizag - may you forever prosper and give similar memories to all those who stay in your shade.

To our pals in Vizag – Musafir hain. Phir Milenge. Grateful thanks for all you did and we treasure our association with you all.

*Author's Note. This was written in Jun 2017 when we shifted out of Vizag after a memorable tenure of four years in the city.*



# A Life Extraordinaire: The Man Behind the Uniform

(A daughter's tribute)

**Surgeon Captain Urvashi Tandon (Retd)**

It was a hot summer day in the city of Karachi, the 12th of May 1930, when a beacon of light and joy arrived at the house of Postmaster Shri Hariram Tahiliani and Smt Bhagwani Tahiliani. A first born male child was an occasion to rejoice. Their little mud house in 'That Bhojraj, Sindh' was filled with happiness.

The years rolled by and there were more male children that were added to the family in fairly rapid succession as was the norm those days. Their first born, named Radhakrishan Hariram or Ram in short was now a young school going lad. Like

When the eldest son reached the age of 17 and the youngest was all of nine months old, Shri Hariram Tahiliani passed away after contracting a pulmonary infection. The 17 year old was catapulted into adulthood and had to shoulder the responsibilities of the family from providing for their day to day needs to the education of the siblings, he had to help his mother.

By this time, our central character, Ram, was a college going lad, staying with his maternal uncle

any other boy his age, he enjoyed going to school which comprised of a single classroom. The children would wait for the master to give them assignments and doze off behind his newspaper after which the thrill of bunking class would drive the young lad with a couple of friends to the nearby railway tracks to watch the trains roll by. About 7 yrs after the birth of their first born, the family decided to move to Baroda as it was a larger city with better educational facilities. The family grew in size and soon enough there were eight young ones, all male (the status of their mother must have risen in society), two elderly female relatives and of course, the master and mistress of the house.

in Colaba in Mumbai and studying at the prestigious St Xavier's College. There were days when he would walk to college because he did not have the bus fare and was too proud to ask his uncle for more money. One day, as he peered into the classifieds column in the newspaper, looking for a job no doubt, he came across an advertisement to enrol in the Royal Navy. It mentioned a paid sea voyage to the UK for training and a stipend to boot! The eager lad dropped a postcard to the address mentioned and forgot about it. Lo and behold! There came opportunity knocking, he got summoned, cleared the initial medicals and was on his way to England! Dartmouth to be precise!







regularly. As all young men of that age, he liked the good things in life so he bought himself a pipe. It was good for the image you see! As this was also important to the young man, there were days when he would skip a meal. Eleven mouths to feed apart from himself must have been very trying on this officer but he never let it get the better of him and always maintained a very cheerful and positive disposition. This I have to say, having been closely associated with him in the later years, this holds true for the entire family. What a role model he was for the younger siblings!

Well, life carried on and time went by when one day cupid struck. He probably always fostered a special affection for his second cousin whose father was a businessman and so was financially certainly better off. The young lady was bright and would lend her academic notes to this lad from time to time to study as he would save on study material. She went on to become an engineer in



### **Gentleman Cadet and an Officer**

This young Indian cadet was undernourished. Ram was thrilled with the extra glass of milk he got as food was rationed. Several weeks of training later, the young man was enlisted into the Royal Indian Navy. He went on to train for the aviation wing of the predominantly "Sea" force and was the first "Test Pilot" of the Indian Navy.

The young officer had not forgotten his responsibilities towards the family in Baroda. The young midshipman would send money home

the city of Mumbai and it must have deterred the young man further from voicing any thoughts of affection. He did finally summon some nerve and propose to her only to be rejected!

Perseverance was a word he was very comfortable with and persist he did. It took him nine long years to finally make her come around and with the blessings of the family, they were united in wedlock. She was used to the affluent lifestyle of Mumbai and he strived hard to keep her happy. As luck would have it, her father's company ran into troubled times and Ram did what





a month before this episode, he lost a fond student and subordinate to sudden cardiac arrest and Ram tried to help the said officer's widow. It so happened that the junior officer's family comprising of a widow and two children, moved to Delhi after his death and Ram also got transferred to the same city. The assistance continued.

Ram's mother was concerned about him being lonely and started

he could to bail them out and get the company back on its feet again. He had proved himself again. His wife Jaswanti had seven sisters, two of whom were promptly married off to Ram's younger brothers. It was all in the family now and they drew strength in numbers.

Tragedy struck unexpectedly - Jaswanti's parents passed away. Jaswanti's youngest sister was still in school and there was our completely dependable Ram to the rescue. He took on the responsibility of rearing this little girl as his own. Their two children were also close in age and the three got along well.

scouting around for a good Sindhi woman who would marry her son. It was then that Ram put his foot down and true to his characteristic benefactory nature, proposed to his colleague's widow Meera. Things didn't quite work out but this did not deter him, he had been through this before. Three years after they had lost their respective spouses, he proposed again, this time, after speaking to Meera's children and asking

"Change is the only constant", how true is this adage! As Ram rose to the rank of an Admiral in the Indian Navy and things seemed to have settled down, Jaswanti took ill and was diagnosed to be suffering from the dreaded BIG "C". The youngest sister was now married, the kids were in residential educational institutes and Ram handled the situation the best he could. There were surgeries involved and long drawn therapies. The stoic Admiral lost his wife to cancer on the 17th of Sep 1979. Exactly



them about how they felt (what a remarkable man!). Being Meera's older child, I can never forget that day (I was all of seventeen). He made me a promise that day which I dare say he kept right to the very end. He sat me down and told me "Beta, I can never be as good a father to you as Ravi was but, I promise to be a better father than anybody else". I was thrilled. My brother was too young to know the difference. He came into our lives as a father figure on the 27 December 1982 and filled a huge void in our lives.

Ram was the Commander-in-Chief of the Southern Naval Command based in Kochi at the time. An avid reader, he came across a bestseller authored by Paul Brunton "The Secret Path". This book influenced him so much that he decided to visit the ashram of Maharshi Ramana in Tiruvanamalai, a city in North Tamilnadu. There was no looking back. He became a staunch devotee and would visit the ashram at least twice every year. His spiritual journey was shared by Meera and as for the rest of us, we didn't really know the extent of his involvement as the rest of his life continued as before.

His involvement with the spiritual teachings of Ramana Maharshi was as sincere as all his other dealings. Some precious morsels would come our way periodically when we were stressed or hassled with the vagaries of day-to-day existence but these were not fully appreciated. It was to happen at a later date when the time was right but that's another story. He was a philanthropist and would donate large sums to charity regularly but would not spend on himself. There seemed to be an inner need in him to do things for people, to help the needy. Dad was a wonderfully positive person to be around. He would repeat these lines from the guru's teachings often "live a life so austere that people pity you rather than envy you".

He excelled in his career and went on to become the Chief of Naval Staff and the youngest one at that! Post his retirement from the Navy at the age of 57 years, he led a very active retired life and was appointed Governor of the lovely state of Sikkim in 1990. He balanced his professional, domestic and spiritual worlds with such ease!

He was a remarkable human being, the likes of



which are rarely seen. A man of high integrity and values, his one liner was "do the right thing and the right thing will happen to you". Being a highly principled gentleman, it wasn't surprising that he went on to chair the Indian chapter of Transparency International and actively fought against corruption. He was also appointed Chairman of the Balwant Rai Mehta School in Greater Kailash II after he offered his services to the "Servants of People Society". The school integrates children from the lower economic strata with equal opportunities. He formed a trust to provide financial aid for such needy children which continues to function even today. The school also started an exchange programme with other countries. He helped integrate several children of a minority community into the school after the Godhra riots. He even prepared us to accept his passing – no, they just don't make them like that anymore! My friend, philosopher and guide, I miss him dearly.



# Remembering Vice Admiral Vasudev Anant Kamath PVSM (1921-2017)

Vice Admiral Yashwant Prasad (Retd)

On January 15, 2017 Vasudev Anant Kamath, Param Vishisht Seva Medal, former Vice Chief of Naval Staff, left us for his heavenly abode. At 94 years then, he was the oldest living World War II era officer of the Indian Navy.

Vasu, as he was commonly called, was the oldest of the nine children, five sons and four daughters, of Dr. AV Kamath, a government doctor working in the Madras Presidency. A very illustrious service minded family which gave two sons to the Indian Navy while the third joined the Indian Air Force. Of the remaining two, one chose to go to sea as a marine engineer in the merchant navy and the other joined the Indian Railways.

In 1939, young Vasu decided to join the then Royal Indian Navy and after initial training was commissioned as Sub Lieutenant on 01 May 1941. His first appointment was to the sloop, *HMIS Clive* from August 42 to Feb 43 at the height of WW II. To meet the war time training requirement, he was soon appointed as an instructor in the Boys Training Establishment, *HMIS Bahadur* in Karachi. He underwent the Long Gunnery Course at Whale Island, Portsmouth in UK completing it in December 1944 where after he was appointed as an instructor in the newly established Gunnery School, *HMIS Himalaya* in Karachi. By this time, the Indian freedom movement was gathering pace and the Royal Indian Navy was acquiring its first largeship from the UK. This was the historic light cruiser *HMS Achilles* of the Battle of River Plate fame in which the German Pocket Battle Ship *Graf Spee* was sunk outside the harbour of Montevideo. He was handpicked as its commissioning Gunnery Officer. On induction to the post-independence Indian Navy, the ship was appropriately christened as *Indian Naval Ship*

*Delhi* after the Indian capital. The acquisition of *Delhi*, in which he played an important role, in fact marks the beginning of the phenomenal growth of the Indian Navy from the motley force of a few destroyers, frigates and sloops that she inherited at the time of independence to what she is today a multi-dimensional blue water force, one of the top navies in the world.

His command appointments include the training ship *INS Tir* and the multi-purpose frigate *INS Trishul*, of which he was chosen as the first Commanding Officer to commission her in the UK. By this time he had adequately distinguished himself to deserve the prestigious command of the aircraft carrier *INS Vikrant* which he commanded for full two years from November 64 to November 66. Regrettably, during the 1965 operations, the ship was under refit and could not actively participate, though her air squadrons were very much utilized in operational role. He later commanded the sword arm of the Indian Navy – the prestigious Western Fleet from January 69 to November 70.

His wide and all round experience can be judged from the variety of appointments he held. He was the very important Director of Naval Plans, the Director of Equipment (now DSR), Director of Naval Armament Inspection and later the Chief of Materiel, one of the few Executive Branch officers to have held that post. In Nov 70, the Commodore-in-Charge Cochin (COMCHIN) was upgraded to a two star rank, designated as the FO Southern Naval Area and he, from the Fleet moved as its first Flag Officer Commanding, later upgraded to a full C-in-C's rank. In March 73, he was appointed to NHQ as the Vice Chief of Naval Staff, where he served for four years, till in the true traditions of a





sailor, at the age of 56 he swallowed the anchor and retired on 31 March 1977.

By this time, India had decided to have a separate Coast Guard and the Government, in recognition of his distinguished service, re-employed him for two years as its first Director General to give the new service a solid foundation. It is to his credit, that the Indian Coast Guard has grown today into one of the finest in the world. His re-employment was further extended by a year and he finally hung his boots on 31 March 1980.

For me, it was a singular honour to have served him as his Flag Lieutenant, first in the Fleet and later in the Southern Naval Area. I thus had a chance of knowing him closely, both personally and professionally. He was an epitome of honesty, integrity, modesty and humility who never digressed from the righteous path. The following anecdotes will buttress my views.

As the Flag Lieutenant, I had to maintain a register of petty cash expenditure on behalf of the Admiral. At the end of the month, the register was put up to him and after his scrutiny; the amount was promptly reimbursed to me. At that time he was constructing his house in Banjara Hills in Hyderabad. As the Admiral could not be away from the Fleet, Mrs. Kamath had to make frequent trips to resolve the various issues of the builder, mostly seeking enhancement of the budgeted amounts. One such trip, I had received her at the VT station.

At the end of the month, when the cash register went up to him, I was summoned to his office. The Admiral in a stern voice said to me *"Flags you should maintain the accounts properly"*. I said *"I do that Sir"*. He said *"No. I see that you have not entered the porter charges spent for Mrs. Kamath"*. I then realized that on that day, while she was trying to take out the money for the coolie from her hand bag, I had quickly pulled out my wallet and paid Rupees two to him, something I would do for my mother. Mrs. Kamath had apparently told the Admiral that the Flag Lt should be reimbursed what he had spent for the porter. It was for me a lesson, that it was not the petty

amount involved but the principle that the Admiral was upholding. I can't fail to mention that they did not consider it infradig for her to travel at times by 3Tier sleeper, when every penny had to be saved for completing their house. She, in her modest manner even suggested that she would make her way to the Fleet House on her own if there was an official engagement, something that I would never have allowed.

Another incident that happened in the Fleet is interesting. The Australian Deputy High Commissioner (DHC) in Bombay then, had been a sailor during the war on the same Royal Navy ship as the Admiral who happened to be his Divisional Officer. After the war, he had joined the Foreign Service and risen to be the DHC. He had much admiration for his old divisional officer and would often invite the Kamaths to dinners where they would fondly recall old anecdotes from the ship. After one or two such occasions, the Admiral decided to return the hospitality and invite them to dinner at his spacious Fleet House. He told me about it and added that he wanted to serve Scotch whisky at home. He asked me to find out from the INCS Canteen what was available and its cost. I promptly collected the price list and put it up before the Admiral. He quietly looked at the price list for some time and said, *"Too expensive. I am afraid the DHC would have to do with the best Indian Whiskey"*. He could easily have hosted the dinner on his Flag Ship where the finest scotches were available, but, he believed that personal functions had to be at home and at his own expense. Besides that, Mrs. Lalitha Kamath also had a reputation of being a gracious hostess who would present delectable cuisine at her parties.

A bit about Lalitha Kamath nee Rao of Mangalore. She was a student of mathematics at the Queen Mary College Madras. When she was told that someone was coming to see her with the view of matrimony, she had her nose pierced and stuck a neem twig in the piercing, hoping it would put off the prospective suitor. It didn't, and they were married in 1945. They have a son and two younger doting daughters. Sunila married with two brilliant daughters lives in the US and Rekha,

a Professor of German Studies at the Jawaharlal Nehru University has a son Karthik a software engineer. A soft spoken and modest lady, Lalitha Kamath was a voracious reader. I had to maintain a constant supply of books from various libraries to keep up with her voracity. In Cochin, without ever complaining, she happily squeezed her belongings from the huge Fleet House to the small old Comchin's bungalow (demolished since then), next to the Command mess. I was allotted a cabin in the block opposite the Flag House. My apprehensions of staying so close soon changed when I started receiving delicious dishes from her kitchen that she would send through their steward. I realized that she was not only a wonderful cook but also a great supervisor. A very soft spoken person, I don't remember her ever losing her temper or raising her voice at me or anybody else.

But, the finest display of the Admiral's quality of leadership I witnessed during an incident of

collective indiscipline by a large group of sailors in Mumbai in 1970. As Fleet Commander, he was at that time officiating as the C-in-C who was out of station. After a short address, in his booming gunnery officers voice at what is today the Barracks wharf, he ordered the collected crowd to fall-in ship wise which they did and marched them off back to their ships under command of the senior most sailor present among them. They obeyed him without hesitation because of his rapport, his fine reputation and the high esteem in which they held him personally and professionally.

Admiral Kamath would always be remembered for the finest example that he set of leadership, personal and professional integrity and humility. I had the good fortune of having served under him.

May his soul rest in peace.



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## WESTERN FLEET FAMILIES DAY AT SEA

**Major General Subroto Kundu, MD (Retd)**

It was way back in November 1973 that I joined the Western Fleet for an extended tenure that I cherish even today. The Fleet Commander was an old friend – Rear Admiral Yankee Prasad. We had earlier served on board the old Tir where he was the NO and self was MO. We had wonderful times those days sailing with cadets of the 41st and 42nd NDA and NAVAC courses, mostly on coastal runs. The rest of the alongside berths were either in Wet Basin or in a Dry Dock with M-seals peeling off every now and again. On completion of my Surg Lt's sea time, I joined the Submarine Arm in November 1973.

Fast forward to November 97. On joining the Fleet, I was very pleasantly surprised to find out that most of the Captains of the Fleet ships were all old cadets with whom I had trained together on board the Tir in those distant days. I embarked Ganga with Capt. Dewan as skipper for my first day as FMO at sea on a fleet ship. It was the Families Day. The reason that I was not with the Fleet Staff on board Viraat was that the Fleet Commander had asked me to choose a ship that I was keen to sail on, as my own Flag Ship. I could then be independent while assessing the ship's medical performance at sea which could be anything from



checking a ship's first aid capability, casevac from various compartments, generally accessible and inaccessible as also from various decks, helo-casevac, emergency OT, setting up first aid facilities in various citadels, inspection of 'First Aid' posts etc. Sanitary rounds of the entire ship, especially various galleys, brought a lot of hardwork for one and all.

Since I used to lecture on aspects of NBC at the NBC school at Shivaji, there were a number of ship's NBC officers whom I knew and so checking out the NBC status of ships was very important as far as I was concerned. Sickbays went through a harsher period. All in all, it was wonderful sailing on every single operational ship of the Fleet although they went through testing times because of my presence at sea. Before entering harbor, I would list out all the deficiencies that I had noted and hand over a list to the Captain, with the words, "Take it that you are the Fleet Commander and these are the problem areas on board your ship. Ensure necessary corrective action. I shall look into these areas when I return next". With that I would disembark. The rest was up to the Captain of that particular ship. I ensured that there was no tattling to the Fleet Commander. After all, they were my ships too.

Coming back to the Families Day at sea, as the ships cast off one by one with 400-450 guests, it was noted that each and every ship had a solid port or starboard list depending on the sides of the jetties that the ships were letting go from. With the tremendous excitement amongst the women, kids and the elderly parents concentrated only on one side of the ship, the ships extended their stabilizers. The sea was flat and calm with a mild swell. The sky was deep blue and so also the ocean. With the sun bright and warm, it was certainly a beautiful day. A couple of hours later, at around 1300 hrs, a very tasty biryani lunch was served that was sumptuous and also available in large portions for all.

By the time the dessert was served, the ship's MC announced the commencement of the Navy's showcase demonstrations on the starboard side. There was palpable excitement all round. The guests made a quick shift from a state of satiation, post lunch belching and the feeling of creeping siesta to preparation for observing the showcase events. With most of the guests shifting to the right side, all the ships in formation experienced acute starboard list. It was a sight worth visualizing and actually wondering when the ship ahead would keel over. In the distance appeared the Fast Attack Craft at 40 knots leaving a rising white churning wake behind and the foxles raised well above the water line. The OOHs and AAHs were echoed from all the ships carrying the families. This was immediately followed by a demonstration by three helicopters that winched the aircrew divers down and then winched them up from sea in a demonstration of a rescue act. The clapping of the ladies and children was loud across the mild swell as the announcer described what was happening. This was soon followed by a couple of Khukri class ships moving at high speed, firing colored flares in a demo of missile firing. A little later, a Kilo class submarine surfaced near the formation and gradually proceeded forward giving all the spectators a good look of a submarine at sea, followed by a demonstration of a submarine carrying out a dive. With the ballast tanks blowing and churning the surrounding water, the submarine carried out its dive. As the decks gradually disappeared followed by the conning tower and masts, the spectators stared in awe at the incident



that they had witnessed probably for the first time. A while later the spectators were treated to the sight of the submarine surfacing from the depths. I experienced a lump in the throat, as I remembered my days as an active submariner proceeding on a war patrol for extended periods. Much later, all the demo-ships and the lone submarine returned to harbour. The Fleet ships continued onwards for a little while longer.

After a cup of tea and some snacks later in the afternoon, the fleet ships made a 180 degree turn and returned to harbor. The sight of Bombay enclosed in a cocoon of a smoky haze of pollution, as the ships came in closer, had everyone wondering as to where they were actually living. Finally, as we entered harbor, the guests noted that even Navy Nagar and Colaba were quite indistinct. It was only near the Middle Ground that the Famous façade of the old Taj Hotel and Gateway had some clarity. As the ships crossed Middle Ground and turned port, the guests were treated to the sight of how the ships came alongside with a strong off-shore breeze blowing. It was about 1600 hrs. mission completed and correct.

The guests disembarked after spending a wonderful day at sea. The broad smiles on their faces were indicative of the fact that they were satisfied. The fleet ships had done everyone proud, as the Fleet Commander and his Fleet Captains went on to plan the next set of operational exercises.

The fleet along with Viraat and the tankers were always under pressure. However, there were in built coping mechanisms to deal with the stress created by days of hectic exercises, especially for the Fleet Staff. Sometimes the fleet debriefings were held on the beaches of south Goa, the islands of Karwar, Laccadives and so on. In addition, the SAM firings on an incoming missile, the LMG and small arms firings in the late evenings, the man-overboard and danbuoy pickups by ships boat crews, early mornings, sea-air rescues and various other drills were not only, relaxing but highly competitive in nature. The josh of the officers and men was extremely commendable.

In harbor the honour of lifting the Fleet Cock had



all the ship's lustily shouting support for their respective boat crews. The FLING evenings were something to relish as ships vied for the Best Ship trophy.

And yet, the famed naval sense of humour at sea remained. One morning as Viraat headed into the wind to launch, albeit rather slowly, the Fleet Commander became a little impatient.

He bellowed, "FNO, what the hell is happening? Find out." In a little while, arrived a signal from Viraat, "Making Wind. Boil in Bum."

Viraat was actually heading for a long refit to Cochin Shipyard and a young signalman with a sense of humour decided that the Admiral needed to be reminded of Viraat's material state. He went on to become a Chief Yeoman.

All in all, extremely gratifying.





# REMINISCENCES OF A SENIOR COMMUNICATOR

**Rear Admiral Kishan K Pandey**

As young naval officers onboard front line ships of the Indian Navy in 1980s, we were enamoured by the sight of a Master Chief Yeoman in the bridge of a ship at sea. The way he used to keep a hawk's eye on the TP operator, in wait for a message and on receipt of the message, the way he used to expeditiously translate ANSB Groups in a flash, without ever hesitating, with a 'loud and confident voice', left us mesmerized. After the Yeomen had played his part, the action shifted to the Signal Communications Officer or the SCO, who would then 'quote authority' verbatim from ANMI, thereby lifting the fog over the emerging tactical situations. The whole situation in the bridge of a ship in those

days looked like a well rehearsed and directed play, where everyone played his part to perfection.

1980s was also the era, when most of the Flag Officers, whether the Fleet Commanders or the Commanders-in-Chief, were communicators. The fact that majority of the senior hierarchy of the Navy comprised Communicators, 'Long C' was obviously the most sought after specialization. Therefore, when our time came to choose a Long course, it was of course the 'Long C' for five Flag Lieutenants 'including me' in a class of fourteen naval officers and two Coast Guard officers in 1986-87. However, when our favoured course

commenced, we realized that the class of 'Long C' were the only officers, who were spending maximum time in school and with books, amongst the four specializations for the X-Branch officers. That's perhaps the origin of the tagline of naval communicators, wherein if a fellow officer remarked 'Long Time No See', the communicator invariably responded by saying 'Long C, No Time'.

After a strenuous learning regime at our Alma Mater, we were the proud recipients of the coveted 'Long C' specialization. We were excited for our ensuing tenures onboard ships as the SCOs, whom we had admired since adorning the white uniform. On completion of the Long course, I was fortunate to get four operational ship assignments, over a period of six years as the SCO. My journey through four ships of the Indian Navy as the SCO, of IN ships Tir, Dunagiri, Godavari & Vikrant, went by like a flash. However, there were many challenges that ensured that my thinking cap was on at all times. For example, we were always struggling to get 'strength five' two-way voice communications during fleet operations. And, my Commanding Officer, who was an equally proud Gunnery Officer, would often tease me that your radio communications is a mere whisper, whereas his loud voice can shake the ships in vicinity. In addition, there were often prevailing situations of dead / null zones in Indian Ocean Region, which made the life of a communicator even more difficult.

My journey in the Navy continued as I progressed through diverse appointments for next several years. However, I always yearned for an opportunity to use my experience as a Communicator to provide the required impetus to naval communications, in line with the changing technology in the field of communications. It was in 2007, when VAdm JS Bedi (Retd), the then FOC-in-C South, a distinguished Communicator of our times, directed me for an assignment as PDNS, albeit in-consultation with P-Branch. As the senior most 'Long C' Flag Officer, he gave me clear directions that I must bring about a transformation in the field of naval communication and networking. With the directions from the Flag Officer, I took over the appointment of PDNS at Naval Headquarters. With his advice at the back of my mind, I shortlisted the first major task, as

replacing all aging Communication and EW equipment by 2009. With concerted efforts, I was able to bring about a visible change in naval communications, at field level, in less than two years time. I also took this opportunity to make a strong team of communicators with CCOs, FCOs and DNS staff, with a singular aim to use the expertise of officers, at various levels of knowledge, seniority and maturity, for transforming the way we communicate at sea. Needless to say that the task was huge with insurmountable odds. We realized that the transformation was needed from portable communication handsets to equipment for Satellite Communications.

The cohesive team efforts brought about the desired changes in a time bound manner during the period 2009-2012 and we were able to make many improvements in the field of naval communications. A few of the important initiatives that were the driving force behind the changes in naval communications are discussed in succeeding paragraphs.

Having replaced the aging VHF sets with the PAE 3060 digital sets, the team embarked on to the next generation 'Software Defined Radio'. After preliminary discussions with the foreign vendors on this new subject, it was very clear in my mind that if SDR has to come for the Indian Navy, it must be 'Make in India' product. Since the security algorithm had to be built into the system and also the system being software driven, we could not entrust this responsibility to a foreign vendor. In addition, we would have struggled to obtain upgrades/ updates subsequently, at an exorbitant price. Therefore, I formed a consortium of five Indian leading agencies, namely CDAC (Trivandrum), DEAL (Dehradun), CAIR (Bangaluru), WESEE (Delhi) and BEL CRL (Bangaluru). DNS played a pivotal role in coordinating with all these agencies for making a cohesive team for developing five different variants of SDR. It is pertinent to mention that the first variant SDR NC has already proved sea trials and has recently been cleared by DAC for production by BEL Bangaluru. Other variants viz SDR (TAC), SDR (Aviation/ Submarine), SDR (Manpack) and SDR (Hand held) are at various stages of development. My team at DNS also focused on transforming the broadcast from the outdated



'Morse Code' to 'Digital Broadcast' Pan Navy. This initiative immensely enhanced the efficiency of naval communications, wherein messages which earlier took 4-6 hours for transmission were now available to its recipients within 20-30 minutes, with 100 percent reception on-board ships, through digital HF sets.

Another field, which needed our urgent attention, was Electronic Warfare. Taking a cue from a pioneer EW programme 'Sangraha', I embarked on the next generation EW programme called 'Samudrika'. Having learnt from our mistake of procuring off-the-shelf EW systems from foreign vendors, such as INS-3 and SEWS V-5, we decided that the way-forward for providing reliable Electronic Warfare capability to our ships was to get indigenous EW systems with niche technology. Our efforts have resulted in Varuna EW system, which has already proved its mettle in the fleet. Other EW suites, which we had conceptualized, would also follow in near future.

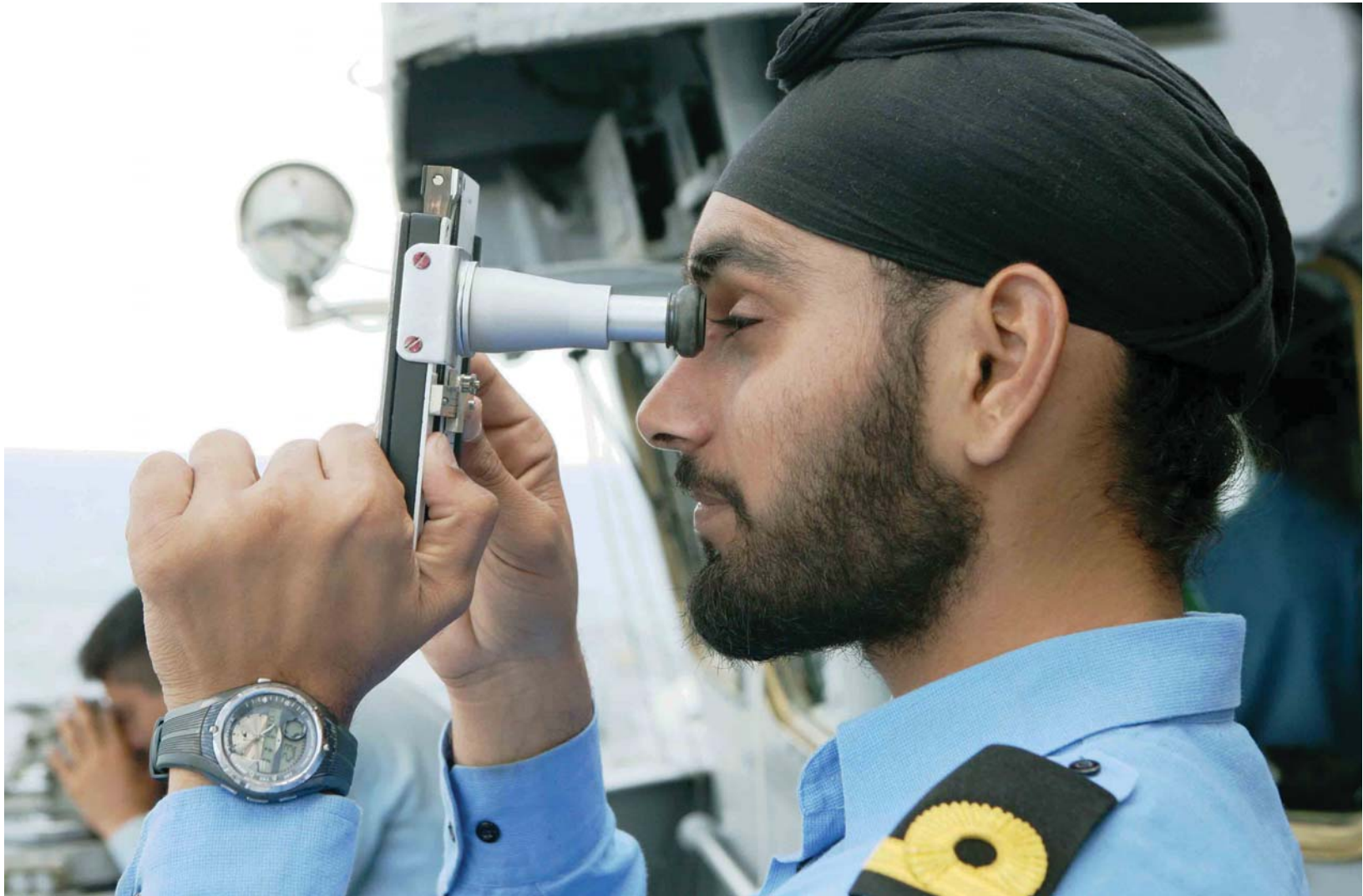
Team DNS also took a detailed study to examine VLF and ELF technologies world over. After detailed deliberations we settled down for collaborations between L&T, India and Continental Electronics, USA. We had envisaged the enhanced role that the VLF and the ELF technologies were likely to play with the induction of many new strategic platforms in the coming decades. It was, therefore, imperative that concerted efforts were made to boost our capabilities in this field as well. With dedicated efforts, by 2014 we had a new robust VLF Station. The spade work for the second VLF station has also been completed and the new VLF station should be available in a few years time at Vikarabad, Telangana.

Rudimentary 2 MBPS/ 64 KBPS networks were, slowly, but surely, migrated to a 100 MBPS network. Concurrently, we worked on three different networks - namely NC3I for integrating 51 Naval and Coast Guard coastal stations with IMAC at Gurugram. Secondly, the DCN for the three Services apex level network and thirdly, NCN as a part of Network for Spectrum (NFS) through BSNL. The idea was to provide multiple networks to users to ensure necessary redundancy and availability of different channels.

Having laid down exhaustive plans to boost naval communications and EW capabilities on land, we shifted our focus to the skies. Fully committed to adding another dimension to naval communications, our satellite team worked with complete passion. Their dedication and perseverance ensured that naval satellite project 'Rukmani', did not just remain on paper, but became a reality in future. This programme also fructified in record time and today has become the backbone of secure and reliable communication for the IN ships operating worldwide. The multiple advantages of satellite communications provide a wide range of options to our platforms at sea.

Having gone through my memoirs as a communicator in the Navy, I often wonder what the youngsters of today may feel about the communication technology revolution world over. Yes, even in the field of civil telecommunications, we have moved on from the basic landline phone of the 1990s to 4G mobile technology, with everything available in our palm. So what have we achieved that is unique in the field of naval and defence communications? I must reiterate here that being in Defence services, one must understand that the biggest difference between outside world and naval maritime environment is 'Security'. The security algorithm, that too indigenously built and suitably graded by Scientific Advisory Group (SAG), DRDO, is a must, in wire and wireless naval communication. As also, the systems should be ruggedized to withstand heavy vibrations onboard defence platforms, especially ships, submarines and aircrafts. It is this aspect of defence communications where the DNS team had to work tirelessly with all stakeholders, to ensure that our networks, including satellite networks, are totally secure.

No mission is complete without the human element or the 'Man behind the Machine'. With so much happening in all aspects of naval communication, a time had come for implementing communications HR expansion plan. Accordingly, in 2012 a case was taken up with the Ministry of Defence for creation of ACNS (CS NCO) as also bifurcation of Directorate of Naval Signals into DNS and DNSO. In addition



DNCO was also made part of CS NCO division. I had the opportunity to be the first Flag Officer to head this unique division.

Creation of CS NCO division provided focused attention on all aspects of naval communications and net centric operations. TRIGUN's amalgamation with naval networks/communication, as also implementation of comprehensive Maritime Domain picture of the entire Indian Ocean Region through IMAC, has been big steps towards providing holistic picture to the Commanders sitting ashore, in addition to the units at sea. Indian Navy Space Vision 2014-2027 was yet another visionary step for providing comprehensive road map for the Navy to develop the entire spectrum of space based capabilities, it requires in the ensuing decades.

1980s and 90s, the ships usually operated in close proximity for exercises such as Fleet Manoeuvres and Seamanship evolution viz. Replenishment at Sea, TOWEX, Boat Drills, REACTIONEX and CRAA firings; so that ships would remain within

V/ UHF communication range. With the advancement of secure, reliable and long range effective communication, the present scenario has been totally transformed. Now, Operational Commanders can stay ashore and yet have effective control over ships dispersed across Indian Ocean Region (IOR) and have a very comprehensive MDA picture at their disposal. Now Indian Navy has started 'Mission Based Deployments' in various choke points as also areas of international interest on round the year basis. Today we are at par with all advanced Navies of the world, in terms of naval secure communication and comprehensive Maritime Domain Awareness (MDA). It, therefore, provides me immense satisfaction, when I see the ships of today, using state-of-the-art technologies for secure naval communications at sea. The naval satellite has also provided the much needed solace to our officers and sailors at sea, wherein they are able to 'call-up' their near & dear ones from across the world. But I am sure we are not going to rest our oars and shall continue to strive to keep pace with the latest technology in the world.





# MEMOIRES OF AN ADC

**Commander Deepak Loomba (Retd)**

I was a young Lieutenant with no experience of dealing with Heads of States, Governors, Chief Ministers, Diplomatic Corps or Protocol when I joined as ADC to the Governor of West Bengal, Kolkata in May 1975. Raj Bhavan Kolkata, a 250 year old heritage building spread across 27 Acres located in the heart of Kolkata was encircled by a pebbled driveway. The well-manicured gardens of Raj Bhavan were famous for Republic Day at Home hosted by the Governor. Raj Bhavan was a three storied building. The public entrance of the ground floor marble hall was used for formal visitors whereas the private entrance was used by the Governors Family and VIP's like Mr Siddhartha Shankar Ray, CM, Mrs Maya Ray, MP, his wife, Lt Gen JFR Jacob, GOC-in-C, Eastern Army Command, etc.

A unique 1892, vintage decorative lift, conveyed 3-4 VIP visitors from the ground to 1st & 2nd floor operated by staff in Raj Bhavan livery. Durbar hall, the offices of the Governor, ADC, Secretary to the Governor and other VVIP suites used by the Heads of States during their stay at Raj Bhavan were located on the first floor. The Governor's residence, and banquet Hall were located on the second floor.

The Raj Bhavan was occupied by stalwarts like Mr C Rajagopalachari, the last Governor General of India, Mrs. Padmaja Naidu, Mrs. Sarojini Naidu and Mr Dharamveera, ICS, Governors and many more luminaries. Kolkata was one of the richest, largest and the most elegant colonial cities of India which served as the Capital of British-held territories in India until 1911. Governor Mr. Anthony Lancelot Dias, ICS, was a distinguished bureaucrat who made a name for himself having established Food Corporation of India & Modern Bakeries under Shri. Jagjiwan Ram, the then Union Food Minister who was his mentor. The Governor was addressed as His Excellency or H E in short, "Laat Sahab" by the Junior Staff, a legacy of the British. On Joining, Lieut Anil Sharma, my

predecessor, took me around the Raj Bhavan and explained the nuances of the job; the golden rule was to be alert, punctual, immaculately dressed and keep your mouth shut unless asked. I was advised to always wear keds when watching a football match to escape common exchange of blows between supporters of various teams. In my initial meeting, H E advised me to be careful as one of the Naval ADC was Court Martialled for contact with Pakistani ISI and some of my predecessors left service prematurely after marrying local actresses. He did not wish to be embarrassed by the conduct of his ADC's.

Mr Dias was a devout Goan Christian who attended Sunday Mass regularly. Mrs. Joan Dias was a very charming, and accomplished lady whose Father was also ICS who had passed away in her infancy. An epitome of national integration, her four daughters were married into different communities. Their four grandchildren addressed H E as 'Opa'. H E was a keen Golfer who played 2-3 times a week at Tollygunge club escorted by the ADC, with a select group which included Capt. Squeaky Khanna, NOIC, Kolkata amongst others.

The Governor had an ADC each from Army & Navy. Of these ADC-I attended on the Governor in the Office as well as his other engagements. The off duty ADC or ADC-II, accompanied Mrs Joan Dias on all her engagements and performed other protocol duties. The Governor & his Wife's Programmes were circulated to all concerned a day in advance.

The ADC accompanied the Governor for all his engagements which varied from inaugural address to the State Legislature, visits to districts, institutions like IIM Calcutta, Victoria Memorial, PSUs, Receptions hosted by the Corps of Diplomat on National Days of their countries, services functions. H E was a teetotaler at all public appearances. However, he enjoyed a Scotch in the evening and would have his Chota peg before



departing from the Raj Bhavan for official engagements. H.E's dealing with all the staff including the ADCs was very formal.

The ADCs were involved with all the engagements of the Governor. Of these, the regulars at the Raj Bhavan were Mr Siddhartha Shankar Ray, CM, Mrs Maya Ray, MP and Lt Gen JFR Jacob, the GOC-in-C, Eastern Army Command. The Governors of Assam and Sikkim, both ICS officers, often visited while passing through Kolkata on their way to Delhi as there were no direct flights from their cities. Mr Siddhartha Shankar Ray shared similar academic background with Mr. Dias, alumni of the London school of Economics, as he had studied Law at Temples Inn, London. Mr Ray would often meet H.E. at the Raj Bhavan, his favourite tea time snack was singhara or samosa.

Gen JFR Jacob was a flamboyant Army Commander. He was a keen student of history and master strategist of the Bangladesh war. He rattled off the history of Raj Bhavan during my first meeting with him in a jiffy. He had a convertible Rolls Royce and a Mercedes Benz which were trophies from the Bangladesh war. He always sat on the front seat next to the Driver. He had a very sharp memory, and placed me instantly when I met him many years later at a function.

ADCs were witness to the occasional tiff and ego clashes between the above dignitaries who interacted often in the creme de la creme social circle of Kolkata. One such event was the visit of Gen. Raina, the COAS to Kolkata. Banquets were planned to be hosted in his honour by the Governor and the Army Commander. The Army Commander wished one of his personal guests to be invited at the Governors Banquet. But the Governor being a stickler for protocol, turned down the request. Rebuff came promptly from the General; his ADC conveyed that the General desired that only Governor's Limousine and not his entire motorcade enter the Army House. I was in a quandary as how to resolve this affront. I knew only H E himself could decide on this issue, I mentioned this to him. Giving me a stern look he asked me to convey to the General's ADC that any change in the security protocol of the Governor would be a breach of security and therefore not acceptable. In case he persisted I could convey



the Governor's inability to attend. Mr Dias knew that the Army Commander would not take any chances with the banquet being hosted for the COAS. Army Commander had no option but to accept the status quo.

I had many interesting moments during my tenure as ADC. One such event was when updating the inventory of trophies I found a huge locked steel trunk in the basement which when broken was found containing an antique Silver Throne with two Maces belonging to the colonial era, that was later displayed in the Governor's Sitting Room. The other was when found a huge Python hiding in the commode in my ADC's suite. Another incident was when wife of the then President threw tantrums at midnight compelling the Governor and his wife to rush to the Presidential suite and render an apology.

I enjoyed every moment of my tenure and met many dignitaries including Prime Minister Mrs. Indira Gandhi, the then President of India, governors of various states, Mother Teresa, just to name a few. I got married after completing a year as ADC and was blessed with a son during my tenure at Raj Bhavan. When I received NHQ letter intimating my repatriation to Navy, the Governor wanted me to continue and was a bit surprised that I was keen to revert to navy to continue with my naval career. But then all good things must come to an end.

# MY SHIPS SAILED THE SEAS BUT I STAYED ASHORE

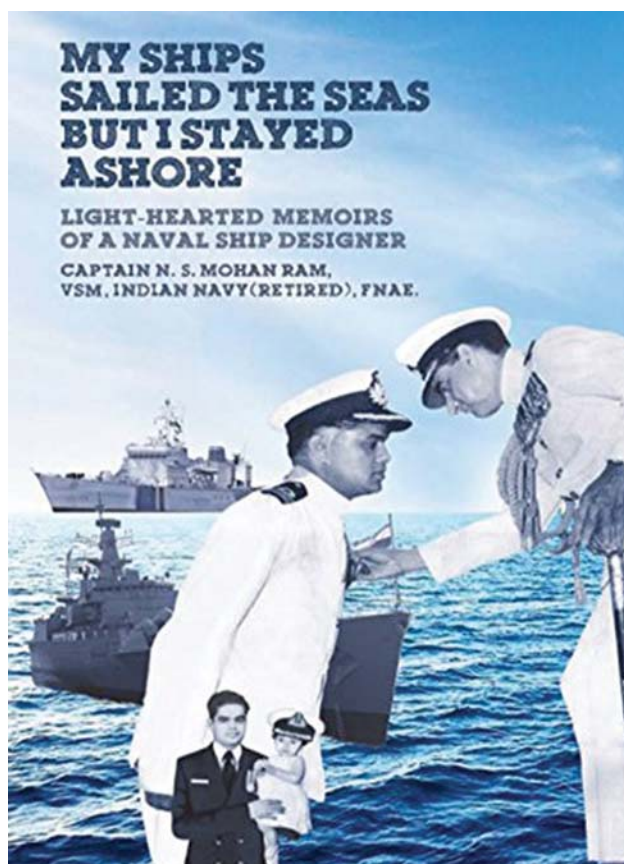
## A Review

Commodore PR Franklin (Retd)

Captain Mohan Ram calls it his light hearted memoirs, but it really is an autobiography of an intelligent and accomplished naval ship-designer, put in a very readable and enjoyable form. He joined the Navy when the naval design group was still in its infancy, and had the benefit of training abroad to acquire much of the technical knowledge required for designing, constructing, and putting ships out to sea. He was also a part of the era when the navy went through the pains of only refitting ships acquired from abroad, to interfacing equipment and systems acquired indigenously and from all over the world (each originating from differing operating philosophies), to designing and building its own warships. This book takes one through those periods in a very lucid manner.

Reading this book, the reader will realize that behind every man-jack that sails out to sea to bring back narratives of exploits in various forms and degrees, there is a team that quietly works behind the scenes, that makes it all possible. I am glad this book has been written because it reminds one that they also serve who design, construct, repair and refit platforms of the navy, and that without them, these platforms cannot be put out to sea.

Can one imagine that the same engines fitted in a medium sized frigate, achieve higher maximum speeds in a bigger-versioned, and heavier, frigate? Captain Mohan Ram describes how he went about achieving this, and in the process, saved the navy huge sums of money. The book brings out the innovativeness that was inherent in the man. It was a talent the navy was to lose very early, when he took premature release to start a new career in 'civvy' street.



In the second part of his book he talks about the second career he took up after leaving the navy he obviously loved so much. His anecdotal extracts from the diary he meticulously maintained through out his two careers, adds clarity and spice to the book.

His choice of words when describing or narrating incidents shows an excellent command of the English language, which makes the reading light-hearted and very entertaining. This book is a must-read for anyone and everyone who is interested in matters maritime.



# The “White Horse in Basra”

Vice Admiral SCS Bangara (Retd)



In this article I narrate two anecdotes, two true stories on Admiral Awati so that the younger generation of officers get to know more facets of his overall personality. Therefore, I am going to talk off the cuff, impromptu or extempore, while narrating.

In 1977, when I was appointed as FTASO now called FASWO of the Western Fleet, I was a Lt Cdr, with under a year of service in that rank. In June 1978, the Western Fleet with FOCWF was on a cruise to Seychelles, Mombasa and Dar-e-Salaam.

Having become independent just a year ago, and Seychelles being a strategically important port, the





country celebrated her national day in the presence of ships from US Navy, the French and Russian Navies, all of whom had a permanent interest in the IOR. We too ensured that we were well represented for the occasion. Soon after we anchored at Port Victoria, I was informed that I would be officiating as Flag Lt in addition to my duties as the incumbent had been transferred for watch keeping duties to one of the ships in harbour. During my tenure later that year, I was also asked to perform the duties of secretary to FOCWF. I do not know of anyone else who has performed three-in-one duties on the Fleet Staff. Suffice it to say that the Admiral thought well of me.



Now then, the dilemma faced by President Francis Rene was, which of the Admirals present in port should coordinate the ceremony. Being conscious of various interests and a vibrant Indian diaspora, the wily President, who finally handed over power only in 2004, casually asked the Admirals to sort it out among themselves. The American Admiral was a tired listless officer with some Pollyanna notions about world affairs. He did not make any bid to lead the men of war in harbour.

The French invited us for lunch. The French Admiral was rather dumb struck with the proficiency of the Indian Admiral in matters maritime, flora and fauna, maritime history and what have you. After a two-hour session he

gracefully suggested that Admiral Awati could consider leading the Independence Day ceremony.

Admiral Yassakov, leading the Soviet contingent was tall, cocky and boastful. In order to establish his credentials, he invited the Indian Admiral for a discussion on his powerful destroyer at about 1030 hrs. I happened to be familiar with Russian customs and traditions having lived in Russia to acquire the Missile boats before the 1971 war. I briefed Adm Awati on what he could expect in terms of the proceedings at which copious quantities of Vodka would form an integral part. Being a teetotaler, he pondered over it and asked me to invite the former Flag Lt to also be present

at this meeting.

Yassakov, as it turned out, went overboard with his hospitality. The table was lined up with bottles of Scotch and Vodka, packets of Dunhill and Rothman cigarettes, caviar, et al. As predicted, Yassakov made a long introductory speech, rather badly translated by a hastily selected interpreter. He then reached out to the bottle of Scotch and poured a very generous quantity of it in two glasses. That was meant to be gulped down by both Admirals at the end of a toast. Having made a politico-military speech, Yassakov stood up and suggested that bottoms up was the next move. All eyes were on Admiral Awati and there was just a fleeting moment of silence! He stood up, looked purposefully at the former Flag Lt who was blissfully unaware of his role, and in a gunnery voice said, "Flags, drink it up". The flamboyant, handsome Flag Lt who was as skilled in elbow bending as his handsome personality, displayed how down-the-hatch is exercised by seamen.

Quite naturally the Russians went into a huddle to decipher what this strange Indian tradition meant. Not to be caught unawares, Yassakov nonchalantly continued his second and third toasts. All three attempts were met with the same response and alacrity by our young Flag Lt. After a quick huddle in which the hosts came to the conclusion that they needed to have a greater understanding of Indian customs and perplexed with "the power of command" on display they wound up the discussions on a meek note. Thus ended the last "battle" before the Indian ships were formally declared leaders of the ceremony-which of course was faultlessly executed.

The second story is when the Western Fleet entered Basra (Iraq) the same year after a very successful visit to Bandar Abbas (Iran). The ship secured at about 2100 hrs in a poorly lit harbour. The Admiral and I were walking on the quarter deck of the flag ship when he abruptly turned to me and said, "A white horse at 0600 hrs, Good Night."

We were trained never to argue with an Admiral. A foreign port with aliens and non-English speaking interlocutors - a white horse? Serendipity some may say. Out of the darkness appears an Iraqi naval officer. "Sir," he says, "I am .... You were my

training officer on INS Kirpan. What can I do for you, Sir?" I hugged him and said, "White horse at 0600 hrs. Good night."

So indeed was a white horse at the gangway at 0545 hrs. What next? At 0600 hrs the forward superstructure door opened and out came this grand person attired in full riding kit of 'The Master of Fox Hounds'.

For those of you who are not familiar with the Defence Services Staff College at Connoor near Ooty, there exists even today a Hunt club. Originally meant to hunt foxes which are now extinct, the club goes through the process of the hunt along with the hounds. The Master and the Committee members are normally attired in a special rig consisting of, hunt cap with chin straps, white or cream stock tie secured with gold pin, black or tan gloves, cream or white vest, coruscating scarlet long hunting jacket with brass buttons, white or tan breeches and black dress riding boots with garters.

Ladies and Gentlemen, the Admiral was immaculately turned out in that rig. He mounted the horse and rode into the port city of Basra. Soon curious onlookers started to line up on both sides of the road and either through curiosity or awe started to spread the word that a Prince had arrived on a visit to Basra. Not surprisingly, by the time the official engagements of calling on the local dignitaries commenced later in the day, the streets were full of cheering citizens and school children of Basra. The visit by the Western Fleet ships was termed as an outstanding success by the hosts.

If you are wondering what cemented this relationship between the Admiral and his three-in-one staff officer with an age gap of 20 years and which continues to blossom, I can attribute it to a quote from Gen Pershing. He said, "In a social order in which one person is officially subordinate to another, the superior if he is a Gentleman never thinks of it and the subordinate if he is a Gentleman never forgets it."

Let me celebrate the Admiral who taught me that pusillanimity, pussy footing and gerrymandering do not make a good leader....





## A COMMISSIONING LIKE NO OTHER

**Commodore N Anil Jose Joseph**

Talking of 'Commissioning Ceremonies', I can't help but look back with pride at the commissioning ceremony of INS Shardul that was unique in more ways than one. It was first to break the mould and set a template for later ships to follow. Today, many ships may have surpassed Shardul Commissioning in terms of presentation; for sheer content and actual 'enaction', I would dare say it's the Commissioning to beat.

Shardul was built at GRSE, Kolkata. It was the first major platform on 'Fixed Price'. After giving life to the hull that was Shardul, we sailed from Kolkata on 'Blue Ensign' for our base port at Karwar on the west coast. We halted at Visakhapatnam and finished most of the Part IV trials over there. Prior to commissioning the balance trials were finished enroute to Karwar and off Goa including SHOL trials for both Chetak and Seaking.

NHQ selected 04 Jan 2007 as the Commissioning date. Coincidentally, it was also my parents' wedding anniversary. Our then Defence Minister Mr AK Antony was the Chief Guest. The Commissioning Ceremony was at Karwar (the first ever commissioning in the base and also in the state of Karnataka). All functions were conducted keeping with our customs and traditions and executed with precision and exhilarating fervor.

After the Commissioning ceremony Mr AK Antony was taken to see the ship's lift, while the guests moved for high tea. We went on board to change to dress No. 10 A. On Chief Guest's return we

had a Barakhana in the tank space, with the entire ship's company and other dignitaries. On completion we had the exchange of gifts and mementoes and then we sailed out.

We 'Sailed on our Commissioning Day'. We disembarked the RM, CNS and C-IN-C at sea to the Aircraft Carrier for RMs day at sea. We then returned, came alongside at about 1800 and hosted the evening reception onboard at 1930 Hrs. Chief Guest for the evening was the CWPA, V Adm Randhawa.

It did not end there as we had our First Day Cover released the next day with the COMINKAR, Cmde K P Ramachandran as the Chief Guest and the entire ship's company and families onboard for the function.

Now anyone would agree that the Commissioning itself was unique and unlike any other. And this Commissioning became the template for many to follow although almost all of them are minus the sailing and also the breakdown of functions as done for Shardul at Karwar. To all the events we had a WHY as well.

The idea for sailing on the Commissioning day was given by Admiral Sureesh Mehta when he was the C-in-C East.

Getting all trials completed before the Commissioning was foremost in our agenda and we went about it systematically and methodically on very firm timelines and with a very determined and proactive approach. There are a lot of side



stories on how we achieved it but those can all wait; the overall picture being that we completed all that we set for except actual beaching operations (this was done immediately after the commissioning on 23 January 2007).

The preparations on the admin side were also unique. Our invitation card and brochure was unique with our card opening like the bow door of an LST. Details in the brochure also had info on old Shardul, history of amphibious operations, team involved in making Shardul, about new Shardul and so on. Every painting and decoration in the ship was selected with logic and a reason. The motto 'ALL FOR ONE ONE FOR ALL', I believe is an appropriate motto for a landing ship. The messes were named after coastal states. The purpose being that each mess could be decorated on that theme and in the process the men learn about that state. The LCAs were all synonyms of 'Shardul' ie the tiger.

For the Commissioning ceremony itself there were

many inputs and we had to fit in the sailing. Besides it would be the first commissioning of a ship at Karwar (most commissions in our Navy have been at Mumbai, Kochi or Vizag or in the location of the yard). For the actual ceremony the Navy Order and Regs IN had clear regulations and that was our basis.

We then had a call from NHQ that certain dignitaries were to be accommodated on the main podium onboard. When I pointed out that Regs Navy had clear directives on who all were to be on the podium onboard (a limited number) and that I could give these dignitaries pride of place among the guests on the Jetty I was told that these orders were from NHQ. I asked the staff at NHQ that they brief CNS or I may be allowed to contact the CNS or VCNS to brief and clarify. I was told I could speak later. I then contacted my C-in-C, V Adm S S Byce to update on the conduct of the commissioning and briefed him on this issue. I pointed out what I was told to do was at variation from what the Navy Order lay down. The C-in-C



gave me a clear directive to follow the Navy Order. [A clear instance of how we as staff need to brief / put up what is correct, or what is laid down and thereafter the call could and would be the seniors].

Then again the staff at NHQ highlighted that someone should clarify the dress for the occasion with the RM, as it was likely that our RM, Mr AK Antony would come in traditional attire. I took on the mantle of briefing the RM's office highlighting that the Navy would be in formals. And MAK Antony came in 'Bandgala' for the commissioning ceremony.

The actual conduct of the ceremony, the interaction with the dignitaries all had their own side stories. We invited every ex-Shardul crew by daily order entries, all previous Commanding Officers of Shardul by personal letter, phone calls and invitation cards. All other commanding officers and dignitaries were invited by personal DO letters and where possible by an additional call, this was beyond the approved guest list and we had to do a lot of follow up for RSVPs. A fair number attended but some regretted view remoteness of location and of course 'service exigencies'. There were many more anecdotes that I could share. Our RM's first question on reading my name was 'which place do you hail from?' in Malayalam and to my reply he enquired further details. To which I

said I am Late Mr Babu Karimattam's sister's son. He was immediately excited and he then introduced me to the CNS and C-in-C as "maine iske ghar ka namak khaya hain". The humility and conduct of our RM was indeed very touching. My maternal uncle ie Late Mr Babu Karimttam and the RM alongwith Mr Oomen Chandy were close friends in their initial days in politics and since my maternal grandmother kept an open house they all dined there often.

The barakhana with the ship's company was a unique addition. Most commissionings provide an opportunity for the chief guest and dignitaries to interact with a very select crowd and a few ship's officers. Herein the Chief Guest, CNS, C-in-C and others had the occasion to interact with the men over barakhana. The positive vibes and cheer was a visual delight and a boost to morale. The RM, CNS and C-in-C enjoyed their time with the men. Exchange of gifts and presentations were done in the tank space with Team Shardul in attendance. On completion of lunch the ship set sail to the tune of 'Shardul Geet'. We had a Shardul song the lyrics penned by a shipmate JP Singh PO SSI and set to tune both by the ENC band and WNC band, both at different tempo. Of course we sailed out on the faster tempo.

The CNS, Admiral Sureesh Mehta and C-in-C V Adm SS Byce as did all guests have plenty to share. Cmde Ramachandran, C O M I N K A R introduced my father to the CNS and C-in-C and Admiral Mehta asked my father to embark for the sailing. What a gift from my CNS and the C-in-C, the father of the C o m m a n d i n g Officer sailing out on the first sortie of the ship. On the return leg to Karwar after disembarking the





dignitaries I had the privilege of seating him on the Captain's chair.

The ship sailing out is a wonderful signal to all. It's a clear indication that the ship is ready for all operations. That RM, CNS and C-in-C were disembarked at sea is an indication of the proactive approach of all involved to get the ship fully ready.

The evening reception was one of its kinds for the base port of Karwar, especially at that time in 2007. We had Vice Admiral Randhawa as the chief guest together with other guests and dignitaries including former Shardul Captains and officers of GRSE and all local units at Karwar and Goa. And the release of first day cover next day gave us an opportunity to get all my men and the entire Shardul family onboard for the function.

We had taken up the issue of first day cover and the postal department regulations warranted that the postal department had to have a place on the podium when the first day cover was released.

But our Navy Order stipulated who all were to be at the podium and that did not include the P & T. Therefore we chose to do it the next day with COMINKAR, Cmde KP Ramchandran as Chief Guest with P & T representative, the Postmaster General having pride of place and thus also giving an opportunity for the entire ship's company and families to participate in the function. The function was followed by a Barakhana with ship's company including families.

The start was auspicious, we straight away got into an SSC, did our first beaching and then I, as senior-most LST CO, was in charge of conduct of beaching for the AMPHEX that was to follow the next week. Integration with Western Fleet, a host of firsts in achievements by Team Shardul notably maximum beaching by LST L's at that time and cross deployment to 1 TS (in effect as TS1 as Tir was in refit) in the second half of the year were all to follow in the first commission. Indeed a very challenging and satisfying commission.



# Little Chiya Returns to Our Fold

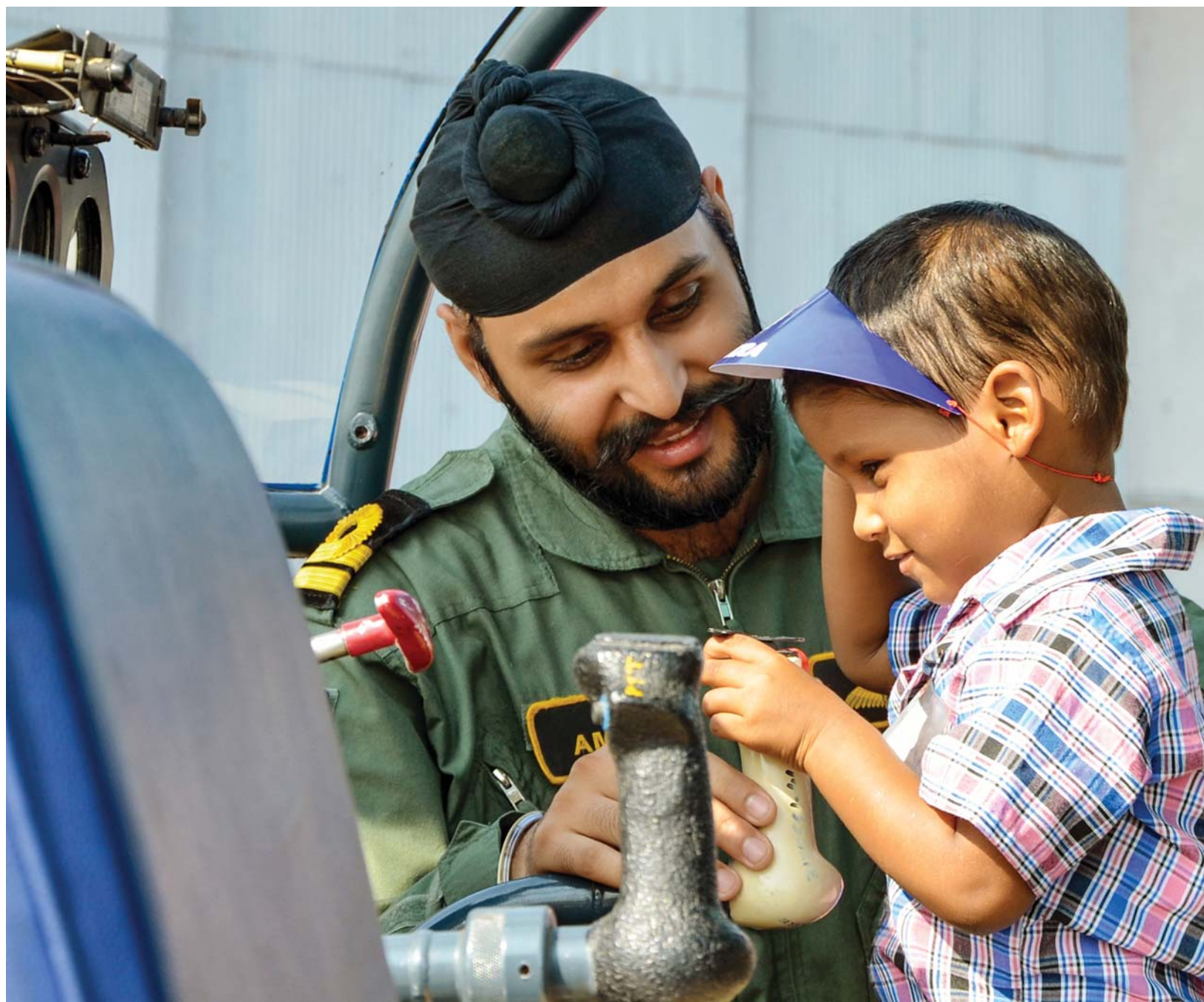
Vice Admiral SCS Bangara (Retd)

This story is about Chirul, affectionately called Chiya, his four year old daughter. In a matter of months, Anu, Manish's wife and Chiya became an extended family with Chiya accepting my wife Gita as naani and I, naanu.

Tempus fugit-it was time to say goodbye. We were moving to the Southern Command of the navy and Manish was posted to the squadron at Jorhat, in the North East. It was then that the subject of a

small apartment that I owned at an Army Housing Society at Pune came up for discussion. Sensing that we were unlikely to settle there, Manish proposed to buy it from me. We had no objections and the paper work was done expeditiously. Manish departed after he took over possession of the house. None of us knew what was in store for us!

We were updated on their progress on occasions



of festivals and birthdays and all was well till the bad news arrived.

A cryptic message stated that Manish was no more. We remained in touch with Anu and Chiya through her, even as they wound up and moved to Lucknow, the house of Manish's parents. I was in touch with my colleagues in the Air Force during which, I shared some sensitive family details about Manish's parents and his apprehensions about their inability to care for the granddaughter. The Air Force followed the legal procedures and preserved a copy of the will left behind by Manish.

A week later we were informed that Anu passed away under mysterious circumstances. The case till today is sub judice. The last we heard was that Chiya was taken away by her maternal grandparents which tallied with the wish expressed by Manish in his discussions with us. That was 13 years ago. Chiya remained in our thoughts and prayers albeit with no communications or coordinates.

It was on 10 July this year that I received a call from Chiya. She was sobbing and trying to reach out to me. We never thought that a four year old would remember enough about us to recall every event at NDA with great clarity. She was finally the rightful owner of the house bought by her father. An invisible hand with the support of well-wishers from the Air Force had ensured that her legal rights were protected. "Could you please come over to be present during the paper work?" she pleaded. I did not have the heart to tell her that her "Nani" was recovering from a surgery and was not fit to travel even the short distance that now separated us.

Chiya ran into my open arms. Here was a young teenager as old as my own granddaughter! That is when the third arm of the Indian Armed Forces entered the scene. Right through the legal battle to deprive Chiya of her rights, a retired Colonel who had, by a strange coincidence, worked with me at NDA and was known to Manish held the crucial honorary chair of the Secretary of the Army Welfare Housing Society which housed Chiya's flat. He firmly and resolutely refused to



compromise on the conditions of Manish's will which clearly identified Chiya as the inheritor of the property. He was instrumental in giving my contact number to her and reuniting us. He stood by our side during all the paperwork ably supervised by her present guardian-the maternal grandfather.

Chiya had to be brought home to meet her "Naani". Needless to say it was a tearful reunion-tears of sadness and yet of joy. Chiya astounded us in the presence of her grandfather by unfolding her memories of NDA. Every happy occasion, the clothes that were worn, the gifts that she received, the car that I drove and so on. Never in our wildest dreams did we credit a four year old to have such vivid memories and a strong resolve to reunite.

She goes back to Mathura to continue her college education. She wants to be a part of the Indian Air Force. Manish and Anu must be happy wherever they are!

This is the strength, bonding and camaraderie that exists in our Armed Forces. We tend to look at all the negatives of our lives while forgetting that the real strengths are those that will see us through till our final journey.

God bless you Chiya!



# Andaman Calling

Commander James John

The news of posting to the pristine islands of Andamans from the salubrious climes of DSSC, Wellington was received with mixed emotions by my family. The thought of packing and moving unsettles us, though we have become expert movers and packers. When we landed up on the isles, the issues of lack of houses, furniture, poor connectivity welcomed us. Despite the issues, from the beautiful hills to the emerald isles, was a welcome change.

New place, new challenges, new adjustments and loads of lessons on life was our expectations of this place. Its been a few months, challenges and adjustments have been many, additionally

opportunities has also been many. I would like to narrate an opportunity, where I met the Lieutenant Governor of A&N Islands.

Being one of the 'youngest' Commanders, I was nominated to volunteer for being the Parade commander during the Independence Day at Netaji Subhash Stadium. My nomination for this job would ideally be termed a 'BJ', a parlance used in the forces to depict an extra job. I would also confess, that I had put in my very best and did the parade '*Dil Se*'.

Surprisingly, the honourable LG took note of my '*Dil Se*' performance and he sent me an invite for



“At Home” at Rajniwas. It was a humbling experience to be invited by the highest authority on these emerald isles, when I would have never figured in the guest list. It was grace on part of the General that he honoured someone who was not so significant. I am reminded of a parable in the bible which Jesus told and it goes like this:-

This is the story of Zaccheus from the New Testament in bible. "Jesus

entered Jericho, a city in Israel, and was passing through the street. A man named Zacchaeus lived in that place. He was a chief tax collector and was wealthy. The tax collectors were appointed by the Romans to collect the tax in Israel. The collectors paid a percentage to the Emperor and the rest was for them. Therefore the collectors were generally corrupt and extorted money from people. Zacchaeus was one of those corrupt tax collectors. He wanted to see who Jesus was, but because he was short, he could not see over the crowd. So he ran ahead and climbed a fig tree to see Jesus, since he was coming that way."

When Jesus reached the spot, he looked up and said to him, "Zacchaeus, come down immediately. I must stay at your house today." So he came down at once and welcomed him gladly. All the people saw this and began to mutter, "He has gone to be the guest of a sinner." But Zacchaeus stood up and said to the Lord, "Look, Lord! Here and now I give half of my possessions to the poor, and if I have cheated anybody out of anything, I will pay back four times the amount."

The story signifies the turning of corrupt man from his sinful ways and pursuing a righteous path. It shows acceptance of God, when a man repents. Though I don't have a similarity with Zacchaeus, I really felt like one when LG staff conveyed LG's invite for me and my family.

The parade went long. Sun, bright and shinny was also curious to watch proceedings on these Islands. This led to many laying down arms in front



of the Sun. The children on the last row stood their ground inspite of the discomfort. As I moved out of the parade ground, I noticed a young girl from the school who was in the platoon in the last row. I told her 'good parade young lady'. She remarked that she was feeling low as "LG saab didn't mention about us in the speech". I told her that the Honourable LG saab had made a medical college for the youth of the Islands and had greater plans in store. He would surely get back to you about your parade.

The issue was brought up to the Lt Governor's notice and the ten practices done by the boys and girls in the rain and sun. The gracious General quickly issued 'Certificates of Appreciation' to all the schools who participated in the parade. He remarked, "the youth are our future and they deserve the praise from their leaders whom they look up to. A good job done if not acknowledged, will not bring about a repetition". I was floored by the gesture and it would go a long way in assuring young minds, that the leaders care about the efforts of the younger ones as well.

I just narrated a chance opportunity. The world in general and the islands in particular have numerous opportunities to offer. It's for us to grab and make the best. When one door of opportunity closes, we need to remember to have a look at the doors of opportunity which were opened simultaneously by God for us who loves us immensely. If the father in heaven closes a door on us, He only wants us to take another door which we could do better.





## Do We Still have such Senior Officers

**Commander RR Tyagi (Retd)**

During our Cadet's training in 1971, our ship had come to Goa, and the first thing every cadet wanted was 'Liberty'. While going around and exploring Goa everyone noticed the helpful attitude of the authorities and people looked up to the Navy. We were too young and too preoccupied in our activities to analyse the reasons that led the Goans to look up to the Navy. Years later I was posted to Goa after completing my Aeronautical Engineering course at Air Force Technical College Jallahali and navalisation at NATS. It is at this stage that I understood the reasons behind positive attitude of the people towards the Navy.

I was posted to INAS 315, in the newly formed IL-38 Squadron. There was paucity of married accommodation in the station. I was prepared to send my wife, in case there was no other alternative. To begin with we stayed with my friend Lt Paroolekar who was large hearted to accommodate us in his house. After joining the squadron I went in dress No. 2s for customary meeting with CO INS Hansa Capt Raj Anderson. In CO Hansa's office I found many civilians waiting for his audience. On enquiry I learnt that Capt Raj Anderson was involved in many welfare and local issues and was regarded as a person who had a





solution to every one's problems. For example, a person had come to the CO to get a seat in Indian Airlines aircraft as he had dire emergency at his native place. I was told that the CO even allowed Navy to participate in the famous Goa Carnival where he allowed naval helicopters to shower flower petals on King Momo in the Carnival. It was during this interaction that I understood that it was because of Capt Raj Anderson's contributions that the relationship between Navy and the local administration was cordial.

Once all the civilians had left I was told to go in. CO's first words were "son come in and sit down. Tell me more about yourself ". The moment I said I was married, he smiled and said "son I will tell you that as such we are terribly short of accommodation, but take my word, wherever you find a place park yourself. If anyone asks, you just have to take my name." Sure enough I found a garage empty in-front of the Officers' Mess. I went to MES to give bare minimum items for living which became my residential accommodation for few months.

In view of the terrible shortage of married accommodation, the Commanding Officer took a decision to allow families to stay in one building of the officer's mess. So all the floors in this building were occupied by married officers with hustle and bustle of children the mess area.

Then came the annual inspection and everyone expected fireworks during the C-in-C's rounds of the officer's mess area. And sure enough the C-in-C asked "Andy...what am I seeing..." pointing towards the clothes drying up in veranda. Capt Raj Anderson who had gift of the gab, replied, without batting an eyelid, "Sir, do you expect my officers to live on the road...?" C-in-C just remained silent and continued with rounds.

It was at this time that I learnt that more than the rules it is the spirit behind the rules which is important. Rules are made and can be changed based on the situation. Not many senior officers could have taken a bold practical decision and defended it in the best possible manner. I just hope, the Navy has more Senior Officers like Capt Raj.





# Golfingly Yours

Commodore Mukund B Kunte (Retd)

Three decades of QD is a good occasion to recount old memories, so here we go.

**Sonia and Sea Harriers:** Sonia was the wife of Graham Meredith the Naval Attaché in the British High Commission and a lively and enthusiastic member of the ladies section of the Delhi Golf Club. Margaret Thatcher had once famously said that she was in Kuwait battling for England in the matter of selling Sea King Helicopters in the Middle East. Well, Sonia was doing the same in Delhi – battling for her country to advertise Sea Harriers. One day she gave small packets to some of us close friends. Inside, there were neatly wrapped golf balls with the signature SEA HARRIERS. Our natural instinct was to say that we must be careful not to lose them whereupon she immediately chided us saying, “Oh no you must do so quickly because how else will other members know about the Navy’s new acquisition!” It did not take me very

long with my modest handicap to unsuccessfully search for ‘harriers’ in our luxurious roughs. I don’t have to tell QD readers how on 29 January 1985 a flight of four Harriers led by a future Naval Chief (Arun Prakash) flew in from Safdarjang Airfield and did a magnificent hover in the backdrop of the majestic domes of South and North blocks. Then, watched by two very distinguished pilots Rajiv Gandhi and Ram Tahiliani in the cockpits of the nation and the navy, they flew at supersonic speed towards India Gate. Quite a sight for the Gods!

**Errant Golf Balls:** This is quite another story. I remember Kulwant Singh Bhasin onboard the Brahmaputra in 1964. He was earning his Engine Room watch keeping ticket and along with Hussain another Sub, he had one day treated the ship’s company to some hilarious entertainment on the after gun deck. The next time I was alongside him was during the Navy Golf Championship in mid-

1970 when we found ourselves in the same four-some as the Admiral. On the 6th tee of the Delhi Golf Club we had the honour of teeing off first. He hit a mighty drive with an equally mighty slice which not surprisingly went out of bounds (OB). He took another new ball which followed the same course and speed and went OB. I suggested that he take an old ball but 'Sardar Bahadur' wouldn't hear of it saying, "what my Chief will think that his officers cannot afford golf balls?" So, off he went with a massive third OB before finding the centre of the fairway with his fourth drive. Well, there was indeed a happy ending to that story. At the wash-up and prize distribution the Admiral, Ronnie Pereira had called his playing 'opponent' and gave him three new golf balls saying. "Son, I have plenty and wouldn't know what to do with so many of them"!

**This and That:** I was Flag Lieutenant to the CNS in Admiral Katari's last year in office. He was a great sports enthusiast – an early injury to his nose ended soccer for him but he played tennis, golf, and billiards/snooker regularly. Often he would drive his Ford Zephyr to the Gymkhana Club after office and have a quick game before joining the capital's cocktail circuit. I didn't play golf then but accompanying him on tours I watched him playing 9 if not 18 holes. Later, when he was our Ambassador in Burma he visited Bombay and I, by then a regular, fixed a game on the US Club Course, Ravi Katari making up our three-some. Some exceedingly lucky chips and putts ended in me winning the match. The Admiral, having been a 'first' everywhere wasn't used to losing but perhaps his diplomatic 'Hat' had changed him and he accepted the result very gracefully. At the Navy's reception in the evening I mentioned the matter to Admiral Karmarkar, then FOB, who said, "Oh it is not difficult to beat old Ramdas – all you have to do is to step on his tee and once it is lost his game goes to pieces!" An observation, no doubt, borne out of their old association starting as term mates in the IMMTS DUFFERIN.

**Now, some tit-bits:** Living on Lodhi Road it was easy for me to play at the DGC often. But I recall some incidents with fervor. Once I was told by the Starter to join a couple who were waiting on the Tee. They turned out to be Vijayantimala (then an M P) and Dr Bali, our resident neighbours in the lane next door, and it was a memorable



morning. Another time, I joined Kapil Dev who was a long hitter of the ball but it was to his 'mobile' I am going to refer. Mobile phones had just entered the scene and were a novelty so seeing him hooked on to his, I asked him if he was following a ball-by-ball commentary. No – he was talking to his financial consultants on investments!

But my next engagement was most unusual. On the side lines of a Rajiv Gandhi Foundation Seminar I had asked the Ugandan President Mr Kenneth Kaunda if he would care for a golf game. He replied that there was no time but his love for the game must have got the better of him and his ADC came to say that nine holes could be possible. So I ran around and fixed a game with Mr Garry Saxena (my one time Boss in the Cabinet Secretariat and later Governor of J & K) and Dorothy Zender wife of the Swiss Ambassador. Our guest turned out to be charm personified, tall in every sense, and even joined in the social discourse telling us how he had introduced peacocks on their course in Lusaka. The Changing Room attendant Mahipal had found size 11 golf shoes for the VIP and the Caddy allotted was Desh Raj, complete in his 'dhoti and Gandhi topee'. A photographer appeared on the scene and took a picture of both, seen in the next morning's Statesman, our guest was hitting out of the bunker of the 9th green.

**Post Script:** I had played with another CNS, although very occasionally. Once, Admiral Nadkarni asked me to join him and his Vice Chief Sudarshan Chand for a morning game at the Air Force Golf Club. So I reported at the time specified but found that it was not quite daylight and the First green hardly visible. Then it dawned on me that, being an ND specialist, he must have consulted the Almanac giving the 'nautical as opposed to civil twilight' time of start!





## The Rejuvenation of 'Amar Jawan' Monument in Borivali

**Lieutenant Shreekant Bhende (Retd)**

permission required maneuvering through the maze of the municipal bureaucracy and the political establishment. Having saved money, bit by bit, over the past three years, I started my endeavor to seek permission from the civil authorities for restoration of the monument.

I chose a human form, to have a greater impact on school going children as well as the civil

Mary Immaculate School in Borivali (W), a Northern suburb of Mumbai, is situated on the junction of two roads. Right opposite the School is a Traffic island. The school and the island together make a conspicuous land mark. I had shifted to this suburbs three years ago and always admired the location and the Traffic island until one day, I noticed that hidden within the wild tall plants was a traditional "Immortal Soldier" monument in a dilapidated condition; the helmet was missing, the gun made of fiberglass was in tatters and the pedestal broken at the edges. It was a pathetic sight, an insult to national martyrs. Then and there, I decided to restore the glory of the Immortal Soldier.

The traffic island is a public place under the municipal corporation. Getting the requisite







*In Picture above Rear Admiral S Mahindru, Rear Admiral R Bhatia (Retd), Cdr Vijay Vadhera (Retd), Committee Members of Navy Foundation, Mumbai Chapter, Mrs and Lt S Bhende (Retd)*

society, to evoke awareness and discipline in them. Before embarking on the mission it was necessary to ascertain the cost which was dependent on the material of construction. To use bronze with its prohibitive cost was out of question. The best option was durable and weather resistant Fiberglass Reinforced plastic. Besides, I was more comfortable using fiberglass material because for 22 years, after my retirement, I used the same material to make a living. Post the Uri attack was an opportune moment to approach the municipal corporation. On the 17 October, 2016 I approached the municipal commissioner, who verbally approved my request to erect an "Amar Jawan" monument. It was easier said than done. After lot of running around, I received the final order only on the 20 March 2017. The Amar Jawan monument was finally erected on the 7 April 2017, a dream come true!

Till the erection of the monument, I single handedly managed the project. However, organizing its inauguration was beyond reach and capability. Being a member of the Navy Foundation, Mumbai Chapter, I requested the Hon Secretary Cdr Vijay Vadhera N M (Retd), who promptly came forward and took over the responsibility of organizing the inauguration. He requested Vice Admiral Girish Luthra, AVSM, VSM, ADC, FOC-in-C West and the Patron of our Foundation for help. The event was graciously attended by Admiral Sanjay Mahindru, NM, Flag Officer Maharashtra Area, representing Headquarters Western Naval Command as the chief guest. The monument was unveiled by Rear Admiral RM Bhatia (Retd) President Navy Foundation, Mumbai Chapter. The Amar Jawan stands on the traffic island in all his dignity and glory.





# Tutoring a Hostage

**Commander CNS Madhu (Retd)**

Way back in 1995, I was the Training officer at the School of Naval Oceanology and Meteorology (SNOM). The school had three officers and I was the junior most. In accordance with the rule of hierarchy I took most of the classes and CI and officer-in-Charge delivered special lectures.

One day, when I reached the school at around 0725 hrs, to my utter surprise, I found both the Oi/C and the CI standing at the entrance, anxiously waiting for a VIP or Admiral. This VIP visit was not known to me. I was embarrassed to have reached the school after my seniors. I was expecting a dressing down and being subjected to usual moral lecture. I quietly moved into my office sat down to prepare the training programme for next week. I

did not have a class in morning session because the HCC course for the day stood postponed.

After a while a sailor came in and said, "Sir compliments from Oi/C." Now, I was pretty sure that usual 'MLs' would follow highlighting the importance of reporting in time. I grabbed my cap and went and stood in 'savadhaan' in front of my superior officer. He asked me as to why was I missing from the class when the trainees were sitting there. I was lost. I told him, "Sir, the HCC course is postponed for today." With a smirk on his face he showed me the way to classroom. I was clean bowled and dejectedly moved towards my class where I found a lone trainee sitting in the third row, waiting for the instructor.

I asked him, "Are you for HCC course?" He nodded his head. I asked him to come in front and the conversation began. He said that he was a grounded fighter pilot who had come on ty-duty to Kochi for conversion to helicopters. I was not convinced. To satisfy myself further, I started by saying "as a fighter pilot you must be well versed in MET, but still I will cover the course as per the norms". Gradually our discussion got interesting; he went on to talk about mountain waves, CAT, etc. Our conversation went on for two hours at a stretch. I had never seen anyone discussing meteorology with so much passion. In between I grabbed the opportunity to also cover the syllabus; he even took some notes by drawing a notebook from his bag.

At around 1015 hrs, I said that we'll take a 15 minute break and resume at 1030 hrs. He was hesitant to go for a break and asked me to continue and finish so that he would finally go for breakfast. This was a real googly. I asked him to follow the training schedule. Now it was his turn. To my utter surprise he said that he was not doing any conversion or course. I then asked "What the hell

are you doing in the class then?" I just didn't know what was happening. He laughed and narrated the entire reason for his presence in the classroom. He told me that he was simply proceeding to the squadron for breakfast when Oi/C SNOM caught hold of him and asked him to sit in the class. He said that he listened to me because it was interesting and he had no special work to do during that time. I turned red in the face. I felt fooled.

Later I understood the entire story. On that day my Oi/C got wind that CO Garuda and FONA were going to the squadron to see the simulator and he didn't want to miss the opportunity of wishing the Flag and seek an opportunity to somehow get the Admiral to visit the school. Anticipating the Admiral's walk-around, he asked the CI if there were any officer's classes to show. CI thought that the officer walking on the road was the trainee. He took him hostage and made him sit in the class.

The OiC and CI never got to know but whenever I remember the bizarre incident, I burst into hearty laughter.





# NOVEMBER BATCH REUNION

Commodore R K Dass (Retd)



The November batch was commissioned on 6<sup>th</sup> March 1967, onboard INS Delhi. The ship was then undergoing repairs in the Cruiser Graving dock, Naval Dockyard Bombay, under the command of then Capt R L Pereira.

Reunions are a gift, wrapped in memories. The times that seemed tough, turn into pleasant memories over the passing years, which one enjoys reminiscing about. We had met each other fleetingly at some functions since we parted after our training and this was the first time we were getting together at leisure.

A reunion was planned to celebrate the 50<sup>th</sup> anniversary of the commissioning of the batch. KB Khanna volunteered to make the necessary arrangements of which he did an excellent job.

We gathered in the forenoon of 5 March 2017, at the Golden Tulip resort, Neemrana. There was little traffic from Delhi since 5 March was a Sunday and the drive was pleasant. The resort is located on the Delhi – Jaipur highway about 80 Km from Delhi.

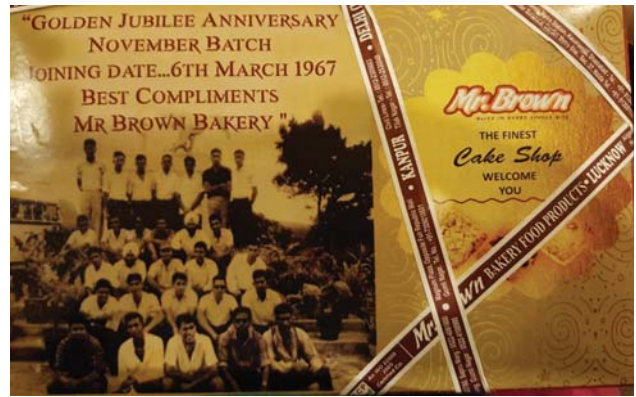
Mrs. Hema Chari made special efforts to cut short her stay in London to join us. Kalpana Gupta also joined us from abroad and SP Malik came all the way from Chicago. In addition, Ravi Kochhar & Neelam, SN Chopra & Leena, KK Jaiswal & Manju, CPS Wariach & Moppy, BK Gupta & Kunj, KB Khanna, Sarika & self, joined the group. Some of our colleagues could not join up due to last minute snags, ill health and or being abroad.

The weather at Neemrana was wonderful,

requiring light woollens in the evening. Days were pleasant and ideal for a walk around the resort. In view of certain restrictions, the elbow bending was organized in one of the suites, with a well-stocked cellar. On 6 March 2017, a visit was paid to the much talked about Neemrana Fort. The fort is representative of the old glory of the Rajas of Rajasthan and the architectural acumen of those days. It is now a tourist hotel. The road leading to the Fort, however, leaves much to be desired.

In the evening, after the customary elbow bending we had the cake cutting ceremony followed by a grand dinner. November batch has the distinction of the first three-star officer from Direct Entry Executive Officer batch. A proud accomplishment for the batch.

On the morning of 7<sup>th</sup> March, SP Malik surprised us with a box of cookies which had a 50 year



old photograph of the batch printed on it. After two lovely days, together and a hearty breakfast we set course for our respective destinations with pleasant memories of the past and the present, with a promise to have many more such get togethers. A Whats App group of the batch has also been formed which is helping us to keep in touch with each other.







## On Writing A Book – With A Deadline

Commodore Sanjay ‘Kris Tee’ Tewari (Retd)

It was sometime in July or August 1992, that the EXO, Cdr (now Commodore) VIS Bal, asked me to accompany him to the CO's office for a meeting of the Heads of Departments to discuss the forthcoming Golden Jubilee celebration of Valsura. This was unusual as I was not a HOD.

The CO, Cmde (now Rear Admiral) S Mohapatra, turned to me and asked, “Can you write the history of Valsura?” I had an idea that this was in the offing, so I responded that while I could, I would need material. In his typical way, he snapped that he would make the Ship's Book available and that I could interview some senior retired officers as well, before moving on to the next item on the agenda. Cmde Mohapatra and I went back a few years, when I as a certified prankster returned to Vikrant, for my full-fledged Competency Training, under his tutelage as Cdr (L). When I cleared the Board topping the ‘A’ streamers, and was considered competent, I was accorded the privilege of attending staff meetings in his cabin.

What was not clear was, whether it had to be an article in Valsura's magazine or a booklet to be given to visiting guests. However, I got down to work, reading through the Ship's Book which was interesting but didn't have enough material that could hold a casual reader's interest. I sought books from the library and read accounts of Valsura during the RIN days. I read up an account of HMS Collingwood, the RN's equivalent of Valsura and a couple of books on the Indian Army's establishments. Slowly, a structure began to form in my mind and I began collecting pieces from various books.

It was like assembling a car from components of older cars, refrigerators, sewing machines, boats and bikes, based on a hazy concept that existed only in my head.

Every night I would fill up sheets of paper with scribbled notes that would later be transcribed into digital form on a desktop in the computer lab. For the benefit of the current generation, that was the

era of PC, PC-XT and PC-AT (look up what those things were). There was no internet so I didn't have the benefit of Google. There was no MS-Word either. In those days, we used an older generation word processor called Wordstar. I had to store my precious notes on 5 1/4" floppy disks. Since terminals were at a premium, I had to make sure I had all my notes ready when I came to the computer lab.

Being an instructor, I had to take classes too, for which I needed to prepare in advance. The plethora of social and other functions in Valsura, invariably occupied most evenings. Besides as the Course Officer, the young officers who were under my charge, kept me on my toes with daily episodes of one or the other officer being spotted by the CO or EXO without a helmet on a bike, or moving around town when he ought to have been in class. In short, I had my hands full. At home, our toddler Vidur, demanded his full share of attention and inevitably, the only time available to study was after he had gone to bed. So, from ten every night till midnight, I prepared for the next day's lectures, and thereafter got down to researching and writing till two or three in the morning. I had to be up by six to take PT for the UT officers. It was tough going and initially I made little progress.

Towards the end of August, the CO told me to plan a trip to Jodhpur to meet (late) Rear Admiral BR Singh, PVSM, one of the earliest COs of Valsura and possibly the oldest Flag Officer of the Branch at that time. Thereafter, I was to visit Cmde Chatterjee in Delhi to collect material from him. This was welcome news for I needed more material, having exhausted all that was available locally. More than anything, I looked forward to a break from the grinding routine. I decided to take my wife Charu, and, our toddler Vidur, along. We had not visited Jodhpur and looked forward to the trip.

Adm BR Singh had very kindly arranged for us to stay in the Air Force Mess, which was near his house. He was well over 80 then and couldn't see too well, but he was sharp and crisp as could be expected from an Admiral of that era. Over the next two days he talked about the early days of the Electrical Branch, Valsura, life in Jamnagar, the Jamsaheb, life in the Service, on board ships

and so on. I found I didn't really know what to ask him, so I just let him speak, while I furiously scribbled notes in my diary. Mrs. BR Singh asked me to bring Charu and Vidur along. For those three days, Adm and Mrs. BR Singh looked after us like their own children. Seeing that we were going back and forth in autos, he generously gave me his son-in-law's scooter and suggested that we visit places in Jodhpur.

From Jodhpur, I went to Delhi where I met Cmde BC Chatterjee who gave me some more material from his tenure as CO. His material also gave me an insight into life in Valsura during the '71 war, which was particularly interesting given Valsura's location. In NHQ, I managed to obtain further material from the Naval History Cell.

I returned to Valsura, in the middle of September and while I had enough material, time was running out. I had plenty of work to do and I couldn't afford to miss a single day of writing. I was sleeping even less, frequently working till 0300 and occasionally till 0400. The routine was the same – classes and Course Officer duties during the day, evening functions, preparation for the next day's lectures, and writing at night. I would somehow squeeze time out between classes to punch in the hand-written material into a computer.

I was so exhausted, that one day while cycling to work, I nearly fell off my cycle. It was time to seek help for typing. That was when I experienced a new dimension of life on a small base. When I approached some of those whom I thought could help me, I received excuses. I hadn't realized that some of my contemporaries and even my seniors were actually jealous of me, as being Course Officer gave me a special status and the writing task assigned to me provided me direct access to the two most important people on the base, the CO and the EXO. Those who could help, pretended they were busy, while those who were sympathetic, were not in a position to help. Eventually, my friend PV Chalam came to my rescue and sent me two UT sailors who could type, albeit with plenty of mistakes. The rest I did myself.

As the pace and momentum picked up, interesting bits and pieces began to emerge – an old Navy Order, some long forgotten registers containing





trainees' marks, where I recognized names of some very senior officers with their marks underlined in red, old policy letters, photographs and other seemingly mundane things everyone had taken for granted. Letters from former officers and sailors arrived with interesting anecdotes. I worked feverishly trying to arrange things in a way that would make sense in a manuscript. Despite the challenges and the obstacles, things were falling in place and a story was beginning to take shape. I began to explore new ideas, and began to search actively for anything that could be woven into the story.

One day, one of Valsura's civilian employees walked into my office and asked me hesitantly, if I was writing the history of Valsura. He said that his uncle, who lived in Jamnagar, had been an overseer when Valsura was being constructed and if I wished, he could take me there. It was my eureka moment. Why had I not thought of interviewing civilian employees, many of whom had been there for over twenty-five years? Accompanied by this gentleman, I went to meet his uncle, Savjibhai, at his home. He was 84 years old and stone deaf, but he had a stack of old diaries dating back several years, written in neat Gujarati. Since he could not hear, he used a slate and chalk for those who wished to communicate with him. I would put the question to my civilian colleague in Hindi, who would write it in Gujarati on the slate. Savjibhai would read and reply in Gujarati, frequently referring to his diaries, which would in

turn be translated into Hindi for my benefit, while I scribbled away in English!

I also made several attempts to reach the then Jamsaheb, but was unable to do so.

It was already the 30th or 31st of October, and while the major portion of the book was complete, I needed to round it off and conclude it in a logical manner. Somehow, I could not think of anything suitable enough to give it a smooth ending. I didn't know the meaning of 'writer's block' at that time. The more I agonized over it, the less was the time remaining. I had already overshot two submission dates. The CO gave me a final date of 5th November 1992 to complete the manuscript and produce it to him for his reading. It was a Go / No Go situation. The book had to be released on 16th December, by the VIP, and needed to go through a due process before that. The orders were clear. If I could not produce it by the 5th, the idea of releasing the book would be dropped. The hour-glass was emptying rapidly!

There was no time for creativity. I told myself, keep it simple stupid! For the final chapter and to wind up the story logically, I decided to use an available description of the training facilities as they existed, the steps taken to build up and improve them, and, plans for the future. All that was needed was someone to type out the last ten pages. Once again, I found myself getting stonewalled. I had approached the same officer earlier and he had

refused help, so I had done the bulk of work on my own. I could have done it myself but I was by then mentally tired and physically weary.

Although I was loathe to crib, I had had quite enough. I marched into the CO's office and explained my predicament. He picked up the phone and snapped an order - I was to be given assistance immediately! A day later, having corrected it for spelling and grammatical mistakes, as best as I could, I handed over a printed copy to the CO in his office before he left for lunch. I walked out feeling light as a feather. But, I wasn't so sure how he would view my amateurish attempt at writing.

That day 'shramdaan' was organized in the afternoon, as the entire base was being prepped for the Golden Jubilee, and I too got busy there. What I didn't know was, that the CO was expected to visit there at 1715 and that he hadn't arrived. Later in the evening, the EXO rang to tell me that he had just returned from Valsura House where he had gone to enquire as the CO had not showed up for a series of appointments. Apparently, the CO had got completely engrossed reading the manuscript and had lost track of time. I was elated!

However, there was more work to be done. The book was sent for clearance to Southern Naval Command, while one copy was sent to a serving Electrical Flag Officer for his review. Around the 20th of November, it was sent to WESEE, Delhi, for printing through their network. I didn't have much of a respite as activities for the Golden Jubilee had picked up and everyone down to the junior-most trainee sailor was busy. Young officers were in great demand by each HOD, and I being the repository of this precious human resource, received calls through the day. Needless to say, I held on to the smarter ones for my own tasks.

It was on 02 December 92, while in the midst of a discussion on some task with young officers, my phone rang. It was the CO. "Can you leave for Delhi tonight? WESEE wants you there tomorrow morning, when they send the book for printing." It was already two in the afternoon and it would have been impossible to board a train without prior booking. So, I expressed my reservations. One of the bright young minds sitting across, promptly suggested that I check with the Air Force if there

was a courier flight. One of my instructors from Pune was posted there, so I quickly called him up. There was indeed a flight leaving the next morning for Chandigarh. I could get to Delhi by bus from Chandigarh.

That evening, the CO handed me a wad of money and a long list of items to be bought from Delhi. The list included all kinds of things from paper towels for the mess, to after dinner chocolates for the Mess Night, to cognac glasses. In addition, I was given samples of the memento, the mess night menu and a few other things to be presented to the CNS for approval. I was also clearly told that I was to bring the printed books back with me.

Later that evening, the wife of an officer from Delhi requested me to take a suitcase to Delhi for her father, as well! The next morning, I boarded the AN-12 at the Air Force base. The flight to Chandigarh and how I reached Delhi remain the subject of a separate story.

The following day, 04 Dec 92, I presented myself at the CNS's office to the NA, then Cmde Arun Prakash. Being Navy Day, NHQ had a 'Make and Mend', while the next day was Saturday and a holiday. I had to work extra fast. I called up WESEE to let them know where I was and immediately received a mouthful from that end. They had held on to the printer and were desperately looking for me. A vehicle was promptly dispatched to fetch me. Just as well, as I had no idea where WESEE was.

The crowd at WESEE didn't seem particularly impressed with my effort. "Haven't you checked it for spelling mistakes? Is this what you are going to present?", were some of the kinder remarks directed at me. I don't remember if I had lunch that day, but I finished late in the evening. The next morning, despite being a Saturday, I was back in WESEE for more formatting, editing, checking layouts, placing photographs etc. Towards the afternoon, the printer, an elderly gentleman named Mr Sharma, offered to drop me at my mother's place, where I was staying, as he was going in the same direction. While in the car, he mentioned that he would not be able to complete the printing and binding of the book before I left as he needed more time. I didn't how to react, so I just kept quiet.



I invited him home for a cup of tea and he got talking with my mother. It turned out that Sharmaji had once worked for my grandfather, whom he held in high regard. Once the connection was established, Sharmaji considered me his own lad. As he was leaving, he told my mother in Hindi, “Behenji, yeh toh hamara apan he ladka hai, Iska kaam ho jayega”.

The next day, Sunday, I went out shopping with my list. By the time I got back, all TV channels were belting out news of Babri Masjid. It was 06 Dec 1992. Curfew had been imposed in Old Delhi. I froze. That was where Sharmaji’s printing press was located. The next day, I asked him how things were progressing and he informed me that though many of his workers had not reported, he had started work on my book.

Meanwhile, the items I had ordered for the base began arriving. There were three large cartons filled with paper towels, napkins and other assorted things. I spoke to the EXO about the situation. I knew he wanted me to command the ceremonial guard for the Golden Jubilee so I assured him that I would do so with minimal practice once I got back. He was relieved to hear that as he would have had to re-assign that task, had I not been available. My train ticket was booked for the 9th (Wednesday) evening.

As the train was from Old Delhi station which was a considerable distance away, I had planned to leave home by 7.30 in the evening. Sharmaji had promised to deliver the books by 3 in the afternoon, which was fine. At 3.30 PM, I called him up and he told me that they would reach me in an hour. An hour later there was no sign of the books. But there was still plenty of time, so I didn’t worry. At 5.30, Sharmaji called up to say that his boy was on the way with the books. I estimated, he would take an hour. But another hour passed and no books. Things were beginning to look ominous.

7.00 PM and no sign of the books. I began to sweat, though I refused to show my anxiety to Mum. 7.15 and my taxi arrived, with no sign of the books. I asked the driver to load my other luggage which was considerable. I called up Sharmaji, but all he could tell me was that the man should be reaching shortly. 7.30 PM and nothing. I ignored the cabby’s grumbling and resolved to wait another

15 minutes. Ten minutes later the door-bell rang. It was the boy with three cartons of books, just in time. I press-ganged his services to accompany me to the station, promising him auto fare home. We somehow shoe-horned everything into the taxi. The boot, roof carrier and the rear seat of the Ambassador taxi were completely taken up with packages, while we sat in front with the driver holding my shopping.

There were police blocks at several places along the way. I bullied, cajoled and sweet-talked my way through any and all questions that the Delhi Police, GRP, Railway Inspectors and anyone else put to me seeing the mountain of luggage that I was carrying. I booked the cartons into the brake van, but decided to keep one carton of books with me in the compartment. As we reached the first-class compartment, the heavy carton of books slipped from the coolie’s grip, fell and burst open and newly bound books spilled out. My Mum had thoughtfully given me a ball of sturdy cotton tape, which was used to truss up the offending carton and thus saved the day.

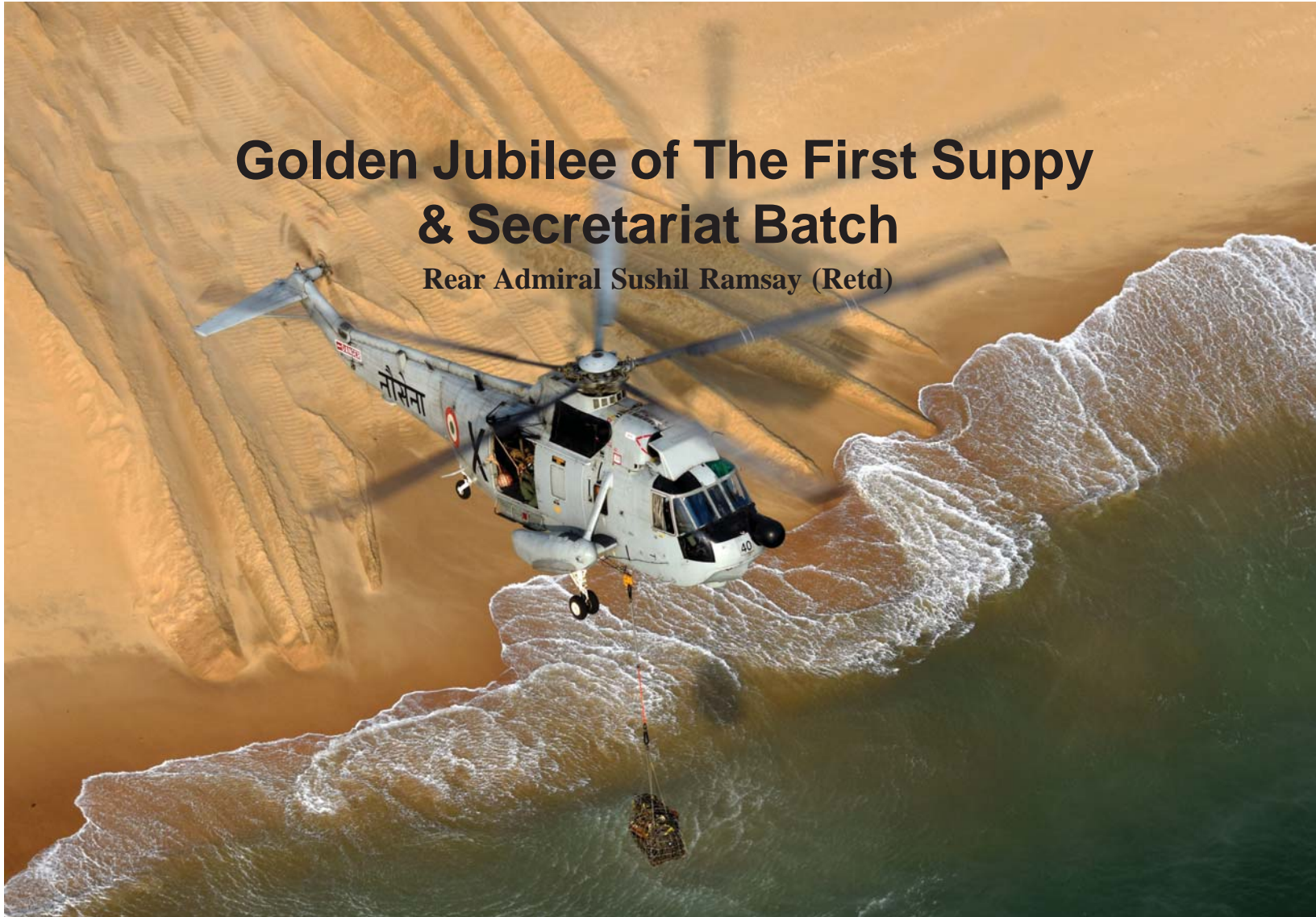
I fell asleep almost immediately as the train pulled out of Old Delhi station. I had achieved all that I had set out to do. I had completed a massive solo effort against several odds. The books were ready, but it had been that close. I was going home. I was now officially a writer.

Looking back, a quarter of a century later, the faith Adm Mohapatra had reposed in me was a lesson in leadership, for it is only when a leader allows subordinates the freedom to work and exercise their judgement, that they grow and deliver. Surely he had moments of doubt in his mind, but he never let them show. Sadly, I never saw Adm BR Singh again, as he couldn’t make it for the final day, being unwell. He passed away in Jodhpur, a few years later. I helped Mrs BR Singh get her dues. It was the least I could do.

It was also, the tacit support by Cmde Bal, then EXO, the encouragement by my peer group who though unable to help, wished me well, and, the trainee officers / sailors and civilians who helped in their own ways, and finally the promise delivered by Sharmaji, whether due to the ‘pandit’ connection or otherwise, that made this project possible.

# Golden Jubilee of The First Supply & Secretariat Batch

Rear Admiral Sushil Ramsay (Retd)



The Induction of Direct Entry, Short Service Commissioned Officers in the erstwhile Supply and Secretariat Branch was suspended after 1963. The first batch of Direct Entry, Short Service Commissioned officers comprising eight officers was inducted after a gap of four years and designated the 1st S&S/67 with commissioning date of 30 October, 1967.

Six veterans along with their spouses and the wife of our colleague, the late Commodore Trilochan Misra decided to celebrate the golden jubilee of our commission on a grand scale on 30 October, 2017 at INS Hamla. Several options for the venue were considered before finally deciding on our Alma Mater to congregate and recreate the moments that heralded our naval career. We are truly grateful to Vice Admiral Anil Chawla, AVSM, NM, VSM, Chief of Personnel, Vice Admiral Sunil Anand, NM, Controller of Logistics, Commodore Vinay Kumar, Commanding Officer, INS Hamla and his very efficient and able team, who gave

their wholehearted support in making our event worth remembering. Throughout our stay, enormous honour and affection was lavished upon us. We settled down to recall the nostalgic moments of the golden era on 29 October, 2017. The ball of fun and frolic truly started to roll. We were fully supported by our spouses to indulge in the extravagant revelry.

The D-Day turned out to be way beyond our expectations and imagination. We were the honoured guests at the Commodore's Divisions in No. 2s, which was held on a Monday instead of Friday, as per regular routine. The Commanding Officer was gracious to acknowledge our presence in the full view of the Ship's Company. In our reckoning it was an unparalleled and unique honour bestowed on us. Our desire to recreate a class room scene was entirely fulfilled when Captain Neeraj Malhotra, the Training Captain gave a presentation on the evolving innovations in training methods, techniques and technology aided







training aids. The interactive session was enlightening and a revelation to us. It made us proud to witness the upwardly growth trajectory of our Alma Mater towards excellence. An interaction with the officers undergoing Long Logistics & Management Course (LL&MC) was an enriching experience. The professional pride was written large on their faces as they presented to us a report on their assigned project work. For us it was a matter of great pride when Commander V Joshua, a pioneer of computerisation in the Naval Pay Office shared his domain expertise with the future Lgisticians of the Indian Navy.

Thereafter, we were very warmly received by Commodore Vinay Kumar, Commanding Officer in his magnificent office. We were deeply touched and were overwhelmed by the kind courtesies, respect and regards bestowed upon us during our interaction. He gave us his perspective on the plans and projects in the pipeline.

The next event, walk around Hamla with our ladies was most fascinating. Every one of us were mesmerised with innovative methods used to improve various facilities, infrastructure, services, etc. The biggest draw was the Naval Institute of Catering Technology and Hospitality Management which has transformed over the years with the induction of latest gadgets, equipment, technology and culinary practices. The Domestic Branch Sailors (old Royal Navy nomenclature) are today an empowered and transformed lot well in sync with the emerging technologies in their respective domains.

The interaction with young officers undergoing Sub

Lieutenants Logistics Course and those undergoing LL&MC at the pre-lunch drinks was delightful because this reminded us of our times in Hamla and provided us with an opportunity to interact with large number of officers from foreign navies, Coast Guard and BSF. All of them very fondly and frankly shared their experiences at Hamla.

The last serial of the Golden Day was the Dinner hosted by the Commanding Officer, Staff Officers and their Ladies. The hospitality was extended with such grace and élan that it touched our hearts. Hamla Band played some scintillating music and the lavish spread was in perfect unison with the traditional excellence of Hamla. The revelry ended with wee-bit of singing along with the crooner of Hamla Band who performed to our utmost delight.

Hearty breakfast on the final day set the tone for winding down joyously with boisterous exuberance in a typical laid-back fashion. The extensive de-brief was indulged in with esprit de corps by exchanging thoughts and ideas on the way-ahead for such reunions in the future. The response was so enthusiastic that the parleys stretched well into the pre-lunch drinks session, which helped in crystallizing the future course. No one was willing to let go of those nostalgic moments, deeply etched in our hearts and mind. The staggered departure post lunch turned out to be nostalgic recreating the scenes of Bidai and au revoir with hugs, sing-song as we bade emotional farewells to each other. We said *Dasvidania* to each other, a traditional Russian goodbye, which literally means “long, until we meet again” and *Alvidaa!*



# KISMET!

## Commander Prakash Swani (Retd)

I am now past eighty years of age. Some events in my life and in particular my escape from death threatening accidents and a career pattern guided by unknown forces is perhaps worth passing on. So here it goes.

### Death threatening accidents

The first accident that I recall happened in Dehradun sometime in 1944 towards the fag end of World War II. About nine years old, I was riding my bicycle like mad, when I found myself knocked cold by an Army truck that had hit me on my side at an intersection. Thanks to the sharp reaction of the driver who stopped his vehicle in time, I came out unscathed but dazed. The story did not end there. A British officer stepped out of the truck, who first checked me carefully for any tell tale sign of serious injury, followed by a sound scolding and finally escorting me safely back home (Luckily for me my parents were not at home, otherwise there would have been hell to play). Full kudos to the British officer for his actions.

Some two decades later, unmindful of a warning notice at the swimming pool (Navy pool in Colaba Mumbai), that read *owing to maintenance work in progress water has been drained out*, (being twilight I did not observe the warning) I dived in from the deep end. My forehead hit the bottom of the pool with a severe thud and I blacked out. Bleeding profusely, I was rushed to Asvini our Naval hospital. The injury turned out to be only a deep cut visible even today. It was my good fortune that there was a little water above the flooring that acted as a cushion on impact.

And finally a third accident that few would survive to tell the story. It happened in the mid-90s when I was in the merchant navy. I was boarding a tug alongside the jetty at Sharjah (UAE). As the separation between the jetty and the tug was relatively small, about 3-4 feet, a narrow wooden plank without side rails, (instead of the standard gangway with rails), had been placed between the jetty and the tug for boarding. Two of us were

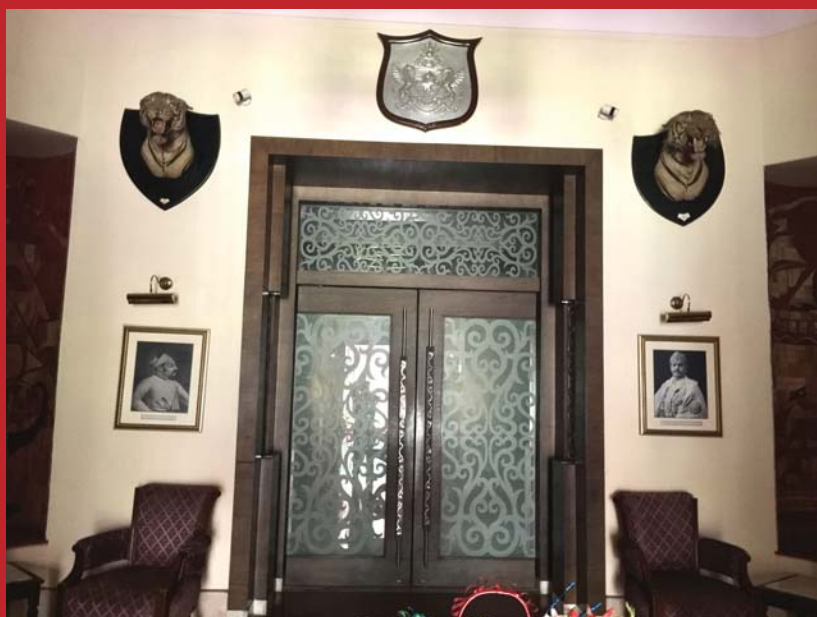
boarding together with the other person ahead of me. As that person was disembarking onto the tug and had just got off from the narrow wooden plank, it tilted forward at a steep angle and I was thrown into the sea. Miraculously I neither scrapped against the iron piles of the jetty nor the steel projections on the sides of the tug. Also being a good swimmer I was able to remain afloat while rescue was arranged.

Was it my destiny or sheer luck that I survived these death threatening accidents. Perhaps one or both I would never know.

### My Career Path

As for above, I likewise had a career path, that seemed to be controlled by some unforeseen hand or power. Let me explain. I left the Indian Navy prematurely in 1979 in the rank of Commander to seek a career in the merchant fleet. Those days were good for naval officers seeking greener pastures into the maritime world. And generally most of us went to the nationally owned Shipping Corporation of India (SCI) based in Mumbai. To my consternation I found that unlike my colleagues who all went to cargo ships (or freighters as they were called then) as Captains (Master of the vessel in merchant navy terminology), I was to go into the bulk oil tanker trade as a Chief Mate (one rank below Captain). Little was I to know that this decision by the powers-to-be would have far reaching positive consequences for me. Job openings for tanker experienced officers in those days were world-wide. Subsequently, after some years in the SCI, where I mostly commanded (after my short spell as Chief Officer) oil tankers, I was able to get into foreign oil tanker operating merchant run companies. And finally, based on my oil tanker experience, to work as a marine surveyor in the US, after I migrated there in 1999.

Perhaps I could end this conversation with a quote from a famous retired General "Providence guides one's destiny on its own way".



# Thank you Maharao Sahib !

**Commander Arun Saigal (Retd)**

Naval Officers Mess Annexe (NOMA) located in Kota House in the heart of Lutyens Delhi has been one of my favourite watering holes for over a quarter of a century now. It is the wardroom where old sea dogs like me find a safe harbour to nip-into for a quick beer enroute to INS India Canteen or CP. On Friday afternoons it's the place to visit, to meet old friends, to recall the good ole' days and to generally exchange gossip. Many of my non-navy friends have often praised its bespoke ambience, its bar and dining facilities and the well-laid party rooms. They are forever fishing for invitations. The impressive Kota Foyer and the displayed priceless wildlife trophies add to the heritage look of this iconic mess and therein hangs a tale. To quote RV Smith from his article in The Hindu two years ago, "Every palace built by the Princely States in Delhi has a riveting past."

Kota House was built as a residential palace in 1938 by Maharao Umed Singh II. Its architects were Sathe Buta & Co, a firm from Bombay. History tells me that Edwin Lutyens conceptualised and planned the city in a grand

manner with the Viceroy's House atop Raisina Hill, commanding a most beautiful central vista. Modern day Rajpath (erstwhile Kingsway) and Janpath (formerly Queensway) connect Rashtrapati Bhavan (Viceroy's House) and Connaught Place via India Gate amongst rich swathes of greenery – trees, lawns and ponds.

Kota House situated on one of the radials (Shah Jahan Road) leading to India Gate was acquired by the Government of India during the Second World War from Maharao Bhima Singh II for use as a base hospital for the military. At the end of the war, the building was returned to the state of Kota. With the subsequent merger of the princely states in 1948 with the Indian Union, the building came under the control of the state of Rajputana. At the time of India's Independence and till the privy purses and titles were abolished in 1972, the ruler of Kota was entitled to a hereditary salute of 17 Guns and a personal Salutes of 19 Guns. Maharao Brijraj Singh was the only one from the Kota family to have lived in three rooms reserved for the Maharao while he was a student in St Stephens College, Delhi University during 1951-56.



In 1961 Kota House was once again acquired by the Ministry of Works, Housing and Development on behalf of the Government of India at a cost of Rs. 12,77,700/- from the State Government of Rajasthan. In November 1962, the ownership of the iconic building once again changed when it was handed over to the Ministry of Defence and converted into an Armed Forces Hostel. Over two decades later in October 1983, the Indian Army handed over the building to the Indian Navy and Kota House became the first Naval Officers' Mess to be established in New Delhi. After the construction of the Varuna Naval Officers Mess on the road to Palam Airport, Kota House was renovated and renamed as Naval Officers' Mess Annexe (NOMA).

In 1999 when I was the Honorary Secretary of the Delhi Charter of the Navy Foundation, it was allotted an office in one of the rooms of a condemned building in the outer periphery of Kota House. It was then that I discovered that the navy wanted to make NOMA into a place which naval officers in Delhi would be proud to call 'home'. One day over a cup of coffee with the Principal Project Director, Commodore Deepak Taneja, I gladly offered to give a helping hand. Having joined Mayo College, Ajmer in 1956, I was familiar with the rich history and heritage of erstwhile Rajputana. I had heard a lot about Brijraj Singhji, a true blue-blood royal, polished, suave gentle and well-read Maharao of Kota. But as a matter of habit I wanted to learn a little more about him and his personality before approaching him to help in the Kota House restoration project. During my research I discovered that Brijraj Singh Bahadur, the 20th Maharao of Kotah, born 21 Feb 1934 had been a popular and accomplished person. An alumnus of Mayo College, he became a Member of Parliament at the young age of 28. He was elected to the Lok Sabha from Jhalawar for three terms (1962-67, 1967- 70 and 1971-1977). Whilst in Parliament he was an active member of the prestigious Consultative Committees on Defence, Civil Aviation and Atomic Energy. He had an abiding interest in wildlife conservation although he was an excellent shooter, winning many championships. When I chanced upon his letter of Jan 1972 to Admiral Nanda praising the Indian Navy for its historic 1971 operations I was sure that he had a soft corner for the Navy! It emboldened me and I decided to approach him through my classmate Abhimanyu



Singh who knew him well. I was pleasantly surprised by the Maharao's prompt and positive response. I was informed that though CNS Adm Madhvendra Singh had once spoken to him about gifting some items for display in a Kotah Room in Kota House, no follow-up discussion by the architect had taken place.

I finally met the Maharao face-to-face in Aug 2003 at the Annual Mayo College Alumni dinner at the Maurya Hotel, Delhi. We talked about the grandeur of the iconic Kota House building and how the renovation would not only enhance its beauty and charm but would help in preserving the legacy of Kotah. He gladly accepted my invitation to visit Kota House. On the appointed day, a couple of well-dressed old farashes were on hand to greet him at the Kota House gate. After brief introductions, the Principal Project Director, the Mess Secretary and I escorted him around Kota House. He was explained that the 'renaissance' plans were first conceived in 2001. A flood of emotions seem to run through the Maharao's mind when he entered his old room (now the Jodhpur Suite) where he had once lived as a college Student. His memory was clear and sharp. He was able to point out the changes that had been

affected over the years. He made notes and sketches in his diary and told us he would revert to us with some ideas about wildlife trophies and memorabilia from his collection which he would donate to enhance the grandeur and romanticism of the entire Kota House and not just the proposed Kota Room. We were elated. Matters moved forward slowly but surely thereafter. The Principal Project Director sent him information on layouts, sizes of rooms, lobbies etc. to help the Maharao make his plans. He kept e-mailing me for additional information and clarifications. It was obvious that meticulous plans were being made by Maharao.

On 29 Apr 2004 the Maharao once again visited Kota House to share his vision. He was received by RAdm Rajender Singh, Assistant Chief of Personnel (P&C). By that time a decision had been taken to create and name the main ground floor central lobby as the Kota Foyer and he was so informed by the Admiral. He was told that the suites would bear the names of the famous princely Rajput states. The Maharao shared his ideas which were appreciated and concurred in their entirety. The minutes of that meeting were recorded by me. On return home, the Maharao, wrote about his visit to his friend CNS Adm Madhvendra Singh and honoured me by naming me his 'trusted colleague in this venture!'

After the Maharao's visit things moved quickly. In mid-May 2004 the Principal Project Director, NOMA Restoration Project, Kota House was gifted eight invaluable large size wildlife trophies which were duly transferred to the Navy under the Wildlife Act. These comprised 2 each Tiger, Panther, Sambhar and Cheetal heads for display on the walls in the manner suggested by the Maharao. Detailed instructions on how they were to be installed and maintained were shared by him. Also donated by him for display in the Kotah Foyer were some rare photographs, state flags, dresses worn by soldiers of the state and the beautifully made coat of arms of the erstwhile Kotah State. The 'restoration' of Kota House was completed on 26 May 2004. A brass plaque at the entrance porch bears testimony to this fact and records that CNS Adm Madhvendra Singh was 'at the helm' of the Navy at that time.

In Oct 2004, when the then CNS Adm Arun



Prakash came to know about the generous contributions made by the Maharao of Kotah he directed the President of the Mess Committee (PMC) to invite the Maharao and Maharani Sahiba to spend an evening at the restored Kota House. They were escorted on a tour of Kota House and formally thanked by the Navy for their gracious and noble gesture. My wife and I were honoured to also be invited to that evening's cocktails.

The Naval Officers Mess Annexe Kota House remains a much sought-after place in Lutyens Delhi. Its charm, ambience and décor have only increased over the years. Thank you Maharao Sahib. You and your family will always be welcome to Kota House whenever you have time from your philanthropic and selfless activities for the betterment of the people of Kotah and when you can take time off from chairing the Governing Council of Mayo College, Ajmer.

*(It only remains for me to add a post script that the correct spelling of Kotah is the one which ends with an 'H' but the Mess also follows the Postal and Railway spelling of Kota, that is why the dual spelling used by me in this article).*



# **Rat o! Rat o! Rat o! (Anagram of Tora! Tora! Tora!)**

## **An Untold Story on GODSAL**

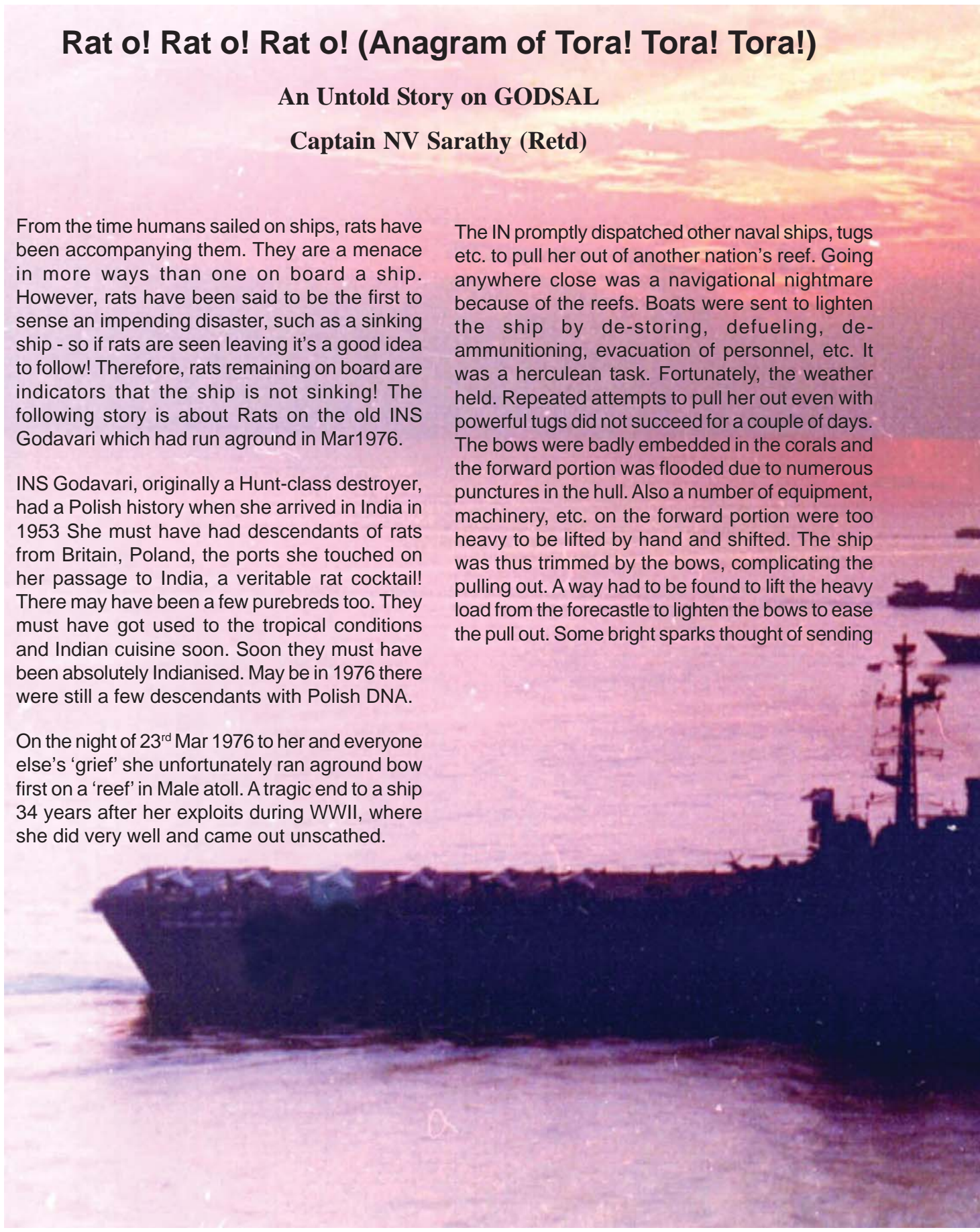
**Captain NV Sarathy (Retd)**

From the time humans sailed on ships, rats have been accompanying them. They are a menace in more ways than one on board a ship. However, rats have been said to be the first to sense an impending disaster, such as a sinking ship - so if rats are seen leaving it's a good idea to follow! Therefore, rats remaining on board are indicators that the ship is not sinking! The following story is about Rats on the old INS Godavari which had run aground in Mar 1976.

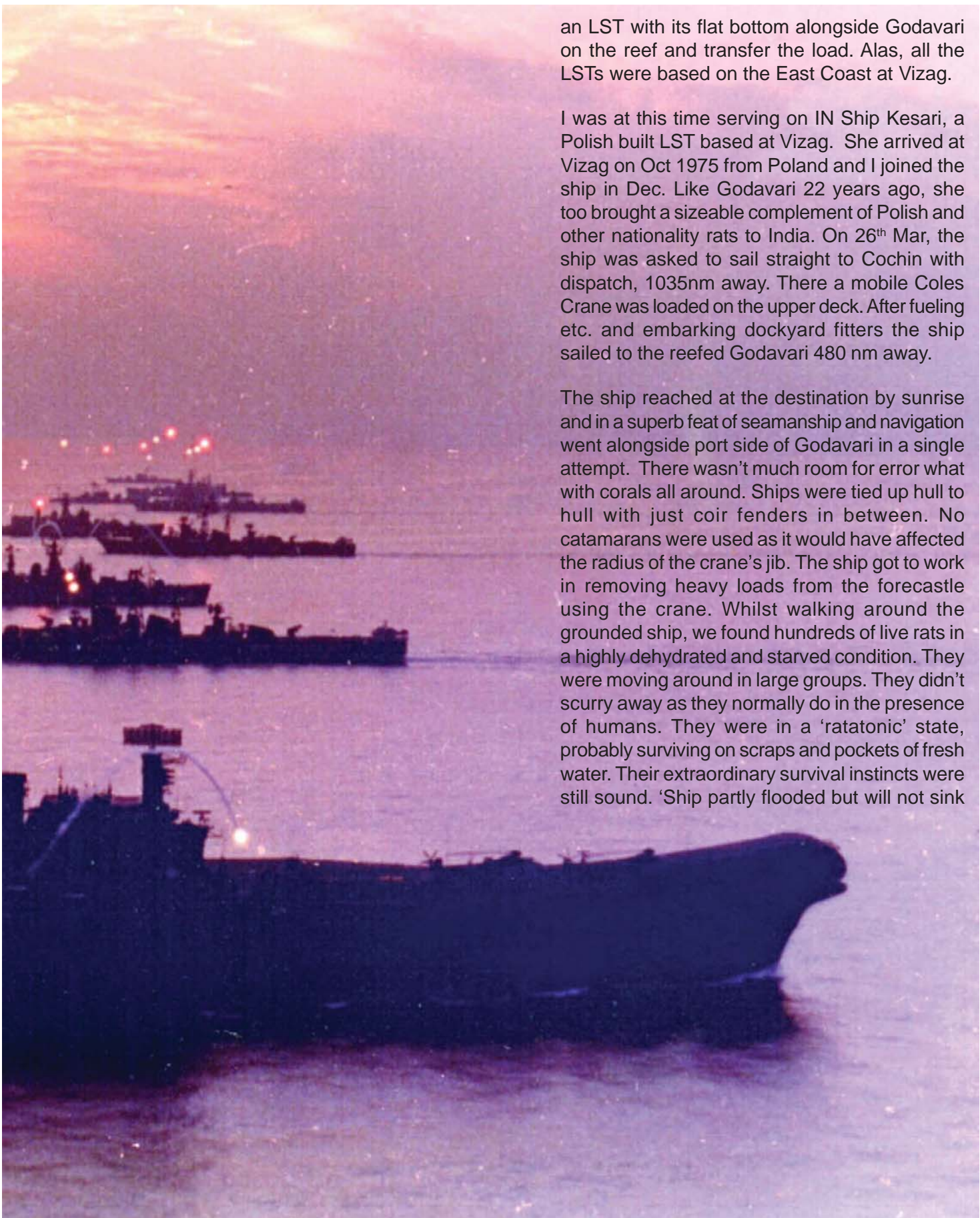
INS Godavari, originally a Hunt-class destroyer, had a Polish history when she arrived in India in 1953. She must have had descendants of rats from Britain, Poland, the ports she touched on her passage to India, a veritable rat cocktail! There may have been a few purebreds too. They must have got used to the tropical conditions and Indian cuisine soon. Soon they must have been absolutely Indianised. May be in 1976 there were still a few descendants with Polish DNA.

On the night of 23<sup>rd</sup> Mar 1976 to her and everyone else's 'grief' she unfortunately ran aground bow first on a 'reef' in Male atoll. A tragic end to a ship 34 years after her exploits during WWII, where she did very well and came out unscathed.

The IN promptly dispatched other naval ships, tugs etc. to pull her out of another nation's reef. Going anywhere close was a navigational nightmare because of the reefs. Boats were sent to lighten the ship by de-storing, defueling, de-ammunitioning, evacuation of personnel, etc. It was a herculean task. Fortunately, the weather held. Repeated attempts to pull her out even with powerful tugs did not succeed for a couple of days. The bows were badly embedded in the corals and the forward portion was flooded due to numerous punctures in the hull. Also a number of equipment, machinery, etc. on the forward portion were too heavy to be lifted by hand and shifted. The ship was thus trimmed by the bows, complicating the pulling out. A way had to be found to lift the heavy load from the forecastle to lighten the bows to ease the pull out. Some bright sparks thought of sending







an LST with its flat bottom alongside Godavari on the reef and transfer the load. Alas, all the LSTs were based on the East Coast at Vizag.

I was at this time serving on IN Ship Kesari, a Polish built LST based at Vizag. She arrived at Vizag on Oct 1975 from Poland and I joined the ship in Dec. Like Godavari 22 years ago, she too brought a sizeable complement of Polish and other nationality rats to India. On 26<sup>th</sup> Mar, the ship was asked to sail straight to Cochin with dispatch, 1035nm away. There a mobile Coles Crane was loaded on the upper deck. After fueling etc. and embarking dockyard fitters the ship sailed to the reefed Godavari 480 nm away.

The ship reached at the destination by sunrise and in a superb feat of seamanship and navigation went alongside port side of Godavari in a single attempt. There wasn't much room for error what with corals all around. Ships were tied up hull to hull with just coir fenders in between. No catamarans were used as it would have affected the radius of the crane's jib. The ship got to work in removing heavy loads from the forecastle using the crane. Whilst walking around the grounded ship, we found hundreds of live rats in a highly dehydrated and starved condition. They were moving around in large groups. They didn't scurry away as they normally do in the presence of humans. They were in a 'ratatonic' state, probably surviving on scraps and pockets of fresh water. Their extraordinary survival instincts were still sound. 'Ship partly flooded but will not sink





and therefore carry on surviving'. None of them ventured on to the upper deck as it was extremely hot.

An hour before sunset the decks were cooler and we could see a mass movement of rats from different part of Godavari towards Kesari. It was Tora! Tora! Tora! We were 'rat-tled' watching this 'Exodus'. No 'Moses' was leading them. The rats were relying entirely on their 'Noses' when they smelt food and fresh water close by. Amazing survival instincts.

Kesari swung into 'Action Stations' 'Condition Z'. All port holes and hatches were closed. Instead of manning weapons, the stbd side was manned to prevent 'G' rats entering Kesari. It was like repelling boarders from pirate ships. The unloading operation went on through the night and so was repelling of boarders. In spite of such vigil, quite a number of determined 'G' rats jumped across to

join their brethren during the night hours on board Kesari. Godavari's loss was Kesari's gain. I guess after an initial 'who the hell are these scrawny looking guys' discussions within the 'K' rat's panchayat; the 'G' rats must have been accepted on board. The Polish rats on board may have rekindled memories of Poland in Polish descendants ex Godavari. Some sort of 'Milan' of long lost families? Remember the movie Ratatouille!

By next noon Kesari had unloaded whatever was needed to lighten the forecandle and cast off. Thereafter the divers plugged as many leaks as possible. The pulling out ops commenced and after a couple of attempts by two huge tugs in tandem, Godavari was literally wrenched out of the reef to everyone's relief. Once afloat, the other major leaks were repaired to the maximum. Godavari with a skeleton crew on board was towed back to Cochin stern first.



Kesari returned to Cochin and then to Vizag via Madras enroute. The whole trip was an Ra (t) zzmatazz where a naval vessel built in Poland 'pulling the chestnuts out of the fire' of another aged ex Polish naval vessel couple of decades later. She probably enabled the reunion of (Polish) Country Cousins.

*Ps: For the movie, Tora was an acronym for (to)tsugeki (ra)igeki "lightning attack".*

# A Victory Song

**Samatha Mookherjee**

A solemn pledge to protect, to sacrifice, show courage under fire,  
To serve the nation with honour, is every citizen's desire,  
Men and women in white, lead from the front, they always inspire,  
Fulfilling their duty, beyond their limits, never do they tire.

I often think about such leadership in ordinary life,  
The meaning of such exalted words for a naval wife,  
Is it that some are privileged to experience the blaze of glory?  
While daily toil and domestic duties remains an untold story.

Raising families, care for homes, many a challenges, never too easy,  
Sometimes a career in the industry, making us ever too busy,  
Yet being there for relations and friends, completing all the chores,  
While our brave sailors sail the seas, and protect our extensive shores.

Women make it a priority to serve the community in any way,  
Making a difference with our diverse skills, inspiring people with what we say,  
Simple acts of honest intent, of true character, smiling yet being stoic,  
Raises an ordinary life from the mundane, to becoming truly heroic.

Leadership is not merely status or position, but is about how people act,  
Every citizen or person can have the privilege, and that is the simple fact,  
There emerges a deeper meaning, that leaders we are all,  
In our own ways being of service, answering to a higher call.

And now it is so clear, a path so straight, easy to see,  
That to do our duty, with honour and courage, is the way to be,  
Driven by passion, to make a difference in some way, is really the key,  
A life of purpose, of good intent, is the meaning of leadership for me.

*Samantha Mookherjee is Coordinator NWWA, Kochi*







# Indigenisation









The Indian Navy started working on Project 16 (INS Godavari) in mid-1970s, around the same time, the Army began work on its Main Battle Tank Arjun and the Air Force on its Light Combat Aircraft. INS Godavari was commissioned in 1983 and decommissioned on 23rd December 2015, after rendering thirty two years of glorious service to the Navy and the nation. While there is no denying that the Navy's ships could and should be built faster, the navy's record stands in stark contrast to that of its sister services. MBT Arjun and LCA Tejas are just entering service after nearly forty years and facing teething problems during induction. INS Godavari has been retired after thirty two years of fruitful service.

What were the reasons behind the relatively better performance of the Navy in indigenization? The Indian Navy had capable technical personnel, but so did the Army and Air Force. A careful and dispassionate analysis will show that policy decisions and approaches, which the top brass of the navy and the Ministry of Defence wisely took in the early years, had paid handsome dividends. The leadership of Admirals Nanda, Dayasagar, Samson, Kohli, Barboza and Secretaries MM Sen and HC Sarin were visionary and far reaching.

The three main contributors to Navy's success were:

- (a) A modest, relatively risk-free and incremental approach to product development and development of capability as opposed to more tempting and risky 'leapfrog' strategy, which tries to match the best in class in one go.
- (b) The decision to retain the Design organization within the Navy and at Naval Headquarters in close proximity to the staff branches facilitated continuous dialogue between users and product developers.
- (c) Perceptive and mature leadership at senior levels of the Navy in investing and developing human resources for design and development, with a long term commitment to a 'Builder's Navy.'

Let us analyze at how each of these elements contributed to the development of naval capability.

## Approaches to Indigenisation

Captain NS Mohan Ram (Retd)



### De-Risked Incremental Strategy.

Construction of major warships started with INS Nilgiri, built at Mazagon Docks with British assistance. The first Leander class frigate, INS Nilgiri followed substantially the RN wide beam Leander class frigates, save for modifications to flying arrangements to suit HAL Alouette Mark 3. A major indigenous element was the crucial Air





Conditioning System developed along with Voltas, a Bombay based air conditioning firm. The second of the class, Himgiri, changed its radar and fire control to Dutch Signaal systems, already in use in the Dutch versions of Leanders. The changeover was assisted by Ms Nevesbu the Dutch design bureau, which did the installation for the Royal Netherlands Navy. The main bull gear was changed to German Maag gear from the UK

supplier and was subsequently manufactured in India by Walchandnagar industries. The fifth and sixth ship extended and strengthened the helicopter deck to operate Sea King Helicopters. By then, the designs had diverged from RN considerably. The changes were stepwise and carefully calibrated.

INS Godavari was the first major warship



conceived, designed and built in India. It was a huge step forward for our Navy. The Navy sensibly de-risked the process to the extent possible. The design philosophy of INS Godavari demonstrated abundant caution in containing radical changes and retaining successful elements from past practice.

A warship essentially comprises three elements namely hull and hull systems, propulsion and auxiliaries and weapons and control. Different approaches were followed for each of these elements in INS Godavari.

Godavari's hull and hull systems though designed anew, substantially followed Nilgiris class frigate's practices. There were of course innovations in the design such as an off-center bulkhead in hangars for Sea King helicopters, with the wider hangar earmarked for regular maintenance and the other for parking a helicopter only. The hull form was derived from the Nilgiri class with suitable changes. The work was original but did not involve radical departures. The layouts were however ingenious ensuring that the experience in design and construction of six Nilgiri class ships were leveraged and conserved.

Thanks to (my) serendipitous discovery that the bigger ship could achieve the stipulated extra knot of speed with the identical steam turbine plant as the Giris, the propulsion and auxiliaries were retained as in Nilgiri class. The Marine Engineering Fraternity of the Navy were initially concerned that the Navy had not moved to gas turbines (with their

quick start capability) but were overruled. This single factor saved huge design and development effort. Equipment developed with huge cost and effort for the Nilgiri class frigates could be used, saving scarce foreign exchange. The relative position of boilers, turbines and auxiliaries were retained as in Nilgiri class which facilitated construction at MDL by experienced builders. It was a case of brilliant de-risking.

In the Electrical and Weapons area, underwater weapons were the same to start with except for the path-breaking APSOH Sonar. Surface weapons and sensors were of Soviet origin and were integrated in to the design with Soviet help. This was not easy, as the ship had to operate two distinct set of power supplies with attendant problems- a basic 440V- 60 Hz power supply but had to provide 380V- 50 Hz supply for Soviet Equipment. This was done by the unorthodox provision of 300 KW Motor Alternators for Soviet systems. The end result was a unique ship with Soviet and western weapons in one hull, which met staff requirements substantially.

### Later Ships

In the next INS Delhi class, the navy introduced Soviet gas turbine propulsion for the first time in a much larger hull. Then the Navy went over to US turbines, stealth design, new weapons and sophisticated electronic warfare and other systems. By incremental progress, today's naval ships have reached relative modernity without undue risks. Calibrated risk and continuous improvement have been the watchword.

### Keeping Design within the Navy

Unlike the Air Force and the Army which farmed out design and development work to DRDO, the naval design set up stayed in Delhi under the control of the Navy. It was developed as a cross-functional set-up manned by officers and civilians of different disciplines. The proximity to the staff branches ensured constant dialogue between user and designers. Without frequent interchange of ideas, silos





tend to develop which inhibit free communication and often tends to end up in blame games. It is interesting that the Royal Navy and the US Navy which outsourced design of ships to civilian shipyards, are beginning to have second thoughts and are gradually bringing back design and development within their fold.

### **Human Resource Development**

The Navy had been training its officers in the Royal Navy in advanced disciplines from the early 1950s, much before there was any thought of indigenous design. A major step was taken in 1957 by setting up a Corps of Naval Constructors (naval architects). The corps which started in a small way with just eighteen officers, today has over three hundred officers. The earlier batches were trained in UK with the Royal Navy. Later batches were also trained in Soviet Union. An officer was deputed to work with the Royal Navy design offices under the aegis of the Leander project and came back to play a key role in the early development of design capability. (No prizes for guessing who it was!)

Mazagon Docks personnel, many on deputation from the Navy, were trained with the UK Shipbuilders Vickers and Yarrow and provided the backbone for construction expertise. Hands-on

experience acquired during standing by construction of ships in UK proved invaluable in the long run. This prescient investment in technical training has paid handsome dividends. Today the Navy has capable hull, engineering, electrical and weapon system ship designers. The results are there for all to see.

### **Way Ahead.**

The next step for the Navy and the nation has to be production of weapons systems in India under license initially and eventually to acquire capability for development later. This can be a part of 'Make In India' initiative. Ship construction has to be speeded up. Calibrated involvement of private sector, without weakening the capable defence PSUs and Cochin Shipyard is required to increase capacity.

A tortoise which followed the path of incrementalism and gradual development arguably won the race against hares which opted for leapfrogging. A strategy of low-risk incrementalism, in-house design and patient investment in human resources has paid handsome dividends to our Navy. One hopes that the Navy will advance further by developing indigenous capability for weapon systems in the future in close collaboration with industry.



# VISIT TO MY VILLAGE – SPRING

Commodore SC Dewan (Retd)

Sitting in Balcony, basking in sun  
Benevolent weather, shining sun  
More people in open walking and jogging  
Children and toddlers laughing and playing

Bye Bye winter, welcome Spring,  
Season of 'Vasant', happiness it brings,  
New flowers in parks present visual treat  
Sense of celebrations merciful upbeat

Wrong time to sit there and grin  
Move with others to enjoy spring  
Best place would be to visit fields  
Love, passion, emotion, benign smile they yield

Weal or woe I must go  
Wind and weather permit me to go  
Time and space permit me to go  
Domestic commitments allow me to go

Away from daily media exposes  
High pitched news with frill and flancer  
Look for enjoying small pleasures of life  
Peaceful environs and pleasant time

Can I resist  
How can I resist  
I have no reasons to resist  
Decide not to resist

Clothes hardly matter  
Collect a few and rest would share  
Sun high in sky I make my way  
Buoyed with enthusiasm in no less way

Leaving of Delhi was divine  
Fresh am and opulent sunshine  
Nature's blessings well define  
Dreamt as I was on cloud nine

Breathing lighter and lighter  
Green fields looked brighter  
Eye heaviness gone  
Coughing suddenly bygone

My lungs were on song  
After a time very long  
Fresh clean air hog and hog  
No pollution, dust and smog

Miles and miles of green fields  
Wistful eyes sight enlivens mind  
Nature's beauty at its best  
Admire, respect, the reality at rest

Finally sighted hamlet my destination  
Glow with pride and passion  
Feelings full of civic appreciation  
Bow humbly in adoration

Grew up studied, played with friends  
Every friend way special even beyond  
Evening gossiping with no end  
Coming home late difficult to defend

Acres and acres of wheat field on show  
By dint of hard-work of farmers indeed  
Give assurance of prosperity to grow  
Exactly what we all need

Yellow mustard flowers in bloom  
Emulate hidden beauty unveiled  
Fresh demine magical charm  
Butterflies pollinators serenade beauty evinced

Lap of nature, happiness galore  
Love serene surroundings even more and more  
Every time visit this place  
Binding assurance accept in grace

Sun disappears below horizon far away  
Stars appear after twilight gives way  
My soul mate lives in that domain  
Indebted to her love I would remain  
Look up to decorated sky, may she appears  
Realised realm of truth with tears in eyes.

Nature's orchestra retires for rest  
Silence lines with somnific effect  
Tranquility prevails in perfect solemnity  
Twinkling stars above far away smile with affinity.

# Sailing Towards Self-Reliance

Lieutenant Sandipan

Pandit Jawaharlal Nehru, our first Prime Minister, rightly said, *“To be secure on land, we must be supreme at sea”*. This well-known quote always reminds us that India is primarily a maritime nation which requires a strong navy to protect a coast line of about 7500 km and an Exclusive Economic Zone (EEZ) of over 2 million sq kms. Between 1976 and 1990, India's Navy grew to be the largest and strongest in South Asia. Towards transition to eminence, the acquisitions from abroad synergized with innovations in warship design and production, and presently we are the 7<sup>th</sup> most powerful navy in the world.

## **Initial Bottlenecks Prior Indigenization.**

In the past, Indian Navy had to import military technology through miscellaneous sources and requisite expertise had to be created for their operation and maintenance. This option had to be exercised since our own research organizations and industry had not developed any major military systems within reasonable time frame to reach

technological relevance in the domain of warfare. This lack of credible R&D in military sciences and technologies, inadequate amalgamation between R&D and manufacturing sectors, near absence of an integrated approach amongst users, designers and manufacturers were some of the important reasons for our inability to achieve satisfactory levels of self-reliance in defence sectors.

## **Sailing Towards Self - Reliance.**

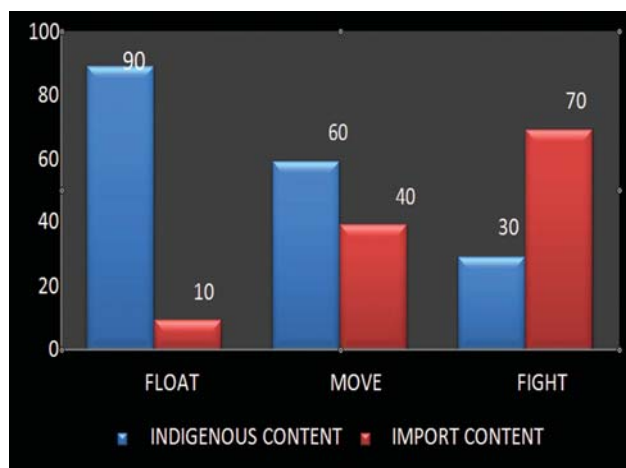
The Indian Navy's incursion into indigenization began over five decades ago with the design and construction of warships in the country. The importance of self-reliance in defence forces cannot be over emphasized and the Indian Navy has been at the vanguard in promoting indigenous design and construction of warships and equipment. While much has been achieved in our pursuit of indigenization over the past decades, it is now time for launching into a new phase of self-reliance by manufacturing technologically





advanced equipment within India in pursuance of the Government's 'Make in India' policy. Indian Navy's Directorate of Naval Design has designed over 80 ships since the commencement of indigenous ship building programme in the 1970s and presently 48 state-of-the-art ships and submarines are under construction in various shipyards, both public and private. The process of achieving self-reliance is complex and requires active participation from many organizations. The indigenous development and induction of technologically superior equipment and systems can only be achieved through innovation leading to indigenization and finally self-reliance in the country.

**Indigenous Developments So Far.** Indian Navy is on its way to become a 200-ship and 700-aircraft force by 2027. However, there is still a need to evolve a sound plan for technology development and production mechanism for complex ship-borne systems. Therefore, the Navy has followed two routes: one, to harness R&D potential at DRDO and second through 'Transfer of Technology (ToT)' with industry partners. The equipment and machinery fitted on board ships in the three categories of float, move and fight has been indigenized to the extent of 90%, 60% and 30% respectively. The analysis of these categories



indicates that while sufficient self-reliance has been achieved in the first category and reasonable in second category, there is a large shortfall in the third category. The current indigenous content of the three categories of warship equipment is depicted in the graph.

Naval systems are inherently technology intensive and require substantial investment of time, money and resources. Submarine equipment, being much more stringent in material specifications, has had limited success towards indigenization. However, in the recent years, support from industry has been a crucial factor in



development of various systems and equipment for use onboard submarines. The support has come forth from across the industry spectrum, right from large industrial houses to smaller MSME (Medium, Small and Micro Enterprises), and has been an encouraging factor for the Navy.

**Potential of Partnership in Overcoming Constraints.** It is imperative to advance the process of indigenization in the armed forces. Aligned with the Make in India call, the entry of private companies into defence sector becomes a game changer. Many large and prominent industrial houses like Tatas, Mahindras, Reliance, Kirloskar, L&T, Godrej etc. have set up special verticals to handle defence related businesses. Some of them have also entered into collaborative agreements with foreign vendors for defence equipment production in country. Some success has been seen in this aspect where a few systems for ships have been developed indigenously, paving the way for further collaboration in self-reliance efforts. Successful indigenous development of ship stabilizers / steering gears, hydraulic systems, automated power management systems and a large number of components / assemblies by the private vendors indicates willingness and ability to partner the Indian Navy in indigenous developmental efforts. The Navy as a customer and designer of equipment & systems and the industry as a supplier need to be on the same platform and work together to achieve self-reliance through indigenisation.

**Indigenisation for Submarines and Carriers.** Private industries have partnered in indigenization for development of various systems and sub-systems for submarines. Indian Navy is expected to induct twelve P-75 and P-75 (India) diesel-electric submarines as an indigenization approach to submarine construction. Presently six Scorpene class submarines are under construction at Mazagaon Dockyard Ltd. at a cost of \$4 billion in collaboration with a French firm DCNS. The first submarine (INS Kalvari) was launched on 28 Oct 2015 after completing the important milestone of vacuum test and battery loading. Numerous challenges were faced while undergoing various harbour trials to achieve complete satisfaction. The second submarine (INS Khanderi) was launched on 12 Jan 2017 and is undergoing sea trials since 01 Jun 2017. She is

expected to be commissioned in 2018. The other four submarines will follow at intervals of nine months each.

INS Vikrant is the first ship of the Vikrant class of aircraft carriers designed by the Directorate of Naval Design and the first warship to be built by Cochin Shipyard Ltd. Her construction involved participation of a large number of private and public firms. Initially the AB/A grade steel which was supposed to be supplied from Russia faced problems in delivery. To cater for the delay, Defence Metallurgical Research Laboratory (DMRL), Hyderabad and Steel Authority of India Limited (SAIL) created facilities to manufacture the requisite steel in India as per specifications given by the Russian firm. Reportedly three types of special steel for hull, flight deck and floor compartments were manufactured at Bhilai Steel Plant, Chhattisgarh and Rourkela Steel Plant, Odisha. After completion of primary construction at dry dock the ship was launched on 12 Aug 2013 and works were commenced for next stage of construction which included installation of integrated propulsion systems, superstructure, upper decks outfitting, cabling, sensors and weapons. The 40,000 T Aircraft Carrier will be propelled by four General Electric LM2500+ Gas Turbines to achieve a maximum speed of 28 knots. The flight deck features a Short-Take-Off-But-Arrested-Recovery (STOBAR) configuration with a ski-jump. It is expected to carry an air group of 30-40 aircraft which will include fixed wing aircraft (MIG-29K) and rotary wing aircraft (Kamov-31). Extensive sea trials are expected to commence by mid 2018 and the ship is likely to be commissioned by 2020. Indigenous development of core military technologies significantly enhances the naval capabilities. Superior navies of the world are already making rapid advances in various associated fields towards enhancing their capabilities through self-reliance. Therefore, a need exists to study these trends of technological advancements and adopt them timely rather than trying to catch up. The Indian Navy, having realized this fact, has shown the greatest determination amongst all three services to be self-sufficient and self reliant. That time is not far when all ships, submarines, and aircraft of the force would be manufactured domestically with the strength of Indian Navy anchored in Self-Reliance.





# Private Sector in Indigenous Ship Building

**Rear Admiral SK Das (Retd)**

In late 1960s we endeavoured to 'Make in India' in a serious way, with the NILGIRI at Mazdocks. Since then, we have come a long way, added many ships and craft to our Fleets and Dockyards. The Indian Navy is far far ahead of other two Services in its Indegenisation programmes of Ship/Submarine building .

*But is this enough?*

It has been mainly by the Public Sector Shipyards – shipyards that are created, funded and governed by the Govt/Dept of Def Production – as though the Govt is responsible for ship-building only through its PSUs and not responsible to harness the entire assets and resources of the nation towards this end.

We have increased our indigenisation content in ship builds over the years but still rely on the more crucial aspects on foreign collaborators. Ships and craft built for the Navy have always been treated as 'the holy cow', secrets not to be divulged outside the PSUs . In today's world of Google and Satellite survey, very little can be a matter of grave secret – not even the Scorpene project! Gone are the days when one was concerned that somebody maybe watching ship construction or ship movement through binoculars, holed up in a sea facing suite of the TAJ hotel!

The PSU Shipyards have achieved much by way of experience and specific knowledge. They are doing a good job, but it may be unfair to saddle them with more than they can build to a time frame.



Thus, every single project by the PSUs has had time (and cost) overruns, not by months but by years. They get the bad name but the fault is not theirs. The fault is of those responsible in placing a huge order book on them as a measure of the great achievement by the Dept of Govt tasked with shipbuilding.

I see much to be gained by the Govt / Indian Navy harnessing the capabilities and capacities of private shipyards - shipyards which have created the infrastructure at their own cost with no grant or subsidy from the Govt. They have to invest huge amounts into these without any returns till orders are placed. And orders will not be placed if the infrastructure is first not in place.

Yes, there have been a few orders of minor warships placed on private shipyards. Unfortunately, for one reason or another, there have been delays in delivery— maybe financial crunch, maybe difficulty in procuring equipment

or drawings – but so what? Have the PSUs delivered a single project since the NILGIRI on time? Project delays by PSU yards are accepted, infact expected, even after their 50 years of experience – that too, without any liquidity damage clause clicking in. Come on, give the Pvt Shipyards a chance of not 50 years but just 10 years of shipbuilding orders. Integrate them into the nation's shipbuilding system, do not isolate them.

Can private shipyards meet the challenge? Why not? The quality is controlled at every stage by an ever vigilant Naval Warship Overseeing Team. In due course, after these Shipyards have earned sufficient revenue from ship orders, they are more likely to deliver on schedule, fearing liquidity damage penalties that do not become applicable to PSU Shipyards. Being of more recent creation, these facilities use modern technologies of capacity enhancement and incorporate modular concepts. Transfer of technology is achieved through the foreign collaborator assisting at the Indian Pvt Yard, like the DCNS assisted Mazdocks with Project 75 Scorpenes.

Perhaps a cautious but positive step to start with could be to split any ship/submarine build orders between the main PSU shipyard and the competing private shipyard. Say 3 of a series by the PSU and 2 by the private shipyard, with the same design specifications. Advantages:

- Competition will force each Yard to give its best in quality and at shortest time frame.
- Overall time for delivery of the entire series would be halved.
- Should one of the Yards be hampered by force majeure, atleast half the order would still be delivered in time by the other Yard.
- Experience will be spread over more Shipyards, thereby increasing the ship building knowledge and potential of the nation as a whole.

PM Modi's thrust on 'Make in India' has given us the opportunity to synergise the capacities and capabilities of all Shipyards in the country - PSU or Private. Let us go for it, twenty years down the line, we will have much to be proud of.



# PLATINUM JUBILEE CELEBRATIONS OF INS VALSURA - THE EPIC JOURNEY FROM 1942 TO 2017

Commodore Indrajit Dasgupta

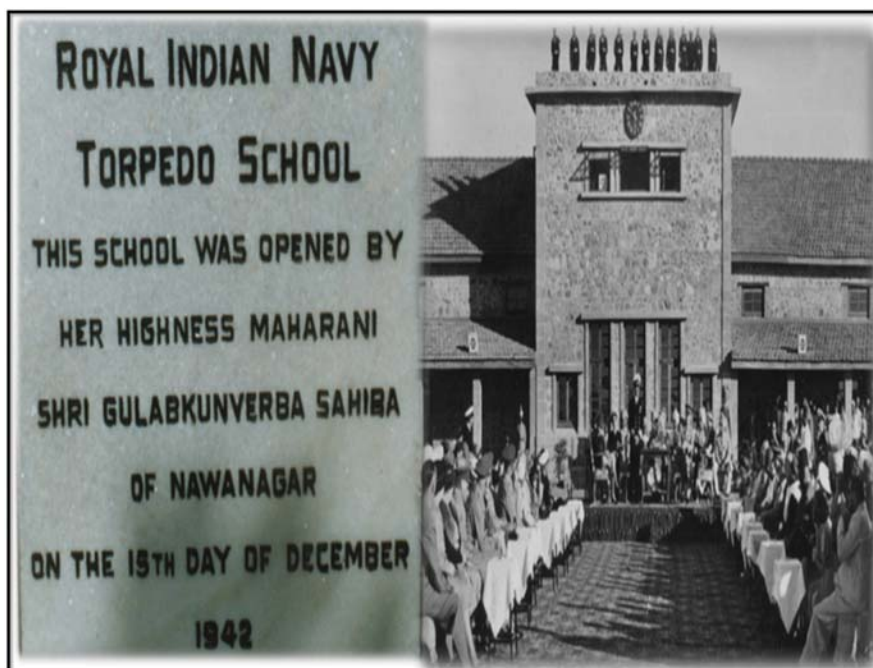
The history of creation of Valsura (then HMIS) finds its roots in the global geostrategic and geopolitical scenario, prevalent during and immediately after World War II. The success of U boats in general and torpedoes in particular, in changing the contours of the War, perhaps brought about a rethinking on torpedo training. During the war, it was decided to set up a dedicated "Torpedo School" for the Royal Indian Navy to augment the war efforts and Commander MFB Ward of the Royal Navy was tasked with establishing a torpedo training school in the shallow waters off the west coast of India. After much deliberations at Kochi and Bombay (present day Mumbai), Cdr Ward settled for a tiny island off the mainland of Nawanagar. The Maharaja of Nawanagar, HH Sri DigvijaySinghjiJadejaSaheb Bahadur readily parted with 30 acres of his game reserve located on Rozi Bet to pave the way for the creation of a permanent Torpedo School on 15 Aug 1942. The Torpedo School was eventually commissioned on 15 Dec 1942, within just five months, a feat unparalleled even today.

It is interesting to note that Admiral Nelson fought the Battle of Trafalgar without electricity. When it was introduced onboard RN ships primarily for mines, the maintenance, was then carried out by the Torpedo Branch in the form of 'wiremen'. However by World War I, the Royal Navy had electricity and subsequently based on the need, the "Electrical Branch" was carved out in the Royal Navy and Valsura became an Electrical School in 1946. Soon after independence, the "HMIS" was dropped and the establishment was renamed INS Valsura. This transformation into a multi-dimensional training unit would not have been possible without the support and patronage of the *Jam Saheb*, who donated another 600 acres in the early fifties.

The infrastructure development at Valsura has always been systematic and well organised. Something that *Le Corbusier* would have been immensely proud of. While the training schools, accommodation and the other infrastructure were added in the next four decades, the expansion was

logical and under the ambit of a master plan. The entire area, with two main parallel roads with perpendicular arteries, clearly demarcated areas for training, administration, inliving & married accommodation and sports facilities is so well planned that it is difficult to believe that this is the oldest, yet most organised base of the Indian Navy.

As the establishment found its footing, more responsibility was entrusted upon the staff in the form of imparting training to all officers and sailors of the Indian Navy, Coast Guard and friendly foreign countries in the domains of Electrical,





Electronics and Weapon systems. Subsequently, “Information Technology” was added to the charter of its ever expanding training curriculum. Today, Valsura conducts more than 100 courses for Officers and 60 courses for sailors with an annual throughput of 1200 officers and 3000 sailors. The unit today has five schools with the latest training infrastructure including 105 class rooms encompassing Virtual, Smart and Model class rooms integrated with the National Knowledge Network.

This Platinum Jubilee journey of INS Valsura in 2017 has been celebrated thus far by the unit through various commemorative events which are described in the following paragraphs.



## The Coast to Coast Car Rally

A unique “Coast to Coast” social outreach programme was organised by INS Valsura to connect with the children and youth of the country along both coasts. This mega road trip in 05 cars covered a distance of 6000 km touching all major naval establishments and places of Naval Maritime Heritage enroute. The Naval team also interacted with local populace, war veterans and widows and visited schools and colleges to spread awareness about the Indian Navy. The participants departed INS Valsura on 16 Mar 17 and reached Kochi on 22 Mar 17 after touching Lothal, Gandhinagar, Mumbai, Goa, Mangalore, Ezhimala and Calicut. An event of this, magnitude has never been undertaken by the Indian Navy and this unique road trip drew an extremely enthusiastic response in social media across cities. The team returned to Jamnagar on 02 Apr 17 after covering the East coast of India upto Visakhapatnam with numerous interactions at schools and colleges at Puducherry, Nellore, Rajahmundry and Hyderabad enroute.

## River Rafting Expedition

Valsura conducted a River Rafting expedition at Rishikesh, Uttarakhand on 07 and 08 Jun 17. The event was flagged from Valsura, Jamnagar on 05 Jun 17. A total of 32 personnel from the unit - 07 officers and 25 sailors participated in the expedition covering a distance of 30 km. The team crossed many rapids, including the famous ‘Roller Coaster’, ‘Goal Post’, ‘Double Trouble’ and ‘3 Blind Mice’. The expedition inculcated the spirit of adventure, camaraderie and ‘esprit-de-corps’ amongst the participants.







### Trekking Expedition

A Trekking Expedition was also conducted from 12 to 19 Aug 17 at Manali, Himachal Pradesh. The trek was undertaken by a team of 24 personnel comprising officers, sailors and trainees. The adventure activity was spread over three nights and four days and conducted in three legs. The first leg started from Gulaba (10,370 ft) and finished at Rola Kholi (12,500 ft) covering a distance of 07 km. The extremely challenging second leg of 14 km was from Rola Kholi to Pandu Ropa (14,100 ft). In the third leg, the trekkers descended eight kilometres downhill from Pandu Ropa to Vashisht Valley (6730 ft). The trekking route wound its way through forests and meadows with magnificent views of Solang Valley, Mt. Hanuman Tibba and Seven Sisters Peak of Beas Kund valley enroute. The trekking team also passed through Kolang Nallah and Bhriagu Lake. On completion of the adventure activity, the expedition team returned to Jamnagar on 19 Aug 17.

### Inauguration of 'e-Lounge'

A 'state-of-the-art' Library 'e-Lounge' was



inaugurated by R Adm R J Nadkarni VSM, Chief of Staff, Southern Naval Command at INS Valsura, Jamnagar on 14 Sep 17. The e-lounge is a modern "Digital Library" with customised content delivered to trainees through various display units. The concept of an 'e-Lounge' was implemented to improve reading habits among officer and sailor trainees. After numerous brainstorming sessions with the trainees, the problem areas in the traditional library set up were analysed and the requirement of a modern lounge was conceptualised. The trainee's requirement of better aesthetics in the library and customised content to cater to their professional needs was also taken into consideration. Thus, every inch of the e-lounge was designed to make reading interesting for the trainees. The Content Management System (CMS) housing thousands of e-books, videos, audio books and magazines on various fields of interest was designed completely in-house by the Information Technology School of INS Valsura. The CMS is a multiuser, responsive and themed web based system to increase the attention span of the trainees. The e-lounge also has the option for the traditional readers to read various books of their interest inside the lounge.

### Inauguration of 'Gyan Sarovar'

To commemorate the epic milestone of 75 years of existence, a unique monument titled "Gyan Sarovar" was inaugurated by VAdm AR Karve AVSM, Flag Officer Commanding-in-Chief, Southern Naval Command on 14 Sep 17. The event was attended by R Adm R J Nadkarni VSM, Chief of Staff, Southern Naval Command and Heads of Training Establishments under the Southern Naval Command. Inspired by the architecture of Jantar Mantar, the Platinum Jubilee



fountain signifies the timeless bond between the Guru and Shishya. The continuous flow of water depicts the pursuit of knowledge by the Shishya whilst the reservoir of water at the base signifies a repository of resident skill and expertise available within the portals of the establishment. The 12 steps on either side at a height of 7 feet represent the 12 hour cycle of day and night for seven days of the week signifying a 24x7 need for assimilation of knowledge.

### Inauguration of 'Platinum Court'

The long pending wish for a better recreational facility for the sailors of INS Valsura was fulfilled on 14 Sep 17 with the inauguration of "Platinum Court". The renovated Sailor's Institute has been named "Platinum Court" to commemorate the Platinum Jubilee of INS Valsura. The Platinum Court was inaugurated by Madan Lal Kalta, MCEA(R) I and Tussan Pal Singh, LOG II(SC) in the presence of V Adm AR Karve AVSM, Flag Officer Commanding-in-Chief, Southern Naval Command. The Commander-in-Chief specially desired that the inauguration be done by the Seniormost and juniormost men of the Establishment. The "Platinum Court" housed in a sprawling area will be utilised by the men and their families. The numerous amenities which form part of the "Platinum Court" include recreational rooms for staff and families, cafeteria, dining halls, a state of the art galley, offices and modern washrooms. The entire facility is a green building with LED lighting and other energy saving mechanisms.



### Inauguration of "The Light House".

VAdm AR Karve AVSM, Flag Officer Commanding-in-Chief, Southern Naval Command inaugurated "The Lighthouse" in keeping with the ethos of INS Valsura which is "Tasya Bhasa Sarvamidam Vibhati" meaning "The light that emanates from

here, illuminates all". The event was attended by a galaxy of dignitaries including RAdm R J Nadkarni VSM, Chief of Staff, Southern Naval Command and Heads of Training Establishments under the Southern Naval Command. The new seminar hall is a modern one with a seating capacity of 150 personnel. The seminar hall has inbuilt back projection units and screens, with consolidated audio and video modular control stations. The seminar hall is also completely networked for live streaming of content to various other places. The seminar hall provides a major fillip to the existing training infrastructure of INS Valsura.



### Conduct of "Leadership Conclave"

The 'Leadership Conclave' of the Southern Naval Command jointly organised by INS Valsura and Centre of Excellence in Ethics, Leadership and Behavioural Studies (CELABS) was conducted at INS Valsura, Jamnagar on 15 Sep 17. Commanding Officers/Directors/Officer-in-Charges of all training establishments of the Southern Naval Command had gathered at INS Valsura to brainstorm on various facets of 'Military Leadership' under the guidance of VAdm AR Karve, Flag officer Commanding-in-Chief, Southern Naval Command. The conclave was attended by Adm Arun Prakash (Retd) and RAdm SY Shrikande (Retd).

The first session on '**Ethical Leadership in a Military Paradigm**' was presented by RAdm SY Shrikande, AVSM (Retd). The second session on '**Charting a Course for the Leadership Development in the Indian Navy**' was presented by RAdm Suraj Berry NM, VSM, from Naval Headquarters, New Delhi. Both sessions were chaired by Adm Arun Prakash PVSM, AVSM, Vrc,



VSM (Retd) and V Adm SV Bhokare AVSM, YSM, NM, Commandant, Indian Naval Academy was the discussant. The third session on **‘Indian Naval Leadership – A Perspective’** was presented by Cmde G Prakash, Commanding Officer, INS Venduruthy, Kochi. The final session on **‘A Good Leader and Divisional Officer – Impressions from the field’** was presented by a syndicate of young officers and senior sailors. Both the sessions were chaired by RAdm SY Shrikande, AVSM (Retd) and RAdm Monty Khanna AVSM, NM, Commandant, Naval War College and Cmde Manohar Nambiar, Head of Faculty, College of Defence Management were the discussants for the sessions respectively.



**Unveiling of Wall Art by Adm Arun Prakash (Retd)**

A painting on the legendary “Fairey Swordfish” WWII aircraft was inaugurated by Adm Arun Prakash PVSM, AVSM, VrC, VSM (Retd) at the Wardroom premises of INS Valsura on 15 Sep 17. The painting depicts a “Fairey Swordfish” aircraft firing a torpedo which crippled the steering gear of the famous German battleship Bismarck during WW II. The Bismarck was the largest battleship ever built and along with the heavy cruiser Prinz Eugen, had dominated the naval battle of the North Atlantic with imperious attacks on Allied merchant shipping. The sinking of the



HMS Hood with 1418 men onboard by the Bismarck led to a relentless pursuit by the British Navy involving dozens of warships. As the Bismarck headed for occupied France, she was attacked by 16 Fairey Swordfish biplane torpedo bombers from the aircraft carrier HMS Ark Royal, one of which scored a hit which rendered the battleship’s steering gear inoperable. In her final battle the following morning, the Bismarck was engaged by British battleships and was sunk with heavy loss of life on 27 May 1941. The torpedoes were so integral to the British war effort that they wanted to replicate HMS Vernon, a torpedo and electrical school of the Royal Navy, at an alternate location. A survey found the sea around Rozi Island at Nawanagar and the rest of the events following it is the history of INS Valsura.

### **Upcoming events of ‘Platinum Jubilee Celebrations’**

A host of events like Health Camps, Half Marathon, Inter School Quiz and Painting competitions, Band Concert, Tech Expo, Tech Seminar and Release of Special Cover are planned in the coming months. A specially created “Heritage Walk” in the old area of INS Valsura will take old-timers on a trip down memory lane and we expect a number of alumni both past and present to attend the finale on 15 Dec 2017.



# THREE DECADES OF THE NAVY FOUNDATION – A PERSPECTIVE

**Rear Admiral M P Taneja (Retd)**

Salt never really stops flowing in the veins of 'old sea dogs' after they have swallowed the anchor. As they melt away into far corners of the country and abroad, there is this yearning and overarching desire to remain connected with their erstwhile 'shipmates' as well as with occurrences within the navy. So no matter how detached one may appear to be, the Navy never leaves our subconscious psyche.

The Foundation, in its own way, provides a replica of the cocoon of support that we grow with and get accustomed to while in service. It addresses, albeit in a tenuous manner, the need for remaining connected to the umbilical.

In penning this brief piece, I have drawn heavily from the writings of Admiral Nadkarni (then VCNS), who gave initial shape and substance to the concept mandated to him by Admiral Tahiliani. The then CNS, had just returned from the US where he was very impressed by the manner in which their Veteran affairs were organised.

After mulling over and considering the various 'Association' and 'League' models already in existence, it was decided to set up a centrally controlled and administered 'Foundation'. Funding for this new setup was provided by NHQ and the existing 'potpourri' of organisations were convinced by way of personal discussions with Adm. Nadkarni to muster under one common umbrella. Initial apprehensions of loss of autonomy; functioning under the 'writ' of NHQ etc were laid to rest. The overwhelming benefits of now having an interlocutor to directly represent veteran matters to the Government won the day. One by one the rainbow of leagues and associations joined the Foundation with independent 'Charters' (now being renamed 'Chapters').

It may interest Veterans to know that under the directions of Admiral Nadkarni (by now the CNS), seed money for the Charters was provided from the profits of Navy Ball 1987!

With drive and impetus from the very apex, much of the structure of the foundation was laid and besides institution of a nodal Directorate for Ex Serviceman Affairs, the very informative 'Quarterdeck' magazine full of topical nostalgia was started. In order to regulate matters correctly, the all important

'Constitution' was drafted, which gets updated in keeping with contemporary requirements.

The initial Charters in cities where larger concentrations of retired officers had settled were joined by others, where growing numbers predicated such additions. These now total 15. Such is the countrywide dispersion of our brethren. Command and Area Headquarters, quite generously provided infrastructure. Those in non-naval stations had to rely on assistance from sister services, which may not be as readily forthcoming.

Common concerns for most Veterans are welfare, pension, medical etc. Add to that the all important plank which the foundation provides for periodic get-togethers where we swap yarns and get to fraternize with members who may otherwise live in far-flung corners of the city.

The Mumbai Chapter, (of which, I was privileged to be the President from 2008 -10), ably driven by the ideas and energy of its present Secretary, Cdr. Vijay Vadhera, assisted by the key Office Bearers have taken Veteran support to another dimension altogether. Currently, the Mumbai chapter has the highest number of members (1038 as on date). It is completely managed via Whatsapp & email and provides copious information as well as assistance using a well structured mechanism. Some popular support includes our own version of Shaadi.com (three children of Veterans have already found life partners) as well as organised support for Veer Naaris in terms of the demise grant, family pension and a system for chaperoning. NFMF has also instituted the felicitating of Octogenarian members during the AGM by presenting them an attractive nautical memento. Some of these schemes have been singled out for mention in various fora and are being emulated by others as well.

Since 2015, annual RGC meetings chaired by the respective C-in-C are being held in each Command, where problems faced by the chapters under their aegis are solved.

The biggest take-away due to the proactive approach has been heightened interaction, bonhomie, empathy and understanding between the Serving community and Veterans. This can only augur well for the future of our Foundation's efforts in mentoring veterans.



## COMMAND ACTIVITIES

### LAST LANDING OF TU 142 M

The flying destroyer TU-142M, the most coveted aircraft of the cold war era and the Long Range Maritime Patrol aircraft of the Indian Navy, made its last landing at INS Dega, Visakhapatnam.



### BANGLADESH NAVY DELEGATION VISITS ENC



Rear Admiral M Shaheen Iqbal, Asst Chief of Naval Staff (Materiel) Bangladesh Navy accompanied by a five member delegation arrived at Visakhapatnam on a three-day to Eastern Naval Command from 07Aug to 09 Aug17.

## NAVY FOUNDATION

The maiden Regional Governing Council Meeting (RGCM) of the Navy Foundation (NF) Eastern Region was held at Headquarters, Eastern Naval Command, Visakhapatnam on 05 Jun 17. The meeting was chaired by the Regional Head for Eastern Region, Vice Admiral HCS Bisht, PVSM, AVSM, ADC, Flag Officer Commanding-in-Chief, Eastern Naval Command(ENC).



## ASSISTED REPRODUCTIVE TECHNOLOGY CENTRE INAUGURATED AT INHS KALYANI

A state-of-the-art Assisted Reproductive Technology (ART) centre was inaugurated at INHS Kalyani by Mrs. Reena Lanba, President Naval Wives Welfare Association, on 05 Jan 17. The naval hospital will now be equipped with Intra Uterine Insemination (IUI) facility and facilitate couples in service who face infertility and aspire to parenthood.





## ENC ORGANIZES A JOB FAIR FOR EX-SERVICEMEN

With an aim to provide better second career opportunities to Ex-Servicemen and retiring Armed Forces personnel (Army, Navy and Air Force) in Corporate Sector and PSUs, a Job Fair was organized at INS Satavahana Hard Ground on 26 Feb 17.



## BANGLADESH HADR

INS Sumitra operating in the Northern Bay of Bengal rescued 18 survivors found adrift at sea approximately 100 miles south of Chittagong. These included ladies, children and elderly people.



## WNC NEWS

The second submarine of the Kalvari Class i.e. Khanderi, was launched at Mazagon Dock Shipbuilders Limited (MDL), Mumbai on 12 Jan 17. The event was presided over by Minister of State for Defence Dr. Subhash Bhamre.



Reliance Defence and Engineering Limited (RDEL) launched the first two Naval Offshore Patrol Vessels (NOPVs) at their shipyard in Pipavav, Gujarat on 25 Jul 17. The two NOPVs, Shachi and Shruti were launched by Smt Preeti Luthra, wife of Vice Admiral Girish Luthra, PVSM, AVSM, VSM, ADC; the Flag Officer Commanding-in-Chief Western Naval Command at the RDEL Shipyard Pipavav, Gujarat.



INS Viraat, the second Centaur Class aircraft carrier, which had served 27 years in the Royal Navy and 30 years in the Indian Navy was decommissioned on 06 Mar 17, in a solemn yet grand ceremony at Naval Dockyard, Mumbai. INS Viraat found mention in the Guinness Book of Records for being the longest serving warship in the world. Admiral Sir Philip Jones, KCB, ADC, First Sea Lord and Chief of Naval Staff of Royal Navy, Vice Admiral Vinod Pasricha, PVSM, AVSM, NM the commissioning Commanding Officer of INS Viraat were the guests of honour, while Admiral Sunil Lanba, PVSM, AVSM, ADC, Chief of the Naval Staff, was the Chief Guest for the ceremony.





Indian Naval Ships Karwar and Kakinada were decommissioned on 09 May 17. These minesweepers, belonging to the Flotilla, were bid adieu at a solemn ceremony in Mumbai. The Chief of the Naval Staff, Admiral Sunil Lanba, who was the second Commanding Officer of Kakinada, was the Chief Guest for the occasion.



Indian Naval Ships Mumbai, Trishul, Tarkash and Aditya, were deployed to Souda Bay, Greece for three-days visit. The Task Group was headed by Rear Admiral RB Pandit, the Flag Officer Commanding Western Fleet.



In continuation of the Indian Navy's overseas deployment to the Mediterranean Sea and West Coast of Africa, three Indian warships INS Mumbai, INS Trishul and INS Aditya visited Toulon, France for three days.



As part of the Indian Navy's overseas deployment to the Mediterranean Sea and the West Coast of Africa, two Indian warships, INS Mumbai and INS Aditya, visited Alexandria on 05 May 17 for a three-day visit. The Task Group was headed by Rear Admiral RB Pandit, the Flag Officer Commanding Western Fleet.



Three Indian warships, INS Mumbai, Trishul, and Aditya, were deployed at Haifa, Israel on 09 May 17 for a three-days visit.





The 73<sup>rd</sup> Annual Conference of the Bombay Medical Congress was held on 11 and 12 Feb 17 at INHS Asvini Auditorium, at Colaba. Books titled “*How I Survive*” by Surgeon Commander Vidhu Bhatnagar and a “*Handbook of Clinical Medicine*” compiled by Bombay Medical Congress were released by Vice Admiral Girish Luthra and Lieutenant General MK Unni respectively.



On World Meteorological Organisation Day – 2017, the Western Naval Command conducted a symposium titled ‘MEGHAYAN’ on 23 Mar 17. ‘MEGHAYAN’ had representation from premier scientific and research organisations like INCOIS, Hyderabad, the Indian Space Research Organisation (ISRO), Ahmedabad, the India Meteorological Department (IMD), Pune as well as the Directorate of Naval Oceanology and Meteorology, IHQ MoD (Navy), New Delhi.

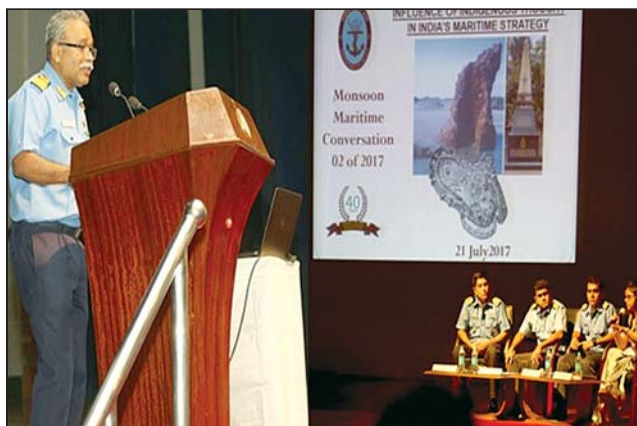


The fifth edition of Maritime Seminar was held at INHS Asvini auditorium with the aim of fostering cooperation between Seafaring Communities on 04 May 17. The seminar was a joint initiative of the Indian Navy, the Nautical Institute and the Indian Maritime Foundation.





The second Maritime Monsoon Conversation was conducted by Maritime History Society (MHS), Mumbai on 21 Jul 17 on the theme 'The Influence of Indigenous Thought in India's Maritime Strategy'. The conversation attempted to trace India's maritime thought from a Harappan civilisation link, with focus on key naval periods of Chola, Kunjali, Marakkar and Angre.



The XXXIII Annual Conference of Marine Medicine and Allied Sciences was held at INHS Asvini on 31 Aug and 01 Sep 17 under the aegis of the Marine Medical Society of India. The theme of Conference was "**Medical Challenges for a Blue Water Navy**". Delegates from eight foreign countries including Bangladesh, Indonesia, Kenya, Myanmar, Oman, UAE, USA and Vietnam also participated in the scientific deliberations, presenting papers and sharing their experiences.



The Guided Missile Frigate INS Ganga sailed for its swansong sortie under own steam on 27 May 17. The ship has been placed in the non-operational category.





## OBITUARY LIST

S.N.	P No	Rank	Name	Next of Kin	Date	Address
1	70006-B	Cdr	JC Sharma	Mrs. Shakuntala Sharma (Wife), Amit (son)	05-12-16	209, Defence Colony, Indiranagar, Bangalore – 560038 Tele : 080-25283713
2	50011-K	V Adm	LR Mehta	Mr. Rajesh Mehta (Son)	14-12-16	Mr Rajesh Mehta R-14 A , Windsor Court DLF City, Phase-4, Gurgaon-122009 MobileNo: 9910194127 Honkong contact No. 852-63398890 Email Id: rmehta248@aol.com
3	40771-K	Cdr	TR Padala	Mrs. Padma Padala (Wife)	17-12-16	MIG-62, Simapuri layout, Vepagunta Post, Visakhapatnam (A.P.) – 530047 Mob : 08106467915(Son)
4	81580-H	Lt Cdr	PN Vaid	Mrs. Sudesh Vaid (Wife)	27-12-16	B-103, Army Colony, Sector-9, Merul East, Navi Mumbai-400706 Mob : 9820743088
5	60064-H	Cmde	Vidya Sagar Laroya	Mr Amit Laroya (Son), Mrs Rima Adya	02-01-17	Mr Amit Laroya (Son), D -48, Malcha Marg,  (Daughter) Chanakyapuri, New Delhi-21, Tel:- 011-26115677
6	01287-Z	Lt Cdr	Surinder Chopra	Mrs. Monideepa Chopra (Wife)	01-01-17	Mrs Moni Deepa Chopra (Wife) 21 A, Subodh Garden, Roy Nagar, Bansdrani, Kolkata-700070, Mobile No: 9831360531
7	50110-K	Cdr	S S Parmar	Mrs Vanmala Parmar (Wife) Sushma & Sapna ( Daughter)	04-01-17	Mrs Vanmala Parmar(Wife) Flat No- K 305, Tarapore Tower Oshiwara, New Link Road, Andheri (W), Mumbai-400053 Tele: 022-26326242 Mob- 9820150402 (Sapna)
8	01490-K	R Adm	VS Chaudhari,	Mrs Mithilesh Chaudhari (Wife), Mr Karan Singh Chaudhari (Son)	08-01-17	Mrs Mithilesh Chaudhari L-101, Sect-25 NOIDA-201301 Mob no:- 9871542428 Email :- mithilesh_chaudhari @hotmail.com
9	50102-T	Cdr	RK Jaitly	Mrs Kiran Jaitly (Wife) Ruchira & Antara (both daughters)	10-01-17	Mrs Kiran Jaitly (Wife) A 961, Sushant Lok-I, Gurgoan-122002 Mob: – 9899273201 (Wife)
10	00007-R	V Adm	VA Kamath	Mr Vasant Kamath (Son), Sunila & Rekha Rajan (Daughter)	16-01-17	Mrs Rekha Rajan( Daughter) , 67, Dakshinapuram JNU Campus, New Delhi-110067, Mobile No:- 9711110867

11	50049-Y	Cmde	Balwant Singh	Mrs Harswaran Kaur (Wife) Taruna, Deepika & Jyoti (all daughters)	23-01-17	Mrs Harswaran Kaur (Wife), EA-146, SFS Flats Maya Enclave, New Delhi-110064; Tele :- 011-25120476, Mob:- 991016994 (Jyoti)
12	89750-A	Lt Cdr	SP Dhyani	Mrs Sumitra Dhyani (Wife) Renu (Daughter), Cdr sunil Dhyani & Lt Cdr Sushil Dhyani (Sons)	28-01-17	Mrs Sumitra Dhyani (Wife) 15, Alaknanda NOFRA, Colaba Mumbai-400005, Tele: 022-22146087, Mob :- 9869756806
13	75094-T	Surg Cdr	Mehar Chand	Mrs Swarn Lata (Wife) Pankaj & Niraj (both sons)	07-02-17	Mrs Swarn Lata ( Wife), Evershine, Millinum Paradise (EMP)-23 Flat No. 703 Thakur, Kandivili (E) Mumbai-400101, Tele:- 022-28462240, Mob- 9820344643 (Dr. Niraj)
14	00833-T	Cdr	Barjor Panveliwala	Mr PJ Panveliwala (Brother)	07-02-17	Mr. PJ Panveliwala ( Brother) 657, Parsi Dharamshala Compund, Napier Town Jabalpur (MP)-482001, Mob-9893419142
15	75260-W	Surg Cmde	PLK De Sylva	Mrs Patricia De Sylva (wife) Rohit and Nikhil (sons)	13-02-17	Mrs Patricia De Sylva (Wife) 701, Emerald Bhakti Park, Near IMAX Wadala, Mumbai-400037, Mob:- 9819467132/9819192529
16	40156-N	Cdr	A G Walavalkar	Mrs Snehlata A Walavalkar (wife) Aparna and Seema (daughters)	18-02-17	Mrs Snehlata A Walavalkar (Wife), 4th Floor, Balwant Niwas Dr Moos Road, Talaopali, Thane Maharashtra- 400602, Tele:- 022-25362025, Mob:- 9819959913
17	01141-T	Cdr	Harsh Wahi	Mrs Manjula (Wife) Amit (son)	26-02-17	Mrs Manjula Wahi( Wife) 408 Veen Chambers Clive Road Mumbai-400009, Tele:- 022-24113535, Mob:- 9820900124/9869028502 (Amit) Email:- manjuwahi@gmail.com
18	50481-B	Cdr	Rajeswar Dayal	Mrs Archana Dayal (Wife) Lt Cdr Abhisek Dayal (Retd)	28-01-17	Mrs Archana Dayal (Wife) 55, Sawarkar Apartments Plot No. 39, IP Extension, New Delhi-11-22724897, Mob: 9953322189
19	02071-F	Cmde	BK Patnaik	Mrs Vandana Patnaik (wife) Ajay ( son), Anubha (daughter)	11-03-17	Mrs Vandana Patnaik (Wife), 2, Aryabhoomi Next to St Xavier's School Patia Bhubaneswar- 751024, Mob- 8658722355, Email:- nitts64@gmail.com



20	50093-Y	Cdr	Snehamoy Guha	Mrs Suchitra Guha (wife) Sunanda Guha (Son)	17-03-17	Mrs Suchitra Guha, C/69 Jalvayu Vihar Sector-III, Block-LB, Salt Lake City Kolkata-700098, Tele:- 033-23350954, Mob:- 9819254504
21	75161-W	Surg Cdr	Tarun Prakash	Dr Gita Prakash(Wife), Ashutosh (Son), Aditi (Daughter)	27-03-17	Dr Gita Prakash (Wife) D- 151A Defence Colony New Delhi-110024 , Tel:- 24610247 , 24641975, Mob:- 9810316245, 9811062768. Email:- gitap50@gmail.com
22	00230-Y	Cdr	A S Balakrishnan	Mrs Ranga Balakrishnan (wife) Arun (Son), Madhu ( Daughter)	23-03-17	Mrs Ranga Balakrishnan(Wife), 1001, Manokamna Plot NO- 419, DK Sandhu Marg Near Joy hospital, Chembur(E) Mumbai- 400071, Tele:- 022-25221662, Mob- 9820638471 (Arun)
23	02738-Y	Cdr	Prabir Guha Roy	Mrs Sorbani Guha Roy (Wife), Preya and Priya (Daughters)	02-04-17	Mrs Sorbani Guha Roy DE/2A. Flat No. 2/1, 1st Floor Prantik Apartments VIP Road, Sahapara, Baguiati Kolkata- 700059, Mob:- 9963511911
24	02719-B	Cdr	NA Mohan	Mrs Mythili Mohan (Wife), Ashwin (Son)	03-05-17	Mrs Mythili Mohan ( Wife) 997, New Brighton Gardens SE Calgary Alberta Canada- T2Z0A2, Tel:- 14036045738, Email:- myth611@gmail.com
25	60020-H	Cdr	Charanjit Singh	Dr Rituraj Singh (Son) Gargi (Daughter)	24-04-17	Dr Rituraj Singh (Son) Sanjivani Hospital 74, Banda Bahadur Nagar Mahavir Marg Jalandhar-144008, Mob:- 9814195550
26	R0223-N	Lt Cdr	MG Deodhar	Mrs Shyamla (Wife), Sudheer (Son)	24-02-17	Mrs Shyamla Deodhar( Wife) 12, Darul Khalil, Opp Khusru Bagh, Near Electric House SBS Road Colaba Mumbai- 400039, Tele:- 22820482, Mob:- 9833796834, Email:- bhidesatish01@gmail.com
27	40909-Z	Lt Cdr	A Bandyopadhyay	Mrs Nandita (Wife), Madhurima (daughter), Swarnabh (Son)	19-04-17	Mrs Nandita Banerjee (Wife) 1703 B, Satellite Tower Film City Road, Goregaon East Mumbai- 400063, Mob:- 9819320762, Email: nandita.banerjee@gmail.com

28	50113-T	Cmde	R Seshadri	Mrs Lakshmi Seshadri (Wife), Mr Bharat Seshadri (Son) Ms Nandini (Daughter)	12-05-17	Mrs Lakshmi Seshadri(Wife) 423, Jalvayu Towers NGEF Layouts Sadanand Nagar, Bangalore- 560038, Tele No:- 08025950423, Mob:- 9916877770, Email: seshadrimemi@gmail.com
29	00654-K	R Adm	MS Bedi	Mrs Prabhjot Bedi (wife), Vikram (Son), Gayatri (Daughter)	06-06-17	Mrs Prabhjot Bedi, N-1/4 DLF Phase II, Qutub Enclave Gurgaon-122001, Tele:- 0124-4011423, Mob: 9810453462 (Mrs Prabhjot Bedi)
30	81930-B	Cdr	AV Rama	Dr Vinod (Son)	06-06-17	Dr. Vinod (Son) , Udayam Nelliparamba, Kuttyeri P.O.Thaliparamba, Kannur, Tele: 0460-22049918, Email: chandran.rheum@gmail.com
31	01685-B	Cdr	Satbir Bakshi	Mrs Mino Jasinder (Wife), Mr Randeep (son)	16-06-17	Mrs Mino Jasinder (Wife) Q-484, Jalvayu Vihar Sec-21, Noida(UP)- 201301, Tele:- 0120-4267366, Mob:- 9873083160 (Mr Randeep)
32	60032-K	Capt	M Agarwala	Virender (Son), Vera Garg (Daughter)	18-06-17	Mr. Virender Agarwala (Son), 9-B, Harbour Heights "A"Colaba, N A Sawanth Marg, Mumbai- 400005, Maharashtra, Mob:- 9811083372 (Daughter), Email:- gargvera@gmail.com (Vera Garg), Viren@omantel.net.om (Virender)
33	40106-K	Capt	VK Agarwal	Cdr Gaurav Agarwal (Son), Pooja Goyal (Daughter)	24-07-17	Cdr Gaurav Agarwal (Retd)(Son), B-303, Jalvayu Vihar, Sector-A, Near SM Shetty School Powai, Mumbai-400076, Mob:- 887939986(son), Email:- geetee1990@yahoo.com (Son), goyala3p@yahoo.com (Daughter)
34	00416-W	Cdr	Bahadur Nariman Kavina	Mrs Farida Kavina (wife) Carl Kavina, (Son) (Roshini ( Daughter)	29-06-17	Mrs Farida Kavina (Wife), 5 Martinique Walk Mawson Lakes, South Australia-5095, Australia. Mob:- +61882602889, +61407396618 (Carl Kavina), Email:- kavina.carl@ flindersports.com.au, farida63@gmail.com



35	50027	V Adm	JN Sukul	Mrs Usha Sukul (Wife) Mr Prashant Sukul (son), Cdr Shantanu Sukul (Retd) and Mrs Urvi (Daughter)	18-Jun-17	Mrs Usha Sukul (Wife) UK-4002, Royal Garden Estate Sec-61, Behind Shopping Mall, Noida-201301. Tele:- 0120-4222322, Mob:- 9811571008 (Mrs Usha Sukul)
36	00488-H	Cmde	Rohit Patel	Mrs Sunita Patel (Wife) Mitul Patel (son), Dr. Toshali Patel (Son)	03-07-17	Mrs Sunita Patel (wife), 11023 ATS, 1 Hamlet, GH-01m Sector-104, GB Nagar Noida (UP)- 201304, Mob: 9717072705, ( Mr. Mitul) Email: sunitarohit@yahoo.com
37	03379-B	Cdr	Amitabh Dutt	Mrs Sangeeta Dutt (Wife), Aryan Dutt (Son), Shreya (Daughter)	03-08-17	Mrs Sangeeta Dutt (Wife), House No- 912, Sector-7 Panchkula-134109, Chandigarh, Mob: 9855593246
38	70091-Y	Cdr	Quintin Joseph Anthony Gomes	Mrs Betty Gomes (Wife), Sean Gomes (Son), Wynzel Chhabrai (daughter)	06-08-17	Mrs Betty Gomes (wife), 3 Savio House, Plot 146, 9th Road Wadala, Mumbai-400031, Mob: 9820551961, 022-24184147, Email: wynzel@hotmail.com, wchhabra@gmail.com (Daughter)
39	02659-T	Cdr	Lalit Clement	Mrs Rekha Demta (Wife) Mr Denzil Udyam Minz(Son)	19-08-17	Mrs Rekha Demta(Wife) EL-1, Navins Jayram Garden River View Road, Manapakkam Chennai, 600125, Mob: 9498090899(Wife)/ 9445889675(Son) Email:- denziludyam@gmail.com(Son)
40	60005-Z	R Adm	RK Chopra	Mr Rajiv Chopra (Nephew)	10-09-17	Mr Rajiv Chopra (Nephew) 1102, Royal Retreat-1, Charmwood Village Suraj Kund Road, Faridabad ,Haryana- 121009 Mob:- 981001277 (Rajiv Chopra)
41	00464-B	Cmde	Revti Raman	Mrs Nirmala Gupta (Wife)	30-08-17	Mrs Nirmala Gupta (wife) 188 B Civil Lines Opp. Sales Tax Office, Bareilly-243001, Uttar Pradesh, Tel: 0581-2424601, Mob:- 9719055853
42	00884-H	Cdr	KN Reddy	Mrs Ranee Reddy (Wife), Archana (Daughter) Babloo (Son)	10-09-17	Mrs Ranee(Daughter), 201- Nargis, Jal Vayu Defence Enclave, Phase-I, Sector-20, Kharghar, Navi Mumbai-410210, Mob:- 9323939344 (Wife) 8800445363 (Daughter) Email:- Reddiarchana@gmail.com (daughter)

43	50059-W	Cdr	Noel M Lobo	Mrs Anjali Lobo (wife)	18-09-17	Mrs Anjali Lobo (Wife), 623 KP Towers-II Fatima Nagar Pune- 4110013 Mobile No. 9404378117
44	75041-Y	Surg Capt	Philips Koshi	Surg Capt Rebu Koshi (Retd) (Son) Sushima Mathew (daughter)	23 Sep 17	Surg Capt Rebu Koshi (Retd) (Son) A 121 Jalavayu Vihar Panampily Nagar Ernakulam Kochi- 682036, Mob:- 9496564698 (Son)
45	80028- F	Lt Cdr	Avatar Singh	Mrs Jaswant Kaur (wife) Surinderpal Singh(son) and three daughters Hameet Kaur, Harjeet Kaur & Pramjot Kaur	01-10-17	Mrs Jaswant Kaur (Wife) 27 Dawn, Friends Colony Chakkalakkal Road, Thevara Ernakulam Kochi- 682015, Mob:- 9387178927
46	50214-Y	Cdr	RC Sharma	Mrs Meera Sharma (wife) Anurag (son)	01-10-17	Mrs Meera Sharma (wife), A-706 Florence New Link Road Kander Pada Dahisar West Mumbai-400068, Mobile:- 9004076012(Son), Email:- rctecholcomp@ gmail.com
47	00112-B	Cdr	AC Mammen	Mrs Kunjamma Mammen (wife), Jacob Mammen(son), Elizabeth Tharakan & Shella Eapen (both daughters)	17-10-17	Mrs Kunjamma Mammen (wife) TC-2/2322, Kallarackal VH-32, Kurvankonam Kaudiar Trivandrum-695003 Tele:- 0471-2433485/2319635
48	50053-F	Capt	BM Muddaiya	Mrs Maya Muddaiya (wife) Mr Poovaya and Mr Devaiya (sons)	22-10-17	Mrs Maya Muddaiya(wife), 82, Jalvayu Vihar Kammanhalli Main Road Kalya nagar Bangalore Karnataka -560043, Tele:- 080-23682082, Mob:- 9448274929 (wife), 9900173364/ 9980157348 (son)
49	40174-B	R Adm	C P George	Mrs Sara Grace George(wife), Dr Philip George (Australia) and Mr Jacob George (USA)	27-10-17	Mrs Sara Grace George (Wife) House No. 32/2255, Chittoor Mundappallil, New kalavathu Lane Palarivattom, Kochi-682025 Tele:- 0484-2533147 (wife) Mob:- 9447033147, 9446537147 Email: saragrace26@gmail.com
50	52421-N	Lt Cdr	Madhan Kandasamy Chakravarthy	Mrs. Vamshadhara VK (Wife)	18-09-17	Mrs. Vamshadhara VK 31/365 Vidya Nagar Thindal PO-Erod, Distt-Erode Tamil Nadu-638012
51	02496-Y	Cdr	Avnendra Kumar Singh	Mrs Seema Singh	25-10-17	Mrs Seema Singh (Wife) 24 C, Sky Light Cosmos Horizon Pokhran Road2 Thane West Mumbai-400610



52	60105-A	Capt	CLN D'Silva	Mrs Margaret D' Silva (Wife)	25-11-17	Mrs Margaret D' Silva (Wife) Beaulieu, Vag Lane, Falnir Post-Kankanady Mangalore-575002 Karnataka Tele:- 0824-2432570/432259 Mob:- 9449452026/9448784409
53	70020-K	Cmde	C Lobo	Mr Mark Lobo (son) and Mr Luke Lobo (son)	28-11-17	Mr Luke Lobo (Son), 85, St Patrick's Town Behind Krome Mall Solapur Road Pune- 411013 Mob:- 9850016032 (Mr Luke) Email:- lukentricia@gmail.com
54	88103-H	Lt Cdr	KP Sukumaran Kutty	Mrs Vasantha Kumari (wife) Mr Shivan, Col Sunil Kutty and Dr Salil Kutty ( sons	05-11-17	Mrs Vasantha Kumari (wife) Vasantham, Peter Asan Lane Konthuruthy Road, Thevara PO Kochi-682013 Kerala, Tele- 0484-2664542 Mob:- 9447036354 (Dr Salil) Email: drsalilkutty@gmail.com
55	06260-A	Lt Cdr At Arms	Nitin Malhotra	Mrs Ruchi Malhotra (wife)	07-11-17	Present Address:- Mrs Ruchi Malhotra B-64 Omaxe Rudrapur US Nagar Uttarakhand-263253 Permanent Address:- Same
56	86803-B	Lt Cdr	A T Thomas	Dr Latha Abraham (daughter), Wg Cdr Jimmy Thomas (Retd) Cdr Tommy Thomas (Retd) (both sons)	07-11-17	Wg Cdr Jimmy Thomas (Retd), 1001'A Wing Gundecha Heights Kanjur Marg West LBS Marg Mumbai-400078, Mob:- 9920043560 (Wg Cdr Jimmy Thomas (Retd), 09847784142 (Cdr Tommy Thomas (Retd)) Email:- Jimmy_ias@yahoo.com
57	79005-F	Surg Cdr	E G Paul	Mrs Annamma Paul (wife), Dr Ajai Paul and Mr George Paul (both sons)	10-11-17	Mrs Annamma Paul Edassery House Cheranalloor via Edappally Kochi-682034, Tele:0484-2430524, Mob:- 9562392338 (Wife), 997106142 (Dr Ajai Paul) Email:- ajailiz@hotmail.com
58	00166-A	Cdr	Suresh C Ahluwalia	Mr Nikhil and Mr Sunil (sons)	22-11-17	Mr Nikhil Ahluwalia 520 South Charles Street Federal Hill Baltimore City Maryland (USA)-21201 Mob:- +371504677579 (Nikhil), +1(757)3760159 (Sunil) Email: soniknz@hotmail.com, sca9@verizon.net
59	40096-A	Capt	PJ Reddy	Mrs Malathi Reddy (wife) Mr P Roy Reddy (son)	16-12-17	Mrs Malathi Reddy (Wife), A8/1-A, 2nd Cresent Road Sainikpuri Secunderabad-500094 Tele 040-27112790, Mob:- 8519850908 (wife) 9866042097 (son) Email: roy_reddy38@yahoo.in

60	70030-H	Cdr	VB Nair	Mrs Radha B Nair (Wife), Cdr RBG Nair (Retd) (son) & Dr Indu Nair (daughter)	26-12-17	Mrs Radha B Nair (Wife) Ragabindu, Kodunganoor Thiruvananthapuram-695013 Kerala. Tele: 0471-2360580, Email:- navynair@gmail.com (son)
61	02017-H	Cdr	Ravi Kant Malhan	Mrs Rekha Malhan (Wife), Pranab (son)	24-12-17	Mrs Rekha Malhan (Wife) F-803, Jalvayu Vihar Hiranandani Garden Powai- Mumbai-400076 Tele:- 022-66920669, Mob:- 9820057546(wife) Email: rekhamalhan.rm@gmail.com
62	60080-W	R Adm	SC Gupta	Mrs Sunita Gupta (wife) Shilin and Sameer (both sons)	25-12-17	Mrs Sunita Gupta (Wife) B-128 Sainikpuri Secunderabad-500094 Tele:-040-27113315 Mob:- 9848482934 Email:- guptabeenu@yahoo.co.in



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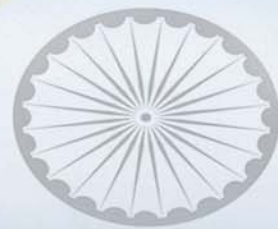
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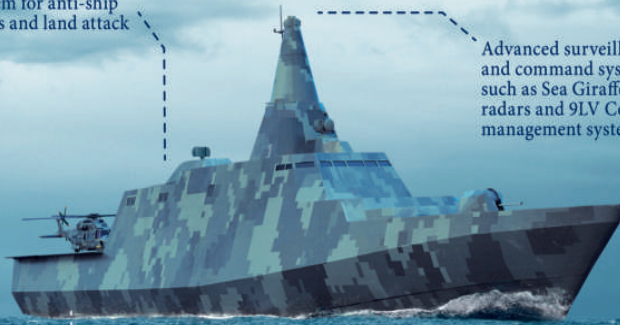
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