



भारतीय नौसेना

THE YEAR THAT WAS

INDIAN NAVY IN THE YEAR 2010

Force levels

- Indian Navy (*IN*) started out at independence as the RIN with a small flotilla of 33 ships of which there were two frigates, four sloops, one Corvette and the others, small utility yards and crafts. Until 1965, our ships were largely of British origin. The years 1965 to 1971 saw Russian acquisitions being added. Today most ships are built in India with a few ships being imported.

- The Indian Navy comprises 130 surface combatants including 15 submarines. The total number of aircraft is 210. The details of various aircraft in the *IN* inventory are as follows:-

Fixed Wing- 83

Helicopters - 127

- **Basing of Ships**. The details of command-wise breakdown of ships and submarines are as follows:-

WNC. There are 44 ships and 09 submarines under WNC.

ENC. There are 42 ships and 06 submarines ships based under ENC.

SNC. There are 11 ships based at Kochi.

ANC. There are 18 ships based at Port Blair.

- **Induction Planned in 2011**. The ships likely to be inducted in 2011 are under:-

Two Shivalik Class.

Two follow-on Talwar class from Russia

Three WJFACs.

Two Survey Vessels.

Two Fleet Tankers.

Perspective Plans

- The Indian Navy's perspective-planning in terms of 'force-levels' is now driven by a conceptual shift from 'numbers' of platforms - that is, from the old 'bean-counting' philosophy - to one that concentrates upon 'capabilities'. In terms of force accretions in the immediate future, we are acquiring ships in accordance with the Navy's current Maritime Capability Perspective Plan. Our preferred choice of inducting ships has been through the indigenous route. There are presently 30 ships and submarines on order from Indian shipyards and the induction programme is continuing apace.
- Cochin **Shipyards Limited (CSL)** is progressing the construction of our most ambitious ship yet – the **Indigenous Aircraft Carrier (IAC)**.
- **Mazagon Docks Limited, Mumbai**, our premier warship-building yard, is engaged in the construction of **three Kolkata Class destroyers and two stealth frigates of the Shivalik Class**, apart from **six submarines of the Scorpene Class**.
- The **GRSE** has already delivered all three of the large amphibious ships. As many as **ten water-jet Fast Attack Craft**, too, are being built here, of which the **first seven have been inducted** into the Navy till date. The yard is also constructing **four advanced Anti-submarine Corvettes**.
- **Goa Shipyards Limited**, which has built a number of Offshore Patrol Vessels for the Navy and the Coast Guard, has **four advanced** versions of this Type under construction. The yard is also building our **second Sail Training Ship**.
- Over the years, we have taken a conscious decision to encourage other shipyards, including private yards, to enter the specialised field of warship-construction. The response has been encouraging. We hope to source some ships from these yards in the near future.
- However, even with all this, our average rate of induction is only three to four ships a year. This is inadequate to maintain our present force levels and some inductions from abroad have to be made to bridge the gap. These include the **carrier Vikramaditya** and three follow-on ships of the **Talwar Class from Russia**, and, two **Replenishment Tankers from Italy**.
- While we currently have Government approval to maintain certain force levels, they will probably keep reducing till 2012, because the ships being decommissioned will outnumber new entrants. In the interim, Mid-Life Upgrades (MLUs) of ships, submarines and aircraft has been approved and the units are being upgraded accordingly. After their MLU, these units will emerge as potent 21st Century combatants.

- **Arihant.** Arihant, which is the first submarine under the Advanced Technology Vessel Programme (ATVP), was launched on 26 July 2009 at Visakhapatnam. It demonstrates a quantum leap in the shipbuilding capabilities of the country. The submarine is now undergoing wide ranging trials to prove the various systems fitted onboard. This will be followed by extensive sea trials, before it is commissioned into the Indian Navy.

Budget

- This Fiscal Year (FY 2010-11), the Navy received Rs 19625.79 Crores, amounting to 13.32 % of the Defence Budget (Rs 1, 47,344 Crores). Of this, 57.57%, that is, Rs 11, 339.14 Crores, is the allocation for Capital Schemes, while 42.22%, that is, Rs 82, 86.65 Crores, is the Revenue allocation. Of the Rs 11, 339.14 Crores allocated for capital expenditure, the bulk (Rs 10863.67 Crores) is earmarked for modernisation projects, with a mere Rs 475.47 Crores being consumed by Land and Works. The percentage of the GDP that is consumed by the Defence Budget is 2.12%.

Manpower

- The Navy is facing a shortage of about 16% in the authorised strength of Officers and approximately 13% in sailors. With the current induction patterns, we intend to bring down the shortages to 5% by 2012. The Navy has a civilian workforce of around 40,100 employees. Currently, there is a shortage of about 15%. Civilian personnel form the backbone of our maintenance force and have longstanding expertise, which we can ill afford to lose. A case has been taken up with the Ministry of Finance and we are hopeful of a positive outcome.

- **Training Civilians.** Training of civilian manpower of the Navy is being accorded due priority, with the Government willing to provide up to 1.5% of salary budget per annum, which works out to Rs. 16.65 Crores for the FY 2010-11.

- **Training for Friendly Foreign Countries**

The Indian Navy has been providing training to foreign personnel for more than 30 years, during which period it has trained more than 6,000 foreign personnel from 32 countries. Our reputation for providing high quality of training drives us to constantly evaluate and evolve in order to remain relevant. It is our earnest desire to share and deliver the finest training in order to build capacity and everlasting relationships.

Recognising this necessity, the Ministry of External Affairs provides assistance for training of naval personnel from a large number of countries under the 'Indian Technical and Economic Cooperation (ITEC)' scheme. Under this scheme, the tuition, boarding and lodging are fully funded by us. We also provide financial aid for meeting living expenses for the entire duration of the course. In some cases, travel expenses of trainees to and from India are also fully funded.

The last few years have witnessed a steady increase in our commitment to build capacity through training cooperation. The number of training slots allocated to foreign trainees during the past five years is as tabulated below: -

<u>Year</u>	<u>Training Slots Allotted to Foreign Navies</u>
2005-06	439
2006-07	352
2007-08	557
2008-09	565
2009-10	706
2010-11	778

Indian Naval Academy (INA), Ezhimala. The Indian Naval Academy (INA) located at Ezhimala, approximately 280 kilometres north of Kochi, in Kerala was inaugurated by the Honorable Prime Minister of India, Dr. Manmohan Singh on 08 Jan 09. Spread over 2452 acres of coastal upland, INA has world class facilities in terms of infrastructure, for both academic pursuits and outdoor activities; including state-of-the-art laboratories, workshops, swimming pools and play fields. The Academy has modern residential facilities, an excellent Mess and five well laid-out squadrons, each with its own comprehensive facilities. Being built at a cost of over 721.88 Crores, the Academy, when fully ready, would accommodate and train 750 cadets.

The first BTech course commenced at INA on 22 Jun 09. This is a significant step in evolution of the Navy to meet the technical challenges of the 21st Century. The induction of cadets to the Academy is through UPSC examinations as well as directly by IHQ MoD (Navy)/ DMPR based on their 10+2 merit.

B Tech curriculum has been drawn up by the Navy, in conjunction with Jawaharlal Nehru University (JNU) and the All India Council for Technical Education (AICTE). INA has been accredited by AICTE. In addition to Technical training, the Academy would provide its cadets with a healthy dose of humanities and Naval History. This is in keeping with the Navy's goal of upgrading officer intake and providing them with high-end technical expertise without sacrificing the proven advantages of a broad-based liberal education. The curriculum would not only provide adequate academic grounding for award of a B Tech degree but would also cater to the overall transition of an Officer Cadet to a Service Officer.

Operations/ Exercises

Surveillance, Operations and Missions

- Surveillance forms one of the pillars upon which the peace-time Concept of Operations of our Navy rests. For the purposes of surveillance, it is divided into the following four segments (proceeding steadily inwards towards our coast): -

- ✓ First are the Choke Points of the Indian Ocean.
- ✓ Next is a 'Maritime Surveillance Zone', with its outer limit defined by mission requirements and its inner limit being defined by the current EEZ boundary, that is, 200 nm from the coast.
- ✓ The third segment is an area called the 'MZI Interest Zone' (MZI being the "Maritime Zones of India), with its outer limit at 200 nm and its inner limit at 12 nm from the Indian coast.
- ✓ Finally, there is a 'Territorial Interest Zone', which coincides with the country's Territorial Waters.

- **Surveillance in Choke Points.** Dedicated surveillance missions are periodically mounted in the Choke Points. These missions are generically termed "SLOC Monitoring Missions".

- **Surveillance within the 'MZI Interest Zone'.** In general, there are not too many dedicated surveillance missions mounted within the 'MZI Interest Zone'. This is largely because surveillance in this zone is considered to be an automatic consequence of the normal deployments undertaken by the Fleets, Flotillas, and Air Squadrons.

- **Surveillance within the 'Territorial Interest Zone'.** Op SWAN and Op TASHA are ongoing operations of dedicated surveillance missions mounted within the 'Territorial Interest Zone'.

- **Operational Interaction with Foreign Navies.** The operational interaction with regional and extra-regional navies involves structured interaction in the form of war games, exercises or operations. The fundamental purpose of this 'Constructive Engagement' in operational terms is to hone our own Navy's skills in a number of diverse areas of war-fighting, by operating with various navies, and to share current tactical and technological practices and techniques. A secondary spin-off is that it enables us to engage numerous navies in a positive manner reinforces their perception of the Indian Navy as a competent, confident and stabilising force in the region. The major engagements with foreign navies include US, UK, Russia, France, Sri Lanka Singapore, Indonesia, Oman, Thailand etc to name a few.

- **Major Exercises/Events.** The following Major Exercises/Events are being scheduled in 2010-11:--

Defence of Gujarat Exercise 10 (DGX 10). Defence of Gujarat Exercise has just been concluded on the Western Seaboard. The exercise was conducted by WNC and saw a wide participation from IAF and ICG units.

TROPEX 11. TROPEX 2011 is scheduled in early 2011. Besides the naval assets, ICG, Indian Army and IAF assets will also participate in the exercise.

Operation 'RAKSHAK'

- Marine Commandos (MARCOS) are deployed in J&K, as part of the ongoing Army CI ops since 1996. The deployment in J&K has been useful for Marcos to gain exposure to real time Special Operations. In addition, the MARCOS have contributed significantly in support of civil authorities by providing timely diving assistance on many occasions thus garnering goodwill of the local populace.

Diving Assistance to Civil Authorities

- Diving assistance to civil authorities in the last few years has increased manifold and diving teams from Commands have been deployed on a regular basis. In the recent past, the following assistance has been rendered to various civil agencies/state authorities for search and recovery of personnel:-

DC, Alapuzha for recovery of body from Pamba River - Jan 10.

DC, West Godavari Dist for recovery of bodies from capsized ferry- Jan 10.

DM, Visakhapatnam for recovery of bodies from Tandev reservoir - Jan 10.

Hindustan Shipyard Ltd, Visakhapatnam - Feb 10.

DC, Kotayam, Kerala for rescue of bus passengers from Meenachil River - Mar 10.

DM, Uttarakhand for recovery of bodies - Mar 10.

DC, Ernakulam for recovery of explosives from Kadalundi River - Apr 10.

DM, Jhajjar for rescue of persons from JLN Feeder reservoir - Jul 10.

DC, Kannur for removal of chemicals from Naduvode River, Kannur – Aug 10.

DC, Samba, J&K for search of body at Mansar Lake- Sep 10.

DRM, NE Railways, for recovery of body at Kasganj, UP - Sep 10.

Anti Piracy Operations

- Piracy off the coast of Somalia has grown steadily over the years and has become serious as it is spreading further from the coast into the Indian Ocean. 88 incidents of piracy have been recorded so far. Consequently, to protect Indian-flagged ships, Indian Navy commenced anti-piracy patrols in the Gulf of Aden from 23 Oct 08. A total of 23 *IN* ships have been deployed for anti-piracy missions in the Gulf of Aden, since Oct 08. Merchant ships, (irrespective of their flag) are currently being escorted along the entire length of the

(490 nm long and 20 nm wide) Internationally Recommended Transit Corridor (IRTC), that has been promulgated in the Gulf of Aden for use by all merchant vessels. The escort schedule of the Indian Navy ship in the Gulf of Aden, which indicates commencement dates of escort from either end of the corridor, is intimated to DG Shipping. Indian flagged merchant vessels avail of this escort. They can also avail of escorts by navies of other countries which are deployed in the Gulf of Aden. This arrangement is working satisfactorily. No Indian flagged merchant ships with Indian nationals onboard has thus far been hijacked in the Gulf of Aden, where the *IN* ship is deployed for escort missions.

- A total of 1415 merchant ships (of various nationalities) have been escorted by the Indian Navy ships in the Gulf of Aden since Oct 08. Of these only 150 are Indian Flag vessels. During their deployments for anti-piracy operations, Indian Naval ships have prevented 23 piracy attempts on merchant vessels of different nations. The proactive stance taken by the Indian Navy towards providing protection to the merchant marine, irrespective of their nationality has deterred acts of piracy in the Gulf of Aden, and this has been widely appreciated.

- With the increased incidents of piracy, up to 900-1000 nautical miles from the Somali Coast and off Seychelles, and at the request of their governments, *IN* ships have also been deployed on occasion in the Exclusive Economic Zone of Maldives, Seychelles and Mauritius for anti-piracy operations. This has been appreciated by their respective governments.

Coastal Security Initiatives

- Since Nov 2008 several initiatives have been taken by the Government to strengthen security of the coastal areas against the threat of non-state actors from sea. One of the most significant achievements of the last year has been the integration of all maritime stakeholders, including the several State and Central agencies into the coastal security matrix. As a result, there is today good coordination, synergy and understanding between all agencies. The resources and security structures of all the stakeholders are being utilised more effectively. Intelligence and information sharing has undergone a transformational change. Real time information flow between all stake holders has resulted in more immediate response by the sea going agencies to a developing situation.

- The hub of all action is the Joint Operations Centre. The Indian Navy has established four such Joint Operation Centres in all Naval Commands and ANC. All coastal security operations are now coordinated from the Joint Operations Centre, which are manned round the clock by Naval and Coast Guard teams. In addition, the state Marine Police and other agencies such as Customs, Intelligence Bureau, Ports etc are also networked with these centers. Besides the four Joint Operation Centers at Mumbai, Visakhapatnam, Kochi and Port Blair, each coastal district also has its own Operations Center for coordinating activity in their districts.

- **Awareness Campaigns**. The very large fishing community all along the coast are considered as very good 'eyes and ears' of the coastal security scheme. They could provide valuable information of any suspicious activity. In a focused drive to enlist the support of fishermen awareness campaigns targeting coastal and fishing communities were conducted. Joint motorcycle rallies by the Navy, Coast Guard and State Police have been

conducted in each coastal state, covering all coastal districts. Villagers and fishermen in almost every coastal village have been sensitised to threats from the sea and the measures they could take to contribute to coastal security. Till date more than 90 awareness campaigns have been undertaken. This is an ongoing endeavour, and all coastal districts will be visited regularly by such teams.

- **Coastal Surveillance.** There has been a quantum increase in the efforts for coastal surveillance patrols by Naval and Coast Guard ships and aircraft. Patrols by the Indian Navy and Coast Guard are closely coordinated so as to maximise efforts and keep the entire coast under surveillance. The Marine Police of each coastal state has been assisted by the Navy and Coast Guard for coastal patrols. CISF units' deployed at all major ports are also being similarly assisted. Territorial waters are therefore being kept under surveillance throughout the year. Because of better surveillance and alertness, any ship straying into our waters is being immediately noticed and interrogated.

- **Operations.** The Navy and Coast Guard have launched a number of joint coastal security operations on both the seaboard and island territories when information of increased threat was available. During this period ships and aircraft of the Navy and Coast Guard kept the West coast of India under continuous surveillance and thorough investigations and checks of various ships, boats and fishing vessels were carried out. Surveillance of the Offshore Defence Areas has also been enhanced. In addition, regular surveillance is undertaken in the vicinity of maritime boundaries with the neighbouring countries. CORPAT i.e. coordinated patrols with Indonesia and Thailand is conducted in the vicinity of IMBL twice every year.

- **Coastal Security Exercises.** In order to periodically review the readiness of the security agencies and the state administrations in thwarting threats from inimical elements, the Navy has conducted coastal security exercises in every coastal state in conjunction with the Coast Guard, marine police, customs, immigration and Port authorities. In all, ten exercises on West coast, nine on east coast and two each in L&M and A&N Islands have been conducted this year. During these exercises several contingency scenarios are simulated, including hijacking of fishing craft, landing of terrorists on the coast, detection of stowaways on ships, etc. All agencies with a stake in coastal security, participate in these exercises with a view to improve coordination, achieve integration and further improve the coastal security mechanism.

- The Coastal Security initiatives are heading in the right direction with necessary impetus by the various concerned central ministries and the state government. Indian Navy and Coast guard are ever vigilant to developing situations at sea and the increased surveillance and patrolling efforts of the Navy and Coast Guard is itself a deterrent to those who may threaten our security from the sea.

- **Sports**

International Level.

The Indian Navy's sportsmen have consistently done the country proud in the International arena. 81 naval sportsmen represented the country at various

International sporting events during 2009-10, and won **19 Gold, 08 Silver and 01 Bronze medals**.

We are particularly successful in Boxing and Shooting. Naval shooters won **11 Gold and 07 Silver medals** during International level competitions including World Cup, Commonwealth Shooting Champion and SAF Games.

Naval sportsmen won **06 Gold, 01 Silver and 01 Bronze medals** during Commonwealth Games 2010. Omkar Singh, CPO QA3 won 03 Gold and 01 Silver medals in Shooting; Suranjoy Singh, MCPO II PT won a Gold medal in Boxing (52 Kg); Harpreet Singh, PO UC3 won 02 Gold medals in Shooting and Sudhir Kumar, MCPO II PT won 01 Bronze medal in Weight Lifting (77 kg).

Sanjeev Rajput, MCPO II QA 3 was bestowed with the '**Arjuna Award**' for excellence in Shooting for the year 2009.

During the recently concluded Asian Games at Guangzhou, China, the naval sportsmen have done the country proud by winning **two silver medals** (team events – sailing and shooting) and **one bronze** medal in boxing.

National Level. 140 sportsmen from the Indian Navy participated at various national level sporting events in the year 2009-10 and collected a haul of 57 medals. These included **20 Gold, 21 Silver and 16 Bronze medals**. The Indian Navy's performance has been consistent in the current year (2010-11) as well. 43 Sportsmen have participated in National level competitions so far, and have won **04 Gold, 05 Silver and 04 Bronze medals**.

Services Level. The *IN* has maintained **Runners Up** position during Inter-Services Sports Championships for the last 17 years consecutively. The performance of Navy teams was exceptionally outstanding during the year 2009-10, which saw the *IN* winning at eight events and finishing runners up in five events. Sanjeev Rajput, MCPO II QA3 of Navy Shooting Team was awarded '**Best Services Sportsman**' for the year 2009-10. This is the third consecutive year that a Naval sportsman has won this award.