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Indian Navy

Indian Navy can trace its lineage back to honourable East India Company's Maritime Service, founded in 1600 to protect British merchant shipping. In 1830, colonial navy came to be known as Her majesty's Indian Navy. It was named as Royal Indian Navy (RIN) in 1934, which continued even after independence of India. In 1950, it was renamed as Indian Navy. The Indian Navy is the 7th largest Naval force of the world. Navy day is celebrated on December 4.



Logo of Indian Navy

The Indian Navy is one of the naval branches of armed forces of India. The primary objective of the navy is to secure national maritime borders. However, India also uses its navy to enhance its international relations through joint exercises, port visits and humanitarian missions, including disaster relief. It has been a catalyst for peace, tranquility and stability in the Indian Ocean Region (IOR).

To achieve these objectives, the Indian Navy is enhancing its capabilities, cooperation and interoperability with regional and extra-regional navies. In recent years, the Indian Navy has undergone considerable modernisation to replace aging equipment, this is often seen as part of India's drive to become a fully-fledged blue water navy. Chhatrapati Shivaji Raje Bhosale, the 17th century Maratha warrior king, is considered as the Father of Indian Navy.

General facts about Indian Navy are:

Motto "Shan No Varunah" (May the Lord of the

Oceans be auspicious onto us)

Colour Navy Blue, White

White Anniversaries Navy Day 4th December

Indian Navy Size 58350 personnel

Structure and Organisation of Indian Navy

The Indian Navy is categorised into the following broad categories:

- Administration
- · Logistics and Material
- Training

- Fleets
- Naval Aviation
- Submarines

Rank structure in the Indian Navy is stated below:

Commissioned Officers

- 1. Admiral of the Fleet
- 3. Vice Admiral
- 5. Commodore
- 7. Commander
- 9. Lieutenant

- 2. Admiral
- 4. Rear Admiral
- 6. Captain
- 8. Lieutenant Commander
- 10. Sub-Lieutenant

Junior Commissioned Officers

- 1. Master Chief Petty Officer (1st Class)
- 2. Master Chief Petty Officer (2nd Class)
- 3. Chief Petty Officer

Non-Commissioned Officers

- 1. Petty Officer
- 2. Leading Seaman
- 3. Seaman I
- 4. Seaman II

Though the provision for the rank of Admiral of the Fleet exists, no Indian Navy Officer has been given this rank. Basically, it is an honorary rank, intended for major wartime use.

Operational Commands of Indian Navy

The Indian Navy operates under three commands. Each command is headed by a Flag Officer Commanding-in-Chief in the rank of Vice Admiral.

	Mumbai	Visakhapatnam	Kochi	Port Blair
Commands	Western Naval Command	Eastern Naval Command	Southern Naval Command	Andaman & Nicobar command
Headed By	Flag Officer Commanding in Chief, WNC	Flag Officer Commanding in Chief, ENC	Flag Officer Commanding in Chief, SNC	Commander-in -chief, ANC
Command Authorities and Units	Units of WNC	Units of ENC	Units of SNC	Units of ANC

Of the three commands, the Western and Eastern Naval Commands are operational commands and exercise control over operations in the Arabian Sea and the Bay of Bengal respectively and also two commands have a two-star commanded fleet, the Eastern and Western Fleets.

Southern Naval Command is home to Flag Officer Sea Training. Importantly, the Andaman and Nicobar Command at Port Blair under Vice Admiral is a joint command which reports to the Chief of Integrated Service Command (CISC) in New Delhi. In 2001, the Andaman and Nicobar Command, a joint navy, Indian Army and Indian Air Force command was set-up in the Andaman and Nicobar islands. It was designed to protect India's strategic interests in South-East Asia and the Strait of Malacca.

Operations Conducted by Indian Navy

The range of operations the naval forces may be involved is vast, ranging from high intensity war fighting at one end to humanitarian assistance and disaster relief operations at the other end. This broad range of operations can be divided into distinct roles, each demanding, a specific approach to the conduct of operations. Military, Diplomatic, Constabulary and Benign are the four main roles envisaged for the Indian Navy.

Different types of operations conducted by Indian Navy are discussed below:

Goodwill and Humanitarian Operations

Undoubtedly, the Indian Navy has played an indespensable role in humanitarian relief in times of natural disasters such as floods, cyclones and tsunami. After the Indian ocean earthquake and tsunami in 2004, the Indian Navy started massive disaster relief operations not only to help affected Indian states, but also to assist other countries like Maldives, Sri Lanka and Indonesia. On 26th Febuary, 2011 the Indian Navy has deployed INS Jalashwa and other humanitarian missions alongwith INS Mysore a destroyer, to evacuate approximately 8000 Indian citizens from Libya. This operation is known as Operation BLOSSOM.

In July 2006, the Indian Navy had evacuated over 2500 Indians, PlOs and foreign nationals from Lebanon following the war between Israel and the Hezbollah. At present, the navy is better equipped for evacuation missions of this kind consequent to the induction of INS Jalashwa; an extremely flexible amphibious platform which can be deployed for humanitarian missions as well.

Anti Piracy Operations

Piracy continues to remain a major area of concern in the Indian Ocean Region (IOR). A large number of India's trade, including oil and fertilisers, passes *via* Gulf of Aden. According to the estimates of Ministry of Shipping, Indian imports and exports through the Gulf of Aden were valued at several billion dollars. The safety of maritime trade, through ships that transit through this route, is a primary national concern as it directly impacts India's economy. Around 20-24 Indian merchant ships pass the Gulf of Aden every month. Though this accounts for only 13% of our trade, the crew of the most foreign flagged vessels consists of Indian nationals, as India's large seafaring community accounts for nearly 6% of the world's seafarers.

For the safe escort of merchant ships and thwarted several pirate attacks, the Indian Navy has deployed warships in the Gulf of Aden from 23th October, 2008. In addition to protecting Indian ships, ships of other countries have also been escorted. Currently, merchant ships are being escorted along the entire length of the Internationally Recommended Transit Corridor (IRTC) that has been promulgated for use by all merchant vessels. Till now, the Indian Naval ships have prevented 40 piracy attempts on merchant vessels.

Major Naval Operations

Major naval operations conducted by Indian Navy are as follows:

Operation Vijay, 1961

The Indian Navy's first involvement in any conflict came with the success of Operation Vijay against the Portuguese Navy in liberation of Goa in 1961. The Portuguese forces fired at commercial vessels and fishing boats near Anjadip island, following this attack Indian military intervene to liberate Goa from the clutches of Portuguese. The Indian ships provided fire support to navy and army landing troops. During the operation, Indian frigates INS Betwa and INS Beas successfully destroyed the frigate NRP Afonso and INS Delhi sank one Portuguese patrol boat.

Indo-Pak Wars, 1971

The Indian Navy actively took part in two wars with neighbouring Pakistan. While it largely involved in patrolling of the coast in the Indo-Pakistani War of 1965, it played an important role in bombing of Karachi harbour in the Bangladesh Liberation War in 1971. This operation is known as **Operation Trident**, which was launched on 4th December. On the same day, Navy Day is being celebrated ever since. The Operation Trident was followed by **Operation Python** on 8th December, 1971 which further deprecated Pakistani Navy's capabilities. In order to demonstrate solidarity with its ally Pakistan, the United States sent Task Force 74 led by the USS enterprise into the Bay of Bengal. In retaliation, INS Vikrant was stationed to counter the enterprise task force; Soviet Navy submarines also trailed the US task force. A major confrontation was averted when the US ship moved towards South-East Asia, away from the Indian Ocean.

The long-range submarine PNS Ghazi of Pakistani Navy was sunk following an attack by INS Rajput outside the Visakhapatnam. This enabled an easy blockade of East Pakistan. The INS Veer destroyed a minesweeper, a destroyer and an ammunition supply ship. IN aircrafts, sea hawks and alizes, operating from the aircraft carrier INS Vikrant were proved instrumental in sinking many merchant navy vessels and gunboats in the Bay of Bengal. All these factors ensured a successful blockade of East Pakistan by the Indian Navy which proved to be an important factor in Pakistani surrender.

Operation Cactus, 1988

In 1988, the Indian Armed Forces launched Operation Cactus to avert a coup attempt by a group of Maldivians led by Abdullah Luthufi and assisted by about 200 Sri Lankan Tamil mercenaries from the People's Liberation Organisation of Tamil Eelam (PLOTE) in Maldives. An Indian naval maritime aircraft detected a vessel hijacked by PLOTE rebels. Among the hostages, a senior Maldivian minister was also involved.

Operation Rahat, 2015

Operation Cactus was initiated to secure the vessel. After the military intervention by Indian Navy frigates, INS Godavari and INS Betwa alongwith marine Commandos, the rebels surrendered and the hostages rescued near the Sri Lankan coast.

Operation Conducted for Coastal Maritime Security

In 2009, Indian Navy was designed as the authority responsible for overall maritime security, which includes coastal security and offshore security of the country. To meet this task, the IN has undertaken Brown water operations along with the Blue water operations to safeguard our coastline from threats of non-state actors from the sea. Blue water navy operations is a maritime force capable of operating across deep waters of oceans. It exercises sea control at wide ranges.

Brown water navy operations refers to small gunboats and patrol boats in river along with larger ships. It is associated with littoral navies.

One of the most important achievements has been the integration of all maritime stakeholders, including several state and central agencies into the new coastal security mechanism. The IN has constituted four Joint Operations Centres (JOC) namely at Mumbai, Visakhapatnam, Kochi and Port Blair. As a result, now, there is good coordination, synergy and understanding between all agencies. All operations concerning coastal security are now coordinated from the JOC, 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 and Ports etc. are also networked with these centres. Surveillance of the Offshore Development Areas (ODAs) has also been enhanced.

Indian Navy Ships

All the names in service ships (and Naval Bases) of Indian Navy are prefixed with letters 'INS', designing the Indian Naval Ship (INS). The fleet of the Indian Navy is a mixture of domestic and foreign built vessels.

Major platforms/ships of Indian Navy are as follows:

1. Aircraft carriers 2. Submarines 3. Destroyers

4. Frigates 5. Corvettes 6. Offshore/ASW patrol vessels

7. Amphibious Vessels

1. Aircraft Carriers

Presently, the Indian Navy has two aircraft carriers namely INS Viraat and INS Vikramaditya. INS Viraat (R22) is a Centaur class Aircraft Carrier. it is the flagship of the Indian Navy, the oldest carrier in service and one of two aircraft carriers based in the Indian Ocean Region. It was completed and commissioned in 1959 as the Royal Navy's HMS Hermes and was transferred to India in 1987. It will be decommissioned in 2016 after the induction of the first domestically built Vikrant class aircraft carrier.

INS Vikramaditya is the newest and largest aircraft carrier (ship), that joined Indian Navy on 16th November, 2013. The ship was commissioned on 16th November, 2013 by Defence Minister in Russia.

INS Vikramaditya

This 44500 tonne aircraft carrier was commissioned on 16th November, 2013 at Severodvinsk, Russia and was positioned in INS Kadamba in Karwar, Karnataka. This is the Indian Navy's latest acquisition that will have force multiplier effect to the navy, as the Indian Ocean region is greatly becoming infested by pirates. The latest aircraft carrier will have 24 Mikoyan MiG-29K fighter jets and mix of 10 helicopters that might include Ka-28 helicopters ASW, Ka-31 helicopters AEW, ALH Dhruv Choppers and Seaking helicopters.

INS Vikrant

The INS Vikrant was launched in a big ceremony on August 2013 at Kochi, marking India's entry into an elite club of nations that have the capability to build their own aircraft carriers. It was floated off the dry docks proving the capability of Indian defence designers and its builders to be able to construct an indigenous aircraft carrier, which will be a 37500 tonnes with STOBAR feature with a ski-jump. INS Vikrant will complement the INS Vikramaditya as India plans to have three operational aircraft carriers.

This massive carrier will have 12 MiG-29K and 8 LCA Tejas with other Kamov Ka-31 helicopters.

2. Submarines

The Indian Navy operates under sizeable fleet of Akula class, Sindhughosh class and Shishumar class submarines. India has also started construction of six Scorpene class submarines with MESMA which are expected to join the navy during the second half of 2016.

INS Chakra is an 8140-tonne Akula class, nuclear-powered attack submarine. It was commissioned on 4th April, 2012. Sindhughosh class submarines are the

Kilo class diesel-electric submarines. They designated 877EKM and was built under a contract between Rosvooruzhenie and the Ministry of Defence (India).

They have a displacement of 3000 tonnes, a maximum diving depth of 300 meters, top speed of 18 knots and are able to operate solo for 45 days with a crew of 53. The submarines in this class include Sindhugosh, Sindhudhvaj, Sindhuraj, Sindhuvir, Sindhuratna and so on.

The Shishumar class vessels (Type 1500) are diesel-electric submarines. These submarines are developed by the German yard Howaldtswerke-Deutsche Werft (HDW). The first two of these vessels were built by HDW at Kiel, while the remainder have been built at Mazagon Dock Limited (MDL) Mumbai. The ships were commissioned between 1986 and 1994. These submarines have a displacement of 1660 tons when surfaced, a speed of 22 knots (41 km/h) and a complement of 40 including eight officers. The submarines have the provision of an IKL designed escape system. Shishumar, Shankush, Shalki and Shankul are the four submarines in this class.

INS Arihant

Indian technologists and defence scientists added another feather to their cap by achieving the vital criticality of the in-board nuclear reactor, Arihant. This is India's first indigenously developed class of nuclear powered ballistic missile sub-marines with five more in the pipeline. It will complete India's much talked nuclear triad capability.

3. Destroyers

Currently, Indian Navy operates under the Delhi, Kolkata and Rajput class guided-missile destroyers. The Delhi class destroyers are classified as guided-missile destroyers. The Delhi class vessels are the largest warships to be fully designed and built in India, although they will soon be superseded by the Kolkata class destroyers (INS Kolkata and Kochi) and the Vikrant class aircraft carrier. These ships have been built at Mazagon Dock Limited in Mumbai. The ships in this class include Mysore, Delhi and Mumbai destroyers.

The Rajput class guided-missile destroyers are also known as Kashin-II class. The ships were built in the former Soviet Union. These ships are the first ships in the Indian Navy to deploy the BrahMos supersonic cruise missile systems. The role of Rajput class ships involves protection such as anti-aircraft and anti-submarine warfare for carrier task force defense against submarines, low-flying aircraft and cruise missiles'. Ships in this class include Rajput, Rana, Ranjit, Ranvir and Ranvijay type destroyers.

4. Frigates

The Indian Navy operates under several classes of frigates. These include three Shivalik and five Talwar class frigates, three Brahmaputra class and three Godavari class. Shivalik class are the multi-role frigates and are the first-of-its kind warships built in India incorporating stealth features. The ships of this class

have been built by Mazagon Dock Limited, Mumbai. The category classification is named after the Indian mountain ranges by the name of 'Shivalik hills'. The ships in this class include Shivalik, Satpura and Sahyadri. The Talwar class of frigates have been built in Russia under an Indo-Russian joint production. The Talwar class guided missile frigates are modified Krivak III class frigates from Russia.

The Talwar class has a displacement of 4000 tonnes and speed of 30 knots and is capable of accomplishing a wide variety of naval missions, primarily, finding and eliminating enemy submarines and large surface ships.

Due to the use of stealth technologies and a special hull design, the resulting frigate features reduced Radar Cross Section (RCS) as well as electromagnetic, acoustic and infrared signatures. The ships in this class include Trishul, Talwar, Tabar, Teg, Tarkash and Trikand.

The Brahmaputra and Godavari class frigates are the guided-missile frigates of the Indian Navy, designed and built in India. The Brahmaputra class have a displacement of 3850 tonnes and a length of 126 metres. Although, the Brahmaputra and Godavari classes have similar hull and dimension internally yet they have different configurations, armaments and capabilities. The ship-class has acquired its name owing to the river 'Bhramaputra'. Other ships of the class are also named after Indian rivers. Three ships in this class include Brahmaputra, Beas and Betwa.

The Godavari class was the first significant indigenous warship design and development initiative of the Indian Navy. Its design is a modification of the Nilgiri class frigate with a focus on indigenous content, a larger hull and updated armaments.

The class and the lead ship, INS Godavari are named after the Godavari river. Subsequent ships in the class, INS Ganga and INS Gomati also take their names from Indian rivers. INS Gomati was the first Indian Navy vessel to have digital electronics in her combat data system.

5. Corvettes

Currently, the Indian Navy operates under Kora, Khukri, Kamorta, Veer and Abhay class corvettes. The Kora class corvettes are 1350-tonnes guided-missile corvettes. Four vessels were built at Garden Reach Shipbuilders and Engineers (GRSE) and outfitted at Mazagon Dock Limited (MDL). Their primary role is as surface combatants.

Four ships in this class include Kora, Kirch, Kulish and Karmuk. The Khukri class corvettes are equipped with diesel engines assembled in India, under license by Kirloskar Group. Around 65 per cent of the ship contains indigenous parts. The ships include Kirpan, Kuthar, Khanjar and Khukri.

The Veer class corvettes form the 22nd Killer Missile Vessel Squadron of Indian Navy. Eight vessels of this class inherit their names from the illustrious 25th Killer missile boat squadron, which attacked and sunk 2 destroyers,

a minesweeper and various other support vessels off Karachi during Operation Trident and Operation Python of the Indo-Pakistani War of 1971.

Ships in this class include Veer, Nirbhik, Nipat. The Abhay class corvettes are customised variants of the Soviet Pauk class corvettes. The class is primarily intended for coastal patrol and anti-submarine warfare. The ships in this class include Abay, Ajay, Aksay and Agray.

6. Offshore/ASW Patrol Vessels

It has the Sukanya class patrol vessels which are large, offshore patrol craft. Three lead ships were built by Korea Tacoma, now part of Hanjin Group. The Sukanya class have large hulls, although they are lightly armed since they are utilised primarily for offshore patrol of India's exclusive economic zone.

However, they are capable of being heavily armed and upgraded to light frigates should the need arise. Ships in this class include Sukanya, Subhadra, Suvarna etc. The Saryu class of offshore patrol vessel, constructed at Goa Shipyard Limited, capable of oceanic surveillence and monitoring. It includes ships like INS Saryu, Sunayna, Sumedha, Sumitra.

7. Amphibious Vessels

The Indian Navy has an amphibious transport dock of the Austin class, re-Christened as INS Jalashwa. This apart, the navy also has a fleet of landing ship tanks and landing craft utility.

Landing Ship Tank

There are mainly two types of tanks in this category. These include Shardul class and Magar class. Both these classes are large amphibious warfare vessels.

Shardul class landing ships built at Garden Reach Shipbuilders and Engineers Limited Kolkata. They are an evolution of the Magar class amphibious landing ships. The class has an indigenous content of over 90 per cent with state-of-the-art equipment. These include Kesari, Shardul, Airavat ships.

The Magar class landing ships are currently in active service. Two ships of the class were designed and built by Hindustan Shipyard Limited, with fitting completed at Garden Reach Shipbuilders and Engineers. It can operate two medium-lift helicopters, To discharge its cargo and most of the troops, it needs to be 'beached' through its 'bow-door' (in the front). These include Magar, Gharial ships.

Landing Ship Tank

It has Kumbhir class landing ships which are medium amphibious warfare vessels of the Indian Navy. They are variants of the Polish Polnocny class landing ships. These include Cheetah, Mahish, Guldar and Kumbhir ships.

Name	Pennant	Home port
INS Ghorpad	L 14	
INS Kesari	L 15	Visakhapatnam
INS Shardul	L 16	
INS Sharabh	L 17	
INS Cheetah	L 18	
INS Mahish	L 19	Port Blair
INS Guldar	L 21	Purt Diair
INS Kumbhir	L 22	

Landing Craft Utility (LCU)

It consists of Mk III LCU, Mk IV LCU class vessels. It is a type of boat used by amphibious forces to transport equipments and troops to the shore. They are capable of transporting tracked or wheeled vehicles and troops from amphibious assault ships to beach heads or piers. These are also deployed for evacuation from distant island, search and rescue operations peace keeping missions. The ships under this include LCU 34, LCU 35, LCU 36 and so on.

Indian Navy Ships

Platform	Number	Class /Type
Aircraft carriers	2	Kiev class and Centaur class
Submarines	14	Shishumar, Sindhughosh and Chakra (Akula II) class
Destroyers	10	Delhi Rajput and Kolkata class
Frigates	14	Shivalik, Talwar, Brahmaputra and Godavari class
Corvettes	26	Khukri, Kamorta, Kora, Abhay and Veer class
Offshore/ASW patrol vessels	10	Sukanya class, Saryu
Minesweepers	6	Puducherry/Karwar class
Missile boats	12	Veer class
Amphibious ships	20	Magar, Kumbhir, Shardul and Austin class, Mk. III & Mk. IV LCU
Auxiliary fleet	4	Jyoti, Aditya and Deepak
Future ships, submarines and aviation		Talwar class frigates, Scorpiene class conventional submarines and Akula II nuclear attack submarines and MiG-29K/KUB fighters for aircraft carriers

Naval Bases

The Indian Navy has commissioned INS Kadamba at Karwar, 100 km from Goa, in 2005. This is the first base that is exclusively controlled by the Navy and the third operational naval base after Mumbai and Visakhapatnam. The newly commissioned base is purely for naval use while the other bases share port facilities with civilian shipping.

Built under Phase I of the multi-billion dollar 'Project Seabird', it is the largest naval base in the region. Another naval base is being constructed for the Eastern shores, near Visakhapatnam at a cost of \$350 million. The base will have comprehensive anti-aircraft, anti-submarine and amphibious capability.

The Indian Navy is also setting up a Naval Station in Madagascar, to monitor and patrol the coast of Mozambique as well as the Southern Indian Ocean. The Indian Navy already has berthing rights in Vietnam and Oman.

The Indian Navy has its bases in the cities namely–Mumbai, Kochi, Lonavala, Visakhapatnam, Goa, Chennai, Jamnagar, Paradip, Kolkata and Port Blair.

Systems and Sensors used by Indian Navy

Given below are some systems and sensors, which are used by Indian Navy:

Weapon Systems

The Indian Navy uses the most advanced technology and weapons, most of which are imported from Israel and United States. Recently, it developed Brahmos supersonic cruise missile which is a long stride in the history of Indian defence research. It was jointly developed with Russia.

It uses a large proportion of Indian-designed components and technology, including its fire control systems, transporter erector launchers and its onboard navigational attack systems. In another joint development, India and Israel are developing Barack-II defence missile system, which is an improved version of the Barack-I air defence missile.

This will be operational on Indian Navy ships. The Barak-I is being used on most of the important ships of the Indian Navy. The nuclear deterrence capability of Indian Navy is based on Sukanya class ships armed with the Dhanush ballistic missiles.

India has several imported cruise missile systems including the Klub SS-N-27. The Submarine Launched Ballistic Missile (SLBM), Sagarika, forms part of India's nuclear triad. It has a range of 700 km. The Yakhont anti-ship missile system is another successful programme into the Brahmos by the NPO and the DRDO.

Electronic Warfare Programme

The Indian Navy developing a joint electronic warfare programme, Sangraha, with DRDO. The programme comprises a family of electronic warfare that is useful for different naval platforms. It is equipped with detecting, intercepting and classifying pulsed, carrier wave, pulse repetition frequency and chirp radars. The Indian Navy is implementing a new strategy known as the Navy Enterprise Wide Network (NEWN).

This is to move from a platform centric force to a network centric force by linking all shore-based installations and ships via high speed data networks and satellites. This will be helpful in increased operational awareness. The Naval Institute of Computer Applications (NICA), Mumbai, providing training to all its personnel in Information Technology.

Naval Satellite

GSAT-7, India's first exclusive defence satellite, was successfully launched in August, 2013 by European space consortium Arianespace from Kourou spaceport in French Guiana.

It gives a fresh impetus to the India's maritime security. It was developed and designed by the Indian Space Research Organisation (ISRO) and is expected to operate for seven years in its orbital. The multi-band home-built communication spacecraft will be useful to the Indian Navy as it provides with an approximately 3500-to-4000 km footprint over the IOR and over both the Arabian Sea and the Bay of Bengal region and enable real-time networking of all its operational assets in the water. With the help of this spacecraft, the IN will able to operate in a network-centric atmosphere.

Coast Guard

The Indian Coast Guard (ICG) came into being as an independence service on 18th August, 1978 under the Coast Guard Act, 1978. Since its inception, the Coast Guard has acquired a wide range of capabilities both surface and airborne to undertake the assigned tasks during peace time and supplement the efforts of Indian Navy during the war.

The Coast Guard is liable for surveillance of the Indian territorial waters and the Indian Exclusive Economic Zone (EEZ) to prevent poaching, smuggling and other illegal activities, to conduct search and rescue operations; to protect and preserve marine environment. The command and control of the Coast Guard lies with the Director General of Indian Coast Guard who has headquartered at New Delhi. The establishment has regional headquarters situated at Gandhinagar, Mumbai, Chennai and Port Blair. These regional headquarters exercise command and control in the waters adjoining the entire coastline of India, through Coast Guard districts located along the coastal states of India.

The duties and functions of the Coast Guard as enunciated in the Coast Guard Act are as follows :

- Safety and protection of artificial islands and offshore terminals devices and installations, and devices in maritime zones
- · Protection and assistance to fishermen at sea
- Preservation and protection of marine environment
- · Assistance to customs and other authorities in anti-smuggling operations
- · Enforcement of maritime zones of Indian Act

Other matters, including precautionary measures for the safety of life and property at sea and collection of scientific data.

Marine Commando Force (MCF)

The Marine Commando Force , also known as MARCOS, is a special forces unit that was set-up by the Indian Navy in 1987 for direct action, special reconnaissance, amphibious warfare and counter-terrorism. It is organised as MARCOS East based at Vizag and MARCOS West based at Mumbai to cater for special operations on the Eastern and Western seaboards.

The roles of the MCF are:

- To conduct clandestine, surveillance and reconnaissance missions/ operations and combat maritime terrorism
- To support amphibious operations and special force missions

Marine Commandos are highly trained, elite 'Special Naval Forces'. In end of July 1987, the Commandos accompanied the Indian Peace-Keeping Force (IPKF) to Sri Lanka to deal with the secessionist LTTE's marine elements that were operating in the shallow lagoons around Jaffna.

In 1988, the MARCOS successfully rescued several hostages, including Maldives' then-Minister of Education, aboard a ship hijacked by PLOTE mercenaries during Operation Cactus. Under Operation Rakshak, the MARCOS is also deployed to prevent infiltration through the Jhelum and Wular lake and is involved in covert counter-terrorism operations in and around lakes and rivers in Jammu and Kashmir. The Commandos were also involved in the rescue operation of hostages captured by the terrorists in Taj Mahal palace and Trident hotel in Mumbai as part of a large terrorist attack in Mumbai metropolis in November 2008. It was named as operation Black Tornado.

Role of the Navy

- Primary role of our navy is to protect our country from external sea attacks.
- Other roles are:
 - (i) To carry out search and rescue operations
 - (ii) Participate in Peace Keeping Mission
 - (iii) To maintain sealanes of communication
 - (iv) Aid to civil administration during natural calamities
 - (v) Improve foreign relations by diplomatic visits.