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## Internal & External Security: 3/4: Defence Forces

Integrated IAS General Studies:2016-17

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### Model Questions

#### Prelims MCQ Topics

Various Ranks, Commands & Equipments / Weapons in Indian Armed Forces, Various Ships, Submarines of Indian Navy, Indian Missiles, Basic information about Paramilitary Forces and CAPF.

#### Mains Model Questions

1. "There is no doubt that killings and human rights violations have occurred due to AFSPA but the problems posed by an array of internal and external agents necessitate an act with teeth to deal with them." Critically discuss in the light of various concerns raised against the act.
2. Why AFSPA has been imposed in J&K and North East but not in LWE affected Areas? Discuss.
3. What could be the consequences of the Tripura's decision to withdraw AFSPA recently. Discuss Critically.
4. What do you understand by Defence Offset Policy? What are issues in its effective implementation? suraj\_winner | rajawat.rs.surajsingh@gmail.com | www.gktoday.in/upsc/ias-general-studies
5. With almost 70% of the Defence equipment still being imported, the goal of self reliance is distant dream in our country. What steps do you suggest towards self reliance in Defence production? Discuss.
6. Private sector can play an important role in Make in India but does our policy provide it level playing field? Discuss in context with Defence Sector.
7. What role MSME could play and what are impediments to its role in Make in India – Defence? Examine suggesting policy steps.
8. "There are divergent views on liberalizing the defence sector." Discuss critically.
9. The subject of reorganization of DRDO has been in policy circles in recent times. Discuss the reasons and various issues around the same.
10. "It is often alleged that the government of India has paid a lip service in reviewing the organizational structures and roles in the defence services." Discuss.



### Section -A: Facts For Prelims

Indian armed forces consist of three services viz. Indian Army, Indian Navy and Indian Air Force. The President of India is the Supreme Commander of Indian Armed Forces {as per article 53(2)}. With around 13 Lakh active personnel, India has world's third largest military force. The armed forces are supported by *three paramilitary forces* viz. Assam Rifles, Indian Coast Guard and Special Front Force. Indian Armed Forces and Paramilitary forces come under the Ministry of Defense.

#### Central Armed Police Forces

Currently, India has five Central Armed Police Forces (CAPF) viz. Central Reserve Police Force (CRPF), Border Security Force (BSF), Indo-Tibetan Border Police (ITBP), Central Industrial Security Force (CISF) and Sashastra Seema Bal (SSB). These come under the Ministry of Home Affairs.

### Indian Army

#### Origin

Current form of Indian army finds its origin from East India Company's military department created at Kolkata in 1776. Gradually, three Presidencies of Bengal, Bombay and Madras organized their separate armies until 1895 when they were unified into single Indian Army. At that time, Indian Army had four commands viz. Punjab, Madras, Bengal and Bombay. The British Indian Army was one of the crucial forces of British Empire during 20th century and it served Britain in both the first and second world wars. Upon independence, the British Army was divided into India and Pakistan.

#### World's largest Volunteer Army

Indian army is *world's largest "volunteer army"*. By Volunteer army, we mean that it is not mandatory for citizens in India to send their children to serve in army. We note here that in some countries such as Israel, all 18 year old people have to serve in army for at least two years via the provision called conscription (forced recruitment by authority of law). In India, there was mandatory conscription during British Era. During Constituent Assembly debates, the issue had come under discussion. The basic argument against conscription was that anything which forces the citizens of mandatory military service is *against the freedom of trade and brings in forced labour*. Our Constitution has no explicit provision for or against conscription. However, during emergency, all the fundamental rights except articles 20 and 21 get suspended, so technically conscription is possible in India also. However, it has never been used in India.

#### Various Ranks of Personnel

The Junior most personnel of Indian army is a Sepoy, followed by non-commissioned officer (NCO), Junior Commissioned Officer (JCO), Lieutenant, Captain, Major, Lt. Colonel, Colonel, Brigadier,



Major General, Lt. General and General.

The rank of General is held only by Chief of Army Staff who commands the entire army.

Indian Army- Officer ranks									
Field Marshal*	General^	Lieutenant General	Major General	Brigadier	Colonel	Lieutenant Colonel	Major	Captain	Lieutenant
*Honorary/wartime rank. ^Held only by the Chief of the Army Staff									

As shown in the above graphics, there is an honorary / ceremonial rank called Field Marshal above the General. This field marshal rank has been conferred only upon two officers in past viz. Field Marshal Sam Manekshaw and Field Marshal K M Cariappa. A Field Marshal of Indian army:

- Holds the rank till his death
- Considered to be a serving officer till his death
- does not draw pension because he never retires. He gets full pay of a General equivalent to General of Indian Army (COAS).

### Infantry regiments

The so called Foot soldiers are largest operating arm of Indian army. There are 32 infantry regiments. Oldest regiment is 1 Gorkha Rifles which is existing since 1815. Except a few recent regiments, most infantry regiments were created on *ethnic, regional, religious and caste lines* such as Punjab Regiment, Madras Regiment, Maratha Light Infantry, Rajputana Rifles, Jat Regiment, Dogra Regiment and so on. In 1949, for the first time an all India, mixed class regiment was raised called "**Brigade of the Guards**". The idea behind raising such regiment was to encourage recruitment from classes which had been under-represented in the forces. Since independence, the policy is to not to raise any new regiment on the basis of a particular class, creed, community, religion or region.

### Order of Precedence

There is also an order of precedence among various regiments of Indian army. Before 1947, this order of precedence was based on seniority (oldest first). Accordingly, the first number was of Punjab Regiment. We note that there were numerous Punjab Regiments beginning from 1761. Before 1947, they were amalgamated to form total six Punjab Regiments. Partition of India led to partition of the Punjab Regiments also. India retained only one of those six (2nd Punjab Regiment), while rest five went to Pakistan. This 2nd Punjab Regiment is the current Punjab Regiment in our army.

Kindly note that in the current order of precedence, Punjab Regiment has fourth place. The first





three places are of *Brigade of the Guards, Parachute Regiment and Mechanised Infantry Regiment*. These three regiments are although created in independent India, but they have got higher order in precedence because *these three regiments were created from the senior most battalions of the various regiments*.

### Armoured Regiments

There are 97 armoured regiments in Indian army including cavalry and lancer regiments.

### Artillery Regiment

Indian army's Artillery Regiment has been one of the most formidable operational arm. For the first time, guns were used by the Bahamani Kings in 14th century. In 1526, Babur used artillery to win over much larger armies of Ibrahim Lodi and later of Rana Sanga.

The East India Company had constituted the first artillery regiment in 1748. In 1827, the Royal Indian Artillery regiment was created in the British Indian Army, which was inherited by Independent India.

Currently, artillery is the second largest arm of the Indian Army (after infantry) with an array of armours including mortars, field artillery, self propelled artillery, rocket artillery etc.

### Seven Commands of Indian Army

The Indian Army has a regimental system, but is operationally and geographically divided into seven commands, with the basic field formation being a division. These commands and their headquarters are mentioned below:

- Southern Command → Pune, Maharashtra
- Northern Command → Udhampur Jammu & Kashmir
- Western Command → Chandimandir Punjab
- Eastern Command → Kolkata
- Central Command → Lucknow
- Training command → Mhow Madhya Pradesh
- South Western Command → Jaipur.

South Western Command, Jaipur is latest and it was formally raised in 2005. Each command is headed by a Lt. General.

### Equipments of Indian Army

The equipment of the Indian army include Infantry weapons such as small arms, rockets & mortars; Vehicles, Combat vehicles such as battle Tanks, Artillery, Missile Systems and Aircrafts. Most of the equipments are imported with an increasingly use of indigenous components and equipments. For tactical air transport, logistics etc. Army Aviation Corps is main responsible arm. Here are some notable trivia for your Prelims Examination (Only those have been included which may be asked in



some examination)

### Rifles

#### INSAS

INSAS (INDian Small Arms System) is a family of assault rifles and light machine guns inducted since 1998 in Indian Army. The family comprises INSAS Standard Rifle, INSAS Assault Rifle, Light Machine Gun (LMG) and three new versions of INSAS viz. *Excalibur*, *Kalantak* and *Amogh*. INSAS is being used by Indian Army, Nepal Army (India sold to Nepal @70% subsidy), Bhutan and Oman. The rifle was used in Kargil war. The design of INSAS is influenced by AK-47 rifle, however it has shown some design flaws ever since it was circulated in the army. The rifle was developed by ARDE, Pune of DRDO. Currently, ARDE is producing the Multi Caliber Individual Weapon System (MCIWS) as a new assault rifle to replace the INSAS and AK rifles.

### Vehicles

#### DRDO Daksh

DRDO Daksh is a remote controlled bomb disposal robot. It is fully automatic, can climb staircases, navigate row lanes, steep slopes and two vehicles to find the bombs. If it finds a Bomb, it would simply throw water on it and diffuse it.

### Tanks

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#### Arjun MBT

Arjun Battle Tank was developed by DRDO's *Combat Vehicles Research and Development Establishment* (CVRDE) due to delays and other issues in acquiring the T-90S tanks from Russia. The tank is in service since 2004. The tank initially relied heavily on imported components but gradually, such components are being replaced by the indigenous ones. For its protection, DRDO has developed an armour called *Kanchan*, named after Kanchanbagh Hyderabad, location of Defence Metallurgical Research Laboratory (DMRL).

Currently, DRDO is developing its Arjun Mark-II variant to improve its performance.

#### T-90 Bhishma

India had purchased over 300 T-90S tanks from Russia in 2001 due to delays in Arjun Tank production. As per a 2006 contract, 330 T-90M tanks were to be manufactured at Avadi factory. This T-90M has been renamed as Bhishma and is tailored as per Indian requirements. First batch of 10 such tanks was inducted in the army in 2009.

#### Vijayanta Tank

Vijayanta Tank is not in service now. It was the first indigenous battle tank of India and it remained in service from 1965 to 2008.

#### T-72 Ajeya Tank

Once the Vijayanta Tank was out of service, they were superseded by the Russia's T-72 Tanks,



whose Indian versions are Ajeya MK1 and Ajeya MK2.

### **BMP-2 Sarath Tank**

India had purchased technology of BMP-2 Sarath Tank from Russia back in 1990s. Most of them were produced in India and currently, some 1500 Sarath Tanks are in service of the army. The Modi Government has given nod to produce 362 BMP-2 Saraths. Kindly note that Sarath has also been modified into the NAMICA (Nag Missile Carrier), which is a tank destroyer.

### **Artillery**

#### **Bofors Haubits FH77**

India had acquired 410 Bofors Haubits FH77 between 1986 to 1991. These howitzers rocked the Indian polity due to the so called Bofors scam attached to their purchase. Nevertheless, the howitzers performed excellently in the Kargil war and proved their worth, which nobody talked about when they were being procured. Currently, the Government is planning to replace them with Dhanush Howitzer.

#### **Dhanush Howitzer**

This is India's indigenously produced Howitzer. Currently, version 2 is under development.

#### **Pinaka MBRL**

Pinaka MBRL (Multi Barrel Rocket Launcher) system has been inducted in Indian Army in large number. It can send a rocket to around 40 Kilometers and can fire 12 HE rockets in 44 seconds, neutralizing a target area of 3.9 km<sup>2</sup>. It has been in service since 1990s and performed well in the Kargil War. Currently, India produces around 5000 Pinaka MBRL every year. After the success of the Pinaka multiple rocket launcher, ordnance factories are now developing **Pinaka Mark II**.

### **Antitank Missiles**

The notable antitank missiles of India include Spike, Nag, MILAN and Helina.

#### **Nag and Helina**

Nag is an antitank missile of India indigenously developed by the Defence Research and Development Organisation (DRDO) under the Integrated Guided Missile Development Programme (IGMDP). HeliNa is a helicopter-launched version of Nag missile. The Operational range of Nag / Helina is 500m to 4 km (Land version), 7-10km (Air-launched).

#### **Spike**

Spike is a fire and forget anti-tank missile developed by Israel company Rafael. Currently, India has ordered for their purchase from Rafael. Kindly note that India has chosen to purchase Spike instead of US Javelin in October 2014.

#### **MILAN**

MILAN missile was developed by France. India's Bharat Dynamics Ltd has produced these missiles with license from the original producers.



### Helicopters

Among utility helicopters of Indian Army include HAL Rudra, HAL Chetak, HAL Cheetah, HAL Cheetal, HAL Dhruv etc. Cheetah and Chetak form the vintage fleet of helicopters used to move troops and equipments to high-altitude locations. The Government is in the process of replacing them with new utility helicopters. Among attack helicopters, Indian army has *HAL Rudra*.

### Unmanned Aerial Vehicles (UAV)

Rustom-1 is the name of India's a medium-altitude and long-endurance Unmanned Aerial Vehicle (UAV), which is being developed by the Bangalore-based Aeronautical Development Establishment (ADE). Rustom-1 follows two other UAVs Lakshya and Nishant developed by the Aeronautical Development Establishment. Lakshya is a drone can be remotely piloted by a ground control station and provides aerial sub-targets for live-fire training. Nishant is a surveillance aircraft which has the main job of intelligence gathering over enemy territory. Rustom has endurance of 12-15 hours and can carry pay load of 75 kilograms. The altitude ceiling is 25000 feet. Rustom can be used by Indian Army, Navy and Airforce, all of them. Currently, Rustom-II is under development.

### Indian Navy

The primary objective of Indian Navy is to secure the nation's maritime borders; have greater influence of India in maritime interests, further maritime trade and

They show a greater influence in India's maritime area of interest, to further the nation's political, economic and security objectives.

### Commands of Indian Navy

The Indian Navy operates three Commands. Each Command is headed by a Flag Officer Commanding-in-Chief in the rank of Vice Admiral. The location of these commands are as follows:

- Western Naval Command → Mumbai
- Eastern Naval Command → Vizag
- Southern Naval Command → Kochi

### Operational Bases

The major operational bases of Indian Navy are located at Vizag, Mumbai, Kochi and Chennai. Further, the INS Kadamba at Karwar was commissioned in 2005 as first such base of Indian Navy which does not share port facilities with commercial shipping. This base was built under Project Seabird.

### Ranks and Insignia

The Highest rank in Indian Navy is Admiral of the Fleet, which is like Field Marshal in Indian Army, is a wartime or ceremonial rank. No officer of Indian Navy has been so far awarded this rank. The second highest rank is of Admiral, which is the Chief of the Naval Staff. The other officers include



Vice Admiral, Rear Admiral, Commodore, Captain, Commander, Lt. Commander, Lieutenant and Sub-lieutenant. Further, there are Junior Commissioned Officers and Non-Commissioned Officers in the Indian Navy.

Ranks and Insignia of Indian Navy										
Admiral of the Fleet*	Admiral^	Vice Admiral	Rear Admiral	Commodore	Captain	Commander	Lieutenant Commander	Lieutenant	Sub-lieutenant	
* Honorary/wartime rank. ^ Held only by the Chief of the Naval Staff or the Chairman of the Chiefs of Staff Committee										

### Naval Air Arm and Marine Commandos

The Naval Air Command is one of the important components of Indian Navy which consists of MiG-29Ks fighter planes and Sea Harrier Jets that operate from aircraft carrier INS Viraat and INS Vikramaditya. MARCOS or Marine Commando is a special force raised by Indian Navy in 1987 for special operations, amphibious warfare and counter-terrorism.

### Equipments of Indian Navy

The equipments of Indian Navy include Ships and Aircraft Carriers, Submarines, Weapon Systems and Naval Satellite. Important Trivia about these is discussed below:

#### Aircraft Carriers

Aircraft Carrier is a warship that has a full-length flight deck and facilities for carrying, arming, deploying and recovering aircrafts. Thus, the Aircraft carriers works as naval airbase of the country. Currently, India has two Aircraft carriers viz. INS Viraat and INS Vikramaditya.

- INS Viraat is the Centaur Class aircraft carrier and should be noted has the last British built ship in Indian Navy and the oldest aircraft carrier in service in the world. It is in service since British Era.
- INS Vikramaditya is the latest aircraft carrier which was inducted in Indian Navy in June 2014. It is a modified Kiev-class aircraft carrier, and was originally developed as Baku and was in service of Soviet Navy as Admiral Gorshkov till 2004 when India purchased it.

We note here that INS Vikrant was India's first aircraft carrier. It served the Indian Navy from 1945 to 1997, then served as a museum for more than a decade, and now has been scrapped. Currently, a new Vikrant Class aircraft carrier is under construction at Kochi Shipyard. The government plans to decommission INS Viraat once this new indigenously made aircraft carrier comes into service.

#### Submarines

The submarines operate underwater and are used to infiltrate the enemy sea and destroy enemy ships. There are two types of Submarines viz. Attack Submarines and Ballistic Missile Submarines.



They can be Diesel powered or nuclear powered.

Currently, India has 15 Submarines. Out of which only two viz. INS Chakra and INS Arihant are nuclear powered while rest are diesel powered.

### **INS Chakra**

The Akula Class INS Chakra was leased from Russia for 10 years in 2012. Currently, it is the only nuclear powered attack submarine of India.

### **INS Arihant**

Arihant Class INS Arihant is India's first indigenously developed nuclear powered ballistic missile submarine but it has not entered into service as of now. It is undergoing sea trials. The design of the submarine is based on Akula class and once inducted into service, INS Arihant would be India's nuclear powered ballistic missile. It would be capable of launching nuclear-capable ballistic missile BO-5 which has a range of 700 kms. It can carry 12 such missiles. With INS Aspirant in service, India would be only country beyond P-5 to have developed such submarine on its own.

Rest of the active submarines are diesel powered and divided into two classes viz. Sindhughosh Class and Shishumar Class. There are nine Sindhughosh class submarines in service currently, but they have become very old. The government is planning to replace Sindhughosh submarines by India's own Kalvari-class submarines under development by Mazgaon Dock Ltd.

### **Destroyers**

Destroyer ships are those warships escort larger ships or group of ships in battle and destroy the other smaller attackers. A guided missile destroyer is capable of launching guided missile to destroy the attackers. Indian Navy has currently 10 destroyers divided into three classes viz. Rajput Class, Delhi Class and Kolkata Class.



Destroyers of Indian Navy			
<b>Kolkata class</b>		Stealth guided missile destroyer	INS Kolkata INS Kochi
<b>Delhi class</b>		Guided missile destroyer	INS Delhi INS Mysore INS Mumbai
<b>Rajput class</b>		Guided missile destroyer	INS Rajput INS Rana INS Ranjit INS Ranvir INS Ranvijay

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### Frigates

Frigates are lighter armed ships to consort the larger ships or group of ships. India has 14 frigates in service divided into four classes viz. Shivalik, Talwar, Brahmaputra and Godavari. The Shivalik and Talwar class are multi-role stealth frigate while Brahmaputra and Godavari Class are Guided Missile Frigates.

### Corvettes

Corvettes are light warships often deployed for anti-submarine operations. India has 26 Corvettes divided into five classes viz. Kamorta, Kora, Khukri, Abay and Veer Class corvettes.

### Mine countermeasure Vessels

These small naval warships are deployed to counter the threats of naval mines. India's Pondicherry class ships are Mine Countermeasure vessels.

### Amphibious transport docks

The amphibious transport docks embarks, transports and lands the land forces for amphibious warfare missions. They are generally designed to transport troops by sea. India's **INS Jalashwa** is such amphibious transport dock.

### Landing Ships

The Landing ships are used to transport the vehicles, troops and cargo to shore. India has nine landing ships divided into three classes viz. Shardul Class, Magar Class and Kumbhir class.



### Patrol Vessels

The Petrol vessels are small naval ships used to patrol the coastal area. They are also used to counter the smuggling, piracy and other such problems.

### Naval Bases

In 2005, the Indian Navy commissioned INS Kadamba at Karwar, 100 km from Goa. This is the third operational naval base after Mumbai and Vishakapatnam and the first to be controlled exclusively by the Navy. (The other bases share port facilities with civilian shipping, but this one is for purely naval use.) Built under Phase I of the multi-billion dollar Project Seabird, it is the largest naval base in the region. Asia's largest Naval Academy INS Zamorin, was inaugurated at Ezhimala, in January 2009 by the Prime Minister of India.

Another naval base is being planned for the eastern shores, near Vishakapatnam at a cost of US\$350 million. The base, which will be located fifty km south of Vishakapatnam in Rambilli Mandal, will have comprehensive anti-aircraft, anti-submarine and amphibious capabilities. This east coast base expansion program is in direct response to Chinese PLA Navy activities in the region.

The Indian Navy is 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 also has berthing rights in Oman and Vietnam.

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### Other Established Bases

The navy has bases at Mumbai, Vishakapatnam, Kochi, Goa, Karwar, Lonavala, Port-Blair, Orissa, Chennai, Kolkata, Jamnagar and Kardip (Andaman).

### The Various Training Establishments

- Indian Naval Academy – Ezhimala, Kerala
- Seamen Training Centre – INS Chilka, Orissa
- Naval College of Engineering, Lonavala, Maharashtra
- Naval College of Electrical Engineering, Jamnagar, Gujarat
- Naval Institute of Logistics & Management, Mumbai, Maharashtra

### Systems and Sensors

BrahMos supersonic cruise missile is becoming the primary anti-ship missile of the Indian Navy. The Indian Navy uses modern technology and weapon systems, most of which are imported from foreign countries. India and Israel are jointly developing the Barak 8 missile system, an improved, longer range version of the Barak 1 air defence missile which is operational on Indian Navy ships. The Barak 1 is used on most of the main ships of the Indian Navy. The Indian Navy's nuclear deterrence capability is based on Sukanya class ships armed with the Dhanush ballistic missiles that has a range of 350 km.





India has a number of foreign made cruise missile systems, including the Klub SS-N-27. It also has its own Nirbhay cruise missile systems under development. The Sagarika (Oceanic) submarine launched ballistic missile (SLBM), which has a range of at least 700 km (some sources claim 1000 km) forms part of India's nuclear triad. Another successful programme has been the adaptation of the Yakhont anti-ship missile system into the BrahMos by the NPO and the DRDO. The BrahMos has been tailored to Indian needs and uses a large proportion of Indian-designed components and technology, including its fire control systems, transporter erector launchers, and its onboard navigational attack systems. The successful test of BrahMos from INS Rajput (D51) provides Indian Navy with precision land attack capability.

### Electronic Warfare and Systems Management

Sangraha is a joint electronic warfare programme of the Defence Research and Development Organisation (DRDO) and the Indian Navy. The system comprises a family of electronic warfare suites, such as Ajanta and Ellora, for use on different naval platforms capable of intercepting, detecting, and classifying pulsed, carrier wave, pulse repetition frequency agile, frequency agile and chirp radars. The systems employ a modular approach facilitating deployment on various platforms like helicopters, vehicles, and small ships. Certain platforms, apart from ESM (electronic support measures), have ECM (electronic countermeasure) capabilities. Advanced technologies like multiple-beam phased array jammers are employed in the system for simultaneous handling of multiple threats.

The Indian Navy also relies on information technology to face the challenges of the 21st century. The Indian Navy is implementing a new strategy 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 help in increased operational awareness. The network is referred to as the Navy Enterprise Wide Network (NEWN). The Indian Navy has also provided training to all its personnel in Information Technology (IT) at the Naval Institute of Computer Applications (NICA) located in Mumbai. Information technology is also used to provide better training, like the usage of simulators for better management of the force.

### Indian Air Force

Indian Air Force is youngest among the three armed forces in the country. It was formally established in 1932 as Royal Indian Air Force. In 1950, the prefix Royal was dropped. First major expansion plan was undertaken in 1953-1960 when new jet fighters called Toofani were inducted in the force. In the Indo-China war, Indian Air Force did not get a chance to test its mettle and its employment was limited to logistics support and casualty evacuation only. Indian Air Force was for



the first time comprehensively deployed in the Indo-Pak war of 1971 on both Eastern and Western Fronts. This resulted in total command of IAF over Pakistan Air Force in East, while substantial edge in west.

### Structure

Chief of the Air Staff with the rank of Air Chief Marshal is the Commander of the Indian Air Force. He is assisted by six officers: a Vice Chief of the Air Staff, a Deputy Chief of the Air Staff, the Air Officer in Charge of Administration, the Air Officer in Charge of Personnel, the Air Officer in Charge of Maintenance, and the Inspector General of Flight Safety.

*In January 2002, the government conferred the rank of Marshal of the Air Force on Arjan Singh making him the first and only Five-star officer with the Indian Air Force and ceremonial chief of the air force.*

### Commands

The Indian Air Force is divided into five operational and two functional commands. Each Command is headed by an Air Officer Commanding-in-Chief with the rank of Air Marshal. The purpose of an operational command is to conduct military operations using aircraft within its area of responsibility, whereas the responsibility of functional commands is to maintain combat readiness. Aside from the Training Command at Bangalore, the centre for primary flight training is located at the Air Force Academy in Hyderabad, Andhra Pradesh, followed by operational training at various other schools. Advanced officer training for command positions is also conducted at the Defence Services Staff College; specialised advanced flight training schools are located at Bidar, Karnataka, and Hakimpet, Andhra Pradesh (also the location for helicopter training). Technical schools are found at a number of other locations.

#### Operational Commands

- Central Air Command (CAC), Headquartered at Allahabad, Uttar Pradesh
- Eastern Air Command (EAC), Headquartered at Shillong, Meghalaya
- Southern Air Command (SAC), Headquartered at Thiruvananthapuram, Kerala
- South Western Air Command (SWAC), Headquartered at Gandhinagar, Gujarat
- Western Air Command (WAC), Headquartered at Subroto Park, New Delhi

#### Functional Commands

- Training Command (TC), Headquartered at Bangalore, Karnataka
- Maintenance Command (MC), Headquartered at Nagpur, Maharashtra

#### Training Centre for Officers

- Air Force Administrative College – Coimbatore
- Air Force Training Academy – Hakimpet, Hyderabad
- Air Force Technical Training Centre – Bangalore and Chennai
- Air Force Non-technical Training Centre – Belgaon



### Bases

The IAF operates over sixty air bases, with more being built or planned. Western Air Command is the largest Air Command. It operates sixteen air bases from Punjab to Uttar Pradesh. Eastern Air Command operates fifteen Air bases in Eastern and North-eastern India. Central Air Command operates seven air bases in Madhya Pradesh and surrounding states of central India. Southern Air Command, a strategically important air command, in line with India's latest doctrine of protecting the vital shipping routes. It operates nine Air bases in Southern India and two in the Andaman and Nicobar Islands. South Western Air Command is the front line of defence against Pakistan; this important Command operates twelve air bases in Gujarat, Maharashtra and Rajasthan. India also operates the Farkhor Air Base in Tajikistan.

### Wings

A Wing is a formation intermediate between a Command and a Squadron. It generally consists of two or three IAF Squadrons and Helicopter Units, along with Forward Base Support Units (FBSU). FBSUs do not have or host any Squadrons or Helicopter units but act as transit airbases for routine operations. In times of war, they can become full-fledged air bases playing host to various squadrons. In all, about 47 Wings and 19 FBSUs make up the IAF.

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### Squadrons

Squadrons are the field units and formations attached to static locations. Thus, a Flying Squadron is a sub-unit of an air force station which carries out the primary task of the IAF. All fighter squadrons are headed by a Commanding Officer with the rank of Wing Commander. Some Transport squadrons and Helicopter Units are headed by a Commanding Officer with the rank of Group Captain.

### Garud Commando Force

In September 2004, the IAF established its own special operation unit called the Garud Commando Force, consisting of approximately 1500 personnel.

### Integrated Space Cell

An Integrated Space Cell, which will be jointly operated by all the three services of the Indian armed forces, the civilian Department of Space and the Indian Space Research Organization (ISRO) has been set up to utilize more effectively the country's space-based assets for military purposes and to look into threats to these assets. This command will leverage space technology including satellites. Unlike an aerospace command, where the air force controls most of its activities, the Integrated Space Cell envisages cooperation and coordination between the three services as well as civilian agencies dealing with space. One such centre is based at Bhopal.

India currently has 11 remote sensing satellites in orbit. Though most are not meant to be dedicated



military satellites, some have a special resolution of 1 meter or below which can be also used for military applications. Noteworthy satellites include the Technology Experiment Satellite (TES) which has a panchromatic camera (PAN) with a resolution of meter, the RISAT-2 which is capable of imaging in all-weather conditions and has a resolution of one meter, the CARTOSAT-2, CARTOSAT-2A (a dedicated military satellite) and CARTOSAT-2B which carries a panchromatic camera which has a resolution of 80 centimeters (black and white only).

### Display Teams

Surya Kiran is an aerobatics demonstration team of the Indian Air Force. The Surya Kiran Aerobatic Team (SKAT) was formed in 1996 and are successors to the Thunderbolts.

Sarang is the Helicopter Display Team of the Indian Air Force.

### Rank Structure

The rank structure of the Indian Air Force is based on that of the Royal Air Force. The highest rank attainable in the IAF is Marshal of the Indian Air Force, conferred by the President of India after exceptional service during wartime. MIAF Arjan Singh is the only officer to have achieved this rank. The head of the Indian Air Force is the Chief of the Air Staff, who holds the rank of Air Chief Marshal.

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### Ranks

#### Commissioned Officers

- Marshal of the Indian Air Force
- Air Chief Marshal (the rank held by Chief of Air Staff)
- Air Marshal
- Air Vice Marshal
- Air Commodore
- Group Captain
- Wing Commander
- Squadron Leader
- Flight Lieutenant
- Flying Officer

#### Junior Commissioned Officers (JCOs)

- Master Warrant Officer
- Warrant Officer
- Junior Warrant Officer

#### Non Commissioned Officers (NCOs)

- Sergeant



### Other Personnel

- Corporal
- Leading Aircraftsman
- Aircraftsman

### Aircraft in the Indian Air Force

Indian Air Force has aircraft and equipment of Russian, British, French, Israeli, US and Indian origins with Russian aircraft dominating its inventory. HAL produces some of the Russian and British aircraft in India under license.

Among the Fighter and Multi-role Combat Aircrafts, India has Sukhoi Su-30 MKI, Mikoyan MiG-29, Dassault Mirage 2000 (Vajra), MiG-21 etc.

### Strike, Attack and Close Support Aircrafts

These are military aircraft designed to attack targets on the ground. They are often deployed as close air support for, and in proximity to, their own ground forces, requiring precision strikes from these aircraft. Further, the SEPECAT Jaguar, known as *Shamsher* and the Mikoyan MiG-27 known as *Bahadur* serve as the IAFs primary ground attack force. The IAF currently operates around 140 Jaguars and over 100 MiG-27s.

### Airborne Early Warning Aircraft

These aircraft are designed to detect and distinguish hostile aircraft. The system can be used to direct fighters and strike aircraft to their targets and warn them of hostile enemy aircraft in the area. The IAF currently operates the EL/M-2075 Phalcon AEW&C, procured from Israel. A total of 3 such systems are currently in service, with possible orders for 2 more.

### Tanker Aircraft

IAF Il-78 MKI is used for aerial refuelling which allows IAF aircraft to remain airborne for longer periods, hence enhancing their effective range. Aerial refuelling also allows aircraft to take-off with greater payload (by carrying less fuel during take-off). The IAF currently operates 6 Ilyushin Il-78MKIs for aerial refuelling roles.

### Transport Aircraft

Transport aircraft are typically used to deliver troops, weapons, supplies and other military equipment to the IAF field of operations. The IAF currently operate different types of transport aircraft for different roles. For example:

- Ilyushin Il-76s known as *Gajraj* is used for military transport roles such as strategic or heavy lift at all operational levels. At present there are 17 such transport aircrafts. The Government plans to replace them with C-17 Globe master.
- India has also acquired C-130J for combined Army-Air Force operations. There are currently



6 C-130Js in service.

- Antonov AN-32 known as Sutlej serves as medium transport aircraft in the IAF. The aircraft is also used in bombing roles and para-dropping operations.
- Hawker Siddeley HS 748 are used mainly for transport training and communication duties.
- Dornier Do 228 serves as light transport aircraft in the IAF
- Boeing 737s and Embraer ECJ-135 Legacy aircrafts are used as VIP Transports.

The IAF operates aircraft for the President of India as well as the Prime Minister of India under *Air India One*.

### Helicopters

An important objective of the IAF is to support ground troops by providing air cover and by transporting men and essential commodities across the battlefield. For this purpose the Air Force maintains a fleet of helicopters including HAL Dhruv, HAL Chetak, HAL Cheetah etc.

### HAL Tejas

The Tejas is a multi-role light fighter developed by India. It is a tail-less, compound delta-wing design powered by a single engine. It came out from the Light Combat Aircraft (LCA) programme, which began in the 1980s to replace India's ageing MiG-21 fighters. Later, the LCA was officially named "Tejas", meaning "Radiance" by then Prime Minister Atal Bihari Vajpayee. The Tejas has a pure delta wing configuration, with no tailplanes or foreplanes, and a single dorsal fin. It integrates technologies such as relaxed static stability, fly-by-wire flight control system, multi-mode radar, integrated digital avionics system, composite material structures, and a flat rated engine.

The Tejas is the second supersonic fighter developed indigenously by Hindustan Aeronautics Limited (HAL) after the HAL Marut. The Indian Air Force (IAF) is reported to have a requirement for 200 single-seat and 20 two-seat conversion trainers, while the Indian Navy may order up to 40 single-seaters to replace its Sea Harrier FRS.51 and Harrier T.60. The Tejas was cleared in January 2011 for use by Indian Air Force pilots. It received the second of three levels of operational clearance on 20 December 2013.

### Paramilitary Forces

"Paramilitary Forces" refers to three organisations which assist the Indian Armed Forces particularly closely and are led by officers of the Indian Army or Indian Navy. However, they have not been defined by any law or rules of the Government. Earlier, the term "paramilitary" forces was used for eight forces viz. Assam Rifles, Special Frontier Force, Indian Coast Guard, CRPF, BSF, ITBP, CISF, SSB. However, from 2011, they have been regrouped into two classes whereby the later five are called Central Armed Police Forces (CAPF).



### Paramilitary Forces

Thus, there are three paramilitary forces of India viz. Assam Rifles, Special Frontier Force and Indian Coast Guard. They come under Ministry of Defense.

#### Assam Rifles

Assam rifles is India's oldest paramilitary force, raised originally in 1835 as *Cachar Levy*. They perform many roles including the provision of internal security under the control of the army through the conduct of counter insurgency and border security operations. Some Other Facts:

- Assam Rifles is known as “Sentinels of the Northeast”.
- Its headquarters are located at Laitkor (Shillong). The motto of Assam Rifles is “Friends of the Hill People”.
- There are currently 46 battalions of Assam Rifles. While Assam Rifles functions under the Ministry of Defence, its administrative control is under the Ministry of Home Affairs.
- One battalion comprises around 1,000 personnel. Of the 46 battalions, 15 are deployed along the 1,643-km border.

#### Special Frontier Force

It was created in 1962 and was put under the direct supervision of the Intelligence Bureau, and later, under the Research and Analysis Wing. It was raised post Indo-China war to carry out covert operations behind Chinese Lines in a future Indo-China war, it actually never fought in China. However, it provided invaluable service in the 1971 Indo-Pak war.

The commandos and officer of SPF are trained in four areas viz. Mountain, Amphibious, Air and Jungle warfare. SPF was also used in combating operation blue star. The SFF, along with the Special Protection Group (SPG) were the pioneers at close protection (CP) duties in India.

#### Indian Coast Guard

The mission of Indian Coast Guard is protection of India's maritime interests and maritime law enforcement with jurisdiction over both territorial and international waters, including contiguous zone & exclusive economic zone. The Coast Guard works in close cooperation with the Indian Navy, Department of Fisheries, Department of Revenue (Customs) and the Central and State police forces.

### Central Armed Police Forces

CRPF, BSF, ITBP, CISF and SSB are collectively called Central Armed Police Forces. They come under Ministry of Home Affairs.

#### Central Reserve Police Force

The Central Reserve Police Force came into existence as Crown Representative's Police on 27th July 1939. Besides law enforcement and counter-insurgency duties, the CRPF plays a major role in the General Elections. Some other notes are as follows:



- Rapid Action Force (RAF) is a specialised battalion of the CRPF formed in 1992, to deal with communal riots and related civil unrest.
- Parliament Duty Group is an elite CRPF unit tasked to provide armed protection to Parliament House and are trained in combating nuclear and bio-chemical attacks, rescue operations and behavioural management.

### Border Security Force

Until 1965, the Pakistan border was manned by the state armed police battalions. This protection of borders was not enough and Pakistan attacked taking benefit of this loophole in 1965. This attack exposed the inadequacy of the state police to protect the border and thus BSF was established to man India's Border with Pakistan. K F Rustamji was its first Director General. It is currently the world's largest border guarding force.

- They are assigned with given the task in counter-insurgency and counter-terrorism operations recently.
- During peace, they prevent smuggling and any other illegal activities on the Border and carry out anti-infiltration duties. They also collect trans-border intelligence.
- Guarding of Prisoners of War camps and acting as guides to the Army in border areas are their primary work when they help army during war.

### Central Industrial Security Force

The CISF came into existence in 1969 to provide integrated security cover to the Public Sector Undertakings (PSUs) which, occupied the commanding heights of the economy in the 70s.

- CISF is currently providing security cover to nuclear installations, space establishments, airports, seaports, power plants, sensitive Government buildings and ever heritage monuments. It is also in charge of airport security at all commercial airports in India.
- Among the important responsibilities recently entrusted to the CISF are the Delhi Metro Rail Corporation, VIP Security, Disaster Management and establishment of a Formed Police Unit of the UN at Haiti.

### Sashastra Seema Bal

It is a armed border force formerly known as Special Service Bureau raised in 1963 to counter the Chinese invasion. SSB is the first border guarding force which decided to recruit women battalions. SSB is also engaged in Counter Insurgency operations in Jammu and Kashmir and Anti-naxal operations in Jharkhand and Bihar and participates in election duties.

The role of SSB consists of the following:

- To promote sense of security among the people living in the border areas.
- To prevent trans-border crimes, and unauthorised entries entry or exit from the territory of





India.

- To prevent smuggling and other illegal activities.

### Indo-Tibetan Border Police

ITBPF is a specialized mountain Force and most of the men are professionally trained mountaineers and skiers.

The ITBP has many major roles to be play, they are

- Vigil on the northern borders
- Detection and prevention of border violations.
- Promotion of the sense of security among the local population.
- Check illegal immigration and trans-border smuggling.
- Provide security to sensitive installations and threatened VIPs.
- Restore and preserve order in any area in the event of disturbance.
- To maintain the peace in the country.

The ITBP is trained in Medical Camp, disaster management, and nuclear, biological and chemical disasters. The manpower of ITBP are exposed to high velocity storms, snow blizzards, avalanches, and landslides, besides the hazards of high altitude and extreme cold.

### Other Forces

#### National Security Guard

The National Security Guard (NSG) is a special force utilised for counter-terrorism activities and was created under the National Security Guard Act in 1986. They are the second line of defence to the nation. The NSG members are also known as **Black Cats** because of the black drill cotton coveralls and balaclavas or helmets they wear.

The NSG's specific goals include:

- Neutralization of terrorist threats
- Handling hijacking situations in air and on land.
- Bomb disposal (search, detection and neutralisation of IEDs).
- PBI (Post Blast Investigation)
- Engaging and neutralizing terrorists in specific situations.
- Hostage Rescue.

The task of providing VVIP security for high-risk VVIPs in India is done by the Special Rangers Group (SRG) of the NSG.

#### Railway Protection Force

Railway Protection Force (RPF) under Ministry of Railways, ensures the safety, security and boosts the confidence of the travelling public in the Indian Railways. They fight against criminals in



protecting railway passengers, passenger area and railway property. The force facilitates passenger-travel and security by removing all anti-social elements from trains, railway premises and passenger area.

### Defence Security Corps

The Defence Security Corps (DSC), provides security at Defence Ministry sites. The CISF and the DSC provide security at Indian Ordnance Factories, India's nuclear laboratories and Defence Research and Development Organisation.

### Indian Missile Projects

#### Project Devil and Project Valiant

In 1970s, the Defence Research & Development Laboratory (DRDL) undertook the *Project Devil* and *Project Valiant*. The Project Devil was aimed to produce short range surface-to-air missile. The project Valiant was aimed to produce long-range ballistic missile. Both Projects were considered failures. Project Valiant was terminated in 1974 and Project Devil ended in 1980.

#### Integrated Guided Missile Development Program

The Integrated Guided Missile Development Program (IGMDP) was launched in 1983 to develop five missile systems in the country viz. Trishul, Akash, Nag, Prithvi and Agni-I (intermediate-range surface-to-surface missile). In 1990s, the program was expanded to develop the long range Agni Missile, Sagarika (ballistic missile), Surya (medium-range version of the Agni ballistic missile) and Dhanush (naval version of the Prithvi). In 2008, the DRDO announced the successful completion of the program.

#### Trishul

It is a short-range surface-to-air missile developed by DRDO with an operational range of 9 km.

#### Akash

It is a medium-range surface-to-air missile designed by DRDO with a range of 30 km. It can reach an altitude of 18 km. It can be fired from both tracked and wheeled platforms.

#### Nag

It is a third-generation "fire and forget" anti-tank guided missile. NAG will be produced in two basic variants: land version and air launched version. Originally Nag would have been available with 3 types of guidance: a wire guided version, an infra-red version and a millimetric wave (mmW) active radar homing version. But DRDO failed to develop a wire guided system. The missile is launched from 3 platforms: NAMICA (NAG missile carrier), HAL Dhruv Helicopter and HAL Light Combat Helicopter. HELINA (HELicopterNag) is an advanced variant of NAG and is based on 'lock-on after launch' system extending its range to 7 km.

#### Prithvi Missile Series

Prithvi missiles are tactical short range surface-to-surface ballistic missiles. There are 3 variants of it.



Prithvi-I is an Army Version with 150km range and 1,000kg payload capacity. Prithvi-II is an Air Force Version with 250-350 km range and 500kg payload capacity. Prithvi-III is a Naval Version with 350km range and 1000kg payload capacity.

### **Agni missile series**

Agni missile are medium to intercontinental range ballistic missiles.

- Agni-I is a medium range (700 km to 1,200 km) missile with one stage.
- Agni-II is an intermediate range (2,000 km to 2,500 km) missile with two stages.
- Agni-III is an intermediate range (3,000 km to 5,000 km) missile with two stages.
- Agni-IV is an intermediate range (2,500 km to 3,700 km) missile with two stages.
- Agni-V is an intercontinental (5,000 km to 8,000 km) missile with three stages.
- Agni-VI is an intercontinental (10,000 km to 12,000 km) missile with three stages.

The Agni-I, Agni-II, Agni-III and Agni-IV are in service with Indian Army. Agni-V is under testing.

Agni-VI is under development.

### **K Missile Series**

The K family of missiles is a submarine-launched ballistic missile (SLBM). They are being developed to provide second-strike capabilities and thus the nuclear deterrence. There are three variants: K-15 (Sagarika), K-4 and K-5. K-15 has 750km range. K-4 missile has two sub-variants, one with 3,500km range and the other with 5,000km range. K-5 is under development with a range of 6,000km. The K family of missiles are used with nuclear powered Arihant class submarines.

### **Shaurya**

It is a short range surface-to-surface ballistic missile developed for Indian Army. Its range is 700km and is capable of carrying a payload of one ton conventional or nuclear warhead.

### **BrahMos**

BrahMos supersonic cruise missile is designed and developed by BrahMos Aerospace, a joint venture of India and Russia. It is capable of being launched from land, sea, sub-sea and air against sea and land targets. It is capable of carrying a warhead of 300 kilogram and can be launched from ships, land and submarines. It has top supersonic speed of Mach 2.8. It can strike a target at maximum range of 290-km. It is two-stage missile, the first one being solid and the second one ramjet liquid propellant.

### **BrahMos II**

It is a hypersonic cruise missile and it is the second of the BrahMos series of cruise missiles. It is expected to have a range of 290 km and a speed of Mach 7. It will be powered by a scramjet engine instead of a ramjet one.

### **Nirbhay**

It is long range subsonic cruise missile. The low altitude flying missile can evade detection by radars by flying at tree top level. It can strike targets that are more than 700 km away also and is capable of



carrying nuclear warheads. It can also hover over targets, unlike other missile. It also has a “fire and forget” system which cannot be jammed by the enemy.

### **Prahaar**

It is a solid fuelled surface-to-surface guided short-range ballistic missile. It would be equipped with omni-directional warheads and could be used for strike both tactical and strategic targets. Its operational range is 150km.

### **Astra**

It is India's first beyond-visual-range air-to-air missile designed and developed indigenously by DRDO. It is capable of attacking targets with varying range and altitudes allowing for engagement of both short-range targets (up to 20 km) and long-range targets (up to 80 km) using alternative propulsion modes. Its test flights are launched from Su-30Mki.

### **Barak-8**

It is a long-range anti-air and anti-missile naval defence system jointly developed by India and Israel. It is a surface-to-air missile.

### **Anti-Radiation Missile**

It is designed to detect and home in on an enemy radio emission source.

### **Anti-Satellite Missile**

It is under consideration for development.

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## **Indian Ballistic Missile Defense Program**

The program aims to develop and deploy a multi-layered ballistic missile defence system to protect from ballistic missile attacks. It is a double-tiered system consisting of the Prithvi Air Defence (PAD) missile for high altitude interception, and the Advanced Air Defence (AAD) Missile for lower altitude interception.

### **Prithvi Air Defence (PAD)**

It is an anti-ballistic missile developed to intercept incoming ballistic missiles outside the atmosphere (exo-atmospheric). PAD is a two-stage missile with a maximum interception altitude of 80 km.

### **Advanced Air Defence (AAD)**

It is an anti-ballistic missile developed to intercept incoming ballistic missiles in the endo-atmosphere at an altitude of 30 km.

## **Section B: Issues & Analysis for Mains**

### **Armed Forces Special Powers Acts (AFSPA)**

Armed Forces (Special Powers) Acts is collective name of several acts passed by Indian parliament for providing special powers to the Indian Armed Forces and to provide army officers and jawans legal immunity for their actions in disturbed areas.



### Historical Background

The British had promulgated the Armed Forces Special Powers Ordinance in 1942 to suppress the Quit India Movement. On the lines of this ordinance, the Government of India promulgated four ordinances in 1947 to deal with internal security issues arising due to partition in Bengal, Assam, East Bengal and United Provinces. These ordinances, which later became acts, were repealed in 1957 but a year later, re-enacted in Assam and Manipur as Armed forces (Assam & Manipur) Special Powers Act 1958 due to growing Naga insurgency. Gradually, the scope of the act was extended to all seven states of North East. Later, the act was extended to Punjab and Chandigarh via Armed Forces(Punjab and Chandigarh) Special Powers Act in 1983. This act was withdrawn in 1997. In 1990, the Armed Forces (Jammu and Kashmir) Special Powers Act, 1990 was enacted.

### Key Provisions of the Act

The salient provisions of this act are as follows:

- Governor of the State and Central Government are empowered to declare any part or full of any state as disturbed area if it is in their opinion that it is necessary to prevent terrorist activity or any such activity that might disrupt the sovereignty of India or cause insult to the national flag, anthem or India's Constitution.
- Section 4 of the act gives special powers to army officers in disturbed area to shoot (even if it kills) any individual who violates law / or is suspected to violate law (this includes assembly of five or more people, carrying of weapons) etc. The only condition is that the officer has to give warning before opening fire.
- Arrest anybody without a warrant, and carry out searches without consent.
- Once a person is taken into custody, he / she has to be handed over to the nearest police station as soon as possible.
- Prosecution of the officer on duty needs prior permission of the Central Government.

### Current Areas that come under AFSPA

Currently, AFSPA act is in force in the following areas.

#### Assam

Assam was the first state to have the AFSPA in 1958. Current act is in force in the state since November 1990, when ULFA's activities were at peak. Currently, the entire state except Guwahati municipal area comes under AFSPA.

#### Meghalaya

AFSPA is in force in Meghalaya only in a belt adjacent to 20 km of its boundary with Assam. This 20 Kilometres belt comes under disturbed area so that the armed forces in Assam are allowed to go into it in hot pursuit of the rebels.



### Arunachal Pradesh

In Arunachal Pradesh, the AFSPA is in force in three districts viz. Tirap, Changlang and Longding; and also a 20 kilometre belt along the Assam Border. In March 2015, the government had brought entire state under AFSPA but due to protest from the state government, withdrew it.

### Mizoram

The condition of the act in Mizoram is vague and unclear. The act has not been “applied” in Mizoram, since 1986 when Mizo Accord was signed. However, since there is not clarity, if this act was lifted from there, AFSPA should be considered a sleeping law in Mizoram.

### Nagaland

The act was in force in Nagaland area even before the state came into existence in 1961 because at that time, state was Naga Hills district of Assam. The act is in force in the state since then. Things are changing gradually there as NSCN(IM) is in talk with centre.

### Manipur

The law is in force in Manipur except in Imphal municipal area.

### Tripura

Tripura was under AFSPA since 1997. In 2015, the act has been withdrawn from the state.

### Jammu & Kashmir

AFSPA is in force in Jammu & Kashmir since 1990.

### Criticism of AFSPA

The act has been justified by the security forces by citing the need for armed forces to have extraordinary powers to deal with militancy. However it has been a subject of intense criticism by the civil society, intellectuals and human rights organizations. The criticism of the act is based on the following premises:

- Firstly, the provisions of the act are inherently flawed. The impunity provided by the law against any prosecution (except by central government permission) is manifested in cruelty and violation of human rights. There have been many cases of rape, torture etc. by the army personnel but none has been prosecuted so far. The most brutal case was of the Thangjam Manorama Devi, a 34-year-old Manipuri, who was arrested by Assam Rifles in 2004 on grounds of being a member of the banned organization. It was claimed by her family members that she was raped and murdered by the security officers. A commission was also formed to investigate the case but the personnel of the Assam Rifles repeatedly denied to appear before the commission and justice is still awaited.
- Secondly, the grounds of declaration of a disturbed area have not been defined in the act. Moreover, once an area has been declared disturbed it cannot be subjected to judicial review. Critics say that the law does not provide adequate safeguards in application of AFSPA.



- Thirdly, the power to shoot to the extent of causing death, and search without warrant are in contravention to the Article 21 of the constitution, the right to life, which forms the foundation of all other fundamental rights.
- Fourthly, the critics say that the law overrides the Crpc which lays down a proper procedure for police personnel in dealing with law and order problems. Unlike Crpc there are no adequate safeguards in the implementation of the AFSPA. Even the SC has stressed the need for following the appropriate procedure especially when security forces work in the aid of civil authorities.
- Fifthly, the act has not been able to contain insurgency and maintain law and order in the disturbed regions. When it was imposed in the north east there was few insurgent groups but today there are more than two dozen groups operating in the north east. In addition to this there has been rise in the number of civilians killed by the forces.
- Sixthly, grave human right violations have actually helped the insurgents to mobilize the people against the government. AFSPA has further intensified the demand for autonomy by the people leading to increase in agitations. This gives rise to a vicious circle of continuing law for indefinite period.

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### 1998 Verdict of Supreme Court in Naga People's Movement Case

The constitutional validity of the law was challenged in the Supreme Court. In a 1998 judgment in the *Naga People's Movement of Human Rights v. Union of India* case, the Supreme Court upheld the constitutionality of the law. However, the judgment made some notable conclusions such as:

- Although Central Government is empowered to declare an area disturbed on its own, it is desirable that it consults the state before making such declaration
- The act is not conferring any arbitrary powers to declare an area as a 'disturbed area'
- The declaration should be for a limited duration and there should be periodic review at 6 months.
- The officers should use minimal force necessary for effective action.
- The authorized officer should strictly follow the 'Dos and Don'ts' issued by the army.

### BP Jeevan Reddy Committee

Justice B P Jeevan Reddy committee was appointed in 2004 to review the provisions of the act in the north eastern states. This committee recommended that the AFSPA should be repealed and its appropriate provisions should be included in the UAPA. Further, the powers of the army / paramilitary officers should be clearly demarcated. Moreover, the committee recommended that grievance cells should be created in each district where such law is in force. The report was endorsed



by the 2nd ARC report also. But since the conditions of the North East *have not improved*, the committee report was junked by the Central Government.

### **Santosh Hegde Committee**

The Supreme Court had constituted the Santosh Hegde Committee to investigate six separate cases of possible AFSPA abuse in Manipur. According to the report of the committee, five out of six killings were encounters fabricated by both the Assam Rifles and the Manipur Police. The committee also reported the use of disproportionate force and intrusion of security forces in areas which are not notified as disturbed areas. Even the local police was found to be encroaching its domain in using lethal force thus misusing the immunity granted to security forces. The Commission even went to the extent of saying that AFSPA was an impediment to achieving peace in regions such as Jammu and Kashmir and the northeast. However the government is yet to act on these recommendations.

### **Why the Act is a Necessary Evil?**

There is no doubt that killings and human rights violations have occurred due to AFSPA but the problems posed by an array of internal and external agents necessitate an act with teeth to deal with them. A soldier deserves all the legal protection for the action he does or judgment he makes on the spot acting in best interest of the country. Our armed forces operate in very difficult circumstances and are much acquainted with actual ground situation than the bedroom patriots.

The act needs to continue, however, needs more humane provisions so that state does not take away the right to life of the people.

### **Why AFSPA has been imposed in J&K and North East but not in LWE affected Areas?**

Declaring an area “disturbed” and putting it under AFSPA has been used by the Governments as last resort to deal with the threat to law & order and national security. If the government feels that local police is capable of handling the situation on its own or with the support of the Central Armed Police Forces, there is no need to impose AFSPA. Further, the situation in North East and J&K is different because of visible external influence on the insurgency and terrorism there. The issue of deploying armed forces has been discussed in past; but the government felt that there is a need to build capacity of local police and central armed police forces instead of bringing them directly under army.

### **What could be the consequences of the Tripura's decision to withdraw AFSPA?**

AFSPA was imposed in Tripura in 1997 in the aftermath of several kidnappings by the National Liberation Front of Tripura (NLFT). It was being renewed every time for the last 18 years. This time when it came for renewal, the state government sought advice of all state departments including the security establishments. Since Tripura has not seen violence for many year by now and also doing well on economic front and has been one of the best governed states in the country, the act has been





withdrawn.

The outcomes will be certainly positive. Tripura now can promote itself as insurgency free state and thereby try to attract larger investments for development and upliftment of the people. Given that law and order is a state subject and Tripura has established its reputation for good governance, withdrawal of AFSPA is a sign of positive development.

### Defence Manufacturing & Procurement

#### Overview of Defence Manufacturing Sector

The indigenous production of Defence equipments in the country comes under the purview of the Department of Defence Production under Defence Ministry. India inherited the Ordnance Factories (OF) Organization from British, now known as Ordnance Factories Board. There are 41 Indian Ordnance Factories, placed under a Ordnance Factories Board and eight Defence Sector PSUs viz. Hindustan Aeronautics Ltd. (HA), Bharat Electronics Ltd (BEL), Bharat Earthmovers Ltd (BEML), Bharat Dynamics Ltd (BDL), Mazgaon Dock Ltd (MDL), Goa Shipyard Ltd (GSL), Garden Reach Shipbuilders & Engineers Ltd (GRSE) and Mishra Dhatu Nigam Limited (Midhani). Further, there is a handful of private participants in the industry including Tata, Mahindra, Ashok Leyland etc.

A little introduction about the same is given below:

##### Public Sector

- HAL designs, develops, manufactures and repairs the aircrafts, helicopters, engines, aircraft accessories etc.
- BEL produces electronic equipments for army and paramilitary forces.
- BEML produces heavy vehicles for Defence and provides re-engineering solutions.
- MDL manufactures submarines, missiles, boats, destroyers, frigates and corvettes.
- GRSE builds and repairs warships
- Midhani is engaged in aeronautics, space, armaments, atomic energy and metal related products such as molybdenum wires and plates, titanium and stainless steel tubes, alloys etc.
- GSL builds medium size special purpose ships

##### Private Sector

- Tata Advanced Systems Limited (TAS) designs and manufactures components, vehicles etc.
- L&T provide naval engineering products and services.
- Mahindra Defence Systems produces vehicles, simulators, arms, sea mines etc.
- Ashok Leyland provides special vehicles.

#### Extent of Import Dependency

The entire Defence production in India can be placed in three broad groups. First is the production of equipments as conceptualized by DRDO via its research laboratories. Second are the projects that



are nominated by the Ministry of Defence after consulting the Services. Third is assembly and production under license from foreign manufacturers.

In our country, the goal of self reliance is a distant dream because almost 70% of the Defence equipment is still being imported. In 1992, a self-reliance review committee was set up under Dr. APJ Abdul Kalam. This committee had developed a Self-Reliance Index (SRI), defined as the *percentage share of indigenous content in total procurement expenditure*. The committee had set a target of 70 per cent self-reliance by 2005. This target has been now pushed to 2020.

Apart from that, a 1998 task force concluded that only public sector cannot deliver and make India independent from Defence imports. The licensed production was neither able to foster indigenization nor innovation in the Defence production. Further, there were frequent blame games between Services, DRDO and DPSUs, which led to delay in acquisition too.

The steps taken so far in this context are as follows: Firstly, the Defence sector was opened up in 2001. With that, the domestic private sector was allowed to produce Defence items with FDI up to 26% and subject to industrial license and security clearances. Secondly, the Vajpayee Government launched a Defence Procurement Procedure (DPP) in 2002. In 2006, the UPA Government launched Defence Offset Policy and a Long Term Integrated Perspective Plan in 2009, a Defence Production Policy (DPP) in 2011 and various task forces and committees to augment and 'streamline' Defence production.

The key idea behind all these steps was to augment the domestic Defence production. Under DPP, various special incentives were provided to encourage domestic private sector. Further, 12 larger private enterprises including TCS, Tata Power, Godrej, HCL, L&T, Mahindra, Kirloskar were given a badge of **Raksha Udyog Ratnas** (RUR) to enable them to be treated on a par with DPSUs. However, this plan was later scrapped.

### Defence Offset Policy

According to the Defence offset policy, a foreign company which invests more than Rs. 300 Crore in India, has to buy at least 30 per cent of the total value of the supplies locally. Such offset policies are followed only in a few sectors in India such as Defence, Railways and Aviation. Initially, the offsets were for the defence sector, but in 2009, the policy was diluted to permit offsets to civil aviation and internal and coastal security sectors too.

The basic objective of such offset policy is to improve the domestic Defence manufacturing sector and also improve a domestic R&D base in Defence. Further, it could help in acquiring some new technologies, domestic job creation, skill enhancement of work force, saving of currency, encourage flow of capital investments etc.



But there were several problems with the Defence Offset Policy. Firstly, there was no effective monitoring mechanism as pointed out by a 2012 CAG report. There were no clear cut definition and role of various stakeholders. Secondly, CAG also pointed out that this policy was only a paper exercise as there was no visible impact either on Defence production or on domestic manufacturing sector. Thirdly, the domestic contractors and manufacturers (called *Indian Offset Partners*) were chosen by the foreign investors / vendors in arbitrary manner and in some cases the IOP was a 100% owned subsidiary of the foreign vendor.

Due to the above anomalies, the offset policy was revised several times. The government established a new organization called **Defence Offset Facilitation Agency** (DOFA) also. However, these changes have not been proved to be effective in expanding India's Defence sector. Again major changes were introduced in 2012 and then in 2013 with the aim of revitalizing the sector and make it more attractive to the foreign vendors. But still there are many challenges.

### Why it has failed to achieve any significant results?

There are several problems. We note that India procures the equipments from abroad in two categories viz. "Buy" and "Buy & Make". **Buy** category does not involve transfer of technology and the technology transfer under **buy and make** suffer from its own limitations. Due to this, Defence Offset Policy has not been able to bring in sharing of technology. This is core issue. The small private entities as well as public sector do not have the requisite experience nor the capacity to absorb the technology. Consequently, the foreign companies could not find suitable partners to execute the project leading to delay in finalizing the contracts.

Further, since the offset policy still gives flexibility to the foreign vendors to discharge their obligations in the area in which they want; it has resulted in unregulated flow of investments killing the very objective of the policy. This is because often there is a mismatch between the demand of Indian defence industry and the area in which foreign entities set off their obligations. Until and unless there are concrete guidelines wherein the offsets are directed according to the need of the industry, the objectives envisaged for Defence Offset cannot be achieved.

### Defence Procurement Procedure (DPP)

Defence Procurement Policy came into effect in 2002. Under DPP all capital acquisitions are categorized into: Buy(Indian), Buy & Make (Indian), Make, Buy & Make, Buy (Global).

- **Buy (Indian)** : minimum of 30% indigenous content.
- **Buy & Make (Indian)** : Initial quantities are purchased through the Indian company followed by licensed production in India by an Indian company / joint venture(JV). Indigenous level should be a minimum of 50%.



- **Make:** applies to cases where Indian companies and / or DRDO have the capability to develop high technology complex systems through local research, design and development in a reasonable amount of time. Indigenization level is a minimum of 30%.
- **Buy & Make with ToT (Transfer of technology):** It applies to cases where Indian companies buy from foreign entities with offset obligation of 30%. No offset obligation will apply if the indigenous content is 50% or more.
- **Buy (Global) :** It applies when Indian companies buy from abroad with offset obligations.

Since 2002, the scopes of procedures have been periodically revised resulting in the promulgation of the DPP 2003, 2005, 2006, 2008 and 2011. In 2013 significant changes were once again introduced in the DPP.

One of the major changes introduced was the change in the arrangement of procurement categories with 'Buy (Indian)' as the most preferred category, followed by 'Buy and Make (Indian)', 'Make (Indian)', 'Buy and Make' and 'Buy (Global)'. Thus, it is clear that the focus of the changes of 2013 is towards greater indigenization.

Along with this, other changes were introduced to streamline the procurement procedure. However still there are structural bottlenecks in the procurement procedure which makes the entire process complex and opaque. This breeds corruption in the procurement process involving middlemen, politicians etc. Often the companies are found paying a percentage/commission of profit from deal. In addition to this foreign companies are finding difficulties in adhering to offset guidelines leading to delay in implementation of projects. Then private sector is also not able to grow up to its potential due to disparity in structure of the policies which is highly favorable towards DPSUs. This led to the formation of another committee under Dhirendra Singh. Currently government is planning to amend the DPP to align it with the Make in India project based on the committee's report.

### Make In India – Defence

India's manufacturing sector contributes merely 16 % to the total GDP and the National Manufacturing Policy aims to increase this share to 25% in next 10 years.

A vibrant domestic defence manufacturing can play a very important role in realizing this goal. Expansion of the manufacturing base in collaboration with foreign entities will help in bringing new technology thereby increasing not only domestic capability but will also provide a platform to tap export markets. Apart from economic benefits a self reliant defence manufacturing base has strategic importance. It reduces the dependence on foreign countries thereby enhancing our security.

In this backdrop, NDA government has launched the concept of Make in India in defence and aerospace sector. The major thrust is to enhance investment in the defence sector with the focus on



R&D, indigenization and developing a **domestic manufacturing base** thereby resulting in higher **self reliance**.

To give a push to the make in India the government has introduced various policy measures like increasing the FDI cap to 49%, e procurement to facilitate the online submission of tenders, easing of licensing requirement for non-core and dual use defence products etc. However still there are challenges to implement the concept.

### Issues and Analysis of Make in India – Defence

The Make in India – Defence should be analyzed in the light of the below statements.

- *Private sector can play an important role in Make in India but does our policy provide it level playing field?*
- *Do we have skilled labour force that is needed in aerospace engineering vital for Defence sector?*
- *What role MSME could play and what are impediments to its role in Make in India – Defence?*
- *What about R&D in Defence?*
- *What about Ease of Doing Business in terms of Defence?*

We take these issues here in brief:

#### **Private sector can play an important role in Make in India but does our policy provide it level playing field?**

Currently, the Private sector has not been provided with the level playing field which acts as an obstruction in their expansion. For instance, unlike private entities, the DPSUs and contractors of the government enjoy exemption from custom duty on import of defence equipments. This places the private companies at a disadvantageous position in terms of cost, thus making them non competitive to foreign suppliers, DPSUs and even the contractors of DPSUs. Another problem faced by the private sector is the selection of DPSUs through nomination instead of bidding process which results in favoring PSUs over private entities. It is important to understand that a strong industrial base requires the government's pro active support to the private sector in terms of funding, policy and an enabling environment.

We note here that recently, government has set up a task force under DRDO chief **VK Aatre** to select Indian private companies as strategic partners for mega 'Make in India' defence manufacturing projects like aircraft manufacturing, warship production etc. This proposal is somewhat on the lines of suggestion made by the Kelkar Committee which asked to identify certain firms based on their technical, managerial and financial strength as Raksha Udyog Ratna and proposals for major systems could be given to them.

#### **Do we have skilled labour force that is needed in aerospace engineering vital for Defence sector?**

Lack of skilled workforce is the biggest challenge faced by the aerospace industry. Defence



production especially aerospace involves high precision training that requires specialized training. But there is a huge shortage of industry-ready personnel with the requisite skill sets. This is high time that government should develop a better training and education infrastructure with the involvement of the industry to tap the huge employment potential. The government can integrate the national skill mission goals with the aim and priorities of defence manufacturing.

### **What role MSME could play and what are impediments to its role in Make in India – Defence?**

Despite the fact that MSMEs employs large workforce and contributes highly to our GDP numbers, MSMEs in defence sector has not been able to contribute in a significant manner. Some challenges faced by them are:

- Lack of finance and technology with the MSMEs leading to low quality standards and reliability.
- Stringent certification process dampens there spirit.
- Lack of skilled workforce with no training facilities.
- Entrepreneurs face difficulty in getting business permits.

Further, Defence sector manufacturing is known for long gestation period. So special funding schemes are needed.

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There are a few pragmatic solutions to this specific to defence sector. Firstly, Development of MSME clusters dedicated to defence is one solution. Secondly, DPP may have some mandatory procurement from MSMEs provide it does not prove to be an impediment to defence sector overall. Thirdly, there may be a separate department for MSMEs in Defence Ministry to facilitate interaction between foreign and Indian MSMEs, organize awareness programmes for MSMEs, bridging the demand and supply cap with respect to technology, required skills etc. These changes will go a long way in integrating MSMEs into the supply chains of domestic and foreign companies thereby expanding our manufacturing base.

### **What about R&D in Defence?**

One of the biggest reasons due to which our defence sector lags behind is the antiquated Research & Development infrastructure which is constrained in the finance as well as design capability. DRDO has around 52 laboratories but the total budget on research is 7% of the total defence budget. Also there are frequent cost overruns and project delays. One example is Tejas. It took 30 years to Tejas to fly. There is a need to overhaul the organizational set up in DRDO to speed up the process of modernization of defence forces.

### **Ease Of Doing Business**

India ranks very low in all the parameters of currently released ease of doing business report by World Bank. Delay in decision making, corruption, implementation problems etc. impedes the



smooth flow of business. Domestic as well as foreign companies are struggling to get the business permits. In addition to this taxation differs from state to state which makes difficult for the foreign entities to expand their business. Often there is a demand for creating a single window for defence licensing and FDI approvals.

Therefore the government should ensure industry friendly eco system through speedy decision making, by bringing in GST, transparency in procurement of projects etc.

### FDI In Defence Sector

It was in 2001 that foreign participation in Defence sector was allowed with a cap of 26%. Before that, production was carried on a limited scale by only eight Defence public sector undertakings. Despite the liberalization of the sector country did not receive any significant amount of FDI. One reason cited for this is limited returns on investment to the foreign companies and lack of control over the intellectual property rights related to technology. Consequently, today India is a largest importer of military hardware with no substantial improvement in capabilities of domestic industry. Even the public sectors enterprises are in severe state of crisis.

The present government has further liberalized the sector by raising the cap to 49%. These reforms are introduced to boost domestic industry. But the question remains is FDI –a solution to the Defence crisis India is facing.

### Changes In The FDI Policy-2015

Earlier, the foreign investment up to 49 per cent was permitted under government approval route. But now the government relaxed the FDI in defence sector by allowing 49% under automatic route and beyond that through the approval of FIPB (Foreign Investment Promotion Board). Also, there is no requirement of approval from the cabinet committee on security beyond 49%.

Also Portfolio investment and investment by FVCIs will also be allowed up to permitted automatic route level of 49 per cent. Earlier it was restricted to 24 per cent only.

### Dissenting Views

There are divergent views on liberalizing the defence sector. The views in favour of liberalizing Defence FDI are as follows:

Firstly, Indian armed forces are working with obsolete military equipments and the domestic industries are not able to match the standards and requirements of the armed forces. The three armed forces put together require more than \$100 billion, which currently cannot be managed domestically. FDI will help in bringing the required capital to modernize the sector. Secondly, if domestic production increases by increased FDI in the Defence procurement, India's dependence on imports will decrease, thus helping in not only lessening the burgeoning fiscal burden of the country





but will also ensure the security of the country. Thirdly, the foreign companies will bring new technology with themselves which will help the domestic industry to boost its production. Fourthly, to strengthen the India's security vis-à-vis nations like china and Pakistan, FDI is inevitable. According to 2013 figures, China's annual defence budget is \$188 compared to India's defence budget of \$47.4 billion. Lastly, foreign companies have big pockets to invest in research & development which is key to indigenization of defence sector. Besides above benefits; job creation and other multiplier effects leading to growth of economy are obvious.

However the opponents of FDI refute all the above benefits by citing that self reliance should be priority and FDI would not make India self reliant. The arguments are as follows:

Firstly, there are no established trends wherein increase in FDI cap ensures inflow of money in the country. This is based on the fact that since 2001, there has been a meager inflow of only \$4.8 billion in Defence sector, in an overall FDI inflow of around \$334 billion. The situation will likely to remain same unless the foreign investors are allowed to hold a major stake in the government. Secondly, the over simplistic assumption that FDI will automatically bring technology is flawed. Although India has a defence offset policy but it has not been able to prove very effective due to lack of willingness of foreign companies to share technology with the Indian companies. For instance, the delay in Rafael deal with France is due to the dispute over dilution of offset clause. Also, there are number of informal agreements regarding technology transfer like MTCR etc. which put sanctions and various conditions before the transfer of technology to a country. And as per the rules of International Traffic in Arms Regulations (ITAR) the percentage of ownership as well as the fact that whether transfer of technology are to Indian Armed Forces, DPSU (Defence Public Sector Undertakings) or an Indian company does not make any difference. So just the liberalization of FDI will not bring technology by itself as the final decision will remain with the parent country controlling technology. Thirdly, Defence is a strategic area, more than mere commerce. Concerns like, shutting down of factory by the foreign company in case of any crisis thus choking the supply, are not misplaced. A country cannot afford to be dependent on foreign country and be guided by its policies.

### The Way Forward

There is no doubt that today armed forces are in dire need of modernization but the indigenous industries neither has the capacity nor the finance to meet the requirements. So, at present there is a need of flexible FDI policy to gain much needed technologies which cannot be mastered through indigenous efforts in the acceptable time frame. For this we need to exploit FDI in a manner which strengthens our domestic production by learning from their technologies.

On the issue that FDI might compromise our national security we need to adopt a cautious policy





with the primary focus on national interest. Today, India has become one of the largest importer of military equipments. So, we need to understand that allowing foreign companies to manufacture in India is nothing worse than being dependent on imports. In fact in India suitable legislations can be imposed on the manufacturers thus giving more safeguards.

Moreover with 49% cap in FDI the management of the company will remain in the hands of Indian manufacturers. This will act as a shield against any activity of the foreign companies.

Ultimately the success of FDI will depend upon the efficient FDI policy. All FDI must be towards greater indigenization, sharing of technology and involvement of domestic companies in design and development.

But at the same time we should realize that FDI is not a magic wand which can solve all the problems of the defence sector. So Increase in the FDI Cap should be complemented by other defence sector reforms such as ensuring enabling environment for investment, solving land acquisition issues etc.

### Issue of DRDO Reorganization

Presently, the head of DRDO is also the secretary to DRDO and scientific adviser to the defence minister. The government has put forth the proposal of splitting these posts so as to ensure that the Defence Minister gets objective and independent feedback on the performance of DRDO.

There is also the need to decentralize the DRDO management for speedier decision making. To achieve this purpose the Rama Rao Committee in 2007 recommended for the formation of technology domain based centers or clusters of laboratories under the Directors General. The DG should be given full autonomy in their domain and at the same time should be made accountable for timely execution of projects. Government should also create a commercial arm of DRDO to develop technologies for civilian use.

Also there is a need to increase the private sector participation in defence production. For this the government should come up with innovative funding mechanisms and DRDO must encourage private R&D labs. Without restructuring DRDO with the elements of accountability and transparency, country cannot embark upon the path of indigenization and achieve the aim of Make in India.

### Defence Management

It is often alleged that the government of India has paid a lip service in reviewing the organizational structures and roles in the defence services.

Currently, the defence forces are managed through three layers. First, three wings of the defence i.e. Army, Navy and Air Force are managed through separate chiefs (Chiefs of Army, Navy and Air Force). This is followed by a bureaucratic layer wherein comes the Defence Secretary who ensures



collaboration between government and various arms of the military. Above this is the Political layer with the Defence minister.

The problem with the current system is that neither the Defence Secretary nor the Defence Minister is acquainted about the exact needs of the military. Thus, if an integrated decision has to be taken with respect to three arms of the military then it has to pass through them which can lead to odd results. Consequently, it prevents the military from building more cooperation and have an coherent approach towards threats. In addition to this policy-making on operations, joint procurement proposals also gets delayed or stuck, in the absence of background knowledge and accountability.

Although following the recommendation of GoM in 2001, an *Integrated Defence Staff Headquarters* (HQ IDS) was set up. But due to absence of its head it has no effective powers to coordinate the functioning of the defence forces. The three wings work as separate entities without effective coordination.

Now the government has proposed the rank of **Chief of Defence Staff** (CDS) or Permanent Chairman Chief of Staff Committee, who would come from the defence and will head the India's Strategic Forces Command as well as the tri-services thus ensuring a combined approach towards the three wings of the military. This proposal was given by Naresh Chandra Committee. Earlier it was also strongly endorsed by the Kargil Review Committee (KRC). Around 70 countries including US, UK, France, Germany and Australia have CDS like post for integration of military operations and planning.

The Chief of Defence Staff (CDS) will help in the following manner. First, he will give single point military advice to the government thereby help in formulation of coherent defence policies. Second, he will ensure synergy among Army, Navy and Air Force by resolving inter service problems and other issues. Third, integrate the Services Headquarters with MoD. Fourth, will provide a strategic vision to the defence forces with complete responsibility of operational as well as contingency planning. Further judicious and distribution of resources and anomaly of civic-military interface during any contingency will be achieved. Thus the advantages are manifold when it comes to the effective discharge of duties and responsibilities.

Moreover for establishment of either the CDS or PC COSC there will be no extra cost involved. As all required organizations, including the IDS Headquarters and tri-service Commands, are already established and operational.

Therefore the rank will help in imposing unity of purpose on the Army, Air Force, and Navy.



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