

# Increasing Indian Air Force's Footprint in Indian Ocean Region

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## Abstract

*The Indian Ocean Region (IOR) is a significant maritime zone. It is bordered by the coastal countries of three major continents: Asia, Africa, and Australia. The region holds strategic, economic, and geopolitical importance due to its vast expanse, rich natural resources, crucial trade routes and the presence of populous and economically active nations. It is bounded by over 35 countries. The IOR is a vital maritime trade route, encompassing world's busiest and most important sea lanes. The Indian Ocean contains significant oil and gas reserves. Major powers, including India, China, the United States, and various European nations, have interests in the region due to its strategic location and resources leading to increased naval activities, defence partnerships, and geopolitical competition. The Indian Ocean is also prone to natural disasters such as tsunamis and cyclones. Coordination and preparedness for disaster management are crucial in the region.*

*"Whoever controls the Indian Ocean will dominate Asia. This ocean will be the key to the seven seas in the 21<sup>st</sup> Century. The destiny of the world will be decided on its waters".*

- Alfred Thayer Mahan, 1897

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## Introduction

The primary role of the Indian Armed Forces is to preserve the national interests and safeguard territorial integrity against external threats by deterrence or by waging war. In modern times, the shaping of the battlefield will be determined by the offensive and defensive operations undertaken by the air force. Additionally, the wars are expected to be short in duration, with airpower having the capability to decisively affect the outcome.

The Indian Air Force (IAF) possesses extensive and rapid reach both on land and in the maritime domain and it has the ability to deliver accurate firepower using modern platforms. The IAF has further increased both its potential and potency through the induction of force multipliers such as Airborne Warning and Control System (AWACS) and Flight Refuelling Aircraft (FRA). Despite the IAF being the fourth-largest air force in the world that safeguards our skies against enemy threats, there is substantial lack of IAF assets in Indian Ocean Region (IOR).<sup>1</sup>

The existing geostrategic scenario provides an opportunity to leverage island nations in the region and evolve a proactive strategy to counter challenges in the region by enhancing the IAF's footprint in IOR. With the recent commissioning of new platforms by the Indian Navy (IN) in terms of destroyers, frigates and aircraft carriers, there exists an opportunity to increase force participation and the complexity of joint exercises with the IN in collaboration with the Indian Army.

To showcase enhancement in the footprint of the IAF in the IOR, India has been regularly and steadily increasing its engagement with the Friendly Foreign Countries (FFC) with the conduct of exercises involving IOR nations. Given the current IAF assets there exists a scope for increasing engagements in the future to enhance the IAF presence in the region and also serve as a tool to counter growing Chinese influence, thereby, safeguarding India's strategic and national interests.

## India's Strategic Interest in IOR

The various choke points and international shipping lanes that pass through IOR where IAF could exert influence are depicted on the map. Both the Six Degree and Nine Degree Channels lie largely within Indian waters, and provide India with a unique geographic advantage in monitoring the majority of shipping traffic transiting the Indian Ocean.



Figure 1: Entry/Exit Choke Points and ISLs of the IOR <sup>2</sup>

**Six Degree.** There are 572 islands in the Andaman and Nicobar Island territory. These islands are located in the Bay of Bengal and the 10° North Parallel splits them into two groups: Andaman and Nicobar. The Six Degree Channel, also known as the Great Channel, lies south of Indira Point on Great Nicobar Island (India's southernmost territory) and north of Aceh in Indonesia. The Great Channel is wide, easy to navigate, and used by ships entering or leaving the Strait of Malacca.

**Nine Degree.** Lakshadweep is an archipelago of 36 islands in the Arabian Sea, off India's western coast. The islands are separated by the 11° North Parallel: North group—Amindivi Islands; Southern group—Laccadive/Cannanore; and Minicoy Islands in southernmost part at the Nine Degree Channel. The Nine Degree Channel is the channel between Lakshadweep Islands of Kalpeni and Suheli Par,

and Maliku Atoll. It forms the most direct route for ships sailing from the Persian Gulf to East Asia.

### **Growing Strategic Interest of Other Nations in IOR**

**United States (US).** The US is one of the major player in this region. Its primary concern in this area is the growing influence of China. The US has established a Naval Support Facility Diego Garcia (a British Ministry of Defence facility leased to the US Navy). Camp Lemonnier, another United States Naval Expeditionary Base situated next to Djibouti–Ambouli International Airport in Djibouti City, and serves as home to the Combined Joint Task Force–Horn of Africa of the US Africa Command. It is the only permanent US military base in Africa. In addition, The US drone base in Seychelles is a military base operated by the United States and located at the Seychelles International Airport on Mahé island, Seychelles. The aerial fleet is composed up of General Atomics MQ-9 Reaper drones. The drones have been hosted in Seychelles since 2009.

**People's Republic of China (PRC).** China's increasing geo-strategic influence in the IOR is a major concern for India. PRC is conducting military and diplomatic activities to spread their foothold in this region. China's increased regional presence with its 'String of Pearls' strategy, stretching from Djibouti (Africa), Gwadar (Pakistan), Hambantota (Sri Lanka), Chittagong (Bangladesh), Sittwe (Myanmar), and potential future developments in Kyaukphyu Myanmar), Koh Kong (Cambodia) and the Maldives is of India's significant concern. The People's Liberation Army Air Force (PLAAF) has been active in the South and East China Sea and frequently asserts its presence in the area.<sup>3</sup>

The strategic dynamics in the IOR are shaped by various nations, each with distinct interests and security concerns that influence their actions and interactions in this vital maritime zone. These are:



Figure 2: China's String of Pearls

- **East Asia.** China's campaign to wear down Taiwan expanded substantially, with nearly 1,200 intrusions by the PLAAF into Taiwan's airspace till Dec 2022. There is a regular intrusion into the airspaces of Taiwan and Japan (over the Island of Okinawa) by PLAAF, while China has deployed its most advanced fighter aircraft. During the visit of US House of Representatives Speaker, China resorted to blockade of the island nation for over a week. Russia's Exercise Vostok 2022, Joint bomber patrols with China and the joint Russia-China Sea Cooperation exercise in Dec 2022 was a matter of regional security concern for nations in the East China Sea, especially Japan.
- **Southeast Asia.** China retains control of the South China Sea in all circumstances short of war with the US. It enforces domestic laws in the international waterways. Reports emerged by year end of 2022 regarding new construction work by China at Eldad Reef, Whitsun Reef, Lankiam Cay and Sandy Islands in the Spratly Islands. Also, there are disputes over the Parcel islands. Regular long-range bomber missions and fighter jet

intrusions are regular missions undertaken by PLAAF in the region.

- **Pakistan.** The major concern for Pakistan is to prevent India from dominating the IOR close to its territory in Pakistan. Pakistan is an active partner with various countries for reasons such as Anti-Piracy, Anti-Terrorism, etc. Pakistan is also trying to widen its area of interest close to India.
- **Japan.** A significant portion of Japanese trade passes through the IOR. If the Sea Lines of Communication were to be interdicted it will be a cause of concern for the Japanese and hence, they are trying to increase their influence in the IOR. Towards this, they are participating in various exercises with India and trying to engage in strategic partnerships like Quadrilateral Security Dialogue.
- **Israel.** The country possesses good surveillance capabilities in Bab-e-Mandeb region and can monitor almost all vessels crossing that region into the IOR.
- **United Kingdom (UK).** The country maintains a presence in the IOR, primarily through its overseas territories, strategic interests and partnerships. The UK, administers the British Indian Ocean Territory which includes the strategically important island of Diego Garcia.
- **France.** France maintains a notable presence and interest in IOR due to its overseas territories such as Réunion Island and the Scattered islands of the French Southern and Antarctic Lands.

### **India's Present Influence in the IOR**

The Indian Armed Forces form an important component in projecting India's foreign policy on the world stage. Well before the emergence of Indo-Pacific concept, India was already strengthening security and freedom of navigation in the IOR and fulfilling its responsibilities of a regional security provider by participating either in peacekeeping efforts, Humanitarian Assistance and Disaster Relief (HADR) requirements or anti-piracy operations in the Gulf of Aden. By sharing equipment, training, and exercises, India has built relationships with partner countries across the region. In the past few years, India has provided coastal

surveillance radar systems to several nations including Mauritius, Seychelles, Sri Lanka, the Maldives, Myanmar and Bangladesh. All these countries also use Indian patrol boats, as do Mozambique and Tanzania. The frequency and number of defence training programmes have also increased. Mobile training teams have been deputed to 11 countries, ranging from Vietnam to South Africa, as well as Sri Lanka, Bangladesh, and Myanmar.

India has been actively engaging both regional as well as extra-regional countries in international defence exercises on bilateral and multilateral platforms. Exercises Desert Knight, Bright Star, Milan, and Pitch Black are few examples of strategic engagements. This indicates a global appreciation of Indian Armed Forces and for enthusiasm of engaging them for mutual understanding of operations. All the three services, either individually or collectively are strengthening India's role as a peaceful and responsible nation. Along with various types of defence cooperation, international exercises with the armed forces of like-minded countries have enhanced India's military diplomacy on a global platform.

The threats to regional security in the IOR range from piracy, terrorism, proliferation of weapons of mass destruction, small arms and drug trafficking, and threats of sea denial in the region. China's intensified activities in the region, including infrastructure development and an active weapons supply program to Pakistan, are additional issues to consider.<sup>4</sup> India's energy security and trade interests are undoubtedly under threat with any instability in the IOR region, and must be addressed on priority. The security challenges for India have increased with the recent developments by China in the region, string of pearls policy, as well as the debt trap policy leading to indirect militarisation of the region by China. Given the present maritime and security challenges, India should enhance its military presence in the region with its navy and air force.

The Indian Navy (IN) is responsible for India's security interests in the IOR. However, with the increasing threats, and China's growing interference in the region, efforts are required to tackle the threats jointly by all the instruments of the nation. Integrated operations between the IN and Indian Air Force are now essential to increase the reach and tempo of operations.

## **Present IAF Engagements with FFCs in IOR**

The IAF plays a significant role in IOR focusing on training security surveillance and response capabilities. It conducts regular joint exercises with other regional and international nations to maintain a strong presence and train to ensure the security of the region's airspace and maritime interests.<sup>5</sup>

India's defence cooperation efforts across various nations in the Indian Ocean Region and beyond reflect its commitment to enhancing bilateral relationships, capacity building, and strategic partnerships through training, joint exercises, and development projects. These are enumerated below:

- **Mauritius.** India has been offering helicopter training, courses under the Indian Technical and Economic Cooperation-II (ITEC-II) scheme and the HAL has secured deals for the ALH Mk-II aircraft. India has recently helped Mauritius in development of the Agelega Islands. The project included construction of a jetty, rebuilding and extension of the runway and building an airport terminal.
- **Egypt.** Both countries continue to provide transit facilities to aircraft/ships for each other. Exercise Bright Star is a major air exercise between the air forces of both countries. Egypt Air Force has also expressed keen interest in the Production Test Pilot courses conducted by the IAF.
- **Kenya.** At present the defence cooperation activities with the Kenya Defence Forces (KDF) are limited to providing various training courses to KDF.
- **Madagascar.** At present there are no defence cooperation activities with the Malagasy Air Force. However, there exists a possibility of increasing defence cooperation in training and capacity building to enhance India's strategic footprint in Madagascar.
- **Mozambique.** The country has no major defence engagements with India, except for gifting of few flying clothing items in year 2021.
- **Saudi Arabia.** At present the defence cooperation activities/exchanges with the Saudi Air Force is limited to Over Flight Clearance and exchange visits.



- **South Africa.** Presently, the IAF's engagement is in terms of presence of Mobile Training Team and exchange programs.
- **Sudan.** The defence cooperation is limited to Sudan availing few training courses in India with IAF and presence of training team.
- **Tanzania.** At present the defence cooperation activities with Tanzania are limited to providing various training courses to TPDF.
- **United Arab Emirates (UAE).** India and the UAE have shared close bonds of friendship since long. Commencement of Air Staff Talks, the conduct of bilateral Air Force exercises and providing training vacancies to UAE, AF will prove to be an impetus for the presence of IAF in the region.
- **Malaysia.** IAF has been a key factor in training its pilots at Gong Kedah airfield for the ab-initio training of its Su-30 MKK aircraft in 2009. The Light Combat Aircraft was also on the shortlist offer for the Royal Malaysian Air Force (RMAF). India has been actively engaging RMAF in bilateral exercise during its ferry for Exercise Pitch Black. Recently, HAL has setup a repair and maintenance facility for sustenance and meeting the maintenance requirements of RMAF's SU-30 aircraft. In the future, there is also a proposal for mutual exchange of fifteen young officers to each other's operational bases.
- **Thailand.** IAF regularly engages the Royal Thailand Air Force (RTAF) in young officer's exchange program. RTAF has been invited as observers in exercises conducted by IAF.
- **Maldives.** India has facilitated Maldives National Defence Force (MNDF) in setting up their Coast Guard Aviation Wing with two Advanced Light Helicopters and a Dornier aircraft to assist MNDF in search and rescue, medical evacuation of critical patients and surveillance. So far, over 300 lives have been saved by these aircraft and have helped India earn a lot of goodwill from the local populace.

- **Australia.** The IAF is part of Exercise Pitch Black which is hosted by the Royal Australian Air Force. Approximately 17 air forces and 2,000 military personnel from across the globe as part of the contingent.

### **Enhancing IAF's Presence in IOR**

Most IAF fighters can now be refuelled in the air. The two fleets with longer ranges are the Su-30 MKI and Rafale. SU-30 fleet has the advantage of numbers and the squadrons are positioned in different parts of India. These two types also carry a larger weapon load for both ground strike and Air Defence (AD) roles. They are thus better suited for long range missions. These and the Jaguars could also operate from Andaman and Nicobar Islands to extent reach of the IOR. IAF has significant transport fleet with global reach. These include the C-17 aircraft (77.5 tonne load capacity) which has nearly 4,500 km range. The C-17 and C-130 have good short field and rough air strip performance. The FRA and AWACS will play a very important role in global combat reach.

The Sukhoi-30 and Rafale have recently carried out long-range missions<sup>6</sup> lasting over extended hours, delivering pinpoint precision strikes, on targets in the IOR. They were supported by IAF's IL-78 FRA for in-flight refuelling, and the IL-76 based AWACS aircraft for aerial radar cover and command and control.

The IAF has one active base in almost centre of the Eastern IOR. Andaman and Nicobar Islands acts as a massive natural fortress for India in the region. These islands can provide many military options to keep the busiest sea lanes under surveillance and enhance air power projection from Bay of Bengal to Pacific Ocean. It allows India to keep a vigilant eye on the strategically important Malacca Strait, through which 80.0 per cent of China's crude and oil imports from the Middle East and Africa pass, along with fuel imports for Japan and South Korea. These islands are also first line of defence in case of a maritime threat and sub-conventional attack. To further our assertiveness and presence in the region, IAF needs to strengthen the Air Defence and the positioning of its offensive elements along with associated infrastructure.

**Headquarters Andaman and Nicobar Command (ANC).** The ANC is the only tri-service command of the Indian Armed Forces based at Port Blair in the Andaman and Nicobar Islands. It was created in 2001 to safeguard India's strategic interests in Southeast Asia and the strait of Malacca by increasing the rapid deployment of military assets in the islands. It is responsible for conducting biannual coordinated patrols (CORPATS) with the navies of Thailand and Indonesia, the annual SIMBEX maritime exercise with Singapore and the biennial Exercise Milan with Indonesia, Singapore, Sri Lanka, and Thailand.

**Offensive Element.** A permanent plan to locate a squadron of Sukhoi-30s or a suitable platform, as decided by the IAF will go a long way in increasing our presence in the eastern IOR. The unit located on the island can serve as a centre of excellence in the conduct of maritime operations and acts as a bridge in ironing out the interoperability issues with the IN. The unit could also serve as a nodal agency in passing expertise to other flying squadrons, which can undertake detachments with the local unit in the Andaman and Nicobar Islands. The unit could also provide guidance on tactics, training and associated technological harmony. The BrahMos Missile system offers a potential for interoperability, wherein the IAF can be called upon for positioning of BrahMos, either air/land-based system for increasing deterrence in the IOR.

### **Recommendations**

For effectively utilising the available resources of the IAF there has to be balance in commitment to meet our operational preparedness and resources allocation for increasing our presence in the IOR. Certain suggestions/recommendations are put across to achieve the desired outcome:

#### **Short Term.**

- A permanent plan to locate a squadron of Sukhoi-30 will inherently provide AD to the islands, and regular exercises with IN will showcase our presence in the region. This should also include training exercises with foreign navies so as to validate the feasibility, time etc., of missions that will be carried out from ANC in case of actual contingency. This will also bring out the limitations and constraints, that the crew will face during operations. All types of assets planned to be

used should be utilised in these exercises to keep the crew and maintainers current on such operations.

- With the induction and operationalisation of Carrier Battle Group (CBG) by the IN, exercises with IAF need to be undertaken to draw valuable tactical lessons for understanding and formulate the principle of deployment of CBG and air force assets.<sup>7</sup>

- IAF may look into the deployment of Maritime Patrol Radars with long ranges to increase the radar cover and early warning capabilities and integration with other sensors presently available in ANC. The offensive presence of IAF in ANC can further be enhanced by permanent deployment of long range surface to air missiles in the northern and southern most parts of the islands.

- Conduct of joint IAF and IN military exercise with AF and Navy of FFC's which will include operations from Island territories in order to enhance the IAF footprints. There can be an increase in the frequency of range/intent demonstration missions in IOR coupled with AAR and AWACS.

### **Medium Term.**

- The airfields at the Andaman and Nicobar Islands, as well as the Lakshadweep Islands should be developed in terms of runways, taxi tracks, dispersals, ammunition and fuel dumps etc, so as to make them fit for regular operations by fighters, as well as AWACS/AAR types of large aircraft.

- A common network including data-linking should be developed for most of the assets, like fighters, ships, maritime patrol aircraft, radars and AWACS which will help to enhance Maritime Domain Awareness (MDA) air picture for effective targeting/deterrence.<sup>8</sup>

- The frequency of exercise with countries like Malaysia, Vietnam, Japan, Indonesia, and the Philippines may be enhanced. This will help the IAF to understand the nuances of operations in a contested maritime domain. Although bilateral exercises with Friendly Foreign Countries (FFCs) are beneficial, the conduct of multinational exercises by the IAF in the ANC, in line with Tarang Shakti, should be considered.

- The IAF doctrine should be revised to include the roles and tasks of IAF assets in a diplomatic capacity, along with the desired effects and objectives aligned with the Naval Doctrine.
- Other non-IOR nations, such as the US, UK, and other North Atlantic Treaty Organisation countries, have expressed keen interest in deploying their naval ships in the IOR. The recent proposals by France, UK and Germany to deploy their Littoral Response Group/Frigates/warships in the IOR could be leveraged to build engagement with IAF assets in Anti-Submarine/MDA/ISR/other support roles to gain experience. The immediate neighbouring IOR nations may be engaged in joint HADR exercise to enhance interoperability of air assets.

**Long Term.** A plan should be developed to either use the airfields of Diego Garcia, the Maldives, Mauritius, Oman and other nations in IOR which have military operations being carried out by Western-friendly nations, or new airfields may be acquired by India in friendly countries for military deployments in IOR. This would be one of the most important steps, as it will increase the reach of air force in the IOR, in minimal time. The aircraft can be deployed anywhere using Air-to-Air Refuelling, and then can continue operations from there within their range. A case for sharing of air picture by FFC's in the IOR should be pursued as a long term plan for inclusion with IAF to enhance its surveillance capabilities. Additionally, formulate and leverage mutual logistics agreements will further enhance enhancing Indian presence in the IOR.

## **Conclusion**

The IAF stands at a pivotal juncture, with its potential to significantly influence security dynamics in the IOR. As a crucial element of India's national defence strategy, the IAF must adapt to the evolving geopolitical landscape characterised by rising tensions and strategic rivalries, particularly from China's increasing presence. By enhancing its operational capabilities and expanding its footprint through collaborative engagements with friendly foreign countries, the IAF can effectively safeguard India's national interests and maintain regional stability. The strategic advantages presented by the geographical positioning of the Andaman and Nicobar Islands, combined with advancements in airpower and the integration of modern military technologies, will empower the IAF to project its

influence across the IOR. Furthermore, the recommendations outlined for short, medium, and long-term actions provide a comprehensive roadmap to strengthen IAF's presence, promote interoperability with allied forces, and counter external threats. Ultimately, through sustained engagement and strategic foresight, the IAF can reinforce its role as a regional security provider and contribute to a stable and secure maritime environment in the Indian Ocean.

## Endnotes

<sup>1</sup> CAPS Article – “Indian Air Dominance to Achieve Maritime Security in the IOR” – by Pooja Bhatt.

<sup>2</sup> IHQ, MoD (Navy). Indian Maritime Doctrine 2009, 69.

<sup>3</sup> India's Indian Ocean Regional Strategy, Article published in Journal of Indo Pacific Affairs by Priyanjoli Ghosh.

<sup>4</sup> India's Defence Diplomacy in 21<sup>st</sup> Century: Problems and Prospects, Book published by ARIDSS, Meerut.

<sup>5</sup> Unclassified Inputs from Air HQ (VB) Int IDC.

<sup>6</sup> Strengthening 24X7 vigil in the IOR, Article CAPS “InFocus: 43/2023” by Radhe Tambi

<sup>7</sup> Research Paper by Maj Roy Walker and Capt Larry Redolfi, “Airpower's Role in Maritime Operations”.

<sup>8</sup> Book published by DDP MoD, “An Ocean of Opportunities: Enhanced Peace, Security & Cooperation in IOR”.