# Potential of Indian Air Power in the Indo-Pacific

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#### INTRODUCTION

Ever since the advent of aircraft, the outlook of militaries worldwide towards conflict has changed. Establishing dominance in the air has become a vital aspect of deciding victory in battle. He who controls the air is sure to have an advantage as air dominance can lead to changing operational directives on land. Establishing air power over a region makes securing interests (national/strategic) effective.

The Indo-Pacific is one such region which has acquired the attention of many countries in the recent past. The region accommodates two of the world's most populous countries, India and China, along with several other emerging powers like Japan, Australia, and Indonesia. It plays a pivotal role in global trade as it connects the Indian Ocean and the Pacific Ocean. The region has recently gained strategic importance as China plans to expand its influence beyond the South China Sea. Indo-Pacific region has become a focal point for geopolitical rivalries and strategic partnerships, shaping the balance of power in the 21st century.

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Air power can play a critical role in shaping the dynamics of the Indo-Pacific region.

This paper aims to identify the instruments of air power deployed by various stakeholders in the Indo-Pacific while also attempting to understand Indian air power potential in the region.

# AIR POWER IN THE INDO-PACIFIC

The Indo-Pacific region is a geopolitical area that comprises the tropical waters of the Indian Ocean, the western and central Pacific Ocean, and the seas that connect the two. The Indo-Pacific can broadly be understood as an interconnected space between the Indian Ocean and the Pacific Ocean. Its stretch is debated to range from the eastern shores of Africa to the western coast of the United States, however with contrast in definitions depending on each actor and their geographic positioning in the vast expanse of this region. The region is home to two of the world's most populous countries, India and China, along with several other emerging powers like Japan, Australia, and Indonesia. It plays a pivotal role in global trade as it connects the Indian Ocean and the Pacific Ocean. It hosts some of the busiest shipping lanes, including the Strait of Malacca, the South China Sea, and the Indian Ocean, through which a significant portion of global trade flows. The region accounts for 63 per cent of the world's gross domestic product (GDP), and a little over 60 per cent of the world's merchandise trade flows through its waters. 1 Moreover, the Indo-Pacific region is also witnessing strategic competition among major powers. China's growing assertiveness in the South China Sea and its Belt and Road Initiative have raised concerns among regional countries and have led to increased engagement by other

<sup>1.</sup> Amit Dev, "China's Rise and the Implications for the Indo-Pacific", *Raisina Edit* 2022, April 27, 2022, at https://www.orfonline.org/expert-speak/chinas-rise-and-the-implications-for-the-indo-pacific/#:~:text=The%20 Indo%2DPacific%20is%20home,trade%20flows%20through%20the%20 region. Accessed on June 15, 2023.

powers like the United States, India, Japan, and Australia. There is thus no doubt about the immense significance the Indo-Pacific region holds in today's geopolitical landscape as it has become a focal point for geopolitical rivalries and strategic partnerships, shaping the balance of power in the 21st century.

Having established a primary understanding of the scenario in the Indo-Pacific let's now return to aspects of air power in the region. Air power plays a critical role in shaping the dynamics of the Indo-Pacific region. One of the primary advantages of air power is its ability to rapidly project force across vast distances, enabling states to exert influence and respond to contingencies quickly while also maintaining surveillance in the region. This is particularly relevant in a region characterised by vast maritime spaces and potential flashpoints, such as the South China Sea and the Indian Ocean.

A significant area of the Indo-Pacific is covered by seas and a vital component for projection of air power in the seas is the Aircraft Carrier. Aircraft carriers are the largest and the most sophisticated of all maritime vessels. They form a formidable force at sea. It is an important instrument of power projection as an aircraft carrier which acts as a mobile airbase in the high seas, showcases 'sea control' and also enables 'sea denial' to other states. Carriers today carry warfare technologies such as anti-ship ballistic and cruise missiles, anti-submarine warfare capabilities, new and improved air defence systems, fighter aircraft capable of short take-off/landing and also monitoring stations for UAVs.<sup>2</sup> Aircraft Carriers operating in Indo-Pacific is not a recent phenomenon. The Americans have had their aircraft carriers in the region since the 1950s. Other countries in the Indo-Pacific that operate aircraft carriers are India (2), China (2), Japan (4), Australia (2); however,

<sup>2.</sup> Pooja Bhatt, "Locating the Role for Aircraft Carriers in the Indo-Pacific", CAPS In Focus, at https://capsindia.org/wp-content/uploads/2021/10/ CAPS\_Infocus\_PB\_02.pdf. Accessed on June 16, 2023.

the US surpasses them all by having 11 aircraft carriers in service.<sup>3</sup> Japan and Australia operate helo carriers which are a variant of aircraft carriers operating only helicopters. It is to be noted, however, that China has not deployed its aircraft carriers in the Indo-Pacific region.

# **KEY PLAYERS**

The ascent of emerging power China beyond the South China Sea and their foraying into the Indian and Pacific oceans challenge the strategic positioning and the security umbrella primarily established by the United States as early as the end of World War II. This race for dominance in the region has led to forming of new alliances comprising different stakeholders in the region: India in the Indian Ocean with Australia and Japan in the Pacific Oceans, who are one of the major stakeholders, became the natural choice for the Quadrilateral Security Dialogue (QUAD) with the US.

For the purposes of this article, focus in the Indo-Pacific is directed towards the QUAD countries and China which seems to challenge the status quo in the region through its policies.

#### **CHINA**

President Xi Jinping's flagship programme, "The Belt and Road Initiative" aims to expand China's market by enhancing regional connectivity, building critical infrastructure and creating economic interdependence. In consonance with its expansionist policies, military build-up has also been the focus for China's armed forces. In the Indo-Pacific the onus of carrying out the policies of China and that of the People's Liberation Army (PLA) fall in the hands of People's Liberation Army Navy (PLAN) and People's Liberation Army Air Force (PLAAF). Their primary role

<sup>3.</sup> World Population Review, "Aircraft Carriers by Country 2023", at https://worldpopulationreview.com/country-rankings/aircraft-carriers-by-country. Accessed on June 16, 2023.

being asserting territorial claims and dominance in the region. Beijing's expansion of its blue-water naval capabilities is aimed at increasing its military's offensive and defensive prowess in the Indo-Pacific region. It is therefore determined to increase its arsenal of nuclear powered submarines, ballistic missile launch submarines (SSBN), intercontinental ballistic missiles (ICBM) and medium-range ballistic missiles (MRBM). It also aims at expanding its fleet of surface combat ships, aircraft carriers and combat aircraft in order to strengthen its comprehensive security in the Indo-Pacific.

The Chinese DF-26 intermediate-range ballistic missile with a range of 4,000 km strengthens its theatre missile defence in the Indo-Pacific.<sup>4</sup> The DF-26, if strategically placed, has the capability to attack land targets in the central regions and entire eastern coast of India, the Malacca Straits and the island of Guam in the Pacific Ocean. Adding to its strike capabilities is its advanced hyperspectral imaging satellite, which is incorporated with command, control, communications, computers, intelligence, surveillance reconnaissance (C4ISR) capabilities, which support ballistic cruise missiles for precision-strike on moving targets in the Indo-Pacific region. Apart from this impressive arsenal of weapon systems, the PLAAF also has about 1,600 combat-worthy aircraft which include Su-27s, Su-30s, Su-35s and J-11s. In its transport aircraft fleet, the PLAAF has 20 IL-76 jet transport and approximately 90 Y-7, Y-8, Y-9 turboprop powered transport aircraft.<sup>5</sup>

#### **UNITED STATES**

<sup>4.</sup> The National Interest, "China's DF-26 Anti-Ship Ballistic Missile: What Does the Pentagon Really Think?", at https://nationalinterest.org/blog/thebuzz/chinas-df-26-anti-ship-ballistic-missile-what-does-the-16260. Accessed on June 12, 2023.

<sup>5.</sup> SP's Aviation, "PLAAF'S growing threat—challenge for the IAF", at https:// www.sps-aviation.com/story/?id=2988&s-Growing-Threat-. Accessed on June 12, 2023.

The United States Indo-Pacific Command (USINDOPACOM) of the United States Armed Forces looks after and dominates the Indo-Pacific region. The largest strategic command of the US, its fleet consists of almost 2,000 aircraft, three Carrier Battle Groups (CBGs), 200-plus ships, submarines and other maritime vessels. A vital component of the command is the Pacific Air Forces (PACAF) which comprise a large number of fighters, bombers and other High Value Air Assets. As mentioned earlier, the US boasts of operating an unmatched fleet of 11 aircraft carriers, with plans of adding one more. To further complement the force's fighting capabilities, the navy has nearly 300 combat ready destroyers, frigates and other auxiliary vessels. The US Navy also has a powerful fleet of submarines which consist of 14 Ballistic Missile Submarines (SSBN) and 55 Attack Submarines (SSNs/SSGNs).6

PACAF fleet of aircraft mainly includes fighters, heavy-lift aircraft, airborne warning and control system (AWACS) and airto-air refuellers (AAR). The fleet includes F-15s, F-16s, E-3 Sentry, C-12J Huron, C-130J Hercules. The PACAF inventory also includes the F-35, F-22A Raptor, C-17 Globemaster III and C-130s.<sup>7</sup> Another powerful air asset in the PACAF inventory, the B-52 bomber with long-range and precision weapon delivery capabilities helps the US maintain its dominance in the Indo-Pacific.

# **JAPAN**

Japan's naval force, Japan Maritime Self-Defense Force (JMSDF), though a much smaller force when compared to China and the US, still has a reasonable fleet of 150 ships and around 300 plus aircraft. The Japan Air Self-Defense Force (JASDF) operates

<sup>6.</sup> Mark F. Cancian, "U.S. Military Forces in FY 2022 Navy", CSIS, November 2021, at http://defense360.csis.org/wp-content/uploads/2021/11/211102\_Cancian\_MilitaryForcesFY2022\_Navy.pdf. Accessed on June 14, 2023.

Mark F. Cancian, "U.S. Military Forces in FY 2022 Air Force", CSIS, November 2021, at http://defense360.csis.org/wp-content/uploads/2021/11/211130\_ Cancian\_MilitaryForcesFY2022\_AirForce.pdf. Accessed on June 14, 2023.

around 750 aircraft which include 350 fighter aircraft among which 200 are fourth-generation. Their fleet also comprises 22 submarines, conventionally/nuclear powered. The main surface fleet comprises 42 destroyers, 3 frigates, 22 Mine Warfare Vessels and 3 Amphibious Assault vessels.8 JASDF operates 155 F-15Js, 62 F-2s and 42 F-35 fighter jets.<sup>9</sup>

#### **AUSTRALIA**

The Royal Australian Navy's fleet comprises 41 ships. The fleet is mostly comprised of Patrol boats with a few combat vessels, i.e., 3 destroyers and 8 frigates. 10 The navy also operates the MH-60R Seahawk, an anti-submarine/anti-surface/search and rescue helicopter. The RAAF has a total of 259 aircraft of which 110 are combat aircraft. The combat aircraft fleet includes F-35A Lightning II, EA-18 G Growler, F/A-18F Super Hornet. Their aircraft fleet also includes C-17A Globemaster III, C-130J Hercules and C-27J Spartan.<sup>11</sup>

# POTENTIAL OF INDIAN AIR POWER IN THE INDO-PACIFIC

The Indian Air Force (IAF), which is the primary instrument of India's air power, ensures that its airspace and interests are always secured. The IAF fleet, numbering more than 1,600 aircraft, has an impressive array of fighters, AWACS, reconnaissance, transport aircraft along with helicopters—fighter and transport.12 The

<sup>8.</sup> World Directory of Modern Military Warships, "Japanese Maritime Self Defence Force", at https://www.wdmmw.org/japan-maritime-self-defense-force. php. Accessed on June 20, 2023.

<sup>9.</sup> Military Factory, "Active Japanese Air Force Aircraft", at https://www. militaryfactory.com/modern-airpower/aircraft-japan-air-self-defense-force. php. Accessed on June 20, 2023.

<sup>10.</sup> Navy.gov.au, "Current Ships", at https://www.navy.gov.au/fleet/shipsboats-craft/current-ships. Accessed on June 23, 2023.

<sup>11.</sup> Airforce.gov.au, "aircraft", at https://www.airforce.gov.au/. Accessed on June 23, 2023.

<sup>12.</sup> Aviation & Defence Universe, "Aircraft of Indian Air Force", at https://www. aviation-defence-universe.com/aircraft-of-indian-airforce/. Accessed on June 24, 2023.

majority of the fleet consists of fighters, which include fourth-generation Rafale, Su-30 MKI, MiG-29 UPG, Mirage 2000, MiG-21Bis, Jaguar, and the indigenous Light Combat Aircraft (LCA), Tejas Mk.1.<sup>13</sup> Other HVAAs include AEW&CS aircraft, IL-78 (Tanker), and heavy lift capability aircraft such as the C-17 Globemaster, IL-76, C-130J Super Hercules, An-32. These aircraft make it possible for the IAF to enhance its capabilities in the Indian Ocean Region (IOR). A strong helicopter fleet including HAL Light Combat Helicopter (Prachand), Apache AH-64, CH-47 Chinook and Mi-17, enabling IAF to be a powerful force in the region.

The Indian Naval Air Arm complements the IAF and can be seen as a vital component of air power. The primary fighter aircraft of the navy is the MiG-29K which is capable of carrying out operations from an aircraft carrier. Helicopters with the navy include Sea King 42(B/C), UH-3H, Ka-28 that are being used for anti-submarine warfare. In addition, Ka-31, P-8I and IL-38<sup>14</sup> add to its airborne early warning and maritime patrol capabilities. The Naval surface vessels also pack a punch in terms of advanced warfare capabilities. Currently the fleet stands at a strength of 150 ships and submarines. Surface vessels include 2 aircraft carriers, destroyers, frigates, corvettes, tankers and other support vessels. The submarine arm of the navy has also about 16 active submarines. In the submarines of the navy has also about 16 active submarines.

<sup>13.</sup> World Directory of Modern Military Aircraft, "Indian Air Force 2023", at https://www.wdmma.org/indian-air-force.php. Accessed on June 24, 2023.

<sup>14.</sup> Indiannavy.nic.in, "Aircraft & Helicopters", at https://www.indiannavy.nic.in/aircrafts-helicopters. Accessed on June 24, 2023.

<sup>15.</sup> Ministry of Defence, "What are the current force levels of Indian navy?", at https://www.mod.gov.in/faqs/q-1-what-are-current-force-levels-indian-navy-what-are-ongoing-projects-what-steps-are-being. Accessed on June 25, 2023.

<sup>16.</sup> Indiannavy.nic.in, "Submarines", at https://indiannavy.nic.in/content/submarines-active. Accessed on June 25, 2023.

Keeping in mind the military capabilities, assets (instruments of air power) of the IAF and the Indian Navy (IN), let's look at what air power means for India and its possible application in the Indo-Pacific. India's security environment is a combination of its history, geopolitics, culture, and hence the security challenges faced by it are diverse, complex and ever changing. For India, national security is a vital component of its overall national growth. Although India as a country has no extra-territorial aspirations, it is still crucial that it has a strong national power instrument that should be capable of preventing violence and preserving peace, and air power can fulfil this essential obligation. The might of India's air power lies with the IAF, with the capabilities of the aviation arms and other services acting as a reinforcement to that might.

The IAF is abreast of the reality that air power is at its strongest when used in collaboration with other components of military power.<sup>17</sup> Turning to the Indo-Pacific, considering the importance of interoperability between the air and naval elements of the QUAD nations and other friendly nations in the region becomes essential.<sup>18</sup> India participated in several training exercises in the region keeping this objective in mind. These exercises help the IAF and IN to conduct operations such as weapon firing, advanced naval warfare manoeuvres, anti-submarine, anti-air and antisurface warfare. Large scale air operations from carriers and land-based platforms are also conducted to enhance air power capability and projection. India's participation in Malabar exercise 2021 along with the other QUAD partners is a step towards that endeavour. The exercise focused on building up synergy, coordination and interoperability amongst the militaries, while

<sup>17.</sup> Arif, at https://www.scribd.com/doc/109721067/Basic-Doctrine-of-Indian-Air-Force-2012-PDF#, p. 11.

<sup>18.</sup> Savinder Pal Singh, "Changing Balance of Air Power in the Indo-Pacific", in The Great Game in the Indo-Pacific: A pivot to India, edited by Air Marshal Anil Chopra (India: KW Publishers Pvt. Limited, 2022), p. 79.

also focusing on advanced surface and anti-submarine warfare exercises and weapon firings. 19 Bilateral exercises such as "Simbex" between India and Singapore enhanced India's engagement and air operations with other littoral states in the Indo-Pacific region. This exercise saw participation from P-8I long-range maritime patrol aircraft along with several ships of the Indian Navy. The Singapore navy deployed the Fokker-50 maritime patrol aircraft and the F-16 fighter jet along with maritime vessels, i.e., frigates, corvettes.<sup>20</sup> Amongst the many objectives of the exercise anti-air and anti-surface warfare drills help India enhance its air power capabilities. Participation of IAF and IN in a bilateral exercise with the US Navy in the IOR is another display of air domination and advanced air defence capabilities of our forces. IN deployed its maritime air dominance fighter MiG-29K along with the P-8I and Kamov AEW helicopter. The IAF arsenal consisted of Jaguars and Su-30 MKI jets, AWACS, AEW&C and air-to-air refuellers. Likewise, the US also brought its Nimitz class aircraft carrier Ronald Reagan and its air element included F-18 fighters, AEW&C aircraft and MH-60R ASW helicopter.<sup>21</sup> In the same way, the Indian Navy has also showcased its "formidable maritime capabilities" when it carried out a combined operation, with both of its aircraft carriers in the Arabian sea. INS Vikramaditya and INS Vikrant also led the exercise with more than 35 aircraft and formations of surface

<sup>19.</sup> Ministry of Defence, "MULTILATERAL MARITIME EXERCISE MALABAR 2021—PHASE II IN BAY OF BENGAL 12-15 OCT 21", at https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1762720. Accessed on June 28, 2023.

<sup>20.</sup> Ministry of Defence, "8th Edition of Singapore-India Maritime Bilateral Exercise Simbex", at https://pib.gov.in/PressReleasePage. aspx?PRID=1751973. Accessed on July 2, 2023.

<sup>21.</sup> Ministry of Defence, "Integrated bilateral exercise of Indian Navy and Indian Air Force with US Navy concludes in Indian Ocean Region", at https://pib.gov.in/PressReleasePage.aspx?PRID=1730308. Accessed on July 4, 2023.

vessels and submarines.<sup>22</sup> China has yet to conduct dual aircraft carrier operations of this nature.

The IAF in its effort to further enhance its air power capabilities plans on upgrading its Su-30 MKI jets to "Super Sukhoi", an upgrade which will make the aircraft outperform any aircraft in the South-Asian region.<sup>23</sup> Deploying this aircraft in the Indo-Pacific region in the near future can enable the IAF to project its power and deter any misadventure by adversaries. India's instruments of air power, i.e., its fleet of aircraft ranging from advanced fighter jets to surveillance, anti-submarine, reconnaissance and others, ensure that India has the capability of securing its interests in the region.

#### **CONCLUSION**

In conclusion, air power has become a crucial factor in shaping the dynamics of the Indo-Pacific region. The region, with its strategic importance and geopolitical rivalries, has drawn the attention of major stakeholders such as China, the United States, India, Japan, and Australia. These countries recognise that air power plays a significant role in establishing dominance while also showcasing their intent and securing their national and strategic interests.

India, with its Indian Air Force (IAF) and Indian Naval Air Arm, possesses significant air power potential in the region. The IAF's fleet of fighters, AWACS, reconnaissance, and transport aircraft, coupled with the Indian Navy's aircraft carriers, destroyers, frigates, and submarines, make India a formidable force. India's participation in joint exercises, such as Malabar and Simbex, with

<sup>22.</sup> CNN, "India demonstrates naval strength with dual aircraft carrier exercise, a feat China has yet to accomplish", at https://edition.cnn.com/2023/06/15/ asia/india-navy-dual-aircraft-carrier-operations-intl-hnk-ml/index.html. Accessed on July 4, 2023.

<sup>23.</sup> Defence XP, "Detailed Analysis of Indian Super Sukhoi, A Jet With 5th Gen Capabilities!", at https://www.defencexp.com/detailed-analysis-of-indiansuper-sukhoi-a-jet-with-5th-gen-capabilities/. Accessed on July 8, 2023.

other QUAD nations and regional partners, further enhances interoperability and collaboration in the Indo-Pacific region, making it a focal point for geopolitical rivalries and strategic partnerships. The evolving dynamics and contestation in the region necessitate a strong air power presence to secure national interests, establish dominance, and respond to contingencies swiftly. Air power's ability to project force over vast distances, support humanitarian operations, and maintain surveillance is vital in this maritime-oriented region. It is crucial for India to continue to invest in enhancing their air power capabilities, promoting interoperability, and strengthening strategic partnerships to maintain stability in this dynamic region. India, with its advanced fleet of aircraft, is more than capable of maintaining favourable air situation for its air force in the region without being on the back foot. It has the capability of establishing superiority in the region by deploying its aircraft on long-range patrol and taking part in various operations with friendly countries in the region that showcase India's intent and its force projection capabilities.