



PARTNERSHIP AND  
BEYOND: EXPLAINING  
SHIFTS IN INDIA'S  
DEFENCE COOPERATION  
WITH THE UNITED STATES

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# South Asia Scan



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## **Partnership and Beyond: Explaining Shifts in India's Defence Cooperation with the United States**

Yogesh Joshi  
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## **Executive Summary**

The bilateral relationship between India and the United States (US) has grown rapidly in the 21<sup>st</sup> century. While economic and political ties have expanded over the years, this bilateral relationship is underpinned by a strong and growing defence partnership.

This South Asia Scan aims to understand New Delhi's strategic logic in pursuing a closer defence relationship with Washington. It studies key elements of India's defence relationship with the US, namely, policy coordination and defence dialogues, military exercises and arms sales.

Through this analysis, this study notes that India's shifting foreign policy and security goals have driven the breadth and depth of the India-US defence relationship. International status and material profit objectives have been replaced by the need to urgently deter Chinese territorial aggression along the Himalayan frontier and creeping influence in the Indian Ocean. Ultimately, this has created a more durable defence partnership, although risks and challenges continue to persist.

## Introduction

Writing in the 1990s, a long-time observer of India-US relations, Selig Harrison, characterised the state of Indo-US cooperation as the “dialogue of the deaf”.<sup>1</sup> The two ‘estranged democracies’ of the Cold War have, however, covered much distance in their bilateral relationship since then. More than any other dimension of their growing bilateral relationship, defence cooperation has attracted the most attention. For India, the US has emerged as its most important security partner in the last decade. In the same vein, US decision-makers are openly calling for a military alliance between the world’s largest and strongest democracies.<sup>2</sup>

This Scan aims to understand New Delhi’s strategic logic in pursuing a closer defence relationship with Washington. It further investigates the trajectory of the India-US defence cooperation as it has unfolded in the last three decades.

This Scan is divided into three major sections.

First, it explains why the growing intensity of Indo-US defence cooperation results from significant shifts in India’s strategic priorities vis-à-vis its national security requirements. It argues that initially, defence cooperation was a vehicle for strategic gain in Indian foreign policy. However, today, defence cooperation with the US is driven by India’s existential security needs vis-à-vis the threat from China. Defence cooperation with the US has shifted from a “bandwagoning for gain” strategy to a “balancing for security” strategy in India’s calculations.

The second section explores three major dimensions of Indo-US defence cooperation – policy coordination and defence dialogues, military exercises and arms sales. It situates how insecurity vis-à-vis

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<sup>1</sup> Selig Harrison, “Dialogue of the Deaf: Mutual Perceptions and Indo- American Relations”, Glazer and Glazer, *Conflicting Images*, p. 58.

<sup>2</sup> Nikki Haley and Mike Waltz, “It’s Time to Formalize an Alliance With India”, *Foreign Policy*, 25 October 2021, <https://foreignpolicy.com/2021/10/25/us-india-alliance-military-economy-biden-china-afghanistan/>.

China has forced qualitative changes in the scope and depth of Indo-US defence cooperation.

The last section underlines the potential fault lines in the growing trajectory of the India-US defence relationship.

## Reimagining New Delhi's Logic of India-United States Defence Relations

Beginning at the turn of the 21<sup>st</sup> century, the US made a strategic bet on India. Though Indo-US relations were resuscitated after the end of the Cold War, Washington started investing in India's rise earnestly only a decade later. During the Cold War, the world's strongest and largest democracies went through years of estrangement. The turning point in the distrustful relationship was when the US unequivocally supported India's position on the Kargil War in 1999. Yet, in Washington's grand strategy, New Delhi became a significant player only in the early 2000s. In the 2002 National Security Strategy, President George W Bush acknowledged India as a "growing power" with significant "common interests" and promised a "strong partnership" with New Delhi.<sup>3</sup> Thereupon, the US pursued, what Ashley Tellis has called, a policy of "benign altruism" vis-à-vis New Delhi.<sup>4</sup> India benefited immensely from the US support for its continued rise. The Indo-US nuclear deal ended India's seclusion from the Global Nuclear Order; it supported its inclusion in global technology regimes and even came around to the idea of sponsoring India's candidature for the permanent seat in the United Nations Security Council.<sup>5</sup> The US' impulse to build its strategic partnership with India has only been accentuated in the last decade, particularly as it faces the rise of a peer rival in China.

The journey has been equally dramatic for India. During his visit to the US in June 2023, India's Prime Minister Narendra Modi claimed in front of the US Congress that "We were strangers in defence cooperation at the turn of the century. Now, the US has become one

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<sup>3</sup> President George W Bush, "Develop Agendas for Cooperative Action with the Other Main Centers of Global Power", Speech, West Point, New York, 1 June 2002, <https://georgewbush-whitehouse.archives.gov/nsc/nss/2002/nss8.html>.

<sup>4</sup> Ashley Tellis, "The U.S.-India Relationship Under Trump and Modi", (Lecture, Georgetown University, Washington D.C.), 22 April 2017, <https://carnegieendowment.org/2017/05/15/u.s.-india-relationship-under-trump-and-modi-pub-70034>.

<sup>5</sup> Obama endorses India's bid for UNSC permanent membership: White House", *The Hindu*, 25 February 2015, <https://www.thehindu.com/news/us-president-barack-obama-endorses-indias-bid-for-unscc-permanent-membership-says-white-house/article6931724.ece>.

of our most important defence partners.”<sup>6</sup> Modi’s statement paints the most accurate description of the India-US defence relationship. For almost three decades, beginning in the mid-1960s, the Indian and American defence establishments were practically disconnected and often found at loggerheads. The US’ help was critical for India’s defence build-up after the 1962 Sino-Indian War. Not only did the US provide critical equipment during the conflict, but also assisted India in its post-1962 military build-up to deter further Chinese aggression. Yet, the momentum was lost soon after the western states imposed an arms embargo on India and Pakistan after the 1965 Indo-Pakistan war. As the US courted China and Pakistan in the late 1960s to tip the balance of power vis-à-vis the Soviet Union, the New Delhi-Washington dynamic reached a nadir. India cosied up to the Soviet Union for both diplomatic leverage and military support. The US and its allies in Asia-Pacific, in turn, viewed New Delhi as a Soviet client. The US-Pakistan alliance in response to the Soviet invasion of Afghanistan in 1979 and the resulting Pakistani military build-up only made New Delhi suspicious of the US’ intentions.

However, as the Soviet Union’s power started dissipating towards the close of the 1980s, India attempted to reconfigure its fraught relations with the US. High-level defence contacts were reestablished with the visit of the Chief of Staff of the Indian Army, General A S Vaidya, in 1984.<sup>7</sup> The US also opened to providing high-end defence equipment to New Delhi, including fighter jet engines for its indigenous fighter aircraft programme and long-range fire-finding radars.<sup>8</sup> However, the insecurity and distrust of decades of conflictual interests significantly slowed the process. The promise and frustration of India-US relations were captured in a confidential analysis of the Indian Ministry of External Affairs, which stated, “Indian and American perceptions of some international issues and political traditions provide for a mutually beneficial relationship.” Yet, “India’s

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<sup>6</sup> “Address by Prime Minister, Shri Narendra Modi to the Joint Session of the US Congress”, Speeches and Statements, Ministry of External Affairs, Government of India, 23 June 2023, <https://www.mea.gov.in/Speeches-Statements.htm?dtl/36714/Address+by+Prime+Minister+Shri+Narendra+Modi+to+the+Joint+Session+of+the+US+Congress>.

<sup>7</sup> Press Information Bureau, “General Vaidya leaves for US”, Ministry of Defence, Government of India, 9 July 1984.

<sup>8</sup> Press Information Bureau, “Defence Minister to visit United States”, Ministry of Defence, Government of India, 23 June 1989.

relations with the US have fluctuated from time to time. The US’ foreign and strategic objectives have often militated against India’s security concerns in South Asia and the Indian Ocean.”<sup>9</sup>

**Table 1: US Equipment in the Indian Military during the Cold War**

Year (Ordered)	Year (Delivered)	Weapon Description	Numbers
1960	1961-62	Bell-47/OH-13 Transport Aircraft	12
1960	1961	C-119 Transport Aircraft	28
1962	1963	C-119 Transport Aircraft	24
1962	1963	DHC-4 Caribou Transport Aircraft	2
1965	1968-76	MK-44 ASW Torpedo	50 (ordered) 10 (delivered)
1969	1971-72	Model-300 Light Helicopter	10
1987	1988	Gulfstream-3 Light Transport Aircraft	2
1987	1988	Learjet-29 Light Transport Aircraft	2

Source: Authors calculations from SIPRI arms transfer database<sup>10</sup>

The end of the Cold War allowed New Delhi to embrace the logic of American power more openly. The US’ unipolarity also left no other recourse available to Indian decision-makers. India required the support of the US for its economic growth and to realise its fundamental foreign policy goals, particularly its acceptance as a significant rising power in the international system. In the first Gulf War, New Delhi reluctantly provided refuelling facilities for the US’ air campaign. The death of the Soviet Union also required India to diversify its defence procurements. Normalising relations with the US was essential. The first initiative was the Indo-US joint naval exercises, which began in 1992, followed by paratroopers from the two armies exercising in the US.<sup>11</sup> By 1993, all three services of the two armed forces formed high-level steering committees to coordinate defence

<sup>9</sup> National Archives of India, (1989), “Indo-US Relations”, Ministry of External Affairs (Americas Division), File No. WII/104/4/8 (Secret).

<sup>10</sup> SIPRI Estimate of Indian Arms Imports from the US: 1960-1990 (In Trend Indicator Values or TIVs), SIPRI Arms Transfers Database, generated January 2024, <https://armstransfers.sipri.org/ArmsTransfer/TransferData>.

<sup>11</sup> Press Information Bureau, “Indo-US Joint Naval Exercises conclude”, Ministry of Defence, Government of India, May 29 1992 ; Foreign Broadcast Information Service, “Daily addresses military exercises with the US”, *The Telegraph*, 11 June 1995.

interaction. By 1995, all three Indian services started conducting joint exercises with their US counterparts.

The US Secretary of Defence William Perry's visit to India in January 1995 was, however, a key turning point. The meeting resulted in a political framework for defence cooperation and commitments to increase military-to-military cooperation and defence research collaboration. In 1997, India and the US conducted their first strategic dialogue under a left-wing government in New Delhi.<sup>12</sup> However, India's nuclear weapons programme was at odds with President Bill Clinton's non-proliferation agenda and hindered the growth of the Indo-US strategic relationship.<sup>13</sup> If India's nuclear ambiguity prospered hopes in Washington that New Delhi would come around its non-proliferation agenda, New Delhi viewed the US' non-proliferation advocacy as a significant roadblock in its rise in the global order. The May 1998 nuclear tests were a blessing in disguise for Indo-US relations. It liberated India of its self-imposed restraints and allowed the US to move beyond its non-proliferation agenda.<sup>14</sup> Economic sanctions following India's nuclear tests notwithstanding, the US' support during the Kargil War allowed New Delhi to overcome some of its historical hesitations. At the turn of the century, India earnestly pursued building a defence relationship with the US.

However, the strategic logic behind building defence ties with the US was hardly motivated by India's security needs. Rather, New Delhi viewed the relationship with the US as helping its rise in the international order. The motivation for the defence partnership, therefore, was part of India's bandwagoning preference – to use the US' power for its own rise in international politics. India's preference for bandwagoning was clearly articulated in the high-level Group of Ministers' report in 2001, "Meaningful, broad-based engagement with the US spanning political, economic and technological interests and commonalities, will impact beneficially on our external security concerns with a resultant albeit less visible impact on our internal

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<sup>12</sup> Dinesh Kumar, *Defence in Indo-US Relations* (New Delhi: IDSA Occasional Paper, 1997).

<sup>13</sup> C. Raja Mohan, *Crossing the Rubicon: The Shaping of India's New Foreign Policy* (New Delhi, Penguin Viking, 2003).

<sup>14</sup> Strobe Talbott, "Engaging India: Diplomacy, Democracy, and the Bomb" (Brookings Institution Press: Washington DC, 2004).

security environment. Conversely, an adversarial relationship with that state can have significant negative repercussions across the same broad range of issues and concerns.”<sup>15</sup> It welcomed Bush’s abandonment of Cold War arms control regimes such as the Anti-Ballistic Missile Treaty. It was among the first states to seek technological collaboration in Ballistic Missile Defence (BMD).<sup>16</sup> After the 11 September 2001 terrorist attacks in the US, India offered military bases for the US’ campaign in Afghanistan, provided convoy security to US warships in the Indian Ocean, and even rallied for a joint anti-terror cooperation between Israel, the US and India as an Axis of Democracies against global terrorism.<sup>17</sup> Such bandwagoning was motivated by a strategy to gain material and status benefits, culminating in the Indo-US nuclear deal in 2008.<sup>18</sup>

In the last 15 years, however, China’s rise as Asia’s potential hegemon has fundamentally altered the objectives of India’s defence cooperation with the US insofar as the most significant power in Asia is also the most threatening to India’s interests and values. As the Indian Ministry of Defence noted in its annual report in 2009, “China seeks to assert its centrality in the Asian security order... the qualitative and quantitative quotients of its military profile are bound to grow.”<sup>19</sup> Never in its history has India witnessed such a concentration of power, threat and revisionism on its immediate borders. The element of distance between a great power and India has wholly vanished. India faces the full force of China’s economic and military power. The asymmetry of power between the two states has grown enormously in the last 40 years. In 1980, China’s gross domestic product was only twice as much as that of India; by 2020, the Chinese economy was six times bigger. As Manjeet Pardesi has argued, even when India is rising, it is not growing as fast to compete

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<sup>15</sup> The Group of Minister’s consisted of LK Advani (Minister of Home Affairs), Jaswant Singh (Minister of External Relations), Yaswant Sinha (Minister of Finance) and George Fernandes (Minister of Defence). See Group of Minister’s Report on National Security, p. 7. <https://www.vifindia.org/sites/default/files/GoM%20Report%20on%20National%20Security.pdf>.

<sup>16</sup> Ashley J. Tellis, “The Evolution of U.S.-Indian Ties: Missile Defense in an Emerging Strategic Relationship”, *International Security*, Vol. 30, No. 4 (2006): 113-151.

<sup>17</sup> Shanthie Mariet D’Souza, “Indo-US Counter-Terrorism Cooperation: Rhetoric Versus Substance”, *Strategic Analysis*, Vol. 32, No. 6 (2008): 1067-1084.

<sup>18</sup> Rajesh Rajagopalan and Varun Sahni, “India and the Great Powers: Strategic Imperatives; Normative Necessities”, *South Asian Survey*, Vol. 15, No. 5 (2008): 15.

<sup>19</sup> Annual Report 2008-09, Ministry of Defence, Government of India, 29.

effectively with China.<sup>20</sup> The latent power of economic growth has also transformed the balance of military power.

The asymmetry in Sino-Indian military power has grown tremendously in the last four decades. In the 1980s, the People's Liberation Army (PLA) was a rag-tag force coming out of Mao Zedong's shadow and its abysmal performance against the Vietnamese during the short border war. India enjoyed local superiority in both the men and quality of military equipment on the Sino-Indian border.<sup>21</sup> China's presence in the Indian Ocean was negligible. Two decades of double-digit growth have allowed China to splurge on its military modernisation. India's defence budget is almost one-fourth of what China spends on its military.<sup>22</sup> If earlier mobilisation of the PLA for action on the Indian border required two seasons, China's infrastructure push in Tibet has ensured that it can field both men and material at breath-taking speeds for almost two weeks.<sup>23</sup>

The new military reality has rendered India's erstwhile defensive posture on the border completely redundant. The rapid expansion of the PLA-Navy, a primarily coastal defence force in the 1980s, into a blue water navy has left India nervous about the safety of its maritime backyard.<sup>24</sup> Such immense power asymmetry has whetted China's appetite for revisionism along the Sino-Indian border and stoked India's anxieties regarding its ability to defend the status quo. The extent of this asymmetry is evident in the increasing demand among India's strategic community to use tactical nuclear weapons to offset its conventional vulnerability.<sup>25</sup> China's power threatens India's

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<sup>20</sup> Pardesi, Manjeet, "Explaining the asymmetry in the Sino-Indian Strategic Rivalry", *Australian Journal of International Affairs*, Vol. 75 (2021): 1-25.

<sup>21</sup> Yogesh Joshi and Anit Mukherjee, "From Denial to Punishment: The Security Dilemma and Changes in India's Military Strategy towards China", *Asian Security*, Vol. 15 (2019): 25-43.

<sup>22</sup> Manoj Kumar, "India raises defence budget to \$72.6 bln amid tensions with China", *Reuters*, 1 February 2023, <https://www.reuters.com/world/india/india-raises-defence-budget-726-bln-amid-tensions-with-china-2023-02-01/>.

<sup>23</sup> Yogesh Joshi and Anit Mukherjee, "From Denial to Punishment: The Security Dilemma and Changes in India's Military Strategy towards China", *Asian Security*, Vol. 15 (2019): 25-43.

<sup>24</sup> Don McLain Gill, "Between the Elephant and the Dragon: examining the Sino-Indian competition in the Indian Ocean", *Journal of the Indian Ocean Region*, Vol. 17, No.2 (2021): 235-254.

<sup>25</sup> For example, Bharat Karnad argues that the "only credible nuclear deterrent in the circumstances (of India-China war on the Himalayan front) are atomic demolition munitions (ADMs) placed just behind the prepared defensive line along the likely ingress routes of the PLA in the mountain." See, Bharat Karnad, *Why India is a not a Great Power (Yet)* (New Delhi: Oxford University Press, 2015), 389.

core national interests, whether it concerns the Sino-Indian border, China's assistance for Pakistani revanchism, or its challenge to India's influence in South Asia or the Indian Ocean. The reality of a hostile great power at India's immediate borders is fundamentally different from what India confronted during the Cold War or even after. As the next section will discuss, this strategic necessity is driving India's closer military embrace of the US.

## The Journey of Indo-American Defence Relations

An empirical analysis of the content and scope of India's defence engagement with the US reveals an interesting dynamic. Under the bandwagoning strategy, India's defence engagement with the US increased exponentially in scope but remained shallow in depth. However, as India began confronting Chinese hostility in the last decade and the necessity of balancing China's military power loomed large on India's military requirements, it has aimed for greater depth in its defence interaction with the US. This shifting nature of India's defence engagement with the US can be observed across several domains of their defence cooperation.

### High-Level Security Engagements

India re-established high-level defence interactions in 1984, when Vaidya visited the US. In 1989, when India's Defence Minister K C Pant visited the US, it was the first visit by an Indian defence minister in almost three decades.<sup>26</sup> In the entire decade of the 1980s, only 10 high-level interactions occurred between the defence establishment of the two sides. In the early 1990s, individual steering groups were established for the two countries' Army, Navy and Air Force cooperation. However, for much of the 1990s, defence interaction occurred at the level of individual armed services. Perry's visit to India in 1995 marked a key juncture. India and the US signed an "Agreed Minute" on defence relations.<sup>27</sup> The agreement institutionalised defence dialogue between the two countries by establishing the Defence Policy Group (DPG) and Joint Technical Group (JTG). The DPG, a senior-level civilian-led interaction, "would serve to review issues of joint concern such as post-Cold War security planning and policy perspective of both sides" among other issues.<sup>28</sup> The JTG, on the other hand, aimed to enhance cooperation in defence research and production. The 1998 nuclear tests led to the suspension of defence interactions and joint military activities, including joint exercises.

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<sup>26</sup> Press Information Bureau, "Defence Minister to visit United States", Ministry of Defence, Government of India, 23 June 1989.

<sup>27</sup> Press Information Bureau, "Indo-US Defence talks", Ministry of Defence, Government of India, 27 April 1995.

<sup>28</sup> "Foreign Affairs Record Vol XLI No. 1 1995", Ministry of External Affairs, Government of India, 14.

The Glenn amendments required the US to terminate any defence sales as well as suspend all kinds of military assistance.<sup>29</sup> Following this, the Indian armed forces were barred from participating in the International Military Exchange Programme.<sup>30</sup> The DPG and JTG meetings were cancelled and suspended indefinitely.

However, the US' policy on the Kargil War, the coming of Bush and the attacks on 11 September motivated the US to gradually lift sanctions and reinitiate defence and security interactions. As the Indian Ministry of External Affairs argued, the lifting of the remaining sanctions "facilitated the development of a stronger defence relationship, as also technical and economic relations".<sup>31</sup> Joint exercises and the suspended DPG and JTG were resumed. The first breakthrough was achieved when India signed the General Security of Military Information Agreement (GSMIA) during the visit of Defence Minister George Fernandes to the US in January 2002.<sup>32</sup> This agreement detailed the procedures that needed to be followed while exchanging classified information between the US and Indian governments. It paved the way for the sale of defence equipment to India. In November 2002, the two sides launched the High Technology Cooperation Group to enhance high-technology trade. The deliberations under this dialogue led to the declaration of the Next Steps in Strategic Partnership (NSSP) document in 2004. The NSSP allowed India's accommodation in the global nuclear order. The move eliminated decades of mistrust between the two sides engendering out of US efforts to deny India cooperation in high technology areas mainly civilian nuclear energy. The NSSP added civilian areas of cooperation like civilian nuclear activities, civilian space programmes and high-technology trade to the bilateral agenda apart from defence trade.<sup>33</sup>

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<sup>29</sup> Robert Hathaway, "Confrontation and Retreat: The U.S. Congress and the South Asian Nuclear Tests", Arms Control Association, 30 April 2024, <https://www.armscontrol.org/act/2000-01/confrontation-retreat-us-congress-south-asian-nuclear-tests-key-legislation>.

<sup>30</sup> Sanjaya Baru, *Strategic Consequences of India's Economic Performance: Essays and Columns*, New Delhi: Academic Foundation, 2006, 354-356.

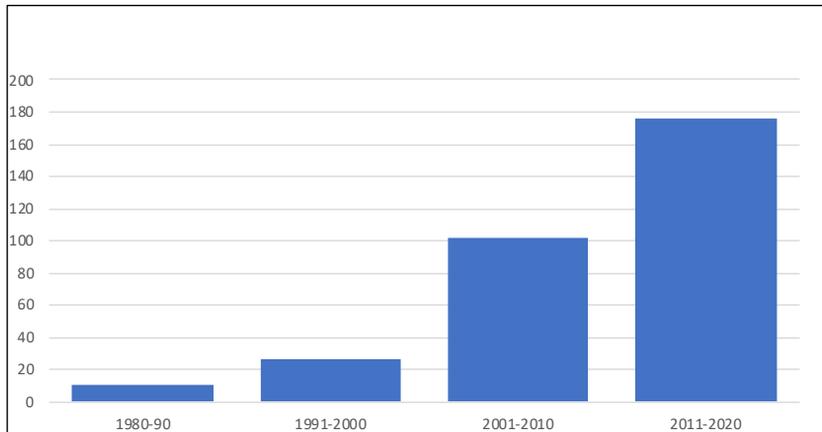
<sup>31</sup> Annual Report 2001-02, Ministry of External Affairs, (New Delhi: Government of India, 2002), 68.

<sup>32</sup> "Towards Closer Strategic Cooperation", *The Hindu*, 21 January 2002, <https://www.thehindu.com/todays-paper/tp-national/tp-tamilnadu/towards-closer-strategic-cooperation/article27827060.ece>.

<sup>33</sup> "India and United States Successfully Complete Next Steps in Strategic Partnership", Press Releases, Embassy of India in Washington DC, 18 July 2005, <https://www.mea.gov.in/bilateral-documents.htm?dtl/6789/India+and+United+States+Successfully+Complete+Next+Steps+in+Strategic+Partnership>.

The new Framework on Indo-US Defence Cooperation was signed in June 2005, identifying “new opportunities” for defence cooperation, including expansion of joint exercises, collaboration in multinational operations, increased intelligence sharing, and collaboration on missile defence.<sup>34</sup> Next, the two countries began negotiations on the End User Monitoring Agreement (EUMA). The agreement, drafted to India’s needs and interests, stipulated procedures for physically monitoring US defence equipment sold to India by the US government. The EUMA aims to prevent the leak of sensitive and high-end technologies transferred or sold to other countries by the US.<sup>35</sup> This agreement was concluded in 2009.<sup>36</sup>

**Graph 1: India-US Military and Defence Interactions**



Source: Authors calculations from multiple sources<sup>37</sup>

Compared to the number of interactions between the two defence establishments in the 1990s, the number of bilateral engagements jumped almost five times in the decade of the 2000s (Graph 1).

<sup>34</sup> “New Framework for the U.S.- India Defense Relationship”, Department of Defence, Government of the United States of America, 28 June 2005, <http://library.rumsfeld.com/doclib/sp/3211/2005-06-28%20New%20Framework%20for%20the%20US-India%20Defense%20Relationship.pdf>.

<sup>35</sup> “US gets right to inspect defence equipment, tech sold to India”, *Times of India*, 21 July 2009, [http://timesofindia.indiatimes.com/articleshow/4800258.cms?utm\\_source=contentofinterest&utm\\_medium=text&utm\\_campaign=cppst](http://timesofindia.indiatimes.com/articleshow/4800258.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst).

<sup>36</sup> Ministry of External Affairs, “Joint Press Interaction by EAM and US Secretary of State”, 20 July 2009, <https://mea.gov.in/media-briefings.htm?dtl/5212/joint+press+interaction+by+eam+and+us+secretary+of+state>.

However, even when new avenues and specific mechanisms for defence interactions emerged between the two countries (Table 2), many of these initiatives petered out quite quickly. For example, the institutionalised dialogue between National Security Advisors progressed intermittently. The first visit by an Indian defence minister to the US after signing the Framework on Indo-US Defence Cooperation in 2005 came in 2008.<sup>38</sup> However, for the next decade, engagement at the defence ministers' level remained moderate (once every two years). Several working groups meant to increase cooperation between India and the US also lay dormant.<sup>39</sup> To reinvigorate joint defence production and technology sharing, India and the US agreed to the Defence Trade and Technology Initiative (DTTI). The initiative aimed to move India and the US away from a buyer-seller relationship and seek opportunities for joint development of technologies. However, programmes identified under the initiative never saw much progress.

**Table 2: Evolution of India-US Defence and Security Interactions**

Name	Format	Year Initiated	Status
Defence Ministerial Dialogue	Defence Minister/Defence Secretary (US)	1988	Ongoing
Indo-US Naval Steering Group	Deputy Chief of Naval Staff/ Commander, 7 <sup>th</sup> Fleet, PACCOM (US)	1993	Ongoing
Indo-US Airforce Steering	Director General Air Operations, IAF/5 <sup>th</sup> Air Force Commander, PACCOM (US)	1993	Ongoing
Indo-US Army Steering Group	Deputy Chief (Strategy), Indian Army/ Commanding General, US Army Pacific (USARPAC)	1993	Ongoing
Defence Policy Group	Defence Secretary (India)/Under Secretary of Defence for Policy (US)	1995	Ongoing
Joint Technical Group	-	1995	Ongoing

<sup>37</sup> The sources used by the authors include Ministry of Defence Annual Reports (available online from 2002), Ministry of Defence Press Releases (available online), Ministry of External Affairs Press Releases (available online), Indian Embassy in the United States Press Releases (available online from 1997) and major Indian News Dailies.

<sup>38</sup> "Defence Minister to visit USA", Press Releases, Embassy of India in Washington DC, 4 September 2008, <https://www.indianembassyusa.gov.in/ArchivesDetails?id=994>.

<sup>39</sup> See notes on the various working groups between India and the US in Table 2.

Military Cooperation Group	Deputy commander, US Indo-Pacific Command/Chief of integrated defence staff	2002	Ongoing
High Technology Cooperation Group	-	2002	Ongoing
Senior Technology Security Group	Director, Defence Technology Security Agency/Additional Secretary (Defence Production)	2005	Ongoing
Defence Production and Procurement Group	Director General (Acq), Ministry of Defence/Director, Defence Security Cooperation Agency, (US)	2005	Ongoing
Joint Working Group on Counter Terrorism	Additional Secretary, Ministry of External Affairs/Coordinator for Counter-terrorism (US)	2000	Ongoing
Indo-US Cyber Security Forum	National Security Council Officials	2001	Discontinued
India-US Energy Dialogue	-	2005	Ongoing
Joint Working Group on Civil Space Relations	NASA Associate Administrator for International and Interagency Relations (US)/Scientific Secretary of the Indian Space Research Organisation (ISRO) for India.	2005	Ongoing
India-US Information and Communications Technologies Working Group	-	2005	Ongoing
India-US Strategic Dialogue	Ministers for External Affairs/ Secretary of State (US)	2010	Replaced
India-US Homeland Security Dialogue	Home Secretary/US Under Secretary for Strategy, Policy and Plans, Department of Homeland Security	2011	Ongoing
India-US Cyber Dialogue	Deputy National Security Advisors of India and the US	2010	Ongoing
Defence Trade and Technology Initiative	Secretary (Defence Production)/ Under Secretary (Acquisition, Technology and Logistics)	2012	Last held in 2022
India-US Space Strategic Dialogue	-	2015	Ongoing

Joint Working Group for possible cooperation in the field of aircraft carrier technologies	Controller Warship Production and Acquisition/Programme Executive Officer, Aircraft Carriers (US Navy)	2015	Ongoing
India-US Strategic and Commercial Dialogue	Ministers for External Affairs and Commerce/Secretary of State and Commerce (US)	2015	Discontinued
India-US Maritime Security Dialogue	Joint Secretary, Ministry of External Affairs Joint Secretary (Navy) and Assistant Chief of the Naval Staff, Ministry of Defence Assistant Secretary of Defence for Asian and Pacific Security Affairs Deputy Assistant Secretary of State for South and Central Asian Affairs	2016	Ongoing
India US 2+2 Dialogue	Defence Minister/Defence Secretary (US)	2018	Ongoing
India- US Defence Cyber Dialogue	-	2020	Ongoing
US-India Advanced Domains Defence Dialogue	-	2023	Ongoing
Initiative on Critical and Emerging Technologies (iCET)	Respective National Security Advisors	2023	Discontinued
India-US Strategic Trade Dialogue	Foreign Secretary, MEA/Under Secretary for Industry and Security, Commerce Department and Under Secretary of State for Political Affairs State Department (US)	2023	Ongoing

Source: Authors tabulation from multiple sources<sup>40</sup>

<sup>40</sup> The sources used by the authors include the Ministry of Defence Annual Reports (available online from 2002), Ministry of Defence Press Releases (available online), Ministry of External Affairs Press Releases (available online), Indian Embassy in the United States Press Releases (available online from 1997) and major Indian news dailies.

**Table 3: Key Bilateral Defence Agreements**

Year	Agreement
1995	Agreed Minute on Defence Relations Between the US and India
2004	Next Steps in Strategic Partnership
2005	New Framework for Defence Relations
2013	India-US Joint Declaration on Defence Cooperation
2015	Indo-US Bilateral Agreement on Defence Cooperation
2016	US declares India as a Major Defence Partner
2018	India gains Strategic Trade Authorisation-1 (STA-1) Status

Source: Authors tabulation from multiple sources<sup>41</sup>

However, a qualitative shift in high-level security and defence engagements has been palpable since the signing of the New Framework for Defence Agreement in 2015. Two qualitative changes are worth mentioning. First, there is an evolving dynamics of a whole government approach in developing a shared understanding of the security situation and threat assessments between the two countries. Initiating the 2+2 format dialogues involving external affairs and defence bureaucracies and leaderships of the two sides was a breakthrough in this regard. As noted in the joint statement of the inaugural 2+2 dialogue, it aims to provide a “positive, forward-looking vision for the India-US strategic partnership and to promote synergy in their diplomatic and security efforts.”<sup>42</sup> The need for such a format and resulting synergy is closely tied to the nature of the threat posed by China. China not only presents a military threat to India and other countries in the region but is also using its growing geopolitical and economic influence to dilute key elements of the international order in the Indo-Pacific. The comprehensive nature of the threat posed by China requires, in India and the US’ estimation, a coordinated response. Furthermore, India and the US have expanded the rubric of the dialogue, which now covers topics relating to cyber, outer space and artificial intelligence. Second, India and the US started evincing

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<sup>41</sup> Ibid.

<sup>42</sup> Joint Statement on the Inaugural US-India 2+2 Ministerial Dialogue, Press Releases, US Mission India, 7 September 2018, <https://in.usembassy.gov/joint-statement-on-the-inaugural-u-s-india-22-ministerial-dialogue/>.

greater interest in plurilateral security dialogues with like-minded partners, as highlighted in Table 4.

Plurilateral security dialogues can bring together countries that share common concerns or outlooks to address specific problems. This format, adopted by India, stems from a recognition that China’s growing influence cannot be contained by a single power.

**Table 4: Key Plurilateral Arrangements**

Name	Format	Year Initiated	Status	Number of Meetings
Japan-India-US	Senior Officials	2010	Ongoing	9
	Ministerial	2015		2
	Leaders’ Summit	2015		2
Quadrilateral Security Dialogue	Senior Officials	2016	Ongoing	-
	Ministerial	2019		7
	Leaders’ Summit	2021		5
India-Israel-UAE-US (I2U2)	Senior Officials	2022	Ongoing	2
India-South Korea-US (Informal Technology Trilateral)	Senior Officials	2024	Ongoing	1

Source: Authors tabulation from multiple sources<sup>43</sup>

A qualitative change can be seen in discussions on the DTTI as well. Early discussions in DTTI meetings focussed on collaborative projects between the Defence Research and Development Organisation and US companies. Later, the two countries began focusing on a more broad-based collaboration between private entities of their defence sectors. The two countries signed an Industrial Security Annex, paving

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<sup>43</sup> The sources used by the authors include Ministry of Defence Annual Reports (available online from 2002), Ministry of Defence Press Releases (available online), Ministry of External Affairs Press Releases (available online), Indian Embassy in the United States Press Releases (available online from 1997) and major Indian news dailies.

the way for greater collaboration between the defence and private sectors.<sup>44</sup>

Overall, in the last decade or so, the India-US high-level defence interactions have greatly expanded in both scope and depth. India's interest in joint defence consultations with the US is on the rise. The rise is clearly motivated by the looming shadow of the Chinese military threat across the Himalayas, the Indian Ocean and its expanding influence in the larger Indo-Pacific region.

### **Joint Exercises, Interoperability and Operational Cooperation**

From the first joint naval exercises in 1992, India and the US have come a long way (Graph 2). The early phase of joint exercises between the US and the Indian military focused on gaining familiarity with one another's tactical and operational thinking. As shown in Chart 1, all exercises between India and the US were between the special forces and the navies. These exercises were limited in their scope and intensity. Special Forces exercises between Indian and US special forces in the 1990s and early 2000s involved basic tasks such as para-dropping, mid-air steering and use of explosives and demolition.

India and the US also instituted the *Yudh Abhyas* (Training for War) series of exercises in 2004 between their regular army units. During the exercises, the two armies simulate and train for various warfare scenarios with the goal of improving interoperability and facilitating the exchange of best practices. Early versions of the *Yudh Abhyas* exercises were conducted at the platoon and company level, with about 100 troops involved from each side. Troops practised basic tactics like raids, ambushes and intelligence collection for counter-insurgency operations.<sup>45</sup> Similarly, air force exercises were restricted to transport aircraft ferrying special forces for low-level

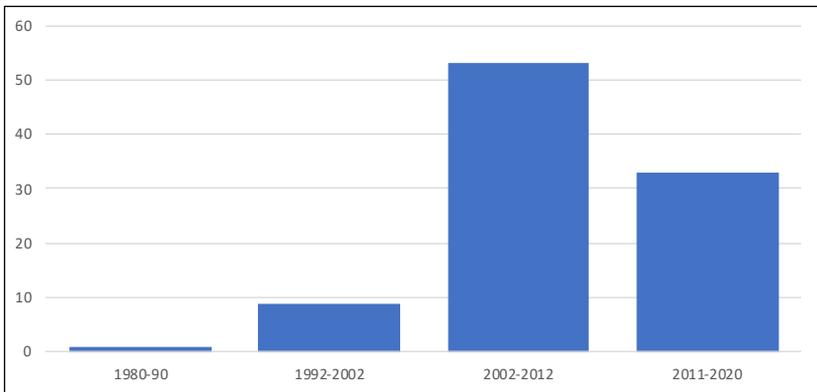
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<sup>44</sup> Dinakar Peri, "Industrial Security Annex opens Indian private partnerships for U.S. defence firms", *The Hindu*, 19 December 2019, <https://www.thehindu.com/news/national/defence-ties-with-us-set-to-deepen-rajnath-singh/article61605050.ece>.

<sup>45</sup> Josy Joseph, "Army team to visit US for joint exercises", *Rediff*, 20 April 2004, <https://www.rediff.com/news/2004/apr/20army.htm>.

flying.<sup>46</sup> The Malabar naval exercises focussed primarily on surface warfare and did not involve front-line battleships and platforms such as aircraft carriers and nuclear submarines. The first exercise in 1992 practiced activities like “general drills, manoeuvres, communication, replenishment at sea, search and rescue”.<sup>47</sup> While an anti-submarine warfare element was added in the next two iterations, complex manoeuvres were avoided, and no live firing drills took place. In the early 2000s, the exercises were focused on enhancing interoperability.<sup>48</sup> A total of four to five surface vessels took part where the navies familiarised themselves with each other’s procedures and operational philosophies.

**Graph 2: India-US Joint Military Exercises**



Source: Authors data from various sources<sup>49</sup>

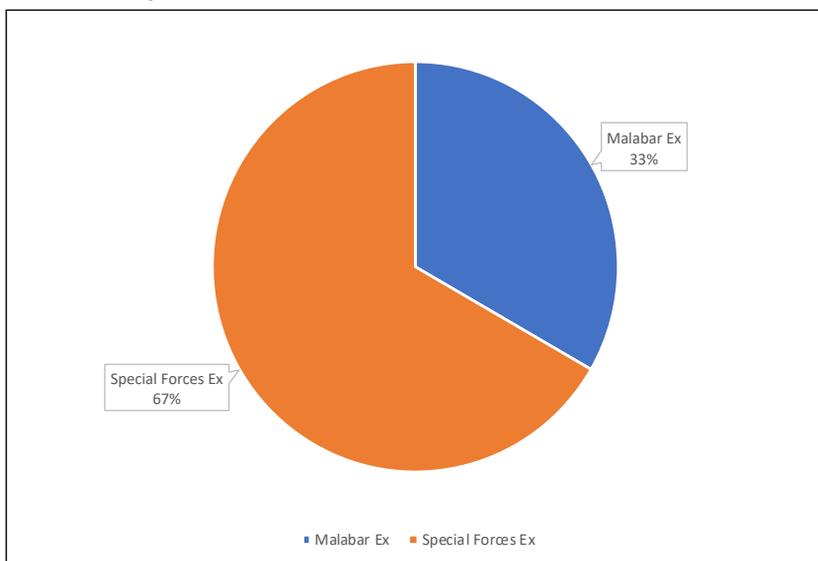
<sup>46</sup> Press Information Bureau, “Joint Indo-US Air force-Para training begins”, Ministry of Defence, Government of India, 13 September 1995.

<sup>47</sup> Press Information Bureau, “Indo-US Joint Naval Exercises conclude”, Ministry of Defence, Government of India, 29 May 1992.

<sup>48</sup> Sandeep Unnithan, “Malabar-2003 naval exercise signals new high in cooperation between India and US”, *India Today*, 20 October 2003, <https://www.indiatoday.in/magazine/defence/story/20031020-malabar-2003-naval-exercise-signals-new-high-in-cooperation-between-india-and-us-791635-2003-10-19>.

<sup>49</sup> The sources used by the authors include Ministry of Defence Annual Reports (available online from 2002), Ministry of Defence Press Releases (available online), Ministry of External Affairs Press Releases (available online), Indian Embassy in the United States Press Releases (available online from 1997) and major Indian News Dailies.

**Chart 1: Proportion of Exercises, 1992-2002**



Source: Authors data from various sources<sup>50</sup>

While these exercises lacked depth, military exercises were increasing in number. India and the US militaries were involved in several exercises through the 2000s, as shown in Graph 2. Habu Nag was a tabletop exercise between the US and India that simulated amphibious operations.<sup>51</sup> Shatrujeet, an exercise between the US Marine Corps and the Indian Army, practiced non-traditional security and counter-terrorism operations.<sup>52</sup> Both these exercises, instituted in the mid-2000s, would carry on into the early 2010s before being deferred. The Indian Navy and US Navy would also participate in the SALVEX exercises, where the navies conducted diving, survey and salvage operations.

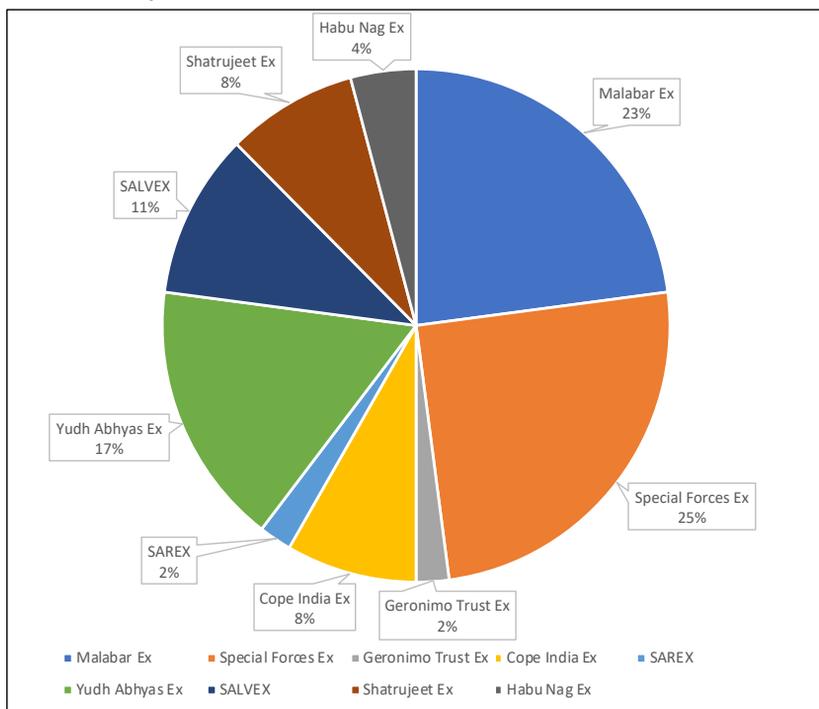
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<sup>50</sup> Ibid.

<sup>51</sup> "Indian Military Officers Train With 31st Marine Expeditionary Unit", 31st Marine Expeditionary Unit, 5 October 2010, <https://www.31stmeu.marines.mil/News/News-Article-View/Article/532834/indian-military-officers-train-with-31st-marine-expeditionary-unit/>.

<sup>52</sup> Press Information Bureau, "Indian Army and US Marines: Joint Exercise – EX Shatrujeet", Ministry of Defence, Government of India, 31 October 2006.

**Chart 2: Proportion of Exercises, 2002-2012**



Source: Authors data from various sources<sup>53</sup>

However, by the mid-2000s, there would be a palpable change in the quality of India-US military exercises. The change in the content of military exercises was driven by China’s growing power. Firstly, several small-scale exercises would be discontinued or deprioritised. Both Habu Nag and Shatrujeet were last conducted in 2012 and 2013, respectively. SALVEX was conducted seven times since its inception in 2005 but only two times since 2012. Between 2002 and 2012, *Yudh Abhyas* and *Malabar* exercises accounted for 40 per cent of India’s total exercises with the US (Chart 2). This number increased to 63 per

<sup>53</sup> The sources used by the authors include the Ministry of Defence Annual Reports (available online from 2002), Ministry of Defence Press Releases (available online), Ministry of External Affairs Press Releases (available online), Indian Embassy in the United States Press Releases (available online from 1997) and major Indian news dailies.

cent between 2012 and 2022 (Chart 3). Secondly, while the overall number of exercises decreased, the size, scope and complexity of India-US exercises would increase over the next few years. The initial push would come from the navies and air forces and soon adopted into the army exercises as well. Beginning in the mid-2000s, Air Force Exercises under the Cope Thunder series have involved increasing participation of fighter jets, airborne warning and control and systems and even Air Force Special Forces.<sup>54</sup> The Indian Navy was concerned about the growing Chinese naval presence in the Indian Ocean. This preceded the steady deterioration of stability along the Line of Actual Control. By the mid-2000s, many analysts were raising alarms about Chinese investments in the Indian Ocean. This manifested in the commonly known “String of Pearls” theory.<sup>55</sup> The Indian Navy was monitoring Chinese naval vessels and submarines regularly foraging into the Indian Ocean. Thus, by 2004, the Malabar exercises increasingly began to focus on conventional warfighting scenarios and operations. In 2004, the Malabar exercise focussed on sea control and fleet defence operations.<sup>56</sup> The following year, a US Aircraft Carrier – USS Nimitz – participated in the Malabar series of exercises along with an Indian Aircraft Carrier – INS Viraat – for the first time.<sup>57</sup> Since then, aircraft carriers and nuclear attack submarines have regularly featured in exercises, and the number of participating vessels has also increased.<sup>58</sup> By the 2010s, the exercises shifted to conventional warfighting training.<sup>59</sup> Specialised domains like air defence, sea control, anti-submarine warfare, maritime domain awareness and maritime strike were key features.

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<sup>54</sup> Sandeep Dikshit, “India, U.S. fighter jet exercises this month”, *The Hindu*, 13 February 2004.

<sup>55</sup> Virginia Marantidou, “Revisiting China’s ‘String of Pearls’ Strategy: Places ‘with Chinese Characteristics’ and their Security Implications”, *Issues & Insights* Vol. 14-No. 7, *Pacific Forum CSIS*, [https://pacforum.org/wp-content/uploads/2019/02/140624\\_issuesinsights\\_vol14no7.pdf](https://pacforum.org/wp-content/uploads/2019/02/140624_issuesinsights_vol14no7.pdf).

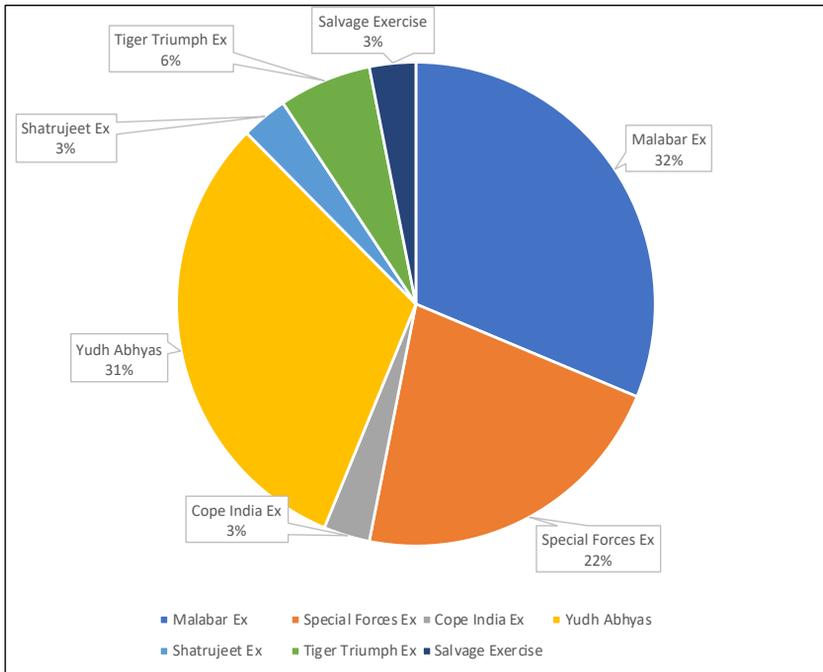
<sup>56</sup> “Annual Report 2003-04”, Ministry of Defence, Government of India, 49-50.

<sup>57</sup> Press Information Bureau, “Indian Navy - US Navy aircraft carriers to conduct joint exercise”, Ministry of Defence, Government of India, 23 September 2005.

<sup>58</sup> Press Information Bureau, “Indo-US Bilateral Naval Exercise – Malabar 08”, Ministry of Defence, Government of India, 15 October 2008.

<sup>59</sup> Seventh Fleet to conduct exercise Malabar with Indian Navy”, US 7th Fleet Public Affairs, 2 April 2011, <https://www.cpf.navy.mil/Newsroom/News/Article/2757589/seventh-fleet-to-conduct-exercise-malabar-with-indian-navy/>.

**Chart 3: Proportion of Exercises 2012-2022**



Source: Authors data from various sources<sup>60</sup>

As the situation on the border became more fraught in the 2010s, the Indian and US armies also shifted their focus to more conventional operations in the *Yudh Abhyas* exercises. The exercises were scaled up to the battalion level under a brigade headquarters and featured the use of equipment like UAVs and armoured personnel carriers.<sup>61</sup> In 2018, the exercise was conducted under the division headquarters from the previous brigade headquarters. Exercises were conducted in mountainous terrain in Uttarakhand (northern border state in

<sup>60</sup> The sources used by the authors include the Ministry of Defence Annual Reports (available online from 2002), Ministry of Defence Press Releases (available online), Ministry of External Affairs Press Releases (available online), Indian Embassy in the United States Press Releases (available online from 1997) and major Indian news dailies.

<sup>61</sup> "India-US Joint Military Exercise Yudh Abhyas 09", Press releases, Indian Embassy in Washington D.C., 12 October 2009, <https://indianembassyusa.gov.in/ArchivesDetails?id=1161>; and Ashley M. Armstrong, "U.S. Army Alaska, Indian Army mark success of Yudh Abhyas 2010 at closing ceremony", *US Army*, 14 November 2010, [https://www.army.mil/article/48092/us\\_army\\_alaska\\_indian\\_army\\_mark\\_success\\_of\\_yudh\\_abhyas\\_2010\\_at\\_closing\\_ceremony](https://www.army.mil/article/48092/us_army_alaska_indian_army_mark_success_of_yudh_abhyas_2010_at_closing_ceremony).

India) and cold weather conditions in Alaska, US. 2020 onwards, the *Yudh Abhyas* exercises featured combined arms manoeuvre and high-altitude warfare drills.<sup>62</sup> Thus, the contingencies simulated increasingly bear close resemblance to conflict zones India will likely find itself.

As India's relations with China deteriorated over the last decade, New Delhi has employed joint military manoeuvres with the US for deterrence signalling. During the 2020 crisis in Eastern Ladakh, the Indian Navy engaged in the Passex exercise with the US Navy in the Indian Ocean.<sup>63</sup> Similarly, India is increasingly inclined to move the location of such exercises to areas closer to the India-China border. The increasing inventory of US platforms in the Indian armed forces (covered in the following sub-section) has only increased the tempo of India-US joint military exercises.

Even when the data on joint exercises shows significant activity, it does not automatically translate into greater capacity for interoperability and operational cooperation. The vast inventory of foreign platforms in the Indian armed forces, particularly the army and the air force, proved to be a significant obstacle to increased interoperability between the two armed forces. From the US perspective, interoperability is not only essential for greater military efficiency but also for increased safety and security of US military equipment and platforms. Foundational defence agreements, therefore, have been a long-held demand of the US defence bureaucracy. The US has struggled to augment its military cooperation with India without these foundational agreements. Even when proposed in the early 1990s, New Delhi took a casual approach to concluding these agreements. India soon realised that the US

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<sup>62</sup> "Indo - Us Joint Training Exercise "Yudh Abhyas 2022" To Commence In Uttarakhand", Press Information Bureau, Ministry of Defence, Government of India, 15 November 2022, <https://pib.gov.in/PressReleasePage.aspx?PRID=1876038>; and "Indian Army Contingent Departs for 17th Edition of Indo-US Joint Military Exercise "Ex Yudh Abhyas 2021" at Joint Base Elmendorf – Richardson, Alaska (USA)", Press Information Bureau, Ministry of Defence, Government of India, 14 October 2021, <https://pib.gov.in/PressReleasePage.aspx?PRID=1763787>.

<sup>63</sup> Kinling Lo and Liu Zhen, "India and US conduct joint military exercises in Indian Ocean", *South China Morning Post*, 21 July 2020, <https://www.scmp.com/news/china/diplomacy/article/3094086/india-and-us-conduct-joint-military-exercises-indian-ocean>.

would find it extremely difficult to sell its arms without an agreement that ensured the security of sensitive military information around them. Thus, the GSMIA was signed in 2002. The GSMIA allowed India to buy US defence equipment but was still restricted to non-lethal platforms. However, domestic politics around non-alignment and India's relaxed security environment in the early decade of the 21<sup>st</sup> century militated against an early conclusion of the remaining agreements.

Within five years, beginning in 2015, New Delhi signed three additional defence foundational agreements with the US. The growing discord with China, along with India's military requirements, are directly responsible for India's alacrity in recent years. The signing of these agreements has facilitated India's defence preparedness significantly. First, they have allowed for greater interest in the US in selling high-end defence equipment to India, including fighter aircraft, jet engines, attack helicopters and drones. Second, they have facilitated greater intelligence sharing between the two defence establishments. American intelligence and early warning information have been pivotal for India to ward off China's grey zone operations along the Himalayan frontier.<sup>64</sup> Third, these agreements have also indicated India's willingness for a tighter military embrace of the US. This signals to Beijing that India is committed to defend its sovereignty and counter China's coercion. Fourth, such foundational agreements have also benefited India's pursuit of building its indigenous defence industry. Lastly, having negotiated these agreements with the US, India finds itself in a comfortable position to conclude such military agreements with other like-minded countries such as Japan and Australia.

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<sup>64</sup> Paul D. Shinkman, "U.S. Intel Helped India Rout China in 2022 Border Clash: Sources", *US News*, 20 March 2023, <https://www.usnews.com/news/world-report/articles/2023-03-20/u-s-intel-helped-india-rout-china-in-2022-border-clash-sources>. ; Pranab Dhal Samanta, "US' Comcasa assurance: Won't share India data without consent", *The Economic Times*, 5 September 2018, <https://economictimes.indiatimes.com/news/politics-and-nation/us-comcasa-assurance-wont-share-india-data-without-consent/articleshow/65678934.cms>.

**Table 5: Major Defence Foundational Agreements between India and the United States**

Year	Foundational Agreement	Functional Importance
2002	GSMIA (General Security of Military Information Agreement)	General-purpose agreement that governed the transfer of sensitive military information whether the transferred information was in the form of technology, equipment or intelligence. <sup>65</sup>
2009	EUMA (End User Monitoring Agreement)	End-Use Monitoring Agreements are to verify that defence articles or services transferred by the US government (USG) to foreign recipients are being used in accordance with the terms and conditions of the transfer agreement or other applicable agreements. <sup>66</sup>
2016	LEMOA (Logistics Exchange Memorandum of Agreement)	Formal mechanisms that allow the Department of Defence to acquire and in some cases provide logistics support, supplies and services directly to eligible countries. <sup>67</sup>
2018	COMCASA (Communications Compatibility and Security Agreement)	Establishes terms for secure communications interoperability and security. <sup>68</sup>
2019	Industrial Security Annex to GSMIA	Facilitate the exchange of classified military information between the Indian and the US defence industries. <sup>69</sup>
2020	Basic Exchange and Cooperation Agreement (BECA)	BECA agreements are intended to function as umbrella agreements wherein various components of the Department of Defence (DOD) and National Geospatial-Intelligence Agency (NGA) and their Indian counterparts would conclude subsidiary agreements on a one-time or semi-permanent basis for exchanges of a specific type of data.

<sup>65</sup> "Building Partner Capacity Programs", Security Assistance Management Manual, Defence Security Cooperation Agency, 3 December 2020, <https://samm.dsca.mil/chapter/chapter-15>.

<sup>66</sup> "End-Use Monitoring", Security Assistance Management Manual, Defence Security Cooperation Agency, 3 December 2020, <https://samm.dsca.mil/chapter/chapter-8>.

<sup>67</sup> "Acquisition and Cross Services Agreement", Office of the Executive Director for International Cooperation, 3 December 2020, <https://www.acq.osd.mil/ic/ACSA.html#:~:text=Acquisition%20and%20Cross%20Servicing%20Agreements,eligible%20countries%20and%20international%20organizations>.

<sup>68</sup> "Building Partner Capacity Programs", Security Assistance Management Manual, Defence Security Cooperation Agency, 3 December 2020, <https://samm.dsca.mil/chapter/chapter-15>.

<sup>69</sup> "India and US to set-up joint working group in defence industrial security", Press Information Bureau, 1 October 2021, <https://pib.gov.in/PressReleasePage.aspx?PRID=1759911>.

2022	Space Situational Awareness Agreement (SSA)	Agreement for sharing information, to create the conditions for a safe, stable, and sustainable space environment. Build exchanges for both civilian and defence cooperation. <sup>70</sup>
2023	Security of Supply Agreement (SOSA, Being Negotiated)	SOSA recognises the potential for a certain degree of mutual interdependence of supplies needed for national security and calls for the parties to explore solutions for achieving assurance of supply. <sup>71</sup>
2023	Reciprocal Defence Procurement Agreement (RDPA, Being Negotiated)	The purpose of an RDP agreement is to promote rationalisation, standardisation, interchangeability, and interoperability of conventional defence equipment with allies and other friendly governments. <sup>72</sup>

Source: Authors data from various sources<sup>73</sup>

## Defence Sales and Technology Transfers

Even when India sought to diversify its arms procurements after the end of the Cold War, the US, as a source of military equipment and platforms, remained elusive for more than a decade after India and the US began normalising their defence relationship in the late 1980s. Several factors explained the delay in the sale of military platforms. First, given India's Cold War experiences, Indian defence mandarins remained highly sceptical of the US' commitment to provide military equipment. American military equipment came with several conditionalities, including end-user verification and agreements regarding the safety and security of sensitive military technology. New Delhi found these conditions intrusive and was unprepared to accept them. More importantly, military sales were highly susceptible

<sup>70</sup> "Joint Statement on the third India-U.S. 2+2 Ministerial Dialogue", Bilateral/Multilateral Documents, Ministry of External Affairs, Government of India, 27 October 2020, <https://www.mea.gov.in/bilateral-documents.htm?dtl/33145/Joint+Statement+on+the+third+IndiaUS+2432+Ministerial+Dialogue>.

<sup>71</sup> "Security of Supply", Industrial Base Policy, Assistant Secretary of Defence, [https://www.businessdefense.gov/security-of-supply.html#:~:text=Security%20of%20Supply%20Arrangements%20\(or,been%20signed%20with%20select%20nations](https://www.businessdefense.gov/security-of-supply.html#:~:text=Security%20of%20Supply%20Arrangements%20(or,been%20signed%20with%20select%20nations).

<sup>72</sup> "Negotiation of a Reciprocal Defense Procurement Agreement With the Republic of India", Federal Register, US Government, <https://www.federalregister.gov/documents/2023/10/10/2023-22429/negotiation-of-a-reciprocal-defense-procurement-agreement-with-the-republic-of-india>.

<sup>73</sup> The sources used by the authors include the Ministry of Defence Annual Reports (available online from 2002), Ministry of Defence Press Releases (available online), Ministry of External Affairs Press Releases (available online), Indian Embassy in the United States Press Releases (available online from 1997) and major Indian news dailies.

to US foreign policy agenda, especially its commitment to non-proliferation. As outlined in Table 3, several military orders made in the early 1990s suffered significant delays because of complex bureaucratic requirements and procedures prevalent in the US defence bureaucracy. Even when US military platforms were highly capable, these platforms were also very expensive. In the 1990s, India struggled to cope with the financial crisis and did not have the economic muscle to pursue military purchases from the US aggressively. Lastly, India's policy of using foreign military purchases as leverage for technology transfers from foreign sources remained firm. The US, however, remained uncomfortable with technology transfers given India's unreliability as a strategic partner and its foreign policy agenda of maintaining a conventional balance of power in the subcontinent between India and Pakistan. India, therefore, continued its defence relationship with Moscow. However, it used the amelioration of the bilateral relationship with the US as leverage to diversify its arms imports from other Western countries such as Israel and France.

When India ordered its first significant military platform from the US in 2007, several constraints identified above had begun to relax. With double-digit economic growth, India now had the requisite financial muscle to invest in cost-intensive military platforms. More importantly, many vestiges of distrust between India and the US had now succumbed to the promise of an India-US strategic partnership. The process, which began with the US' unequivocal support for India during the Kargil war, culminated with the announcement of a civilian nuclear deal in 2005. For the first time in several decades, the US was seen as committed to India's rise in the global system. However, even then, most of the defence sales in this period were procurements of second-hand US defence platforms or orders for sub-systems such as jet engines for India's indigenous fighter jet aircraft.

After 2008, India purchased from the US the C-130 J transport aircraft and P8-I Maritime Reconnaissance aircraft.<sup>74</sup> These aircraft, along with some lethal weaponry like Harpoon Anti-Ship missiles and MK-54

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<sup>74</sup> Jim Wolf, "U.S. OKs record \$2.1 billion arms sale to India", *Reuters*, 17 March 2009, <https://www.reuters.com/article/us-india-usa-arms-idUSTRE52F6X520090317>.

Torpedo, improved India's military logistics, intelligence, surveillance and reconnaissance (ISR) and strike capabilities vis-a-vis China. However, most of these platforms were explicitly geared towards the maritime domain rather than contributed to India's continental military needs. The C-130J Super Hercules and C-17 Globemaster aircrafts give it the ability to perform humanitarian assistance and disaster relief tasks, increasing the Air Force's "strategic reach".<sup>75</sup> India's motivation to procure the P8-I aircraft was partly driven by Pakistan's own procurement of a similar aircraft, the PC-3 Orion.<sup>76</sup> However, India stated its desire to play a constabulary role in the maritime domain, a key objective in its quest for status. Both these aircraft helped India project power across the Indian Ocean, a critical capability for India as it positioned itself as an Indian Ocean power.<sup>77</sup> The US contribution to the Indian Army's force structures was almost negligent. Possibly, both the US and India were partly responsible for these trends in military sales. For the US involved in the fight against the Taliban in Afghanistan, Pakistan was a key ally. Any arms sale that may impact the delicate balance of military power on the Indo-Pakistan border would have resulted in major Pakistani outbursts. The US focused primarily on building India's maritime military capability to take upon China's continuous assertiveness in the Indo-Pacific. For the Indians, the China-India border was reasonably tranquil, not necessitating significant accretion in its firepower for the Himalayas. For the military operations against Pakistan, Russia, France and Israel were deemed as more credible and sufficient sources of military equipment.

However, the deteriorating India-China border situation and recurrent military crises in recent years have changed India's military calculations and strategy along the Himalayan border. For long neglected, the Himalayan border has become the primary military front for the Indian armed forces. Given the asymmetry of military power vis-à-vis China, Indian military strategy has changed from

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<sup>75</sup> "Annual Report 2013-14", Ministry of Defence, Government of India, 42-43.

<sup>76</sup> Rajat Pandit, "India to ink largest-ever defence deal with the US soon", *Times of India*, 26 December 2008, <https://timesofindia.indiatimes.com/india/india-to-ink-largest-ever-defence-deal-with-the-us-soon/articleshow/3897678.cms>.

<sup>77</sup> David Scott, "India's 'Grand Strategy' for the Indian Ocean: Mahanian Visions", *Asia-Pacific Review* 13, no.2 (2006), 97-129.

dissuasive defence to deterrence by punishment.<sup>78</sup> High mobility firepower for the mountains was a critical capability lacking in India's arsenal. As India looked for options, other defence partners such as Russia, France and Israel were found wanting. To satisfy its defence requirements for developing robust deterrent capability on the border, India turned to the US.

Beginning in 2015, India augmented its capabilities on its northern frontier by improving firepower and mobility. India focussed on improving firepower through the induction of Apache close-combat helicopters and M-777 ultralight howitzers.<sup>79</sup> India's strategic and tactical mobility was significantly upgraded by the induction of not only the C-130J Super Hercules and C-17 Globemaster heavy-lift transport aircrafts but also Chinook heavy-lift helicopters. Speaking on these inductions, the Ministry of Defence notes that the platforms enhanced the Indian Air Force's airlift, air mobility and airborne assault capabilities.<sup>80</sup>

On the maritime front, India, through its defence partnership with the US, has significantly expanded its military power in the Indian Ocean. India specifically focussed on strengthening its anti-submarine warfare and maritime interdiction capabilities. India purchased 24 MH-60R Seahawk helicopters capable of undertaking anti-submarine and anti-surface warfare missions.<sup>81</sup> It has also gone in for the purchase of 31 MQ-9 Reaper drones, 15 of which have been allocated to the Indian Navy.<sup>82</sup> These drones come with air-to-surface missiles and Hellfire missiles. Furthermore, India has placed follow-on orders for additional P8-I maritime reconnaissance aircraft, nearly doubling

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<sup>78</sup> Yogesh Joshi and Anit Mukherjee, "From Denial to Punishment: The Security Dilemma and Changes in India's Military Strategy towards China", *Asian Security* 15, no.1 (2019), 25-43.

<sup>79</sup> Sushant Singh, "With gun assembly plant, defence gets a 'Make in India' project", *The Indian Express*, 16 November 2015, <https://indianexpress.com/article/india/india-news-india/with-gun-assembly-plant-defence-gets-a-make-in-india-project-2/>; and Sushant Singh, "Apache and Chinook in IAF; Modi gov't's biggest defence deals so far", *The Indian Express*, 23 September 2015, <https://indianexpress.com/article/india/india-others/narendra-modi-governments-biggest-defence-deal-so-far-for-apache-and-chinook-choppers-for-the-iaf/>.

<sup>80</sup> "Annual Report 2013-14", Ministry of Defence, Government of India, 43; "Annual Report 2015-16", Ministry of Defence, Government of India, 41.

<sup>81</sup> Elizabeth Roche, "Purchase of 24 Seahawk helicopters a 'force multiplier': Indian Navy", *Mint*, 27 February 2020, <https://www.livemint.com/news/india/purchase-of-24-seahawk-helicopters-a-force-multiplier-indian-navy-11582793734554.html>.

<sup>82</sup> Dinakar Peri, "Explained | The India-U.S. deal for 31 MQ-9B drones", *The Hindu*, 25 June 2023, <https://www.thehindu.com/news/national/explained-the-india-us-deal-for-31-mq-9b-drones/article67008319.ece>.

the inventory of aircraft the navy operates. The Indian Air Force's Jaguar aircraft were fitted with Harpoon anti-ship missiles in 2016, giving it the ability to conduct maritime strike operations.<sup>83</sup>

All these capabilities further the Indian military's deterrence by punishment-posture. The Navy's maritime surveillance and strike capabilities have been greatly enhanced. This furthers its ability to execute a sea control doctrine. After the June 2020 Galwan Valley clashes, the Indian Air Force deployed Jaguar aircraft to the Andaman and Nicobar Islands.<sup>84</sup> From here, the aircraft could threaten China's sea lines of communication. The Indian Navy stepped up deployments in the Indian Ocean as a signal to China.<sup>85</sup> This posture was aided by the US defence sales that have improved India's ISR capabilities in the naval domain. India has even employed the P8-I's surveillance capabilities to collect intelligence on Chinese troop movements and military establishments along the Himalayan border.

The intensification of the Sino-Indian competition alongside the Sino-US competition has unfurled the tremendous potential for US-India bilateral defence cooperation. For one, the US is far more willing to offer India top-end military equipment than ever before. For example, India was interested in buying Reaper MQ-9 drones from President Barack Obama's administration in 2015. However, the US deferred the sale of these High-Altitude Long Endurance (HALE) because of its commitments to the Missile Technology Control Regime. Under the Donald Trump administration, the US revised its domestic laws to allow the sale of such drones to India. Indian Navy leased two reaper drones in 2020 for two years for maritime surveillance and domain awareness in the Indian Ocean. During Modi's trip to Washington, both countries reached a preliminary agreement to procure 31 such drones by New Delhi. More significantly, with the Initiative on Critical and Emerging Technologies (iCeT) between the two countries

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<sup>83</sup> Shishir Gupta, "A first for IAF: Anti-ship Harpoon missile fired from fighter jet", *Hindustan Times*, 29 May, 2015, <https://www.hindustantimes.com/india/a-first-for-iaf-anti-ship-harpoon-missile-fired-from-fighter-jet/story-MXA3sHLLvDCW4OfsohDRPN.html>.

<sup>84</sup> Udai Rao, "Transforming Andaman & Nicobar Islands", *Deccan Herald*, 22 September 2020, [www.deccanherald.com/opinion/in-perspective/transforming-andaman-nicobar-islands-891582.html](http://www.deccanherald.com/opinion/in-perspective/transforming-andaman-nicobar-islands-891582.html).

<sup>85</sup> "Indian Navy's deployment impacted post-Galwan border talks with China: Vice Admiral Singh", *The Hindu*, 3 December 2021, <https://www.thehindu.com/news/national/indian-navys-deployment-impacted-post-galwan-border-talks-with-china-vice-admiral-singh/article37826313.ece>.

under the Joe Biden administration, the long-held Indian desire for technology transfers by the US for India's indigenous defence industry is finally being realised. The agreement for indigenous development of General Electric's F-414 jet engine, which would lead to 80 per cent technology transfers to Hindustan Aeronautics Limited (HAL), will provide a significant boost to India's military aerospace industry.

**Table 6: India's Defence Imports from the United States since the end of the Cold War**

Year (Ordered)	Year (Delivered)	Weapon Description	Numbers
1993	1994	Paveway Guided Bombs	315
1999	2010-12	LM-2500 Gas Turbines for Shivalik Class Frigates	6
2002-2003	2006-07	TPQ-37 Artillery Locating Radar	12
2004	2022	LM-2500 Gas Turbine Engines for Vikrant Aircraft Carrier	4
2006	2007	AALS Jalashwa	1
2006	2007	S-61/H-3A Sea King Helicopters	6
2007	2016-21	F404 Turbofan Jet Engines for Tejas-1 LCA	24
2008	2017-19	For ERJ-145 Transport aircraft conversion into AEW&C aircraft	4
2008	2010-11	C-130 J Hercules Transport Aircraft	6
2009	2012-15	P-8A Poseidon ASW Aircraft	8
2010	2013-17	CBU-97 SFW Guided Bombs	512
2010	2013	Harpoon Block-2 Anti-ship missiles/SSM for Jaguar aircrafts	20
2011	2013-14	C-17A Globemaster-3 Heavy Transport Aircraft	10
2011	2013-16	MK-54 ASW Torpedo	32
2012	2014	Harpoon Block-2 Anti-ship missiles/SSM for P-8I ASW aircraft	21
2013	2019-20	Stinger Portable SAM for AH-64 E Combat helicopters	245
2013	2017	C-130J Transport Aircraft	6
2015	2019-22	AGM-114K Hellfire anti-tank missiles	1354
2015	2019-20	General Electric T-700-701D turboshaft engine	6
2015	2019-20	Ch-47F Chinook heavy lift helicopters	15

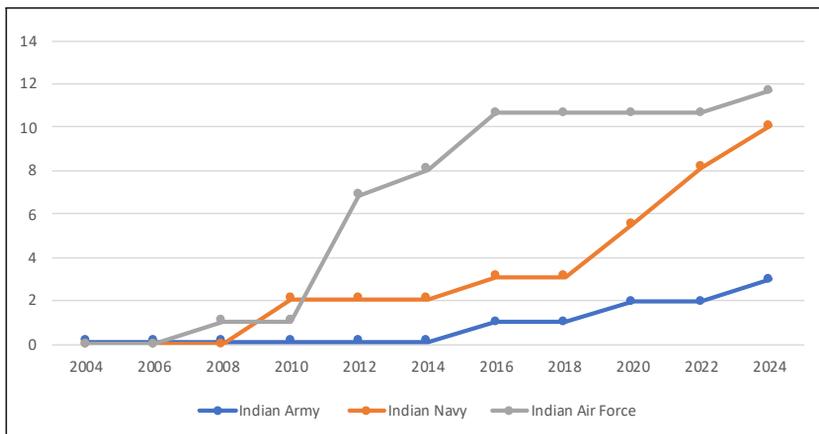
2015	2019-20	AH-64E Apache Helicopters	22
2016	2019-20	APG-78 Longbow Helicopter Radar	12
2016	2022	F404 Turbofan Aircraft Engines for Tejas	20
2016	2020-22	P-8A Poseidon ASW Aircraft	4
2016	2018	Harpoon Block-2 Anti-ship missiles/SSM	12
2016	-	M-777 155 mm Ultralight Howitzers	145
2017	2019	C-17A Globemaster-3 Heavy Transport Aircraft	1
2017	2018	LM-2500 Gas Turbine Engines for Nilgiri Frigates	14
2018	2019	C-130J Transport Aircraft	1
2019	2019-20	M-982 Excalibur Guided Shell for M-777 155 mm guns	1,200
2019	2022	WGU-59 APKWS anti-tank missile/ASM for MH-60R ASW helicopters	600
2020	2022	AGM-114A HELLFIRE anti-tank missiles	250
2020	2022	Harpoon Block-2 Anti-ship missiles/SSM	10
2020	2021-22	MH-60R Seahawk ASW helicopter	24
2020	2022 (ended)	Lease of MQ-9 Reaper UAV	2
2020	ongoing	F404 Turbofan Jet Engines for Tejas-1 LCA	99
2020	ongoing	AH-64E Apache Helicopters	6
2021	ongoing	M-982 Excalibur Guided Shell for M-777 155 mm guns	-
2021	ongoing	Mk-54 MAKO ASW Torpedo	16
2022	ongoing	TPE-331-12B (1100hp) turboprop engine for 70 HTT-40 trainer aircraft produced in India	88
2022	ongoing	JDAM guided bomb for Tejas aircraft	250

Source: SIPRI arms transfer database and Press Information Bureau, Government of India

Graphs 3 and 4 show India's cumulative spending on defence procurements in the past 20 years from the US. Both graphs highlight India's increasing defence spending into the 2010s as the China threat became more acute. Graph 3 highlights the distribution of defence spending by the three services. While defence procurements in the late 2000s focussed on the air force and navy, the army began procurements as well in the 2010s as the threat along the continental frontier increased. Graph 4 shows India's defence spending across lethal and non-lethal weaponry. Again, India's spending on lethal

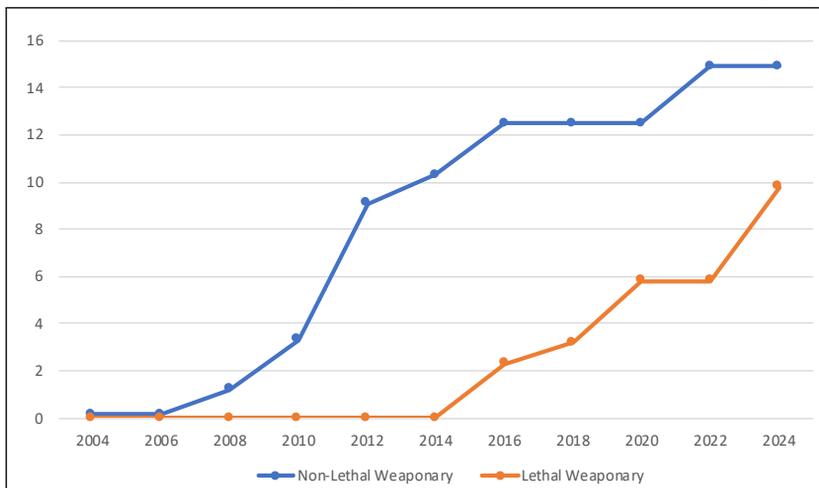
platforms increased in the 2010s as China began flexing its muscles along the Himalayas.

**Graph 3: Cumulative Spending on Major Platforms by the Indian Military (US\$)**



Source: Authors data from various sources<sup>86</sup>

**Graph 4: Cumulative Spending on Lethal and Non-lethal Platforms (US\$)**



Source: Authors data from various sources

<sup>86</sup> Graphs 3 and 4 are derived from figures and sales between the United States and India listed in the appendix.

## Potential Roadblocks in United States-India Defence Cooperation

Notwithstanding the significant progress made in the US-India defence cooperation, the relationship faces some serious and potential political, domestic, military-strategic, economic and bureaucratic challenges. Given that the defence relationship has indeed embarked upon its most intense phase just recently, decision-makers in both New Delhi and Washington must acknowledge and remedy such potential obstacles that may prevent the relationship from reaching its full potential.

The most serious challenge confronting the burgeoning India-US defence relationship is the significant divergences in their perceptions and understanding of geopolitical realities. Despite three decades of continuous defence and security engagement, the two countries do not fully appreciate their respective domestic constraints. The most emphatic manifestation of this clash of perceptions has been over Russia's role in global politics and India's defence relationship with Moscow. Russia directly impinges on US-India defence cooperation. Washington wants New Delhi to support its policy of isolating Russia globally, a position India is unwilling to take. India views Russia as a key pole in a multipolar world order, an international order it views favourably. India's defence relationship with Russia also complicates US calculations for greater defence technological cooperation with New Delhi. The US is reasonably concerned that systems like the S-400 will be able to collect intelligence on Western weapon systems.<sup>87</sup> This carries grave security implications for the US. Lastly, given the anti-Russia stance in US domestic politics, India-Russia defence cooperation also impinges on US policy to sanction Russian defence exports. Sanctions cannot be imposed without hurting the interests of an important strategic partner. The enunciation of Countering American Adversaries through Sanctions Act in 2017 presented a crisis in India-US defence relations. Though successive US presidents – both Trump and Biden – have provided exceptions to India even after the Russian invasion of Ukraine, it does create

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<sup>87</sup> Madina L. Rubly, "Russian Weapons in Turkey: A Trojan Horse?", *Georgetown Journal of International Affairs*, 3 March 2020, <https://gjia.georgetown.edu/2020/03/03/russian-weapons-in-turkey-a-trojan-horse/>.

rancour in both capitals. New Delhi, too, must revise its defence dependence given the tight alignment between Russia and China. The economic sanctions against Russia have also questioned its capability to fulfil India's defence needs in the future.<sup>88</sup>

Another geopolitical friction point yet to be fully captured in the discourse is the possible crisis over Taiwan. A significant gap may exist between the US' expectations of India in the event of a crisis and Indian willingness and capability to act. The US government has acknowledged that Indo-US defence cooperation does not necessarily entail potential Indian involvement in assisting US and allied forces during a hot war over Taiwan. However, it is natural for the US to expect some reciprocation from India in the long run. This may result in a possible clash of failed expectations, shattering the promise of Indo-US defence cooperation. Thus, the US and India need to engage in debates and discussions and develop an understanding of each other's expectations and constraints regarding Taiwan.

While India and the US agree on the geopolitical threat from China, they differ in their assessments of the primary military impact of China's growing assertiveness. This results from India's geographic vulnerabilities and core national interests compared to the US' geographical reality and its military commitments in the Indo-Pacific. Given the nature of the border dispute and the asymmetry of military power across the Himalayan frontier, India is naturally more concerned about the continental threat from China. The Sino-Pak military collusion has stoked fears of a two-front war across India's northern and western borders. India's strategic priority, therefore, remains the defence of its continental borders. As a maritime power with security commitments across the vast waters of the Indo-Pacific, the US is primarily focused on containing China's maritime prowess. The continental-maritime divide in prioritising military focus between India and the US has created some dissonance in their respective defence bureaucracies and strategic communities. The disagreement sometimes takes precedence over the commonality of their strategic necessities and operational requirements.

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<sup>88</sup> "Fear of US Sanctions, Payment Method Issues Stall Russia's Military Supply to India: Report", The Wire, 21 April 2023, <https://thewire.in/diplomacy/fear-of-us-sanctions-payment-method-issues-stall-russias-military-supply-to-india-report>.

Domestic politics is another avenue that may adversely impact the growing trajectory of US-India defence cooperation. This is less of a problem in the US, where there exists a bipartisan consensus across the political spectrum on building a strategic partnership with India. However, even with the ensuing security competition with China, there is a strong inclination to find a modus vivendi with Beijing. The G-2 concept – a condominium of China and the US to manage global politics – was purposefully pursued by Obama early in his administration.<sup>89</sup> Any thaw in US-China relations will automatically impinge on the necessity of India as a strategic partner. India's divided politics, however, may pose a bigger problem. All Indian governments of all ideological hues have pursued a closer strategic partnership with the US. However, the nine years of the Modi government witnessed unprecedented progress compared to the policy paralysis during the second term of the Congress-led United Progressive Alliance government. The Congress is also the progenitor and the foremost defender of non-alignment and strategic autonomy. This often results in greater introspection of India's strategic closeness with the US.

Economic aspects of the Indo-US defence relationship are equally critical. Without the rise in India's economic profile, the current state of India-US relations would have been impossible. The financial muscle of a rising India provides it with the capacity to purchase costly defence equipment from the US, the growing profile of Indian businesses and their capability to partner with the US' defence industrial complex makes India a very lucrative business opportunity for US defence companies. The bipartisan consensus in the US on providing India with high-end defence equipment and pursuing greater technological cooperation adds an economic dividend to the defence partnership. Any slowdown in the Indian economy will, therefore, naturally impinge on India's capability to engage in defence cooperation with the US. It will also impact the latter's willingness to provide India with top-of-the-line defence equipment.

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<sup>89</sup> By Robert B. Zoellick and Justin Yifu Lin, "Recovery: A Job for China and the U.S.", *Washington Post*, 6 March 2009, <https://www.washingtonpost.com/wp-dyn/content/article/2009/03/05/AR2009030502887.html>.

## Conclusion

This Scan has argued that India's changing strategic priorities over the past decade have resulted in deeper cooperation between India and the US. India's aims have shifted from extracting profits by bandwagoning with the US to now being driven by a need to balance with the US to counter an external security threat from China.

The changing priorities have resulted in a deepening of India's defence engagement with the US. High-level security dialogues between the two countries are more structured and comprehensively engage several issues involving multiple ministries and departments. Military exercises and defence sales have also shifted to focus on the military threat from China.

The partnership is now multifaceted, covering a myriad of issues. Its success will have an impact on the Indo-Pacific's balance of power.

# Appendix 1

## Data for Graphs 3 and 4

Platform	Cost	Quantity	Date	User	Type
TPQ-37 Firefinder Radars	US\$146 million (S\$187.6 million)	12	Two orders in May and November 2002	Indian Army	Non-Lethal
P-8I Poseidon	US\$2.1 billion (S\$2.6 billion)	8	January 2009	Indian Navy	Non-Lethal
	US\$1 billion (S\$1.28 billion)	4	July 2016	Indian Navy	Non-Lethal
	US\$2.42 billion (S\$3.11 billion)	6	April 2021	Indian Navy	Non-Lethal
C-130J Hercules	US\$1.059 billion (S\$1.36 billion)	6	2008	Indian Air Force	Non-Lethal
	US\$1.2 billion (S\$1.542 billion)	6	July 2012/ December 2013	Indian Air Force	Non-Lethal
C-17A Globemaster-3	US\$5.8 billion (S\$7.45 billion)	10	June 2011	Indian Air Force	Non-Lethal
AH-64E Apache	US\$1.4 billion (S\$1.79 billion)	22	September 2015	Indian Air Force	Lethal
	US\$930 million (S\$1.19 billion)	6	June 2018	Indian Army	Lethal
CH-47F Chinook	US\$1.18 billion (S\$1.52 billion)	15	September 2015	Indian Air Force	Non-Lethal
M777A2-155mm Artillery	US\$885 million (S\$1.136 million)	145	November 2016	Indian Army	Lethal
MH-60R Seahawk	US\$2.6 billion (S\$3.3 billion)	24	February 2020	Indian Navy	Lethal
MQ-9B Sea Guardian Drones	US\$3.99 billion (S\$5.11 billion) (IA- 1.02 billion USD; IAF- 1.02 billion USD; IN- 1.93 billion USD)	31 (IA- 8; IAF-8; IN- 15)	June 2023	Indian Army/ Navy/Air Force	Lethal

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