CHAPTER - 3

BILATERAL DEFENCE COOPERATION

In international relations, security has always been considered as main objective of any country’s foreign policy. In this context such capabilities are acquired by the states themselves or through the cooperation with other powers. Hence, defence cooperation is a tool of protecting national and global security which strengthens foreign policy goals of a country.¹ Defence cooperation, therefore, is an important tool of bilateral relations for building bridges of friendship, mutual trust, preventing conflicts, and buildup capacities in this world.² Such cooperation not only builds trust and confidence among nations, but also facilitates cooperation at strategic, political and economic levels.³ It is reflected through exchange visits of dignitaries, individual and joint trainings, joint military exercises, equipment procurements, transfer of military technology and development of common doctrines. Such cooperation also promotes global and regional peace and stability through dialogue and reciprocal exchange of ideas. It is more useful when forces have inter-operable systems and equipments, which facilitate functional cooperation. This can be helpful for the new innovations in a rapidly changing operational environment through production and joint development of military equipment.⁴

⁴ Bishoyi, n.3, p.67.
With the collapse of the erstwhile Soviet Union, India not only lost a reliable source of weapons supplier friendly power but also in need to adjust its foreign policy due to significance changes in global order.\(^5\) In this context, emerging defence cooperation proved the most visible, and pro-active aspect in the transformation of India-US relations in the post-cold war era. Such initiatives become successful due to common abilities of both in the areas of non-proliferation of WMDs, maritime security, counter terrorism and a strategically stable Asia. Particularly, India is desirous to gain nuclear energy, missile and space technologies and advanced defence technologies through its cooperation with the USA.\(^6\)

India also reoriented its foreign and security policies as per the need of the emerging international environment. As a result, close cooperation with the USA, particularly in the area of defence and security, become inevitable for it. Similarly USA also decided to improve its military relations with some emerging countries like India in the changed global milieu. Moreover, lessening of differences on many global as well as bilateral issues also facilitated both countries to utilize this opportunity to develop closer defence cooperation between the two states.\(^7\)

1. Defence Engagements in post-Cold War Era

Though their cooperation became explicit during the post-cold war era, yet the beginning of developments in defence cooperation can be seen during the last decade of the cold war. This drastic change in Indo-US defence cooperation can be noticed in the form of signing of “Memorandum of Understanding” (MoU) between India and the USA in

\(^5\) Dinesh Kumar, *Defence in Indo-US Relations*, IDSA, New Delhi, 1997, p.43.
\(^6\) Dutta, n.2, p.37.
\(^7\) Bishoyi, n.3, pp.64-65
1984 on the issue of technology transfer. Though this MoU, technology licenses to Indian companies and institutions of government was granted, but mainly for the items that were below the level of state-of-the-art technology.\textsuperscript{8} It was later on strengthened with the visit of an American defence delegation to India in December 1990, headed by Assistant Secretary of Defence for International Security Affairs Henry Rowen. This delegation had fruitful discussions with its counterpart in the field of defence cooperation.\textsuperscript{9} This growing trend of defence cooperation in 1980s, between the two countries, worked as background for the mutual exchange of information and personnel that occurred in 1990s.\textsuperscript{10}

A radical shift in Indian foreign policy, however, was witnessed with the beginning of the Gulf war. Taking a pro-US step, the then government of V.P. Singh allowed refueling facilities to US aircrafts on Indian soil during Gulf war. This step helped the USA Air Force to manage their aircraft transportation with full payload capacity. This pro-US ideological shift was also carried on by next Prime Minister Chandra Shekhar. However, that decision was soon revoked following strong criticism by opposition party in the country.\textsuperscript{11}

In 1991, General Claude Kicklighter, visited India and initiated the first comprehensive effort which was known as “Kicklighter proposals”. It improved defence relationship between the USA and Indian militaries.\textsuperscript{12} In this context, Kicklighter proposals primarily focused “on consultative mechanisms, strategic dialogue, training and other


\textsuperscript{9} Ibid.

\textsuperscript{10} Sharma, n.8, p.11.

\textsuperscript{11} Kumar, n.5, pp.43-44.

exchanges, and visits at both senior and staff levels.”  

As a result, Executive Steering Groups (ESGs) in the defence forces were established by both countries to intensify military-to-military cooperation. It was first formed in the armies of two countries which were later followed in their navy and air force ESGs in March 1992 and August 1993 respectively. It envisaged the way for expanded cooperation and partnership between the militaries of the two countries which marked a turning point in the relationship during early 1990s. These ESGs were mainly aimed at to identify their mutual area of convergence and divergence in changed international scenario.

India and the USA thus, wish to improve their defence collaboration in the context of shared national interests and common principles such as preventing proliferation of weapons, fighting terrorism and maintaining regional stability. With the beginning of Clinton’s tenure in 1993, it has seen that the growing Indo-US military relations were based on the Kickleighter Proposals. Furthermore, both countries carried on a series of conversation to remove misperceptions and develop mutual understanding on political and security issues, particularly in the areas of, human rights, nuclear and missile proliferation.

However, it needs to be acknowledged that during the cold war period, India and America had negligible defence relationship, barring the brief interlude after the Sino-Indian border conflict in 1962. But, after the end of cold war, Indo-US defence cooperation became a reality and the two countries have entered in a new era in their relations, marked by

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14 Bishoyi, n.3, pp.64-65
16 Sharma, n.8, p.11.
frequent joint military exercises and signing of a ten-year defence agreement.\footnote{Ibid., p.3} Furthermore, a watershed decision on Indo-US defence relations occurred on 12 January, 1995 when the two sides signed an Agreed Minute on Defence Cooperation during the visit to India by US Secretary of Defence William J. Perry, the third visit by an American Secretary of Defence.\footnote{Kumar, n.5, p.43.} Under this agreement, a Defence Policy Group and a Joint Technology Group were established, which provided for greater interaction between civilians, scientists and the militaries of both sides.\footnote{Dipankar Banerjee, “An overview of Indo-US Strategic Cooperation: A Rollercoaster of a Relationship”, in Sumit Ganguly, et. al eds., \textit{US-Indian Strategic Cooperation into the 21st Century: More than Words}, Routledge, New York, 2006, p.70.}

India’s decision of conducting nuclear test in 1998, however, brought a negative response from the United States in the form of economic sanctions. But it is considered that, these sanctions did provide an opportunity for meaningful conversation to both the states on the nuclear non-proliferation issue. In this regard, the then US Deputy Secretary of State Strobe Talbott and the then Indian Foreign Minister Jaswant Singh met regularly from 1998 to 2001. Thus, it was for the first time when both the countries agreed to come on same table to understand mutual burning issues. It was the result of these conversations that their stand on issues of terrorism, non-proliferation, Kashmir issue, military trade and high technology trade were discussed and understood thoroughly and finally, both the countries wished to cooperate on this above issue positively.\footnote{Brian Shoup and Sumit Ganguly, “Introduction”, in \textit{Ibid.}, p.3.}

As a result, in the waning stage of Clinton administration Indo-US relations entered in to a new amicable phase. Consequently, during
Kargil War, “America condemned Pakistan for having sent troops across the line of control and played a pivotal role in breaking a cease fire agreement, warmth in their relations dawned.”\textsuperscript{21} The Clinton era prepared the ground for more harmonious relations between the two states in forthcoming years. He “had resolved post-test tensions and had supported India strongly on Kargil and terrorism. However, the Indian strategic community cheered Bush’s arrival in Washington in January 2001. The reasons were largely to-Bush’s disdain for NPT, a serious fetter on India, and his clear desire to contain China.”\textsuperscript{22}

The Clinton policy towards India continued by Bush more effectively because, the key policy makers and advisers of Bush signaled that India would be accorded a higher priority in America’s foreign policy calculus.\textsuperscript{23} But, it was also observed that terrorism in India and South Asia was not the central part of the US foreign policy in Asia before 9/11. Mainly, China, Gulf countries, Asian countries, open market economy, democracy, human rights, non-proliferation were the priorities of the US foreign policy goals during Bush era.\textsuperscript{24}

However, there was a change in the American foreign policy after 9/11 attacks. Now US started considering terrorism as a major global problem. Subsequently, entire focus of US foreign policy was towards a war against terrorism.\textsuperscript{25} Therefore, it has been rightly observed that, “On

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\item \textsuperscript{21} Nerottam Gaan, \textit{India and the United States from Estrangement to Engagement}, Kalpaz, Delhi, 2007, p.157.
\item \textsuperscript{23} Gaan, n.21, p.157.
\item \textsuperscript{24} Vivek Chadha, \textit{Indo-US Relations: Divergence to Convergence}, Macmillan, New Delhi, 2008, p.194.
\end{itemize}
the eve of 9/11 the Bush administration had been moving towards the establishment of a close strategic relationship with India, pledging to remove all US nuclear specific sanctions.”26 At that time, USA was in the process of forging closer diplomatic and strategic ties with India.

Their partnership developed new hopes and expectations between the two countries from 2001 to 2003. After a series of breakthroughs in bilateral military to military relations, the first-term diplomatic achievements of Bush administration has been the development of ‘Next Steps in Strategic Partnership’ (NSSP), announced by the USA in January 2004.27 It was a major breakthrough in Indo-US relations as it proved “essentially a phased effort to ease restrictions on India’s access to US technology in four areas: dual-use items, civilian nuclear applications, civilian space cooperation and ballistic missile defence. The initiative helped to remove the Indian Space and Research Organization (ISRO) from the US Entity List.”28 NSSP covered all those areas which were earlier restricted between the two countries. But irrespective of all bilateral upheavals, the NSSP did not include any such provisions that might ask India to give up its nuclear weapons capability or to sign any non-proliferation agreement, and it was signed even when India refused to send troops for Iraq to aid the Americans. It opened further the way of Indo-US defence cooperation.29 During the first term of the Bush administration, the military relations between India and USA were not outstanding. However, India’s support to the US on missile defence

26 M. Saleem Kadwai, “US and South Asia: Post 9/11 Scenario”, in Ibid., p.38
27 Gaan, n.21, p.163.
29 Sharma, n. 8, p.21.
programme created enthusiasm and hope in the Bush Administration towards the former.\textsuperscript{30}

With the beginning of second term of Bush administration defence relationship became major pillar of strength between India and the USA. The signing of ‘New Framework for the U.S.-India Defence Relationship’ agreement for next 10 years in June 2005 is an example of such change. The agreement focused on defence trade, joint exercises, personnel exchanges, cooperation in maritime security and counter-piracy, and exchanges of information among each of the three services.\textsuperscript{31} Simultaneously it initiated cooperation in nearly a dozen areas like: joint military exercises, cooperation in missile development, intelligence-sharing, establishment of four joint working groups, formation of bilateral defence procurement and production group etc. A year later both countries signed a similar agreement on cooperation in maritime security, which provided for cooperation in the protection of sea routes and for combating piracy and trade in illegal goods.\textsuperscript{32} In 2006 ‘Indo-US Framework for Maritime Security Cooperation’ formulated cooperate against a wide range of maritime threats, including: piracy, smuggling, and trafficking; maritime proliferation of weapons of mass destruction; threats to safety of ships, crew, and property; environmental degradation; and, natural disasters.\textsuperscript{33}

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\textsuperscript{30} Ibid., p.19.
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In September 2013, during the time of visit of Manmohan Singh to Washington both countries declared that their relations were much stronger than at any point in 67-years of history. In the joint statement issued at that time both affirmed that two countries had built up a comprehensive global strategic partnership. Simultaneously the need for more serious defence cooperation, joint R&D, including technology transfer, co-development, and co-production, was emphasised by both the countries.\(^\text{34}\)

As a result, a ‘Framework for the U.S.-India Defence Relationship’ was enacted in June 2015 between the two countries. It was based on the previous framework to guide the bilateral defence relations for the next ten years. This new framework provided opportunities for high level strategic discussions, military trade, continued exchanges between armed forces of the two countries and strengthening of defence capabilities.\(^\text{35}\) The most important element within the agreement was to show the importance of the Defence Technology and Trade Initiative (DTTI) group. Originally, DTTI was called the “Carter Initiative” as US Deputy Secretary of Defence Ashton Carter worked out for this initiative.\(^\text{36}\) Its main goal was to strengthen defence relations by facilitating the Indian companies to collaborate with American partners in defence co-production, “where the US provides technology and guidance for building modern weapon systems.”\(^\text{37}\) It is important because co-


\(^{\text{37}}\) Ibid.
development and co-production under DTTI may become the hallmark of the Modi government’s ‘Make-in-India’ initiative.

Over the past decade, there has been a rapid transformation in the India-US defence relationship. At present, India-US defence ties are growing strong. Their defence relationship involves a robust slate of dialogues, military exercises, defence trade, personnel exchanges, and armaments cooperation. The United States remains committed to a broad defence trade relationship that enables transfers of some of the most advanced technologies. However, closer defence cooperation may not constrain either country's freedom of action in pursuing respective national interests. Military cooperation depends on mutuality in trust, aims and objectives as well as common perceptions of threats and agreements on grand strategies.

The transformation in India-US defence cooperation witnessed during recent years has strengthened mutual understanding on regional peace and stability, enhanced both countries’ respective capacities to meet humanitarian and other challenges such as terrorism and piracy. It also contributed to the strengthening of this strategic partnership. Further the two Governments resolved to strengthen defence cooperation, including security dialogue, joint military exercises, and promoting trade and collaboration in defence equipments and technologies, which can be analyzed by explaining them in greater details.

2. Area of Defence Cooperation

Defence cooperation has many dimensions. It can not only be understood through defence engagements and ties, but also through

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38 Latif, n.33, p.54.
39 Bishoyi, n.3, p.83
regularly enhanced bilateral relations. Indo-US defence cooperation is an important element of their broader strategic partnership. Basically it progressed through their regular conduct of military collaboration activities, technology transfer, exchange of experts, high level visits of political elites, military trade, cooperation in defence research and regular conduct of joint exercises. Therefore, their defence ties can be understood after an in depth analysis of their cooperation manifest through following area.

(i) **Joint Military Exercises**- Since past one decade, India and the United States have held a series of increasingly and unprecedented substantive joint exercises involving there armed forces. Such military-to-military relations have been a key aspect of US-India relations in recent years. India now conducts more exercises and personnel exchanges with the United States than with any other country. As a result more than 60 such formal events are occurring annually between the two countries. The armed forces of both the countries have been holding joint exercises since the resumption of defence cooperation between them. Thus, joint exercises between the US and Indian armies have become routine, and are expanding greatly in scope. Important joint exercises concluded between the two include the following:

(a) Naval Exercise- With the end of cold war, joint military exercises between India and the USA became an important component of bilateral relations in general and defence cooperation in particular. In this changed environment, the two countries engaged in army, navy and air force exercises and started developing mechanisms to identify their regional

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40 Annual Report, n.1, p.165.
42 Sharma, n.8, p.18.
and global security concerns. In this context, their engagements in the land and air-defence remained the low key areas, but the joint naval exercises have been working significantly since the end of cold war era. Naval cooperation between the two countries appears the most robust in terms of personnel exchanges and exercises. Convergent strategic interests in maritime security in the Indian Ocean region largely explain the higher level of contact between the two navies. Moreover, the U.S. and Indian navies have had a longer history of contact than other services, and this is being augmented and regularised at a more rapid pace than the others. Navies of both India and the US were engaged in joint naval exercises with the objectives of maritime surveillance, naval aviation, sea piracy and sea-lane security.

Specifically, Malabar has been the premier annual bilateral naval exercise that epitomised the maritime tactics, techniques, and procedures of both nations. Malabar, the regular bilateral naval field training exercise, broadened the scope and simplified the existing complexity of India-US bilateral relations through the years and strengthened the mutual interests and professional bonds. Moreover, it laid the groundwork for further engagement in non-conventional security threats and expanded bilateral relations for further activities such as train exchanges, information exchange, and technical cooperation.

However, during cold-war years India and the US defence-

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44 Kronstadt, n.41, p.6.
relationships were not cordial because of former’s leaning towards the Soviet bloc. As India did not go well with American strategy of containing communism, hence their defence relationship remained strained. Nonetheless, the end of cold war changed the scenario, and the ice-breaking step in this regard was taken by the Claude Kickleighter, who first proposed military-military cooperation in the area of joint military exercises.\(^48\) His proposals stimulated both of them which resulted to “held three rounds of joint naval exercises Malabar-I in May 1992, Malabar-II in 1995 and Malabar-III in 1996.\(^49\) These joint naval exercises brought about significant collaboration between navies of both countries. Though the first round had been preliminary and exploratory in nature, yet second and third rounds were three dimensional involving maritime reconnaissance aircraft, surface ships and submarines. During these exercise the US navy, in fact, used nuclear powered submarines and the P-3C Orion maritime patrol and attack aircraft to show the significance of the events.\(^50\) These exercises were followed by a new understanding in which “two navies signed a Letter of Agreement (LOA) for submarine rescue facility, upon which India made an initial payment of $500,000 to the United States in April 1997. Under the agreement, the Indian navy used the US-made Chukkar Pilotless Target Aircraft (PTA).”\(^51\)

These initiatives of Malabar exercises in 1990s, however, did not establish common foreign policy goals because of differences on many issues related to bilateral and global scenario. But after three naval exercises the US terminated all types of military exercises with India. It is because the nuclear test conducted by India in May 1998, did not go

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48 Shoup, n.20, p.4.
50 Kumar, n.5, pp.44-45.
51 Malik, n.49, p.85.
well with the USA. As a result, the USA terminated all types of military relationship with India and it remained suspended till 2001.\textsuperscript{52} Besides, these exercises in 1990s also proved casual in nature and narrow in scope because of limited common maritime security objectives. But these initiatives at least brought the two countries together superficially.

During this time, the events look like a tool of investigation of foreign policy of each other on their own parts because of historical mistrust existed in their relationship. So these exercises were not proved a key factor in bilateral relations. Thus, these exercises were only a single step to come closer from the cold war relationship. But incident of 9/11 enforced the USA to identify terrorism as a major global threat. In this perspective, the US renewed military relations with India and subsequently, the latter also joined President Bush’s campaign against global terrorism.\textsuperscript{53} As a result, the Malabar exercises, which were suspended after the India’s nuclear tests, were resumed after 9/11. This was evident from the Malabar-2002, which was pitched at a fairly basic level and focused on the communication drills, underway replenishment and exchange of personnel for the first time.\textsuperscript{54}

The Malabar-2003, conducted in the southern coast of India’s Navy, engaged in thousands of naval personnel manoeuvres for five days and show-cased the live-weapon firings, fleet air-defence and anti-submarine warfare.\textsuperscript{55} Indian submarine INS Shalki, besides several other


\textsuperscript{53} “India-US holds Naval Exercises”, \textit{BBC News}, 5 October 2003.


aircrafts, carried out anti-submarine warfare tactics of low intensity operations for the first time in Malabar-2003. Several new measures were also initiated, mainly, the periodic policy reviews and the reciprocal visits of the senior commanders. Moreover, the scope of the exercises was expanded with the inclusions of helicopter cross-deck landings, submarine operations and anti-submarine warfare for the exercises that followed in 2003 and 2004.\textsuperscript{56}

The intensity and complexity of these exercises were increased with the participation of aircraft-carriers from both countries for the first time in Malabar -2005.\textsuperscript{57} The US showcased the ‘USS Nimitz’, an aircraft carrier which can carry more than 100 aircrafts in its belly; besides, the US nuclear submarine ‘USS Santa Fe’, the latter played a part with Indian ‘INS Shankul’. Approximately 12,000 personnel from both sides participated in these exercises and aimed at inter-operability confidence to tackle piracy, terrorism and relief and rescue issues in the region and elsewhere. These exercises also witnessed exchange of officers and sailors by both navies on vessels and operating aircraft and helicopters.\textsuperscript{58}

Besides, in 2005, India and the USA signed a ten years agreement for defence cooperation which laid the ground for the framework for Maritime Security Cooperation which was later signed in 2006. The latter emphasised on need for periodical exercises to facilitate inter-operability and share best practices.\textsuperscript{59} The impact of agreement was

\textsuperscript{56} Khurana, n.54, p.3.
\textsuperscript{57} Ibid.
evident in Malabar-2006, where US Expeditionary Strike Group (BOXESG) led for the first time in a large-scale joint naval exercise.\(^{60}\) Specifically, the US BOXESG showcased thirteen ships including amphibious ships, destroyers, cruisers and the submarine USS Providence (SSN-719) as well as Marines from the 15th Marine Expeditionary Unit (MEU).\(^ {61}\) Indian Navy had no experience in operating BOXESG vessel, got chance to participate and experience advance naval exercise at several Indian ports, including Goa and Mumbai. Operating with USS Boxer (Landing Helicopter Dock) led the Indian side to experience the procedural details for launching and recovery of several helicopters and simultaneously the landing crafts that were carried by the vessel.”\(^{62}\)

Furthermore, Malabar maneuvers are “designed to advance participating nations’ military-to-military coordination and capacity to plan and execute tactical operations in a multinational environment.”\(^ {63}\) Malabar-2007 was the ninth naval exercise and unique in several aspects. It was first one to be held outside the Indian Ocean, off the Japanese Island of Okinawa. The navies of India, the USA, Singapore, Australia and Japan participated in the exercise and covered different exercise areas and multilateral character.\(^ {64}\) Overall 27 ships (8 from Indian Navy, 14 from US Navy, two each from Japan and Australia, and one belonging to Singapore) ranging from the size of a super carrier to frigates, aircraft and helicopters from five nations, engaged in simulated war-game and

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\(^{61}\) Ibid.

\(^{62}\) Khurana, n.54, p.3.

\(^{63}\) Kronstadt, n.41, p.6.

\(^{64}\) Sandeep Dikshit, “Japan to take Part in India-U.S. Naval Exercises again”, The Hindu, New Delhi, 16 February 2011.
combat manoeuvres. The inclusion of new warfare technology was displayed. Three aircraft carriers were, for the first time, led by the Indian Navy and IAF pilots, which was an important step to familiarise with these carriers. Mock battle was another interesting aspect of exercises where soldiers, irrespective of their nationality, were divided into opposing groups as according to the matching capabilities.65 These mock battle exercises identified several avenues to converge and project common worldview on security cooperation and also signalled towards the ‘strategic deterrence’ to China.66

In Malabar -2008, US Navy participated with sophisticated aircraft carriers such as USS Ronald Reagan (CVN 76), Carrier Air Wing 14, guided-missile destroyer USS Decatur (DDG 73), USNS Bridge (T-AOE 10) and the fast-attack submarine USS Springfield (SSN 761). On the other hand, the Indian Navy displayed three guided-missile destroyers, four guided-missile frigates, an underway replenishment ship and a submarine. These features of both navies, in combination, improved inter-operability for carrying missions of humanitarian assistance, disaster relief, maritime security and piracy.67 Furthermore, the exercise primarily focused on deriving mutual benefit from the experiences of the two participating professional navies. This confidence-gaining exercise later improved inter-operability and proved to be of immense use in Humanitarian Assistance and Disaster Relief (HADR) operations.68

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66 Khurana, n.54, p. 4.
68 Ibid.
In Malabar -2009, Japan’s Maritime Self Defence Force (JMSDF) joined the Indian Navy along with the US and the exercise was conducted off the coast of Okinawa. Its objectives were to strengthen the stability of the Pacific region. Earlier, Malabar was a bilateral engagement between the United States and India; however, with the arrival of Japanese Navy, greater number of ships were involved which increased the complexity of the exercise.\textsuperscript{69} Apart from personnel exchanges and professional discussions, approximately 4000 personnel from the three participating maritime forces executed anti-submarine warfare, surface warfare, air defence, live-fire gunnery training and involved in visit, board, search and seizure (VBSS) evolutions.\textsuperscript{70} These warfare tactics were to meet any threat posed by China. However, the Malabar-2010 was much lower in vigour as compared to previous editions. Mainly, training included surface and antisubmarine warfare, air defence and visit, coordinated gunnery exercises, board, search, and seizure drills were also part of this exercise. Sailors of both services also took part in professional exchanges and discussions while on shore and at-sea.\textsuperscript{71} Task Force 70 of the US 7th Fleet, based in Yokosuka, Japan, has brought a cruiser USS Shiloh, destroyers USS Chafee and USS Lassen and a frigate USS Curtis for participation in this exercise.\textsuperscript{72} US Navy personnel participated in a community service project during the port visit to Goa. India showed


\textsuperscript{72} Ibid.
Guided missile destroyer, INS Mysore and three frigates namely INS Godavari, INS Brahmaputra and INS Tabar.

Therefore, Malabar-2010 was focused on anti-submarine warfare, surface firings and maritime interdiction operations apart from humanitarian assistance and disaster relief efforts on the basis of their mutual benefit.\(^73\) Naval personnel from India and the United States participated in exercise Malabar-2011, continuing series of exercises conducted to advance multinational maritime relationships and mutual security issues. The at-sea portions conducted in the Western Pacific Ocean, east of the Luzon Strait and east of Okinawa. The location coincided with the Indian Navy’s western Pacific deployment. The exercise was designed to advance US-India military-to-military coordination and capacity to plan and execute tactical operations. Events planned during this exercise include liaison officer professional exchanges and embarks; communications exercises; surface action group exercise operations; formation maneuvering; helicopter cross deck evolutions; underway replenishments; humanitarian assistance and disaster relief; gunnery exercises; visit, board, search and seizure; maritime strike; air defence; screen exercise; and anti-submarine warfare.\(^74\)

In Malabar-2012, which was 16\(^{th}\) annual exercise, navies of India and US conducted their exercises which began on 7\(^{th}\) April, 2012 in Chennai, the capital city of Tamil Nadu. It featured seminars, air defence, integrated anti-submarine warfare operations, counter-piracy operations

\(^73\) Ibid.

and carrier aviation operations. Sailors aboard the Nimitz-class aircraft carrier and USS Carl Vinson (CVN 70) conducted a refueling-at-sea (RAS) exercise with the Indian Navy replenishment oiler INS Shakti (A57). In this exercise, for the first time, RAS exercise was conducted between a US aircraft carrier and an Indian INS oiler. The exercise took place about 450 nautical miles of sea and offered the opportunity for the US and Indian naval services for communication exercises, helicopter cross-deck evolutions, and gunnery exercises. Carl Vinson and CVW-17 provided air support for the exercise.

Malabar-2013 included Surface Action Group operations, professional exchanges and embarkations, leapfrogs, helicopter cross-deck evolutions, communications exercises, VBSS and anti-submarine warfare (ASW). The US Navy participated with the Arleigh Burke class guided-missile destroyer USS McCampbell (DDG 85) and a P-3 Orion aircraft. Indian Navy’s participation includes the indigenously built Frigate INS Shivalik (F47), the Guided Missile Destroyer INS Ranvijay (D55) and Tupolev Tu-142 Maritime Reconnaissance aircraft.

The 18th edition of Malabar exercise commenced on 24 July 2014 at Sasebo Naval Base, Japan in which JMSDF was invited to participate. The subsequent participation of the Japanese navy in the Malabar 2014 exercise was a sign of enhancing the security relationship of India, US

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75 Zachary Keck, “India's Navy Good U.S. Option”, The Diplomat, 10 April 2012.
77 Ibid.
and Japan\textsuperscript{80}. The exercise, hosted out of the port of Nagasaki, involved three Indian warships, two Japanese destroyers and several US ships, including the aircraft carrier USS George Washington.\textsuperscript{81} On the other hand, the inclusion of Japan in this exercise indicated that India should now stop jumping at Chinese shadows. India saw considerable operational benefits of the Malabar series, particularly when they are held in a multilateral format.\textsuperscript{82}

Malabar-15, the 19th edition of the exercise, was held in the Bay of Bengal from 14-19 October 2015. It encouraged wider professional interactions during the Harbour Phase and a diverse range of operational activities at sea during the Sea Phase. In this edition, Japan became a permanent participant of the Malabar exercise.\textsuperscript{83} Along with the Indian Navy and the US Naval Forces, the Japanese Navy sent destroyer JS Fuyuzuki to participate in this exercise. During exercise, the Indian Navy was represented by INS Shivalik an indigenous frigate, INS Betwa an indigenous frigate, INS Ranvijay a guided missile destroyer and INS Shakti a Fleet Support Ship. Besides this one Sindhugosh class submarine, INS Sindhudhvaj, Long Range Maritime Patrol Aircraft P8I and integral rotary wing helicopters did also participated in the trilateral exercise from Indian naval side.\textsuperscript{84}

Moreover, the US Navy was represented at Malabar-2015 by ships from the Carrier Task Force (CTF) 70 of the USN 7th Fleet based at


\textsuperscript{82} Ibid.

\textsuperscript{83} Pranav Kulkarni, “Significance of the India-US-Japan MALABAR Naval Exercise”, \textit{The Indian Express}, New Delhi, 21 October 2015.

\textsuperscript{84} Indian Navy, n.80.
Yokosuka, Japan. The CTF included the Nimitz class aircraft carrier USS Theodore Roosevelt, Ticonderoga class cruiser USS Normandy and Freedom class Littoral Combat Ship USS Fort Worth, besides the Los Angeles class nuclear powered submarine USS City of Corpus Christi, and F18 Aircraft from the Carrier Air Wing and P8A Long Range Maritime Patrol Aircraft.85

In 1990s, some major developments occurred, which cannot be ignored. In this context, Malabar exercises after 9/11 proved a road-roller to Indo-US defence relations as these exercises worked smoothly and regularly to enhance the scope and nature of their bilateral cooperation. Besides, these exercises proved a showcase of exposing regional and global collective security goal for both countries. Malabar naval exercises, thus, have been a regular event to promote military to military relations between India and USA in the regional and global context. With every subsequent Malabar series, the event that occurs every year showcased their strengthened military capabilities and fine-tuned military cooperation. These exercises are important vehicles in developing professional relationships and familiarity between the two navies and test the scope of high-end naval warfare, including integrated air and missile defence, anti-surface warfare, anti-submarine warfare, and naval special warfare.86

Malabar exercises provided a “continuation of the larger US project in the Asia-Pacific region, which includes sending the signal to China on the issues of freedom of navigation in international waters. The US reportedly plans to sail warships within 12 nautical miles of Chinese-claimed features in the South China Sea, as part of Freedom of

85 Kulkarni, n.83.
86 Latif, n.45, p.62.
Navigation operations.”

Thus, India and the US became natural partners in 21st century who share common goal to ensure security and stability in the Indo-Pacific region. A regular exercise like Malabar makes stronger of their defence relations. An important outcome of this activity has been the increased capacity of the two countries against piracy and maritime terrorism and the provision of Indian naval escorts for the US ships transiting the Malacca Strait.

In brief, the Malabar exercises helped in enhancing military-to-military coordination between the two navies and it promoted strategic and execute tactical operations in changed global geo-political environment. The main objectives of the naval cooperation have been to enhance military capacity, combating terrorism and piracy, freedom of seas and helping secure worldwide trade. It was concluded with an aim to increase the inter-operability among the two navies and also to develop a common understanding of maritime security operations. It has been a considerable march to increase mutual confidence and sharing best practices among the two countries.

(b) Joint Army Exercises- Besides Malabar, the joint army exercises are also important part of India-US military to military relations. The Indian Army has been involved in joint exercises with the US Army on low-intensity conflict, counter-terrorism and counter-insurgency in varied terrains. In this context, the ‘Vajra Prahara’ and ‘Yudh Abhyas’ are two main exercises which played vital role to enhance cooperation between the armies of two countries.

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87 Kulkarni, n.83.
88 Latif, n.45, p.62
89 Bishoi, n.3, p.73.
In this context, first major initiative by them was taken in Agra in 2002 when joint army exercise ‘Vajra Prahar’ was conducted. It was largely aimed at familiarization of both countries Special Forces.\(^91\) In September 2003, US Special Forces conducted a combined exercise with Indian commandos based in Jammu and Kashmir in high altitude, dry and rocky terrain similar to that in which Osama bin Laden is reported to be hiding\(^92\) and it helped US forces to experience the terrain in the important field which was not available to them in the United States.

It is considered that, the Army to Army collaboration has been expending steadily since the beginning of Yudh Abhyas in 2004 between US army (Pacific) and the Indian army. This exercise has been hosted by the Indian Army.\(^93\) Later on this exercise was upgraded to battalion level from companies sized field training. Basically, it was a conventional forces training exercise which focused on counter-insurgency and counter-terrorism operations in different terrains.\(^94\)

In the wake of increasing cordial relations, after 9/11 the Executive Steering Group decided to convene such exercises between two armies annually. Apart from this, numerous subject matters were included in such exercises; important among them were expert exchanges on challenges of mutual concern, including improvised counter explosive devices.\(^95\) As a result, Yudh Abhyas-09 was organized from 12-29 October 2009 in Babina, India. In this exercise about 1,000 military

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\(^92\) Sharma, n.8, p.18.


\(^94\) Bishoyi, n.3, pp.71-72

\(^95\) Latif, n.45, pp.62-63.
personnel participated from the Indian and the US army. The exercise included combat vehicles, tanks and anti-tank missile. In November 2010, conducting of Yudh Abhyas-10 established and enhanced relationships between the two militaries. This 14-day combined training exercise expanded operational and cultural knowledge between U.S. and Indian Soldiers and increased knowledge of peacekeeping operations. Indian and the US troops conducted joint military exercises involving airborne specialist operations in sub-zero temperatures at joint Base Elmendorf-Richardson in Alaska. The US army itself viewed Yudh Abhyas as “a challenge, something unique and definitely a lesson in patience with the language barrier,” as it involves training foreign troops in American operational doctrines.

Yudh Abhyas-15 was held in September 2015 at Joint Base Lewis McCord in the USA. This exercise was the 11th edition of such event in the Yudh Abhyas series. This exercise seeks to “broaden and strengthen cooperation and inter-operability between armies of both democratic nations. It also provided an ideal platform for the army personnel of the both countries to share their experiences of military operations in urban terrain under the United Nations mandate.”

The beginning of Yudh Abhyas exercises since 2004 increased the scope and sphere of the joint exercises between India and USA.

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96 Embassy of United States, n.93.
98 Bishoyi, n.3, pp.71-72.
Presently, the Yudh Abhyas plays an important role to improve India’s regional security capacity as the Indian army has to face a number of domestic and cross-border security problems in South Asian region. Thus, the exercises have been designed to promote collaboration between the two militaries through inter-operability of combined military decision-making process, building joint operating skills and exchange of tactics, techniques and procedures.\(^\text{100}\)

(c) Joint Air Force Exercises- In 2002 alone, six most important joint military exercises were conducted between the two countries. Indian and US Special Forces conducted the airborne joint exercises, “Balance Iroquois” in Agra in May, 2002 and “Geronimo Thrust” in Alaska in September-October 2002. A joint air transport exercise, “Cope India” was conducted in Agra in October 2002 aimed at improving inter-operability between the two air forces.\(^\text{101}\) In Cope India-02 the US Air Force “personnel, on board Indian aircraft, observed the drop of Indian paratroopers and heavy equipment. Both air forces learned each other’s formation flying techniques. The Indians marked the difference in the way the Americans drop cargo with drag-parachutes and prepare drop zones. By the end of the exercise, Indian paratroops dropped from US C-130 Hercules transporters.\(^\text{102}\)

The Indian Air Force (IAF) has been conducting the Cope India series of exercises with the US Air Force (USAF) since 2002. But, the exercise Cope India-04 held in February 2004 at Gwalior was the first

\(^{100}\) Bishoyi, n.3, pp.71-72.  
\(^{101}\) Sharma, n.8, p.18.  
ever India-US fighter aircraft exercise.\textsuperscript{103} This exercise provided valuable training for aircrew and maintenance personnel and enhanced military-to-military cooperation between India and the US Air Forces.\textsuperscript{104} Additionally, the US Air Force flew in F-15Cs, while the Indian Air Force was represented by Su-30K, Mirage 2000, MiG-27s and MiG-21 (upgraded). Mainly, the exercises provided a strong foundation and deep understanding towards enhancing a new relationship between the Indian and the US Air Forces for the future.\textsuperscript{105}

Another important exercise Cope India-05 was held in November 2005 at Kalaikunda near Kolkata. This had 12 F-16s flying alongside 26 Indian jets, including the Sukhoi 30 MKI, in an AWACS environment. India also participated in the Cope Thunder series of exercises held in Alaska in 2004 and has been invited to observe and participate in the Red Flag-Alaska Exercises in 2007 and 2008, respectively.\textsuperscript{106} Although the respective armies and air forces hold regular dialogues and conduct periodic exercises, it appears that the “strategic and logistical thresholds for securing closer cooperation in the air and land realms have yet to be defined to the satisfaction of both parties.”\textsuperscript{107} As a result, above joint military exercises are not identical in nature, scope and regularity like Malabar naval exercises. If both the countries provide same weight to these exercises like Malabar, then defence cooperation between India and the US may build up as natural allies.

(ii) Bilateral Defence Trade- During the cold war period, India got most

\textsuperscript{103} Sharma, n.8, pp.18-19.
\textsuperscript{104} “Cope India” Newsletter, \url{http://www.globalsecurity.org/military/ops/cope-india.htm} (Accessed on 12 February 2016).
\textsuperscript{106} Samuel, n.88, p.219.
\textsuperscript{107} Kronstadt, n.41, p.6.
of its military equipments from Moscow due to their mutual strategic and economic cooperation. But, disintegration of erstwhile Soviet Union transformed international environment for all countries on their own parts. In this context, the US also changed its strategy for India and Pakistan according to changed South Asian regional security environment. Now it is in no need of cold war strategic friends like China and Pakistan as before. Thus, the USA was looking towards India as an outsourcing hub and the huge markets to fulfill its defence trade goals.

At present, the US is one of the major suppliers of defence equipments in the world. So, it made an effort to identify a significant market to sale its defence equipments.\(^{108}\) On the other hand, India is also willing to improve its defence capacity with the help of the United States which is a leading military power in the post-cold war era. Furthermore, the changed strategic environment and the increasing common interests provided them more advantageous circumstances towards increasing defence trade and militarily activities. As a result, the confidence and the trust in the overall bilateral relations facilitated their defence trade which can be a key component of their ongoing military-to-military relations.\(^{109}\)

After 9/11, the Bush Administration made an early breakthrough in arms sales to India. As a result, he simplified the congressional notification of arms, sale and lease of fire finder radars, consideration of the sale of Special Forces, fast track delivery for spares of Sea King helicopters, the sale of General Electric engines and avionics for the

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Indian light combat aircraft.\textsuperscript{110} Since 24 October 2002, only those major defence equipment items costing more than $14 million require congressional notification. This change puts India in a category with American treaty allies such as South Korea and Japan.\textsuperscript{111}

On the other hand, defence and strategic experts of India also welcomed the moves of the latter to engage with the USA, which was the only alternative source available to it for acquiring the modern version of fighter aircraft and other military weapon system.\textsuperscript{112} In this regard, in 2002 India and the USA initiated a deal for the sale of 12 Raytheon artillery and short-range missile tracker system and the AN/TPQ 37 Weapon Locating Radars. This deal was signed on 18 April 2002. It was the first major Government-to-Government purchase from the United State which has supplied system worth nearly US$4 billion to India.\textsuperscript{113} India also purchased $29 million worth of counterterrorism equipment for its special forces and has received sophisticated US made electronic ground sensors to help stem the tide of militant infiltration in the Kashmir region.\textsuperscript{114} The sale was supported on the grounds that it would help to improve the security of a country which has been and continues to be an important factor for political stability and economic progress in South Asia. It has also been reported that India is exploring the possibility of acquiring Sikorsky-supplied helicopters to replace the navy’s ageing Sea King fleet, and AGM-84 Harpoon anti-ship missiles.\textsuperscript{115}

Apart from increasing the scope of military relations, Bush administration indicate a willingness to sell India various forms of

\textsuperscript{110} Sharma, n.8, p.17.
\textsuperscript{111} Ibid.
\textsuperscript{112} Jain, n.90, p.170.
\textsuperscript{113} Ibid.
\textsuperscript{115} Tomar, n.52, p.27.
weapons tools, including previously embargoed artillery locating radars and air craft engines. Both India and the US continued regular diplomatic consultations on the issue of common interests like problems of terrorism, peacekeeping operations, protection of sea-lanes and piracy.\textsuperscript{116}

In 2004, the US Congress was reported of a possible arms sale to India up to $40 million worth as aircraft self-protection equipment systems are to be mounted on the Boeing 737s next generation aircraft that carry the Indian head of state. The State Department of the US gave approval to Israel to sell to India the jointly manufactured US-Israeli Falcon airborne Early Warning, Command and Control system, a costly asset that proved the regional strategic balance in India’s favour.\textsuperscript{117}

The USA also finalised the sale of Patriot Advanced Capability (PAC-3) which is the most mature weapon system of the Ballistic Missile Defence System and F-18 fighter jet aircraft Hornet which has a twin-engine supersonic. These deals proved milestone for India-US defence relations. With the help of these deals the US military sales to India have increased from US $ 5.6 million in 2003 to US $ 64 million in 2005.\textsuperscript{118} In March 2005, a major policy decision took by the Bush administration on the issue of military trade to India. It allowed the United States to supply advanced military equipment to India, including allowing Lockheed Martin and Boeing to sell F-16 and consider co-production co-development of these platforms in India.\textsuperscript{119}

\begin{itemize}
\item \textsuperscript{116} Gaan, n.21, pp.161-62.
\item \textsuperscript{117} Kronstadt, n.114, pp.35-36.
\item \textsuperscript{119} Malik, n.49, p.98.
\end{itemize}
The defence agreement On 28 June 2005 stated that India and the US would work to make stronger their strategic partnership and assemble a greater understanding in defence establishments. The agreement established a joint Defence Procurement and Production Group to supervise defence trade as well as prospects for co-production and technology collaboration. With this the two countries agreed to increase cooperation relating to missile defence.\textsuperscript{120} In 2007, India paid the United States $50 million for the amphibious USS Trenton (LPD-14) warfare ship, which was received by the Indian Navy in the same year and rename the INS Jalashwa (L-41), has helped the Indian Navy expand its expeditionary and amphibious warfare capabilities.\textsuperscript{121}

In last fifteen years, India has considered the USA as its main supplier of equipment for the Indian armed forces. The US has joined the ranks of ten largest exporters of military equipment to India. In January 2009, Boeing won a $2 billion order for eight P8 maritime reconnaissance aircraft and Lockheed Martin won a $1 billion contract for six C1301J transport aircraft. Besides this, Americans are likely to win a tender, estimated at some $12 billion, for 126 multi-task fighter jets for the Indian Air Force.\textsuperscript{122} In November 2009 during Obama visit; it was announced that the US would sell $5 billion worth of his military equipment to India; including ten 100 General Electric F414 fighter aircraft and Boeing C17 military transport aircraft. These deals made the USA to becoming one of India’s major suppliers.\textsuperscript{123}

\textsuperscript{120} Koithara, n.22, p.3587.
\textsuperscript{121} Latif, n.45, p.64.
\textsuperscript{122} Kugiel, n.32, p.35.
Though both India and the US have started to make the political concessions necessary to expand their military trade, yet they required to go further. During his visit to India in November 2009 Obama agreed to remove some export control sanctions on India and to lift some restrictions on trade with India’s space and military research agencies.\footnote{Ibid., p.5.} In this situation, India and the United States have reached in an End-Use Monitoring agreement (EUMA) of defence equipment that allows the two countries to set the timing and location of inspections. The agreement gave a framework for finding compromised solutions on additional defence cooperation agreements in future.\footnote{Sunjoy Joshi, et. al, “Beyond the Plateau in U.S.-India Relations”, 26 April 2013, p.15, \url{http://www.heritage.org/research/reports/2013/04/beyondtheplateauinusindiarelations} (Accessed on 12 February 2016).} With the signing of this agreement major difficulty in negotiations with India has been removed on the mandatory requirement of the sale of defence items. Thus, signing of 2009 EUMA constituted an important step for defence trade between the two countries as end-use monitoring is likely to remain an important factor in India’s acquisition of defence items from the United States, significantly complicating the task of encouraging high-end sales to India.\footnote{Kronstadt, n.41, pp.23-24.}

Defence sales provided mutual support to both countries. Mainly, it helped in the economic and strategic manner for them. Now India and the US view defence sales as a mechanism to facilitate new training and exchange opportunities between the two militaries. With the end of first decade of 21st century, defence trade between them reached a new level of interaction for their militaries. Delivery of C-130J Super Hercules aircraft began in February 2011 and it was the first US military aircraft which was delivered to India in half a century. The aircraft successfully
worked to provide critical humanitarian help following an earthquake came in Sikkim in September 2011. Moreover, the US Air Force trained more than 100 IAF personnel – including loadmasters, pilots and maintenance staff.¹²⁷

America became one of the major arms suppliers to India, along with Israel, France, and Russia. In the spring of 2011, India took a decision to buy fighter jets from French, rather than from America. This order for 126 medium multirole combat aircraft clearly have seen as a lost opportunity for their bilateral defence cooperation. But the sidetrack deal cannot be viewed as a major setback in strategic partnership due to collaboration on other procurements and co-production initiative between them.¹²⁸

India signed a USD3 billion contract with the US to purchase 22 AH-64E Apache and 15 CH-47F Chinook helicopters on 28 September 2015, just before two days of expiration of the deadline to sell at a price negotiated in 2013. India’s Ministry of Defence officials informed that the delivery of the two platforms would start in September 2018 and be completed till March 2020. Boeing confirmed that this agreement, in which, the option was included for India to acquire 11 additional Apaches and seven Chinooks. The contract comprised a ‘hybrid’ deal for the Apaches, combining a Direct Commercial Sale (DCS) with Boeing for the platform and a Foreign Military Sales (FMS) agreement with the USA for weapons, sensors, training, radar, and varied components.¹²⁹ The

¹²⁷ Latif, n.45, p.64.
¹²⁸ Joshi, n.125, p.15.
deal of Chinook and Apache stand for the best of high-performing technologies that may modernize defence capabilities of India.

There is also the reality that Indian armed forces cannot be equipped solely on American arm pattern. The USA defence budget is 23 times large from the size of Indian budget and its equipment budget over 50 times bigger from India.\(^\text{130}\) Along with growing military-to-military relations, the matter of the US weapons sales to India has come out in larger perspective. With the beginning of 21\(^{\text{st}}\) century the issue of the US arms sales to India has taken a much higher weight. India is undertaking a most important military modernisation programme with the USA to update it’s mostly arsenal and advanced technology. The US weapons makers are ready to gain a slice of this profitable contract and its companies also see in India a potentially huge market for sophisticated equipment such as surveillance and detection systems.\(^\text{131}\)

(iii)Technology Transfer- India was not ready to develop its defence relations with the USA in the manner of latter’s relations with its NATO allies during cold war era due to its non-alignment policy. The two countries have long history of detachment, mistrust and hostility in their bilateral ties and global concerns. Due to sanctions against India their defence relationship could not be established during cold war period. This has affected transfer of technology to India by the US.\(^\text{132}\)

US policy of technology transfer has been conditioned largely by the politics of the cold war, a situation that has dramatically changed since the political upheavals in Eastern and Central Europe and in the Soviet Union. India’s policies have been conditioned by efforts to

\(^{130}\) Koithara, n.22, p.3587.
\(^{131}\) Kronstadt, n.41, p.19.
\(^{132}\) Joshi, n.125. pp.15-16.
maintain an independent foreign policy outside the cold war struggle. As American efforts to cooperate Pakistan into Western military alliances succeeded, India began to rely increasingly on the Soviet Union for weapons and military technologies, thus aggravating cold war politics on the subcontinent.\textsuperscript{133}

The above conditions are not likely to apply during the post-cold war period as global scenario underwent significant transformation. As a result, positive development in Indo-US technology relationship can be observed since the signing of the Memorandum of Understanding for technology cooperation in 1984 between the two countries.\textsuperscript{134} Such technology cooperation was initiated by Rajiv Gandhi to accelerate the speed of Indian technological developments in the defence sector. It is because until 1985, two-thirds of India’s defence technological cooperation was with the Soviet Union, and some with Western Europe. On 11 October 1986, a high level US delegation led by Secretary of Defence Caspar Weinberger visited India to negotiate the transfer of military technology with India.\textsuperscript{135} As a result, India and the US were involved in technological dialogue from 1986 to 1989. During this period they discussed three main areas of cooperation like: advanced aero-engines for the development of a Light Combat Aircraft, supercomputers for weather forecasting and satellite and booster rocket technology for India’s space programme. However, doubts continued between the two countries because of their different approaches on all three issues. The

\textsuperscript{135} Thomas, n.133, p.825.
basic apprehension of the USA was that the sophisticated technology might be leaked to Soviet Union by India.\textsuperscript{136}

But with the end of the cold war, though general relations between India and the USA improved to a great extent, yet their negotiation on second supercomputer to be used by Indian Institute of Science could not be realised. It is because in May 1992, the USA announced the imposition of a two year sanction on trade and technology transfer activities with the ISRO and the Russian Glavcosmos against the deal on the providing of cryogenic rocket engine technology to India. However, the USA did not stop Chinese supply of M-11 missiles to Pakistan.\textsuperscript{137}

In first term of Bill Clinton, proliferation issues acquired high priority in the US foreign policy calculations. As a result, linkage of proliferation issues with technology transfer by the US was bound to limit the Indo-US technology cooperation. The USA always believed that India’s indigenous missile programme may work as a destabilising growth of South Asia. India’s divergence with the US on this issue was also based on double standard adopted by the US on proliferation matter. But to purchase high technology from the US continue to remain a core issue for India.\textsuperscript{138} Thus Indo-US collaboration on technology transfer during the last decade of 20\textsuperscript{th} century was not outstanding because of their divergent views on many issues.

In second tenure, Clinton administration tried to expand its ties with India, but the latter conducted nuclear tests in May 1998. As a result, defence cooperation between the two countries was derailed.

\textsuperscript{136} Ibid.


\textsuperscript{138} Ibid., p.115.
Technological cooperation also suffered extremely in different areas. However, the ‘strategic dialogue’, initiated between the then Deputy Secretary of State Strobe Talbott and External Affairs Minister Jaswant Singh, continued to built up confidence and discuss the issue of technology transfer on broader level. These dialogues prepared the ground for Clinton’s visit to India in March 2000. The signing of the “Vision Statement” during the visit provided a framework for closer collaboration in the area of strategic partnership and technology trade.\textsuperscript{139}

India-America technology cooperation enhanced gradually when George Bush came into power in 2001. Since then, the two countries started number of initiatives for high technology trade and collaboration, which were guided by transformed geo-strategic realm. In this regard, first major step has been the establishment of India-US High Technology Cooperation Group (HTCG) in 2002 by both countries to promote and facilitate high-technology cooperation. Besides, Statement of Principles (SOP) was signed in 2003 to enhance cooperation in high technology. The initiative enlarged role of the private sector in technology transfer and it worked for eliminating barriers to technology trade.\textsuperscript{140}

As a result, on 17 September 2004 both countries, signed a High Technology Trade Agreement. This agreement marked the conclusion of Phase 1 of the implementation of the NSSP. The agreement implies only cosmetic changes to the technology transfer policies of the United States and put emphasis to India to take strong step for the US non-proliferation concerns.\textsuperscript{141} Later in June 2005 a defence agreement was signed to increase opportunities for technology transfers. Finally in joint statement

\textsuperscript{139} Bishoyi, n.134.  
\textsuperscript{140} \textit{Ibid.}  
\textsuperscript{141} Malik, n.49, p.92.
on civil nuclear cooperation US recognized India as “a responsible state with advanced nuclear technology.” Thus, these above important initiatives proved milestone for India and the USA on the issue of technology transfer, along with other important issues like military trade, joint exercises and counter terrorism cooperation after 9/11 incident.

In the twenty first century when, India is planning for modernisation of its military, it is inevitable for it to have cooperation in advance defence technologies with USA. But, the India-US defence cooperation in the area of dual-use technology has stumbled over issues like leakage of technology to other countries, maintaining exclusive technology control and the area where dual-use technology was used. This became all the more difficult in the wakes of USA’s export control policies and its support to several international organizations of technology control regimes such as Nuclear Suppliers Group (NSG) and Nuclear Non-Proliferation Treaty (NPT),

Technological collaboration has become an important part of defence cooperation in modern era. Transfer of technology by a country to friendly countries can help in modernization of their weapon system. The US tries to modify its technology transfer and co-production rules and bring them at par with Indo-Russian defence cooperation. Besides, if India really needs technology from the USA it can resolve these critical issues in a more careful manner. The USA has signed these accords even with the UK and Japan. There will be no exception for India.

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142 Bishoyi, n.134.
143 Ibid., p.69.
144 Santhanam, n.118, p.167.
In this regard, India signed the EUMA in 2009 which has a wide-ranging for their technology transfer. It allowed the US representatives to check regularly and records of items transferred to India. This type of agreement can provide an outline for finding solutions on other defence cooperation agreements in the future. After all India had to agree to the EUMA, the ball is very much in India’s court.146

Besides, in June 2009 the first US-India strategic dialogue was concluded in Washington DC. In the joint statement US Secretary of State Hillary Clinton and India’s External Affairs Minister S.M. Krishna highlighted the key issue of cooperation in strategic and high technology sectors through the HTCG as a key instrument to achieve the full potential of the strategic partnership. Both of them also tried to identify the common objectives in the area of high technology cooperation. This development signifies the substantive progress made in the area of defence cooperation between the two countries.147

President Obama’s visit to India in November 2010 has had a positive impact on India-US relations. Obama emphasised to enhance the high technology cooperation with India and considered it as an indispensable partner for the US in the twenty first century.148 Homeland Security Dialogue was also announced during Obama's visit to India to deepen operational cooperation, technology transfers, counter-terrorism and capacity building. Two rounds of dialogue have been held, in May 2011 and May 2013, with six sub-groups steering cooperation in their specific areas.149

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147 Bishoiy, n.3, pp.69-70.
148 Ibid., p.70.
149 “India-U.S. Relations”, n.31.
Joint Declaration on Defence Co-operation concluded during the Indian Prime Minister’s visit to USA in September 2013. The declaration is a major step towards greater cooperation in the defence trade and technology cooperation. Two countries agreed to identify mutual area of cooperation in advanced defence technologies and systems. Both also agreed to improve licensing approval processes to facilitate defence cooperation and collaborate in the area of advance technologies and information.¹⁵⁰

Moreover, the focus on deepening defence cooperation was concretized through the US-India Defence Technology and Trade Initiative (DTTI). The stage was set earlier in September 2014, when both vowed to treat each other at the same level as their closest partners on issues including defence technology transfers, trade, research, co-production, and co-development.¹⁵¹ DTTI is now poised to increase co-development, co-production and partnership in India-US military-industrial matters. In November 2014, the two sides held the first meeting of a revived HTCG after a gap of more than three years to strengthen the strategic partnership and boost high technology trade. They also held the first-ever India-US Technology Summit in November 2014, where representation from industry representatives, policy makers, academics and researchers calculated the role of science and technology cooperation in 21st century.¹⁵²

Obama visited India in January 2015 second time, as a Chief Guest at India’s Republic Day function. The joint statement issued during that period noted that relationship between India and USA has been satisfactory and qualitative reinvigoration of strategic ties can be witnessed. They agreed to seek under the bilateral High Technology Cooperation Group, a timely resolution of the challenges to trade in high technology goods, including US licensing requirements for trade in certain dual use items.\(^{153}\)

To improve its defence capacity India is likely to purchase high-end technology and sale of sub systems and components that may enable it to manufacture its own major weapon systems. But, the US is not ready to transfer advance technologies to India because of commercial and security reasons. However, after US sanctions against India were lifted in 2001, the latter purchased more than $9 billion in weaponry. But such purchases it have not included technology transfer, which has been an Indian goal. Two countries have not been able to effectively execute the issue.\(^{154}\) It is recognised that technological superiority is the foundational source of US military power and thus technology control is a keystone of its defence policy. Hence its defence technology transfer regimes are much tighter than any other country.\(^{155}\)

But, the new developments in bilateral relationship are likely to be mutually beneficial for both India and the US in times to come. It is because, if the USA is stronger in terms of advanced technologies and hardware, then India is a leading competitor in the software domain.

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\(^{153}\) Sibal, n.34, p.109.


\(^{155}\) Koithara, n.22, p.3587.
US reluctantly accepts that India has satisfactory safeguards for the technology transferred. But simultaneously USA must acknowledge that it may benefit from the lower cost of production in India, particularly of manufacturing sub-systems and components.\(^\text{156}\)

On the other hand, India tries to develop admirable relationship with the USA as it does with Japan, Israel, Australia and other Western bloc countries. In this regard, both countries identify common security goals for long term objectives. India’s desire for closer defence cooperation with the US is mainly based on technology transfer. The reason is that when a country purchases military weapons, it needs technological and institutional support at international level. Being a superpower, India accepts the technological superiority of the US weapon systems, but it seeks to have natural partnership with the US and is not interested in seller-buyer relationship for long term security goals.\(^\text{157}\)

Thus, Indo-US defence cooperation are devised to fulfill India’s long-term goals of acquiring the capacities to design, manufacture and develop arms, including the economic viability of transfer of technology and its applicability on regional and global level. In fact, improved investments of America’s in the Indian defence sector and technology transfer are going to be the landmark of military cooperation between these two democracies.\(^\text{158}\)

(iv) **Joint Development of Military Armaments** - In the post-cold war era India constantly trying its best to enhance its defence capacity because of the complex regional security environment. India imports more than 70 percent of its military equipment from foreign countries. At


\(^{158}\) Sharma, n.8, pp.28-29.
present, the US is leading supplier of military arms to India. But, India wants to modify its buyer-seller relationship with the US towards joint production, joint development, and joint marketing of latest military weapons and technology. In this stance, India wish to seek the growth of its own manufacturing defence industry, with the use of advanced technologies in this sector.\textsuperscript{159} On the other hand, USA is also interested in maintaining its superiority in defence production and so it is not ready to help India in this issue. Hence, India is struggling hard to create its indigenous defence industry base to reduce its dependence on imports of weapons from foreign countries.\textsuperscript{160}

During the first decade of twenty-first century, international environment compelled both the nations to come-closer to each other in the area of strategic relations. The progress of improving strategic cooperation between India and the USA can be observed after 9/11 incident.\textsuperscript{161} Though, both were not good friend during cold war years, yet in the post-cold war period both are engaging each other due to convergence of their security goals.

When India and the US sign a ‘New Framework for the U.S.-India Defence Relationship’ in June 2005 for 10 years a ‘Defence Procurement and Production Group’ was also created to recognise the growing "breadth and depth" of the defence relationship.\textsuperscript{162} It was realised that the groups may help in defence trade, as well as prospects for co-production, technology collaboration and broadening the scope of its predecessor subgroup for security cooperation. Both discussed issues of joint

\textsuperscript{159} Bishoyi, n.3, pp.70-71.
\textsuperscript{161} Latif, n.45, pp.64-65.
development and joint procurement, but there was no remarkable progress in particular area.

India’s the then Defence Minister, A.K. Antony, while releasing of India’s first defence production policy (DPP) in New Delhi in January 2011, emphasised that major initiative of this policy is to assemble an industrial infrastructure that is technologically, quantitatively, and qualitatively support the requirements of India’s armed forces in terms of weapons systems, platforms, upgradation and overhaul. It is envisages a great opportunity for long term defence cooperation and strategic partnership between the USA and India’s research, development, and manufacturing establishments.\(^\text{163}\)

An institutional development in the area of joint development of arms between the two countries has been evolved when US-India Defence Technology and Trade Initiative, (DTTI) was conceptualised in 2012. It is likely to enhance prospect of becoming an effective tool for building defence relationship at the present stage. It is also believed that DTTI may work in the areas of co-development and co-production of military equipments, foreign military sales and reforms in US trade control system and collaboration in science and technology on basis of mutual interests.\(^\text{164}\)

The US has taken many steps in recent years to facilitate technological and research cooperation with India. As the relationship between the two is strengthening it is expected that the co-development of military armaments may become a reality soon.\(^\text{165}\) For this, “The US and India must broaden the scope of their military partnership by jointly

\(^{163}\) Bishoyi, n.3, pp.70-71.


\(^{165}\) Latif, n.33, p.60.
developing and producing arms, US Defence Secretary Chuck Hagel said the two countries should transfer of defence industrial cooperation from simply buying and selling to co-production, co-development and freer exchange of technology.”\footnote{Santanu Choudhury, “Hagel Says U.S., India Should Jointly Develop, Produce Arms” \textit{The Wall Street Journal}, 9 August 2014.}

The US has offered to co-produce the third generation Javelin ATGMs, and to co-develop its fourth generation version with India. Thus, India looked through the US offer to co-production of the Javelin systems. But, that deal became tricky and took more years from the scheduled date. In October 2014, India finally made deal with the Israeli Spike Missile including the technology transfer. Thus the Indian public sector undertaking (PSU) company Bharat Dynamics Limited produced the Spike Missiles in India. The important deal holed some 321 Missile Launcher tubes and Launching Equipments and some 8300 missiles and 15 training simulators.\footnote{“Boost in Indian Military Capabilities with Spike Anti-tank Guided Missile”, \textit{Defence Update}. http://www.defenceupdate.in/boost-in-indian-military-capabilities-with-spike-anti-tank-guided-missile (Accessed on 16 March 2016).} Once again it was clearly viewed that the different perception of India and the USA on the issue technology transfer proved barricade in defence relations.

However, it is observed that the Modi’s government is interested in improvement of its defence modernization programme under its policy of ‘Make in India’. In this context, the government has focused on joint production and development with friendly countries to ensure its strategic and economic interests. It plans to encourage domestic defence industry, including the private sector, which have a large share in production and design of defence equipments around the world. For this purpose a liberalized policy on foreign direct investment (FDI) is required. The
government has even permitted FDI upto 49% in the defence sector without any mandatory provision of transfer of technology. It is encouraging private Indian and foreign companies, to set up base in this country and manufacture defence equipment jointly. The step taken by Indian government has been well appreciated by the USA because it wants to transform its defence relationship with India from a buyer-seller model to one that of co-production, co-development and more exchange of technology. As such, it seems the India-US’s relations under the present governments are likely to regain their lost vitality.\footnote{Shekhar Adhikari, “Emerging Indo-US Security Cooperation in the 21st Century”, \textit{AMIRJ}, vol.2, no.3, November 2015, p.15.}

During the June 2016 visit of Modi, joint statement declared that the USA designated India a “Major Defence Partner.” Hence, India will be eligible to buy and, under an already existing agreement, in some cases co-develop and co-produce the most advanced weapons and weapon systems that the Pentagon is willing to share with its closest partners.\footnote{Deepal Jayasekera, “Modi Declares Enhanced Indo-US Military Alliance “Need of the hour”, \textit{WorldSocialistWebSite}, 9June2016, p.1,\url{https://www.wsws.org/en/articles/2016/06/09/inus-j09.html} (Accessed on 16 July 2016).}

Apart from this, there are some other areas which facilitate India-US bilateral defence cooperation on their own part. The space programme, nuclear cooperation, education and researcher collaboration and human rights are also associated with the bilateral defence cooperation. But, the areas of military exercises, defence trade, technology transfer of military equipment and joint production of arms have become very important for both the countries in the post-cold war era. It is because, military exercises build up confidence; military trade provides economic and strategic benefits; technology transfer gives speed...
to advance development of military weapon and co-production of arms are a landmark of strategic partnership between the two countries. Broadly, the defence relationship of India-America is helpful in bilateral, regional and global context.

Bilateral military cooperation between the India and the United States has made great progress and presently they are in a very sound position than some decades ago. In fact, military cooperation is much stronger today than it has ever been. However, more need to be accomplished, if both sides make serious efforts in removing the obstacles to military cooperation. As twenty first century is poised to be an Asian one, the India and United States are in a position to enhance huge opportunities to become close partners in contributing to a stable and secure world. To achieve this important goal, both sides require a balance pathway on current engagement which may make their ties more routine and consistent. By doing this, it will not only create a secure environment to achieve peace and prosperity for both the countries, but also for the larger scale at global level.\(^\text{170}\)

India-US long-term defence cooperation may be considered to be mutually beneficial and thus must be pursued in a desirable manner in the right direction. Most important strategic convergence is that, both nations seek regional stability, support non-proliferation and want to counter international terrorism and religious extremism. In the coming years, defence cooperation may thrive, if this remains embedded in the larger context of the bilateral relations and cooperation, encompassing political and economic relations. It can be said that defence diplomacy may continue to play a larger role in building trust and confidence between the two nations on a range of issues related to two nations.

\(^{170}\) Latif, n.33, p.48.