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A Paradigm Shift in Indo-US Defence Cooperation

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The agreement signed between US President Biden and Indian Prime Minister Modi on June 22 marks a new beginning in the defence partnership between the oldest democratic country and the biggest democratic country. The relations between the two countries have been marked by a clear difference in approach depending on the PMs at the helm of India. While Nehru was needlessly squeamish and taciturn towards American overtures during the presidency of Eisenhower, he was far more warmly disposed towards Kennedy. In fact, during the Chinese aggression in 1962, he pleaded through Galbraith, the Indian ambassador, for massive help from President Kennedy. Dr. Manmohan Singh had a marvellous breakthrough in Indo-US relations through his civil nuclear cooperation (123 Agreement) in 2005. He was also hugely respected for his views on how to handle the US financial crisis in 2007 by President Obama. Modi is a different kettle of fish. He was well aware of how the USA put a ban on his US visit based on his lamentable record as CM of Gujarat during the Godhra riots. But as an astute Gujarati, he knew how commercial interests could transcend the cerebral script of secularism and democracy. The US was aware of his star power as a leader who had no peers on the political stage of India. Modi had a discreet voyage with Obama but has now taken Indo-US relations by the scruff of its neck and chosen defence collaboration as the new signage for a bolstered relationship.

After the Chinese debacle in 1962, India consciously opted for a strategic defence partnership with the Soviet Union with the induction of MIG-21 aircraft and the technology transfer thereof. Instead of boosting our research and development (R&D) and design capabilities and 'Make in India,' Nehru consciously opted for the transfer of technology (ToT) route (buy technology and make in India) as the predominant policy for building the military industry complex. Be it frigates for the Navy, tanks for the Army, or fighter aircraft for the Indian Air Force (IAF). It was the USSR all the way. Despite his political posturing as nonaligned, Nehru's clear predilection for socialism and Russian tryst with centralised planning drove India's defence technology cooperation with the USSR. The 1971 war with Pakistan, when the Nixon Administration took a stridently anti-Indian position by sending the 7th Fleet, took Indo-Soviet cooperation to a crescendo, inking the 'Indo-Soviet Treaty of Friendship and Cooperation.' No wonder that close to 85 per cent of India's defence inventory is of Russian origin. Nevertheless, there have been outliers, like when India acquired the Jaguars from the UK in 1978 and the Mirage 2000 from France in 1982 as a rebuff to Pakistan buying F-16 aircraft from the US. In both these cases, there was no provision for ToT.

Given India's bitter experience with the Americans in the 1971 war and the ban it imposed on the export of several critical items after PM Atal Bihari Vajpayee's nuclear bomb test in 1998, the

2005 civil nuclear agreement between the two countries during Dr. Manmohan Singh's administration can be termed a watershed turnaround moment. In weapon acquisition, the relationship has been largely driven by foreign military sales (FMS) arrangements under the aegis of the Defence Security Cooperation Agency (DSCA), where India gets its preferred military equipment sourced from the USA.[1] The FMS route saves India from the long-run process of framing qualitative requirements (QRs) and going for extensive field trials. From 1950 to 2020, the US sold weapons for US $12.8 billion to India through the FMS program.[2]

The popular impression has been that the USA doesn't believe in technological collaboration and knowledge transfer, except to countries like Japan, Israel, and South Korea, as a seller of critical platforms and equipment. On the other hand, the Israelis, who have benefited immensely due to their partnership with the USA, have been the major supplier of arms and platforms to India. The addition of unmanned aerial vehicles (UAV) to all three services is a reflection of the growing military relationship with Israel. In communication devices, the Israelis have a near monopoly in supplying them to the Indians. As a matter of fact, Israel has emerged as the second-most important defence partner of India, particularly after the Kargil War, when the anti-material rifles (AMRs) to bust bunkers came in very handy. This established Israel as a very credible defence ally, thanks to the political overtures shown by the Janata Party.

This formed the backdrop for the Memorandum of Understanding (MoU) signed for powering the Light Combat Aircraft (LCA) with a General Electric (GE) F414 engine and the transfer of 11 critical technologies to Hindustan Aeronautics Limited (HAL). It is worth recalling that India ventured into its own indigenous engine programme called the 'Kaveri engine' in 1986 to power the LCA aircraft. However, due to its design failure after auditing by France based Snecma, the initial LCA prototype aircraft are being powered by GE F404 engines. Against this backdrop, the proposed ToT collaboration for a GE F414 engine would be timely because India is only familiar with the technology of Russian engines. It may be noted that the Defence Research and Development Organisation (DRDO) is still going for an upgraded version of the Kaveri engine called 'Ghatak.' Given India's bitter experience in design and lack of adequate expertise, it would be far more advisable to have a technological collaboration with the US for engines. It would, however, be necessary to have a proper assessment of the range and depth of technology being transferred and to what extent HAL would be able to absorb critical technologies like special coatings and Fully Automatic Digital Engine Control (FADEC). One might remember how Martin Marietta Overseas Corporation (MMOC) reneged on its contract to provide the flight control system (FCS) to the aeronautical development

agency (ADA) after the nuclear bomb test in 1998. This pushed back the indigenisation programme of LCA by several years.

The other collaboration being envisaged is to make India a hub for maintenance, repair, and overhaul (MRO) for forward deployed US Navy assets and Master Ship Repair agreements with Indian shipyards. A comprehensive MRO facility in India is being contemplated, even for UAVs. With India's skill power, which is considerably cheaper than that of our Western counterparts setting up an MRO facility in India is cost-effective and convenient. The willingness of the US to transfer critical technology was triggered by the Medium Multi-Role Combat Aircraft's (MMRCA) 'buy and make' tender when President Obama, during his India visit in 2010, promised to transfer key technologies such as active electronically scanned array (AESA) radar and the engine if the F-16 or F-18 was chosen as the preferred aircraft.[3] It is perplexing that the government, instead of exercising the 'buy and make' option for MMRCA, opted to buy Rafale aircraft from France without any ToT. The policy preference for 'Make in India' was supplanted by import, leading to complaints regarding its high cost and potential corruption.

The other highlight of the Biden-Modi agreement is India's plan to procure 31 MQ9B predators from General Atomics at a cost of 3 billion dollars.[4] This is a major development since all the UAVs of the high-altitude long-endurance (HALE) variety have been procured from Israel Aerospace Industries (IAI). The MQ-9B is a hunter-killer UAV that moves from surveillance, intelligence, and reconnaissance to a hunter-killer role, operating from a service ceiling of 50,000 feet against 35,000 feet of Israeli UAVs. This procurement would be a major game changer in India's capability for surveillance coupled with lethality. The joint production of jet engines, long-range artillery, and intelligently connected vehicles (ICVs) is also being contemplated. From being sellers, Americans have come a long way to become technology and production partners with India. The harsh reality of few competitors bidding for the same system as a cash-rich country like India, which wears patriotism on its sleeves, has made the USA benign in the matter of ToT. However, in the matter of technology transfer, we should be concerned about the range and depth of technology being shared. There is also a perception that developed countries don't share state-of-art technology but outdated and obsolete technology.

DRDO, India's premier agency for the design and development of critical systems, has a rather poor record in propulsion systems (Kaveri Engine), sensors like AESA Radar, and weapons like air-to-air missiles. In the areas of passive seekers, and focal plane arrays, DRDO's record is dismal. Our import dependence on weapons, sensors, and propulsion systems is almost 90 per

cent. That is mainly responsible for our Self Reliance Index (SRI) of 30 per cent calculated by the Kalam Committee in 1993, with a fond hope that we reach 70 per cent by 2003. A decade later, the SRI has not moved much because of our design capability for critical subsystems and ability to have co-production arrangements with reputed original equipment manufacturers (OEMs), joint R&D, and well-known design houses that have not moved at the requisite pace. The problem is further compounded by our inefficient defence public sector undertakings (DPSUs), which have a poor record in terms of quality, delivery commitment, and price. Private players like Tata, L&T, and M&M are still pariahs regarding access to critical technology. The level playing field, which was championed by the Kelkar Committee in 2005 and further buttressed by the 2016 Dhirendra Singh Committee recommendation for strategic partnership between DPSUs, the private sector, and OEMs to bolster 'Make in India,' has still not fully fructified.

The sane voice and vision of Dr. Kalam could not have been more salient for India. When MMOC, USA, cancelled the FCS contract, he foresaw an opportunity to rev up our indigenisation effort. Though 'made in India' FCS has taken a few more years, it has clearly proven how a crisis can be an opportunity. Dr. Kalam clearly foresaw the limitations of ToT arrangements with DPSUs, particularly HAL, and the need to forge alliances with OEMs and design houses to foster our military industry capability. Joint R&D collaboration with the Israelis for manufacturing medium-range surface-to-air missiles (MRSAM) is one such initiation. This imaginative design and development collaboration found fruition when the first batch of MRSAM was delivered to the IAF in 2021. Dr. Kalam also sowed the seeds of a joint venture for the BrahMos cruise missiles with Russia in 1998. This has been a salutary move by India when these missile systems are in heavy demand both by our services and by foreign countries. Quite clearly, instead of reinventing the wheel, joint ventures and partnerships with reputed OEMs and design houses will help both our private sector and public sector players have credible collaboration and potentially make India a global hub of defence manufacturing instead of being the second largest importer of arms globally as per the 2022 SIPRI report.[5]

It is interesting to glance through India's past efforts to build our military industry capability through inter-governmental agreements (IGA) and ToTs, with the Soviet Union giving way to competitive tendering and the thrust towards import substitution by asking in India. Competitive tendering has widened our choice of technology and facilitated the coalescence of Soviet systems with Western systems. Israel was the first country to break the monopoly of the Soviet Union, and the USA is the latest player to come out of selling mode and into ToT mode. It also did not do a song

and dance when India opted to buy the S400 missile system in 2018 for US $5.4 billion from the Russians, though it would have ordinarily attracted the Countering America's Adversaries Through Sanctions Act (CAATSA). This is *real politick*, where, as John Foster Dulles said, "there are no permanent enemies or friends. There are only permanent interests." In this transactional approach to arms buying and building, economic liberalisation has buried the last wisp of socialism in India.

Henry Kissinger wrote in his book 'World Order,'[6] that there is no longer a balance of power but a balance of equilibrium. India's defence ties with Russia and the USA are emblematic of this equilibrium act. All the same, the Biden-Modi honeymoon in defence cooperation and technology undoes the ghastly spectre of the 7th Fleet trying to twist India's arm in its war engagement with Pakistan in 1971 and the US ban on post-nuclear bomb tests in 1998. One can never crystal gaze into the future and how the wheels of history can turn socialism on its head by disintegrating the USSR, prompting Francis Fukuyama to write in his iconic book 'End of History' that the fall of the Berlin Wall and disintegration of the USSR will now make every country a liberal democracy and opt for the free market model of Adam Smith. Who knew that Narasimha Rao, the Nehru acolyte, would turn Nehru's Fabian socialism on its head and ask his finance minister, Dr. Manmohan Singh, to adopt a new path of economic liberalism? However, given India's bitter experience with the USA in defence and strategic matters in 1971 and 1998, India not putting all its defence requirements in the nest of the Soviet Union, and the USA considered India as a serious technology partner in lieu of Pakistan, its erstwhile military alliance partner in SEATO is a metamorphic moment and paradigm shift in Indo-US defence collaboration. As Victor Hugo said, "No one force on earth can stop a moment whose time has come!" The balance of equilibrium, as Kissinger would rue, has ironically shifted in favour of India.

NOTES

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[5] "SIPRI Yearbook 2022: Armaments, Disarmament and International Security - Summary – World", Stockholm International Peace Research Institute, https://www.sipri.org/sites/default/files/2022-06/yb22_summary_en_v2_0.pdf. Accessed on July 3, 2023

[6] Henry Kissinger, *World Order*, (New York : Penguin Press, 2014)