

INDIA-CHINA MISSILE EQUATION: NO WAR, NO PEACE

JAY BHARAT DESAI

INTRODUCTION

The recent American Defense Intelligence Agency report¹ says that China remains India's enemy number one. It says, "Indian Prime Minister Narendra Modi's defense priorities will probably focus on demonstrating global leadership, countering China, and enhancing New Delhi's military power. India views China as its primary adversary and Pakistan more an ancillary security problem to be managed." The report further states,² "In late October 2024, India and China reached an agreement to move forces away from the two remaining contested positions along the disputed Line of Actual Control in eastern Ladakh. The disengagement did not resolve the longstanding dispute about border demarcation but reduced some tension still lingering from a 2020 incident when troops on both sides were killed in a clash along the Line of Actual Control." So, the border

Dr. **Jay Bharat Desai** is currently a Visiting Researcher at the University of Bonn in Germany.

1. "2025 Worldwide Threat Assessment", Defense Intelligence Agency, 2025; https://armedservices.house.gov/uploadedfiles/2025_dia_statement_for_the_record.pdf. Accessed on May 27, 2025.
2. Ibid.

dispute will remain³ and that is why one has to consider examining how a potential India-China war of the future can pan out.

The Indian armed forces have always worked, and will continue to work, hard to deter a war so that the citizens of India can focus on their economic upliftment. India and China have had an inimical relationship on the Line of Actual Control (LAC) since the 1950s. The current research will examine the threat posed by the People's Liberation Army Rocket Force (PLARF) to the Indian Air Force (IAF) bases, which are spread right from the west of India (Jammu and Kashmir) to northeast India. In any war with China, the PLARF would strike all the IAF bases to neutralise the edge in the war that the Indian Army might attain due to the superiority of the IAF over the PLA Air Force (PLAAF) in terms of better-trained pilots, altitude advantages, higher payload capacity of warplanes, etc. This article will also examine how India can mitigate this threat by developing its own rocket force.

POLITICAL CONTEXT

Just after the Panchsheel Agreement between India and China in 1954, Jawaharlal Nehru got the news that the Chinese had built a road through Aksai Chin. With the Chinese having built this road in the middle of the 1950s (India, due to its severe internal problems, was unable to exercise physical jurisdiction over Aksai Chin), the trust was reduced between Jawaharlal Nehru and Mao Zedong. The Chinese were continuously killing and suppressing the Tibetans in Tibet. As a result, in the late 1950s the Dalai Lama, along with lakhs of his followers, took refuge in India, and Jawaharlal Nehru embraced these Buddhist people. This issue of giving them refuge and the forward policy of Nehru provoked Mao Zedong to wage a war and teach Nehru a lesson. So, before the 1962 War, India had already lost 38,000 sq km of territory in Ladakh to China (that is, Aksai Chin) during 1956. All this got formalised after the 1962 War as the Chinese took another 2,500 sq km of land during this war (October

3. "India-China Rivalry Not Episodic or Contextual but Structural: Experts", *Business Standard*, May 28, 2023, https://www.business-standard.com/politics/the-sino-indian-rivalry-not-spoken-of-in-hushed-tones-say-experts-123052800523_1.html. Accessed on May 1, 2025.

20 to November 20). After this war, Nehru was a broken man and he eventually died after one and a half years.

Today, Xi Jinping's expansionism is like Mao Zedong's, and his government has gone to great lengths to lay claim on Ladakh and Arunachal Pradesh. In 2020, the Chinese military made multi-pronged deep intrusions into Ladakh and a belligerent occupation of 1,000 sq km⁴, as per the most credible Indian newspaper *The Hindu*. Xi Jinping aims to physically reclaim the entire Ladakh and Arunachal Pradesh. What India attained on October 21, 2024, with China (the patrolling agreement announced by the Foreign Secretary, Vikram Misri, in the press briefing) is only about disengagement (troops moving away some distance from each other in order to avoid escalation) and being able to patrol⁵ their respective claimed areas. It might be the case with this disengagement that India recovered all its claimed territory which it lost in 2020 (1,000 sq km) as normal patrolling had resumed by end of 2024.⁶ The Chinese side has not spoken a word on this issue since October 21, only claiming that they have reached a resolution. Now what is that resolution? Perhaps India has just averted a war and gained time to prepare itself well for a war with China.

THREAT FROM THE PLARF

Chinese cruise missiles (ground-launched and air-launched) pose a significant challenge to the infrastructure possessed by the IAF and the Indian Army.⁷ The majority of China's missile bases are located

4. Vijaita Singh, "China Controls 1,000 sq. km of Area in Ladakh", *The Hindu*, September 1, 2020, <https://www.thehindu.com/news/national/china-controls-1000-sq-km-of-area-in-ladakh-say-intelligence-inputs/article32490453.ece>. Accessed on June 5, 2025.

5. Suhasini Haidar, "Reached Agreement with China on LAC Patrolling, Resolution of Friction Points: India", *The Hindu*, October 22, 2024, <https://www.thehindu.com/news/national/foreign-secretary-vikram-misri-press-conference-in-new-delhi-on-october-21-2024/article68778732.ece>. Accessed on June 9, 2025.

6. HT News Desk, "India-China Relations have Progressed: S Jaishankar in Lok Sabha", *Hindustan Times*, December 3, 2024, <https://www.hindustantimes.com/india-news/indiachina-relations-have-progressed-s-jaishankar-in-lok-sabha-101733216118721.html>. Accessed on June 5, 2025.

7. Kartik Bommakanti, "China's Cruise Missile Capabilities: Implications for the Indian Army and Air Force", Research Gate, December 2020, https://www.researchgate.net/publication/346624967_China%27s_Cruise_Missile_Capabilities_Implications_for_the_Indian_Army_and_Air_Force. Accessed on May 2, 2025.

in the eastern provinces of China.⁸ However, the Kunming Base 62, is located near the LAC, with a range of 2,500 km, to the very east of India.⁹ It falls in the Southern Theatre Command of China. On the other hand, the nearest base inside the Western Theatre Command of China, Lanzhou, is 3,000 km away¹⁰ from New Delhi. But this does not mean that the majority of PLARF missiles, which are present in the east of China (to cater for Taiwan), cannot be effectively used against India. A study done by Harvard University in March 2020 says, “To keep one airfield shut for 24 hours, the PLAAF will require 220 ballistic missiles. This will not make any difference to IAF operations in the east or in the west since the IAF has a large number of other operational airfields from which it can operate. If the PLAAF attacks just three airfields, it will require 660 ballistic missiles per day to attack the runway and taxi track alone. China’s stock of the 1,000-1,200 Medium-Range Ballistic Missiles (MRBMs) and Short-Range Ballistic Missiles (SRBMs) will be over in less than two days when attacking just three airfields, with no other major target systems like C2 (Command and Control) centres or air defence units being addressed.”¹¹

Whatever damage takes place to the runway of an IAF air base is expected to be repaired in a short time using fibreglass mats.¹² This has been a priority for the IAF. The cruise missiles of the PLARF like the Hong Niao Series 1, 2 and 3, as well as YJ-18, can cause substantial damage to the IAF base in Tezpur.¹³ However, what is notable is that in the case of YJ-18, there is not enough clarity on whether or not the Chinese can launch these by road-mobile means.¹⁴ The PLARF also has the CJ-10 surface-to-surface missile and the CJ-20, which is

8. Major General Nitin P Gadkari, “Chinese People’s Liberation Army Rocket Force: The Decisive Instrument: Part II”, *Bharat Shakti*, February 9, 2021, <https://bharatshakti.in/chinese-peoples-liberation-army-rocket-force-the-decisive-instrument-2/>. Accessed on May 3, 2025.

9. Ibid.

10. Ibid.

11. Frank O’Donnell and Alex Bollfrass, “The Strategic Postures of China and India: A Visual Guide”, Harvard Kennedy School, March 2020, <https://live-hksbelfer.pantheonsite.io/sites/default/files/2020-03/india-china-postures/China%20India%20Postures.pdf>. Accessed on May 4, 2025.

12. Vijay Mohan, “Fiberglass Mats for Quick Runway Repairs”, *The Tribune*, February 3, 2019, <https://www.tribuneindia.com/news/archive/nation/fiberglass-mats-for-quick-runway-repairs-722957>. Accessed on May 5, 2025.

13. Bommakanti, n. 7.

14. Ibid.

an air-launched cruise missile. The CJ-10 has a range of 2,000 km; once launched from Chengdu, it can reach Tawang in Arunachal Pradesh, which is more than 1,200 km away.¹⁵ The PLARF has many conventional-tipped ballistic missiles too, including the DF-26 and DF-31¹⁶ (both these, among other kinds of missiles, are dual-use that either carry a conventional or nuclear warhead); in fact, the Chinese have been focussing on their inventory of conventional-tipped missiles for the past two¹⁷ decades. Anyway, nuclear-tipped missiles are not meant for tactical/strategic warfighting; they are just political instruments of deterrence that are effectively useful to limit a war (if a conventional war breaks out).

COUNTER-MEASURES

In September 2021, former Chief of Defence Staff (CDS) General Bipin Rawat said that India would develop a rocket force of its own.¹⁸ Indirectly, he was hinting at the fact that the missile asymmetry between India and China is growing, and needs to be bridged. Since 2015, the project of developing the Pralay missiles was started by the Defence Research and Development Organisation (DRDO). This tactical ballistic missile is powered by a solid-fuelled rocket motor. This missile has a quasi-ballistic¹⁹ flight path, and Manoeuvrable Reentry Vehicles (MaRVs) to overcome ballistic missile defence. The Pralay may be mounted with a 350 to 700 kg²⁰ high explosive pre-formed fragmentation conventional warhead. The range of the Pralay is 150-500 km; hence, it is an SRBM. The Pralay has very good accuracy or a Circular Error Probable (CEP) of less than 10 m²¹, so it will be useful for conventional counter-force strikes inside the Western and Eastern Theatre Commands of China. The missile has

15. Ibid.

16. Bates Gill and Adam Ni, "The People's Liberation Army Rocket Force: Reshaping China's Approach to Strategic Deterrence", *Australian Journal of International Affairs*, January 22, 2019, <https://www.tandfonline.com/doi/full/10.1080/10357718.2018.1545831>. Accessed on May 6, 2025.

17. Ibid.

18. Saurav Jha, "India's Coming 'Rocket Force'", *The Diplomat*, November 6, 2021, <https://thediplomat.com/2021/11/indias-coming-rocket-force/>. Accessed on May 8, 2025.

19. "India's Hypersonic Ballistic Missile Pralay Decoded", NEWS 9 Live, January 25, 2025, <https://www.youtube.com/watch?v=Aau4KXDgVEk>. Accessed on May 9, 2025.

20. Ibid.

21. Ibid.

a hypersonic speed of Mach 6.1 during its terminal²² phase of flight as it approaches the target. The Pralay is designed to target radar and communication systems, command and control, fuel depots, and blast pens at air bases. This missile is road mobile too on an Indian Ashok Leyland 12×12 high mobility²³ truck. In December 2022, the Indian Ministry of Defence cleared the proposal to build 120 Pralay ballistic missiles, which are meant to be deployed²⁴ along the borders with Pakistan and China. Another order for 250 Pralay missiles was placed in May 2023.

Another missile, the Shaurya, has a conventional role as a ballistic missile. It flies at a hypersonic speed of Mach 7.5, and depending on the size and weight of the warhead, the range of this missile varies. Theoretically, it has a range of 750 km. After some further testing in the years to come, it is officially expected to be inducted into the Indian armed forces. The newer variant of the Shaurya missile being developed has a higher range of 1,800 km, depending upon the size and weight of the warhead. For India to set up a rocket force, it is a must that it work on the principle of jointness as a result of integration among the army, air force and navy so that as theaterisation progresses, the rocket force evolves while learning in the process as the army will arrange for logistics while Intelligence, Surveillance and Reconnaissance (ISR) inputs will be obtained from the IAF and Indian Navy; this process should go on until and unless the rocket force develops its own capabilities²⁵, which will definitely take some time. Former Defence Research and Development Organisation (DRDO) Chairman and eminent missile scientist V.K. Saraswat has said that a distinct rocket force “leads to economies of scale, the evolution of a suitable doctrine of employment and aggregation necessary for massed fires.”²⁶

22. Ibid.

23. Ibid.

24. Ajit K. Dubey, “India Clears Pralay Tactical Ballistic Missiles for Armed Forces, to be Deployed Along China Border”, *ANI*, December 25, 2022, <https://www.aninews.in/news/national/general-news/india-clears-pralay-tactical-ballistic-missiles-for-armed-forces-to-be-deployed-along-china-border20221225184047/>. Accessed on May 10, 2025.

25. Jha, n. 18.

26. Ibid.

As known,²⁷ in the case of India, all its ballistic missiles are currently in service with the Strategic Forces Command in the domain of nuclear deterrence. India can develop a rocket force quite easily because complete indigenisation has already been attained since the time of the Integrated Guided Missile Development Programme, which was started by Prime Minister Indira Gandhi way back in 1983 under the visionary leadership of Dr APJ Abdul Kalam. For example, initially, the 150 km range Prithvi missile was not meant to carry a nuclear warhead—only conventional high explosives; it is a different issue that later on, it evolved as a nuclear-tipped missile and remained so. India needs nuclear weapons as political instruments of deterrence, but, in actual war, they cannot be used, and that is where the prime importance of conventional-tipped missiles needs to be realised and understood. So, for the Government of India, it is just a matter of time, good planning, and meeting the timelines to raise such a force and make it an operational deterrent should it choose to do so. The past experience of developing and deploying missiles, from the Prithvi to the Agni, has decisively proved that this is a doable task.

In the case of cruise missiles, the IAF needs to add a greater number of Su-30 warplanes equipped with the air-launched cruise BrahMos missile. In 2020, when the first such IAF warplane at Thanjavur Air Base²⁸ was exhibited, the media reported that only 40 such Su-30 warplanes would be built. A lot more of these Su-30s are required. During Operation Sindoor, the BrahMos proved that it is unlikely to be intercepted²⁹ due to its very high speed—three times

27. Jay Bharat Desai, "Missile Deterrence in an India-China Conflict: Lessons from the V2 Rocket to the Dong Feng", *The Print*, October 11, 2024, <https://theprint.in/yourturn/subscriberwrites-missile-deterrence-in-an-india-china-conflict-lessons-from-the-v2-rocket-to-the-dong-feng/2308299/>. Accessed on May 10, 2025.

28. Manjeet Negi, "Indian Air Force Inducts BrahMos-armed Sukhoi-30MKI Fighter Squadron at Tamil Nadu's Thanjavur", *India Today*, January 20, 2020, <https://www.indiatoday.in/india/story/indian-air-force-inducts-brahmos-armed-sukhoi-30mki-fighter-squadron-tamil-nadu-thanjavur-1638454-2020-01-20>. Accessed on May 11, 2025.

29. Ashesh Mallick, "'Can't Be Intercepted': DRDO Official on Why BrahMos was Used During Operation Sindoor", *News18*, May 11, 2025, <https://www.news18.com/india/cant-be-intercepted-drdo-official-on-why-brahmos-was-used-during-operation-sindoor-pakistan-9332210.html>. Accessed on June 9, 2025.

the speed of sound (340 m per second). It is India's best conventional-tipped missile.

MEDIUM RANGE MISSILES

India should not tie its hands behind its back by not developing dual-use ballistic missiles, especially with the latest one being the Agni-P. They must be made conventional-tipped too, especially because the Nirbhay cruise missile, with a range 1,000 km, is taking time to become operationally deployed due to certain technicalities after its 2020 flight test.³⁰ No country in the world has the technology to detect whether or not an incoming ballistic missile is nuclear-tipped or not. This is true for not only ballistic missiles but also any missile. For example, when India fired the BrahMos cruise missile accidentally³¹ towards Pakistan, the Pakistan Army only said that it observed a projectile flying at supersonic speed. So, Indian policy planners must stop worrying about deterrence stability vis-à-vis Pakistan. Pakistan is a strategic nuisance whose ability to wage war is almost next to impossible due to its staggering economic crisis. With respect to China, it can prove to be a silver bullet as the 1,800 km Shaurya missile is also far from becoming an operational deterrent.

No matter what happens in a war between India and Pakistan or between India and China, the use of nuclear weapons seems unlikely. The benefits of not using nuclear weapons outweigh any potential benefit, and that is why this taboo has remained since the end of World War II. India, Pakistan and China are densely populated countries, so any nuclear bomb detonation will kill crores of people. The taboo is linked to the fact that the spread of radiation due to a nuclear bomb detonation will not be confined within the geographical territory of any one country, as the wind will carry it across the man-made borders. This is perhaps the reason why even Russia has not used a nuclear weapon in Ukraine to date, as the wind

30. Jay Bharat Desai, "Chinese Rocket Force Strategies under BMD Shield, Organisation for Research on China and Asia", ORCA, February 24, 2024, <https://orcasia.org/article/620/chinese-rocket-force-strategies-under-bmd-shield>. Accessed on June 9, 2025.

31. Dinakar Peri, "IAF Completes Inquiry into Accidental Missile Firing Incident", *The Hindu*, April 10, 2022, <https://www.thehindu.com/news/national/iaf-completes-inquiry-into-accidental-missile-firing-incident/article65306093.ece>. Accessed on May 12, 2025.

would carry the radiation would from west Ukraine to east Ukraine, and then ultimately across the border with Russia (from its western side). What India requires with respect to China is a conventional-tipped missile having a range³² of 2,000 km. The Agni-P is the best missile to perform this task, as it has a maximum range of 2,000 km. Developing the Agni-P as a conventional-tipped missile will be great because a lot of focus has already been given to the accuracy aspect during its flight test. So, it has the potential to be a good conventional counter-force weapon. With regard to this, Chief of the Army Staff Naravane had said³³ in August 2021,

Even while troops at the Forward Defended Localities (FDLs) are all primed and in a state of high alert, it is the command and control centres, airfields, depots, and strategic communication nodes in depth that take the first-hit from standoff vectors with precision targeting. Swarms of low-flying autonomous drones breach or overwhelm the air defence cover in the second wave, targeting artillery guns, missile bases, and tank concentrations. Rocket and missile attacks from standoff distances join the battle to degrade conventional capabilities and soften the targets. Operations will unfold in 'reverse linearity,' with the FDLs being the last to be addressed, if at all.

CONCLUSION

It is important that India gives the necessary attention to developing a rocket force which will help it win a war (retain territory at all cost, while the enemy tries to capture it through salvos of missiles and its army trying to dislodge the Indian Army in the high mountains or Himalayas)with respect to China, such that it is quick, effective, and decisive, in order to ensure that when negotiations take place after the war is over, the Indian side can negotiate from a position of strength to ensure that the territorial integrity of India is not adversely impacted. To attain such a goal, India needs the Agni-P missiles deployed as conventional-tipped missiles in big numbers; the Shaurya and Pralay ballistic missiles, as well as the Nirbhay and

32. Jha, n. 18.

33. Ibid.

BrahMos cruise missiles are also required in big numbers in the form of conventional-tipped missiles. This will at least reduce the missile asymmetry between India and China, if not eliminate it.

India has always tried to ensure the survival of its defence forces during war-time by ensuring sufficient force dispersion. That is, across all three vectors, the army, air force and navy, the force is dispersed in multiple locations, making it difficult for the Chinese strategic plans, if and when they attempt to eliminate India's strategic reach towards Chinese targets. At the start of a war with India, China will undoubtedly use the PLARF because it was formed in 2015; since then, President Xi Jinping has given it enough attention, as was observed in September 2016 when he said that the PLARF helped contain war threats. So, India must think along similar lines to deter a war with China. A war between India and China cannot be ruled out in the near future, as the dream of the rejuvenation of the Chinese nation is the top priority in Xi Jinping's mind. The way Xi created a war-like situation on the LAC in April 2020 shows explicitly that the intentions of the enemy can change any time if the prerequisite deterrence is not in place.