

Unmanned, Unchecked:

Tech-Driven Instability in South Asia



Adil Sultan

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House 4, Street 36, F-6/1, Islamabad

Authored by

Dr. Adil Sultan

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Introduction

South Asia's strategic balance is shifting in ways that are hard to predict, and even harder to control. For decades, India and Pakistan have operated within a familiar framework of deterrence, shaped by conventional and nuclear capabilities. As warfare evolves, however, new technologies are rewriting the rules of engagement. Conflict can now be waged remotely, deniability is easier, and escalation risks are difficult to calculate. Without clear norms to govern these emerging tools, the space between crisis and catastrophe is narrowing. The challenge is no longer just about military superiority, it is about managing instability in an era where the development of evolving warfare outpaces the mechanisms to contain it. This paper examines the implications of emerging technologies on South Asia's security landscape and explores potential confidence-building measures to prevent miscalculation in an increasingly complex battlefield.

The emergence of new technologies has revolutionised the face of conflict in the 21st century, but the challenges they pose for the future of warfare are equally unprecedented. Frontier technologies and weapon systems that use Artificial Intelligence (AI), quantum, cyber, hypersonic tech, anti-satellite tools, drones, and several others that are being integrated into military systems by different countries with a speed and scale that could totally alter the equation between actors in future conflicts. Conflicts now could be more complex, cost-effective, and opaque, thus incentivising states to engage in limited conflict without risk of a major war. Given that some of these technologies, such as drones, are commercially available and have dual-use applications, the possibility of non-state entities deploying them against state adversaries will make asymmetric wars more complex and difficult to regulate.

Drones are already in use on different battlefields. They were used in the 2020 [Nagorno-Karabakh war](#), by the [Houthis](#) against Israel in 2024, and by non-state actors in India's [Manipur](#) state in February this year—examples that may encourage other state and non-state entities to adopt similar tactics in the future. The use of Elon Musk's private satellite network in the Ukraine-Russia conflict has also signalled a new possibility, the 'commercialisation of war', where private entities may develop 'drone fleets' for potential outsourcing to various conflict zones for monetary incentives.

In South Asia, India and Pakistan are also building and expanding their drone inventories that are likely to be used in a future conflict between the two for limited military and political objectives. This paper therefore aims to analyse the impact of emerging technologies, especially the potential use of drones on South Asian strategic stability. It will also look at how the two states can possibly

manage risks that are associated with starting a limited drone war, which could lead to misinterpretation and escalation to an all-out war between the two nuclear adversaries.

India-Pakistan: The Uneasy Stalemate

India and Pakistan have had a difficult past that has seen several wars, conflicts, and military crises with no tangible outcome. The most recent crisis that witnessed the use of air power by both sides ended up in a significant humiliation for the Indian Air Force as it failed to achieve the desired objective. The loss of at least [two aircraft](#) and a pilot in the custody of Pakistani forces in February 2019 was a major blow to India's prestige and aspirations to compete with China as a potential rival.

Learning a few lessons from the 2019 aerial skirmish, India moved swiftly to modernize its air force and is also acquiring different categories of drones that could provide its leadership with an option to engage in a limited conflict with Pakistan without resorting to the use of manned aircraft. In such an eventuality, a future aerial surgical strike by India that deploys armed drones would not just reduce the political cost but also remain non-attributable in case of failure. To meet this new threat, Pakistan is also building up its fleet of drones for a proportional response, besides having the option of manned retaliatory strikes as part of its '[quid-pro-quo plus](#)' (QPQP) doctrine.

Emerging Technologies: Global and Regional Trends

The most significant AI advancements with military applications are being developed for use across all domains of warfare, including space, land, air, and sea. The use of AI in developing Lethal Autonomous Weapons (LAWS) where unmanned aerial platforms and other weapon systems would have the capability to launch weapons on their own has raised serious questions about the humanitarian aspects of conflict, not to mention unintended consequences. This is particularly worrying when it comes to the potential use of AI in nuclear command and control. In scenarios where computers and machines that learn, not humans, would trigger the final decisions, conflicts could potentially spiral to mutually assured destruction.

All nuclear weapon states, including India and Pakistan, need to consider the risks inherent in incorporating AI in their nuclear command and control systems. This means that engagement over new regimes must be aligned to the new technologies in current and future use. This must include Confidence-Building Measures (CBMs) that parse the possibility of algorithms taking charge of the nuclear decision-making processes. Most of the new technologies in use have not been

questioned or tested for their impacts on humanitarian outcomes, nor has international law kept up with the novel legal challenges arising from such new tools. All the more reason that nuclear adversaries with crisis-prone borders and historic rivalries bring strategic attention to the number of new risks arising to stability from weaponizing new tech.

Quantum technologies have not attracted much attention, despite their potential to revolutionize air operations, especially in navigation, communication and detection systems. With the use of quantum mechanics, navigation would not be reliant on GPS signals anymore, and would become more secure, accurate and lethal. Quantum tech could also complicate or sabotage an adversary's interception and communication capabilities and potentially dominate spectrum warfare. With advanced quantum sensors capable of detecting submerged platforms underwater, the oceans would become virtually transparent, undermining the foundation of assured second-strike capability.

States like India that are spending billions of dollars to build second-strike capability may have to rethink their future investments, as the same defence dollars spent on new technologies could offer more dividends in the long run. Similarly, Pakistan, which faces financial constraints and limited access to sensitive technologies, must consider this before pursuing the costly and arduous path of acquiring fully operational nuclear powered and nuclear capable submarines with a Continuous At-Sea Deterrence (CSD) posture.

Space has emerged as another domain of contestation due to its growing military and commercial uses. Many countries, including India, are contemplating the establishment of a separate space command or transforming their air forces into 'aerospace power.' India has also demonstrated its potential to destroy satellites in space by conducting an Anti-Satellite (ASAT) weapons test in [March 2019](#). This could force its adversaries to take countermeasures, including the possibility of developing a matching capability that could reduce the incentive for India to target an adversary's space-based assets.

At the same time, a surge in the commercial uses of space that could exceed investments of [\\$1.8 trillion by 2035](#), is one of the key factors that is encouraging state and non-state entities to enhance their space operations by launching more satellites. This is likely to saturate low earth orbits where most of the communication and surveillance satellites are positioned, thus making it difficult for states like Pakistan to find slots for its indigenous satellites.

Despite India starting its space program one year after Pakistan, it has made significant strides in the space domain. In fact, its success rate, which is spurred by low costs, has encouraged several countries and private entities to launch their satellites using the Indian Satellite Launch Vehicles

(SLVs). India is actively ramping up its partnership with the US in multiple space related activities, which include the training of Indian astronauts at the NASA Space Centre as part of their collaboration on an International Space Station. Both sides are also forging a new partnership between the US Space Force and Indian startups, which includes space situational awareness. Unless there are tangible measures taken to put the national space program on track, and to achieve the commercial as well as military dividends of space technology, these developments could have clear implications for Pakistan's national security.

Cyber warfare has emerged as a preferred means for state as well as non-state entities to achieve their limited objectives. Due to its inherent characteristics of ambiguity and difficulty in attribution, state actors have increasingly been resorting to cyber warfare against adversaries without fear of retribution. Israel's cyber-attack on [paggers](#) being used by Hezbollah in 2024 is one such example where a massive attack was launched without discriminating between civilians or militants to inflict a psychological blow on Israel's adversaries. To avoid legal repercussions under International Humanitarian Law (IHL) the Israeli state is unlikely to take the responsibility. This has set a new precedent that may be followed by other states like India where Kashmiri militants continue their fight for a legitimate right of self-determination, who could then potentially be targeted by India using similar methods or technologies.

The Future of Drone Warfare in South Asia

Over the last few years, drone warfare has gained attention because of its impact in some of the most recent conflicts where unmanned aerial vehicles, also called unmanned aerial systems (UAS) played a pivotal role in achieving the desired military objectives at a relatively low cost. The US effectively used drones in the Gulf War and later in Afghanistan for surveillance and targeting of militants.

The availability of commercial drones for use by non-state actors to bomb targets sets a dangerous precedent. As of now, no effective counterstrategy exists. Even if states develop protective shields, these systems may be costly and still unable to intercept all incoming drones. The affordability and cost-effectiveness of drones may encourage state entities to use their drone fleet more often for achieving limited political objectives or to respond to the threat of non-state actors. In the peculiar South Asian environment, such a dynamic could be highly destabilizing in the broader context of mutual distrust and public pressures on the respective leadership in both the countries.

Among the multiple risks in the strategic theatre of potential crises between India-Pakistan, a new one could be triggered by a militant group using drones in Indian-occupied Kashmir. In response, if India opts to retaliate across the LoC or the international border, Pakistan would be forced to respond with a strike of its own or escalate further by launching its air force. Such an encounter could eventually lead to uncontrolled escalation and a full-fledged war.

Of course, the accessibility and affordability of drones does not mean that they would replace traditional air power, which will remain a critical component of all military platforms. The precision, and ‘shock and awe’ impact that can be achieved by traditional military tools remains the hallmark of manned aircraft. Drones can best be used as supportive tools for carrying out reconnaissance, surveillance or for limited tactical operations against relatively smaller targets or individuals.

Currently, India is operating a fleet of indigenously developed drones as well as [Israeli supplied](#) drones. It is also in the process of [purchasing 31 MQ-9B](#) drones from the US at a whopping cost of \$3.9 billion. This would provide India the option of using a whole suite of drones for surveillance, reconnaissance, and possibly limited aerial surgical strikes inside Pakistani territory. Out of the 31 MQ-9B drones that India is acquiring, eight will go to the Indian Air Force and a similar number to the Indian Army, while the remaining number would be allocated to the Indian Navy to protect its Sea Lanes of Communications (SLOCs). Due to their long endurance-time of almost 35 hours, it would require significant effort by Pakistan to deploy assets to counter this nature of threat. In response to this new strategic challenge on the horizon from India, Pakistan is also expanding its drone fleet of indigenously developed drones with Chinese assistance, while also tapping into the Turkish drone brand [Bayraktar](#), which has already demonstrated its use in various conflicts.

As new technologies and concepts emerge, there is a strong likelihood that drones and robots may eventually become an integral part of all future air operations. The US, among others, is working on the concept of [Collaborative Combat Aircrafts](#) (CCAs), which would accompany manned aircraft while performing most tasks assigned to it. Also known as Loyal Wingmen, the CCAs would provide ‘mass’ in the battlefield and would be able to target an adversary’s well defended strategic assets with a high degree of precision, without risking the costly attrition of manned aircraft. Due to their relative low cost, CCAs are easier on the budget than 4th or 5th generation manned fighter aircraft. This is why they are now within reach of several countries that have access to advanced AI capabilities, including India, which has expanded its strategic partnership with the US over the past few years.

In 2023, India and the US launched the [“Initiative for Creative and Emerging Technologies”](#) which would significantly boost India’s technological capacity. More recently, US-India have agreed on expert exchanges on emerging domains, including AI, while also accelerating the joint adoption of cutting-edge commercial technologies for military solutions, and the capability-enhancement of both defence ecosystems. India and the US have also agreed to expand their defence industrial partnerships, including the launch of an AI Multi-Domain Situational Awareness product to support joint all domain command and control systems. These developments would provide India with a set of significant advantages over its adversaries, especially Pakistan.

The Future of Strategic Stability in South Asia

Strategic stability amongst nuclear powers can be defined as an absence of incentive by either party to use their military capabilities against each other. In an era of emerging technologies where the use of AI, cyber or drones could become affordable and set a new norm for adversaries to launch disruptive operations against each other, the traditional concept of strategic stability may eventually become obsolete or remain in flux.

While drones provide flexibility and affordability, they also heighten the risk of unintended incidents that could lead to a serious military crisis in a South Asia where both India and Pakistan have a long history of deep-seated mistrust. It is therefore important that both sides negotiate norms for operating these new systems close to contested boundaries and along the international border to reduce the possibility of miscalculation and an unintended crisis.

Potential Measures to Avoid Unintended Crisis

Despite a chronology of crises, India and Pakistan are reluctant to engage in formal talks and resume their stalled dialogue process since 2012 when the last round of their ‘Composite Dialogue’ process discussed conventional and nuclear CBMs. Although India doesn’t want to engage with Pakistan in a bilateral process that excludes China mainly for political reasons, at the same time it may be hurting its own interests by such protracted disengagement in the face of new potential triggers for the crisis. More responsible options would entail engagement with each other to develop a common understanding on drone employment along their borders. Some of the proposals that could be considered for discussion between the two sides are listed below.

- a. Establish at least a 2 KM ‘no-fly zone’ for drones on both sides of the LoC and the international border

- b. Agree not to target each other's drones across the LoC and international border
- c. Agree to notify each other in case a drone crashes across the LoC or international border
- d. Avoid using autonomous drones carrying weapons along the LoC and international border
- e. Share specifications and types of drones deployed against each other for military purposes
- f. Agree not to use non-military drones against each other for surveillance and reconnaissance purposes
- g. Develop a common strategy to share information and interdict drones being used by smugglers for illicit purposes across the international border

Conclusion

Is a new kind of Armageddon inevitable? Not if India and Pakistan understand the implications this would have on deterrence regimes that have held their ground so spectacularly over the last few decades. But the ground is inherently unstable. Both countries have a long history of mutual distrust and have fought several wars to resolve their outstanding disputes. Post nuclearization, while the possibility of a major war has diminished, there has been a worrying increase in the frequency of military crises, which could be attributed to the 'stability-instability' paradox. Without new rules of the game for unmanned aircraft and other tech-enhanced weaponry there is a dangerous likelihood not just of accidents but a higher frequency of engagement. One of the key risks of such high-tech, low-cost weaponry is of course their availability to non-state actors who could acquire and use the same to their advantage, increasing the scale of inadvertent threats, with the ultimate risk of drawing India and Pakistan into conflict. It is therefore necessary for both sides to understand the trajectory of risks that new technologies could create if integrated into strategic conflict armouries, not only to avoid unintended conflict but also to ensure that such a conflict doesn't escalate into a major war between the two nuclear neighbours.



Email: Info@jinnah-institute.org
www.jinnah-institute.org