Editorial

The *Journal of Defence Studies* is now in its twelfth year of publication. Beginning as an annual issue in 2007, it was later expanded to a quarterly as it filled an obvious gap in defence and military studies in India. The past 12 years have seen us publish articles on a variety of subjects and also expand the scope of the journal to cover the strategic and security studies domains, as these are not entirely divorced from defence studies. Our aim has been to encourage and facilitate deeper analysis and discussion on defence and military issues and, as much as possible, present an Indian perspective on the same. It is only pertinent that deeper engagement and research on defence and military studies, and strategic and security studies take place in India and we hope, in the coming years, to bring that to both a specialist and non-specialist but informed audience.

This issue aptly features an article by Pradeep Kumar Gautam, titled (very) appropriately, 'A Longue Durée Perspective on Military Science in India'. It contends that military science has been one of the most neglected subjects in Indian history, both in practice and in scholarship. Gautam opines that the more popular scholarly focus tends to be mostly on subjects dealing with grand strategy and, with it, abstract armchair theorising. While grand strategy is necessary at the political-military level, it is not sufficient by itself as victory or defeat also depends on the capacity of the armed forces to achieve the desired results during the conduct of war. In an interesting and timely perspective on the subject, the article takes military science as pertaining only to matters military, excluding grand strategy, diplomacy and the sub-discipline of political science, international relations (IR). The article takes a long view or longue durée and attempts to unpack and deliberate on military science in India. It suggests that like natural, physical or social sciences, military science too needs to be accorded its proper place in the academic, service and policy discourse.

Technology is a game-changer, and more often than not this is the case with respect to technologies that have a defence application. In 'Additive

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Manufacturing (AM) in Aerospace and Defence Sector: Strategy of India', Prakash Panneerselvam discusses how this process, popularly known as 3-D printing, is revolutionising the global manufacturing landscape. The proliferation of AM technology has had a huge impact on the design and production capability of the manufacturing industry. At the same time, the technology to mimic and print real parts has huge implications for a country's defence capability and security. In order to understand the growing importance of manufacturing technology in the digital age, the article focuses on the fundamental aspects of AM technology and how it is changing the aerospace and defence sector. The author also makes some pertinent observations on how India should not lose out on developing its capabilities vis-à-vis AM, as many other countries have already made considerable investments in research and development on this technology.

While technology has a largely positive side to it, it also carries within it a great potential for misuse. One just has to recall a number of films and books of the thriller genre that, while quite obviously in the fictional realm, have shown how technology in the wrong hands can create panic and events with catastrophic consequences. In 'Drones: An Emerging Terror Tool', Atul Pant discusses how from the days of their inception, remotely piloted aero models (known popularly as drones) have been feared as a means of spreading terror. More recently, the use of drones by terrorist outfits like the Islamic State of Iraq and Syria (ISIS), also known as the Islamic State (IS), has seen an increase and this has brought those fears to the fore. Experts fear that drones have given terrorists a near-perfect solution for spreading terror and a major terror act may be around the corner as legal and illegal drone activities are on the rise. Thus, it is quite possible that a future 9/11 might not involve hijacked airliners but remotely piloted drones. Pant opines how many solutions have been put forth but none are foolproof, and that governments are looking for more reliable and acceptable solutions by seeking answers in technology again. The article reflects on the extent of the problem and highlights the nuances of looking at such technology and its misuse. It examines the current solutions available to counter the use of drones for terror activities and suggests some new and possible counters to the same.

These are interesting times across the world, which is seeing the rise of populism, nationalism and even authoritarianism, and an increasingly fluid geopolitical situation in many parts of Asia and the Indo-Pacific. Closer home, we find that the two Asian economic and demographic giants—China and India—are aiming to not just deal with geopolitical uncertainties but also use the opportunity to shape the regional order to their advantage. In a detailed and rich review essay 'India's Pathways for Regional Prominence in Asia-Pacific: Prospects and Challenges', Abhay Kumar Singh takes the opportunity of setting the context of Sino-Indian relations, Asian geopolitics and the strategic interactions among India, China and the United States in perspective. In doing so, he uses two recently published works that share a common thread by virtue of their focus on and examination of India's Look East Policy—*East of Asia, South of China: Sino-Indian Encounters in Southeast Asia*, by Amitav Acharya, and *India Turns East: International Engagement and US–China Rivalry* by Frédéric Grare.

An area of constant friction in India-China relations is the land boundary issue. In 2017, a military standoff ensued at the Doklam Plateau when, on 8 June 2017, Chinese People's Liberation Army (PLA) troops crossed over into Bhutanese territory with road construction machinery, with the aim of building a motorable road connecting Chumbi Valley and the Doklam Plateau. In response, the Indian Army stationed at the nearby Sikkim garrison quickly moved inside Bhutanese territory and prevented the PLA from constructing the road. The standoff continued till 28 August when both countries agreed to pull back their troops; the media hailed it as a diplomatic victory. However, since then, there have been news reports of increased PLA troop strength in the area. Therefore, the military situation in Doklam has not normalised and unease continues to persist in the region. Drawing from his experience as the Commandant of the Indian Military Training Team in Bhutan, A.K. Bardalai writes a perspective for this issue titled, 'Doklam and the India-China Boundary'. He discusses and links together a number of key issues pertinent to Doklam: how it relates to the regional power balance, the timing of the incident, and also how to interpret it from the Indian perspective. Bardalai stresses on India-Bhutan relationship as the key to India's ability to deal with an aggressive China.

The issue also includes four detailed and interesting book reviews on subjects ranging from history to cyberspace. Vishal Kumar Verma reviews *Faith, Unity, Discipline: The ISI of Pakistan*; Kishore Kumar Khera reviews *High Command: British Military Leadership in the Iraq and Afghanistan Wars*; Munish Sharma reviews *Inside the Enemy's Computer: Identifying Cyber-Attackers*; and Y.M. Bammi reviews *Balochistan, the*

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British and the Great Game: The Struggle for the Bolan Pass, Gateway to India.

As always, in the first issue of each volume, we acknowledge all our referees of the past year, who took out time from their busy schedules to review papers, give feedback and help improve the content of the journal.