

EDITOR'S NOTE

As we shift gear and move into the third quarter of 2018, it is time to reflect on how the 'earth-shattering' events of the last quarter actually panned out.

The 'trade war' between the US and China has intensified into more than just a slug fest, with the volume of tariffs being imposed on each other's imports reaching incomprehensible levels with each passing day. The economies of both nations are bracing for a staring contest to see which blinks first. With China's mounting debt, and the fact that as much as 44 percent of its nominal Gross Domestic Product (GDP) in December 2017 was on account of infrastructure investments – as compared with 20-25 percent for the US – it would not be a surprise if China is the first to blink. In a surprise move, in the third week of September, the US imposed sanctions on the Chinese for the purchase of the Su-35 and the S-400 missile system from Rosoboronexport – Russia's main arms exporter – in terms of the US' Countering American Adversaries Through Sanctions Act (CAATSA) that was signed into law by President Trump on July 24, 2017, and is meant to 'punish' the Russian president for interfering in the US elections, and for Russia's involvement in Ukraine and Syria. Although China has protested strongly against this unilateral action by the US, and warned the US to revoke the sanctions or be prepared to "bear the consequences", the chances of the US backing away from enforcing the CAATSA provisions are slim.

The economic cold war has just begun.

Closer home, the 'two plus two' dialogue has resulted in the signing of the Communications Compatibility and Security Agreement (COMCASA) that is meant to "facilitate access to advanced defense systems and (that will) enable India to optimally utilize its existing U.S.-origin platforms". More

than how the COMCASA would play out in the days ahead, the vexing issue is that of the CAATSA. How exactly the CAATSA provisions would apply to India's proposed purchase of the Russian S-400 SAM system would become clear only in the coming days.

The historic meeting between President Trump and his North Korean counterpart, Kim Jong-un – that held the promise for a complete denuclearisation of the Korean peninsula – has not seen any forward movement. Although North Korea has announced measures that include halting further nuclear and missile tests, the ground reality appears to be completely different, based on recent UN reports. The US has, therefore, continued with its tough sanctions against North Korea in an effort to rein in its nuclear weapons programme.

This Monsoon edition begins with an article on 'National Security' by **Shri S Jaishankar**, the former foreign secretary, that was delivered by him during the Jasjit Singh Memorial Lecture on July 18, 2018. Delivered in his inimitable style, the lecture encapsulated the significant contributions of the founder Director General of the Centre for Air Power Studies (CAPS) to national security. He emphasised very lucidly the relevance of "integration and jointness" – as propounded by Air Cmde Jasjit Singh – but added that in contemporary times, their relevance goes well beyond their applicability merely to the armed forces. Mr Jaishankar explained that integration, jointness, coordination and sharing are connected challenges of all large organisations, and, historically, all those who have acted in a more integrated manner have prevailed. He lamented that even 71 years after independence, security challenges continue to be faced by the nation, and suggested the 'securitising' of the foreign policy as an imperative, and also suggested a change in the culture of working in silos in Lutyens' Delhi.

The incessant chatter on the need for Integrated Theatre Commands (ITCs) had reached a crescendo last year. The views of CAPS on the inadvisability of ITCs in the Indian context appeared in these pages as early as the *Journal's* Summer issue of 2017 wherein "joint planning for operations" was given primacy. The common refrain and clamour for the creation of the chief of defence staff was also argued against. The second

article in this Monsoon issue is titled “**Air Power in Joint Operations: Primacy of Joint Training**” and traces the preeminent role that air power has played in joint operations in the various wars India has fought since independence. The gaps in achieving jointmanship have been highlighted by the author. The article also traces the combat training being carried out by the Indian Air Force (IAF), the Pakistan Air Force (PAF), and the People's Liberation Army Air Force (PLAAF). The threats likely to be faced by the nation in the future, and the need for the armed forces to train jointly to tackle these threats, becomes an inescapable issue. While considering any change to the higher defence organisation, the importance of joint planning and joint training has been amplified. Finally, the article deals with the subject of ITCs in the Indian context.

The claimed range of 450 km in respect of Pakistan's submarine launched cruise missile, the Babur-3, has been carefully assessed by a team of scholars from the National Institute of Advanced Studies (NIAS), Bengaluru, led by **Prof Rajaram Nagappa**. The article examines whether the fielding of the Babur-3 would have any impact on Pakistan's progress towards achieving a credible second strike capability and argues against the Babur-3 changing the strategic balance in the South Asian region.

Swarm technology holds great promise for military applications in the future, not the least because of the purported drone swarm attack on a Russian air base on the night of January 5-6, 2018, in Syria. Over the last two years or so, there has been an effort by the Chinese to match the US in 'swarm' technology. The emphasis on Artificial Intelligence (AI) as well as advanced Unmanned Aerial Vehicle (UAV) industries of both nations has been the catalyst for this development. Swarm UAV technology – with its possible military applications – has been considered as 'disruptive' and the challenge in the future would be to develop 'anti-swarm' defences. **Gp Capt Narang** explores China's leap in cutting edge technology, especially with respect to UAV swarms in the next article. The ability of swarms to fly in Global Positioning System (GPS)-denied areas appears to be the focus of research by the US; something that the Chinese are still trying to 'catch-up' with.

The continuing important role that Counter-Surface Force Operations (CSFOs) have played in conflicts since the end of World War II is discussed by **Gp Capt Bains** in the next article. While the lethality of Surface-to-Air Guided Weapons (SAGW) was proved in the 1973 Yom Kippur War, it also revealed the necessity of Suppression of Enemy Air Defences (SEAD) and Destruction of Enemy Air Defences (DEAD) campaigns towards ensuring survivability of strike aircraft in the Tactical Battle Area (TBA) prior to commencement of CSFO missions. The debilitating impact of air power on the enemy's surface forces as well as on his command and control structures was best exemplified during Operation Desert Storm (Gulf War, 1991), although the vulnerability of strike aircraft/helicopters to the Man-Portable Air Defense Systems (MANPADS) remained. Forward Air Controllers (FACs) were still relevant in a fast moving battle if fratricide was to be avoided. The requirement of joint training was an important takeaway from this war. With the growing sophistication of Air Defence (AD) weapons, the necessity of the SEAD/DEAD campaign prior to undertaking CSFO missions was once again highlighted during the Kosovo War. The near absence of joint planning led to cases of fratricide during Op Enduring Freedom – the war on terror unleashed by the US in Afghanistan post 9/11. This was despite the use of space-based assets – that made the battlefield transparent – and Special Operations Forces (SOFs) personnel designating targets for attack by aircraft armed with Laser-Guided Bombs (LGBs).

The world stood with bated breath as the future of the Korean peninsula was at stake. The June 12 meeting between President Trump and his North Korean counterpart, Kim Jong-un was nothing short of a miracle as we had covered in the previous issue of this *Journal*. Were the promises made by both leaders merely optics or were they serious on delivering on the assurances given by both on June 12? **Hina Pandey** revisits the past to find pointers for the future of US-North Korea relations.

While all the brouhaha was on regarding the reclamation of islands by China in the South China Sea, China was simultaneously upgrading its ice breaking research vessel, the *Xue Long* (among the world's biggest). Obviously, as a participant to the Spitzbergen Treaty since 1925, China did

not want to be left out of the race for a share of the oil rich Arctic region – specifically the Svalbard region – which was soon to be ‘up for grabs’, largely due to the adverse impact on the Polar ice cap owing to global warming. What are the geostrategic implications of the redefinition of the Arctic land mass once the Polar ice cap starts melting makes for some shrewd *realpolitik* in the future? How should India play its cards to ensure that it gets its due share in the region, particularly in view of having signed the Svalbard Treaty as early as 1920? These are some of the issues that have been deftly examined by **Stuti Banerjee** and **Pooja Bhatt** in the penultimate article.

The rise of sea levels due to climate change brought about on account of global warming is the biggest environmental challenge confronting the world, especially coastal nations. For India, with a coastline of more than 7,500 km and with island territories both in the east as well as the west, the dangers are real. **Cyriac S Pampackal** discusses the adverse effect of climate change that could lead to a rise in sea levels, and examines its impact on the territorial security of India. Without sounding alarmist, he clinically examines the military infrastructure that is at risk due to possible sea level rise. He also makes a strong pitch for the creation of alternative space launch facilities – an assessment that is ‘spot-on’.

Happy reading

