

➤ EDITOR'S NOTE

While the world continues to see wars in Ukraine and between Israel and Hamas, India is busy building its global status through friendships and partnerships. During the three-day state visit of the Sultan of Oman, Haitham bin Tarik, to New Delhi from December 16, a Joint Vision Document was adopted. Titled "A Partnership for the Future", the document aims to leverage the remarkable synergy between Oman and India.

While the USA and India continue to affirm the need for a strategic partnership, there were frictions related to the US' and Canada's soft approach to some elements inimical to India. But Prime Minister Modi has clearly stated that these small pinpricks will not affect the general roadmap of strategic congruence.

Bhutan, which has strong traditional ties with India, has of late been looking for financial support from China for certain infrastructure projects and has forced itself to do some tightrope walking between the two giant neighbours that sandwich it.

China's economic growth is slowing down. There are issues of China's ageing population. There are also road blocks in the Belt and Road Initiative (BRI) due to debt servicing problems. Notwithstanding, China is actively supporting further enlargement of the Brazil, Russia, India, China and South Africa (BRICS) and Shanghai Cooperation Organisation (SCO) groupings to pack them with friendly nations and to increase global influence. China is also making attempts, along with Russia, to reduce global dependence on the dollar.

Meanwhile, China continues to pull ahead in its capabilities in space, nuclear warhead expansion, building of aircraft and aircraft carriers, hypersonic weapons, and other military hardware. India must concentrate on

the use of game-changing technology, especially electronic warfare, quantum, cyber, information technology, and use Artificial Intelligence (AI), robotics and machine learning to reduce the power asymmetry with China.

Pakistan remains in economic and political turmoil as it prepares for the elections in early 2024. Former Prime Minister Nawaz Sharif has returned to Pakistan and is actively pushing to win the next elections. Imran Khan has announced that he will contest the elections from prison, if he is still there. Pakistan is also working towards deportation of nearly a million Afghan refugees. While the majority of the over four million Afghans living in Pakistan have been in the country since the Soviet occupation of Afghanistan, nearly a million Afghans are believed to have arrived after the Taliban take-over in 2021. Identification and deportation would be a complex process. Many have gone underground in anticipation. Meanwhile, there is a significant increase in terrorist acts and killing of wanted men by “unknown gunmen”.

A day after India’s Supreme Court upheld the legality of the abrogation of Article 370 of the Indian Constitution, Pakistan’s caretaker Foreign Minister Jalil Abbas Jilani called it a “travesty of justice”. Pakistan intends to take up the issue with the United Nations, the Organisation of Islamic Cooperation and the European Parliament. But the internal political strife in Pakistan has already buried the issue. Meanwhile, as Pakistan continues to bank on China for military equipment, many influential strategic analysts are suggesting not putting all its eggs in one basket, and bringing a balance.

During Pakistan Army Chief Munir’s recent visit to the USA in mid-December, he met Defence Secretary Lloyd Austin, Deputy Secretary of State Stephen Biegun, UN Secretary-General António Guterres, and visited the Central Command (CENTCOM) Headquarters in Florida. The US continues to have significant influence over Pakistan. Both Pakistani generals and politicians, and their families have significant investments in the West, and nearly nil in China.

This issue of *Air Power Journal* covers many contemporary security issues. For long, India’s Space Vision had a science and technology angle. The same is now being transformed with a serious strategic element. The Indian Air

Force (IAF) is undergoing a significant transformation, seeking to evolve into the Indian Air and Space Force (IASF) and enhance its capabilities in the aerospace realm. Chief of the Air Staff, Air Chief Marshal VR Chaudhari has emphasised the imperative for India to develop defensive and offensive capabilities in space. The importance of the effective utilisation of the “air and space continuum” has been emphasised and a detailed “Space Vision 2047” has been submitted by the IAF to the government for approval. It is time to use the full strategic potential of space, beyond just intelligence, surveillance, reconnaissance, communication, and navigation capabilities. The IAF envisions nearly 100 military satellites in the next seven to eight years, he said. There is also significant action in near space using advanced winged bodies.

As aviation technology has advanced, the ability to defend a country's air space has become increasingly important. Increased number of stealth fighter/bomber aircraft, long range sensors and weapons, proliferation of unmanned systems, including small sized drones, increasing number of cruise and ballistic missiles, stand-off precision guided munitions, hypersonic threat, directed energy weapons, and better electronic warfare and cyber capabilities, have all changed the environment for the air defence of a nation. There is, thus, a need to look ahead.

The modern battle zone is flush with technologies. Wars are no longer fought and won based only on physical strength, and on physical terrain. There is an intricate network of technology, intelligence, and communication systems. There is an exponential growth of data. All this can be addressed effectively only by knowledge management. A cross-functional approach is required for disseminating critical information at the right time, at the right place. Big data and AI will support the exercise. Network-centric warfare enhances both agility and responsiveness. Cyber security will be a critical element for own protection. From data-driven decision-making and intelligence fusion, knowledge management will be important.

The Indian armed forces today face a significant threat of cyber attacks, particularly from hostile neighbours like China and Pakistan. Cyber attacks

could potentially damage or cripple critical weapons platforms, major communications and ISR (Intelligence, Surveillance, and Reconnaissance) systems, and vital infrastructure, undermining the military's preparedness and war-fighting capabilities. The approach has to be to develop technologies, take procedural and policy calls to identify and reduce vulnerabilities and build capabilities. The implications are highest in the very fast moving air battle.

In this journal, we also analyse India's nuclear liability law, the Civil Liability for Nuclear Damages Act, 2010. What are the provisions and ambiguities in India's nuclear liability law: the supplier's liability in the event of a nuclear accident? What makes foreign companies wary of signing deals with India?

Radicalism continues to be a reality. Terror continues to be funded. Digital connectivity has speeded up both enrolment and operations. Cheaper kamikaze drones and other weapons have added to potential threats. Small island nations are highly vulnerable. Counter-terrorism is an important area of cooperation for the Quadrilateral Security Dialogue (QUAD). America's war-against-terror and the failure of its approach in Afghanistan has put questions on the framework and way ahead. It has to go beyond rhetorical and generic statements. Institutionalising intelligence sharing and putting in place a response mechanism are important. India has been most vocal on counter-terrorism in all international forums such as the United Nations, G20, BRICS, SCO, and others, and has ensured its inclusion in the jointly agreed statements.

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Jai Hind!

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