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Defence News

Defence Strategic : National/International



Press Information Bureau Government of India

Ministry of Defence

Thu, 10 Nov 2022

Visit of Admiral R Hari Kumar, Chief of the Naval Staff to Japan

Adm R Hari Kumar, Chief of the Naval Staff, made an official visit to Japan from 05 to 09 Nov 22.

During the visit the CNS witnessed the International Fleet Review (IFR), hosted by the Japan Maritime Self-Defense Force (JMSDF) off Yokosuka on 06 Nov 22 in commemoration of the 70th Anniversary of its formation. HE Mr Fumio Kishida, Prime Minister of Japan, was embarked on board JMSDF Ship Izumo for the Fleet Review, along with distinguished heads of delegations from participating Navies. Indian Naval Ships *Shivalik* and *Kamorta* represented the Indian Navy in the IFR. RAdm Sanjay Bhalla, the Flag Officer Commanding, Eastern Fleet was embarked on board INS *Shivalik* during the Fleet Review. Participation of the two indigenously built ships of the Indian Navy at the IFR aptly showcased the ship-building prowess of Indian shipyards to the international gathering and participating navies.

Following the IFR, Japan, as the current Chair of WPNS, hosted the 18th Western Pacific Naval Symposium (WPNS) at Yokohama on 07-08 November 22. Indian Navy participates in the WPNS, as Observer, since 1998. In his remarks at the WPNS, Adm R Hari Kumar stressed on primacy of a Rules Based Order and expressed commitment of the Indian Navy and that of the Indian Ocean Naval Symposium (IONS) towards promoting the idea of 'collective responsibility' for maritime security in the Indo-pacific. This year's edition of Exercise MALABAR is also being hosted by Japan. Initiated in 1992, this year marks the 30th anniversary of Exercise MALABAR. To mark this special occasion, Chiefs of Navies participating in Ex-MALABAR held joint consultations to review the progress achieved through this exercise thus far and areas that could be focussed upon during future iterations, with an aim to further enhance interoperability amongst the participating navies.

The CNS interacted with the crews of participating Indian Naval Ships *Shivalik* and *Kamorta* and expressed satisfaction on the scale and complexity of this multilateral exercise. One P8I Maritime Patrol Aircraft of the Indian Navy has also been deployed to Japan separately to participate in Exercise MALABAR-2022. The sea phase of this edition of Exercise Malabar

would continue until 15 November 2022. Participation of the CNS in a series of multilateral engagements at Japan also afforded an opportunity to undertake meaningful bilateral meetings with several heads of delegations from Friendly Foreign Countries, who were present for the IFR and WPNS. Progress of ongoing defence cooperation engagements being pursued with individual countries and opportunities to enhance constructive engagements in the maritime domain were discussed during these meetings.

Adm R HariKumar, conveyed his special compliments to Adm Sakai Ryo, Chief of Staff, JMSDF for highly professional and successful conduct of these high intensity multilateral maritime engagements. The visit of the CNS to Japan exhibited India's consistent support to multilateral maritime security constructs in the Indo-Pacific and further consolidated the high level of bilateral defence engagements with Japan.

https://pib.gov.in/PressReleasePage.aspx?PRID=1874993

REPUBLICWORLD.COM

Fri, 11 Nov 2022

Navy Chief's Visit Further Consolidated High Level of Defence Engagements with Japan: Indian Navy

Navy chief Admiral R Hari Kumar's Japan visit this month exhibited India's consistent support to multilateral maritime security constructs in the Indo-Pacific and further consolidated the high level of bilateral defence engagements with that country, officials said Thursday. During the official visit from November 5 to 9, Admiral Kumar witnessed the International Fleet Review (IFR) hosted by the Japan Maritime Self-Defense Force (JMSDF) off Yokosuka on November 6 in commemoration of the 70th Anniversary of its formation. "The visit of the CNS (Chief of the Naval Staff) to Japan exhibited India's consistent support to multilateral maritime security constructs in the Indo-Pacific and further consolidated the high level of bilateral defence engagements with Japan," the defence ministry said in a statement.

Prime Minister of Japan Fumio Kishida was embarked on board JMSDF Ship Izumo for the Fleet Review, along with distinguished heads of delegations from participating Navies, it said. Indian Naval Ships Shivalik and Kamorta represented the Indian Navy in the IFR. Participation of the two indigenously built ships of the Indian Navy at the IFR aptly showcased the shipbuilding prowess of Indian shipyards to the international gathering and participating navies, the statement said.

https://www.republicworld.com/india-news/general-news/navy-chiefs-visit-further-consolidatedhigh-level-of-defence-engagements-with-japan-indian-navy-articleshow.html

Business Standard

Thu, 10 Nov 2022

Info War can be a Threat to Stability: Defence Minister Rajnath Singh

In a security environment where the government seldom puts defence policy in the public domain and successive governments have failed to create a national security strategy, Defence Minister Rajnath Singh delivered a convocation address on Thursday to the graduating National Defence College (NDC) cadets in Delhi. Such institutional speeches, especially those delivered at military training institutions, such as the NDC, are carefully parsed by defence analysts the world over, for indications of strategic policy. Thursday's NDC speech was no exception.

The most striking observation that defence analysts arrived at is: although India has active borders with two hostile neighbours — China and Pakistan — and combats long-running insurgencies in Jammu & Kashmir and Manipur, the defence minister chose to focus almost entirely on non-traditional threats rather than hard military ones. Rajnath called for concerted efforts of the international community to counter "grave" emerging threats such as cyberattacks and information warfare. Highlighting the narrowing gap between internal and external security, Rajnath said new dimensions of threats that keep evolving make them difficult to classify. He asserted that terrorism, which generally falls in the category of internal security, is now increasingly regarded as an external security threat, since the training, funding, and arming of such organisations is being carried out from outside the country.

The defence minister described the vulnerability of critical infrastructure to cyberattacks as "a big concern", with energy, transport, telecommunications, critical manufacturing industries, and interconnected financial systems being vulnerable to such threats. Underscoring another non-traditional threat, he stated that the "information war" has the potential to threaten a country's political stability. This was now being done by shaping the opinion and perspective of the masses through the organised use of social media and online content generation platforms.

"The deployment of information war was most evident in the ongoing conflict between Russia and Ukraine. Throughout the conflict, social media has served as a battleground for both sides to spread competing narratives about the war and portray the conflict on their own terms," stated Rajnath, identifying social media as the primary distribution channel. The defence minister said the Ukrainian conflict illustrated how ripple effects could adversely impact the whole world. Together, Russia and Ukraine export nearly a third of the world's wheat and barley, but this conflict had prevented grain from leaving the 'breadbasket of the world', leading to food crises in Africa and Asia.

Rajnath said that India also faced an energy crisis, with the Russia-Ukraine war leading to a disruption in international energy supply, raising the cost of energy import. He reaffirmed India's belief in a "multi-aligned policy", which envisioned diverse engagements with multiple stakeholders, so that everyone's concerns could be addressed. He termed it as the only way

towards shared responsibility and prosperity. "Strong and prosperous India would not be built at the cost of others... India does not believe in a world order where a few are considered superior to others. It is for this reason that when we partner any nation, it is on the basis of sovereign equality and mutual respect," said Rajnath. He was addressing officers of the Indian armed forces, civil services and from friendly foreign countries during the 60th NDC course convocation ceremony.

<u>https://www.business-standard.com/article/current-affairs/defence-minister-rajnath-singh-underlines-non-traditional-threats-to-india-122111001156 1.html</u>

BusinessLine

Thu, 10 Nov 2022

Defence Minister Expresses 'Big Concern' on Cyber-Attack Threats, Seeks Concerted Global Response

Defence Minister Rajnath Singh on Thursday expressed his "big concern" on cyber-attack threats looming over sectors such as energy, transport, public sector services, telecommunications, critical manufacturing industries and inter-connected financial systems and sought concerted counter efforts by global community. Addressing officers of the Indian Armed Forces, Civil Services as well as from friendly foreign countries during the 60th National Defence College (NDC) course convocation ceremony, the Defence Minister also stated the information war has the potential to threaten the political stability of a country. He drew the attention of the gathering towards how organised use of social media and other online content generation platforms are engineering the opinion and perspective of the masses.

"The deployment of information war was most evident in the ongoing conflict between Russia and Ukraine. Throughout the conflict, social media has served as a battleground for both sides to spread competing narratives about the war and portray the conflict on their own terms. The propaganda campaigns as a means of strategy to shape narratives are by no means new during warfare, but its reach has increased by leaps and bounds due to the shift toward social media as the primary distribution channel," said Rajnath Singh. The changing times, the Minister felt, has also narrowed the gap between internal and external security. He said terrorism which generally fell into internal security domain, is now classified in the category of external security as well, given that training, funding and arms support of such organisations is being carried out from outside the country.

Global insecurity

Singh was of the view that the world cannot remain aloof if peace and security of any region is compromised and quoted Martin Luther King Jr: "Injustice anywhere is a threat to justice everywhere" to suggest the fallout of the global insecurity on people. "The recent Ukrainian conflict showed how its ripple effects could adversely impact the whole world. Together, Russia and Ukraine export nearly a third of the world's wheat and barley, but this conflict had prevented grains from leaving the 'breadbasket of the world' and led to food crisis in various African and Asian countries. The conflict has also fuelled an energy crisis in the world. In Europe, oil and gas

supply has been dwindling. India has also been affected as the Russia-Ukraine war led to disruption in international energy supply, making the energy import much more expensive," he said.

Trans-disciplinary approach

Commandant NDC, Lt Gen MK Mago, in his address stated the officers of the 60th NDC course would be able to apply a trans-disciplinary and out-of-the-box approach to national issues at a strategic level, both in policy formulation and execution. According to him, the NDC's vibrant academic environment, in addition to fulfilling its mandate, has inspired many course participants to pursue PhDs or original research in defence studies. Defence Secretary ShriGiridharAramane, Vice Chancellor, University of Madras Professor S Gowri and other distinguished guests were present on the occasion.

<u>https://www.thehindubusinessline.com/news/defence-minister-expresses-big-concern-on-cyber-attack-threats-seeks-concerted-global-response/article66120171.ece/amp/</u>



Thu, 10 Nov 2022

How India and Africa are Redefining Defence Ties

By Gurjit Singh

The India Africa Defence Dialogue (IADD) 2022 was successfully held alongside the DefExpo in Gandhinagar on October 18. It was the second edition of the IADD after the first was held at the DefExpo in Lucknow in 2020. The government should be complimented for regularising the IADD and holding it regularly. The IADD focused on 'Adopting Strategy for Synergizing and Strengthening Defence and Security Cooperation' as an important theme with which several African delegations empathised. The IADD was attended by representatives of 50 African countries, including 13 defence ministers, seven ministers of state, seven service chiefs and eight permanent secretaries of defence. Defence Minister ShriRajnath Singh and Minister of State for Defence Ajay Bhatt used the occasion to meet African ministers who travelled to India for the IADD.

Among African ministers who participated were Abraham Belay from Ethiopia, HaninOuldSidi from Mauritania, SeringModouNjie from Gambia, Dominic AdunaBingabNitiwul from Ghana and Ramaeaux Claude Bireau from the Central African Republic. They called on the defence minister in Gandhinagar. The IADD explored new areas of convergence for an engagement in the defence sector with African countries. These include building African capacities, training in enhancing cyber security measures, dealing with counterterrorism and increasing awareness of maritime security. These ideas were importantly buttressed by the fact that the Institute for Defence Studies and Analyses is the knowledge partner for the IADD bringing strategic depth to the discussions.

India invited African countries to explore the possibilities of utilising Indian defence equipment and technologies. The growing robustness of India's defence-related manufacturing was brought to their attention and an awareness created of the greater willingness of India now to provide defence related equipment to its partners. India and Africa are both joint stakeholders in keeping the Indian Ocean region safe and secure, both from the maritime and environmental angles. For this, enhanced cooperation is sought. India sees Africa as a true partner in the mould of what the recent book, *The Harambee Factor*, on India's development cooperation with Africa described. The defence minister said that India sees its international relations emphasising equality and dignity which is the basis of India's Africa policy.

Relating India's Africa engagement to Indian support for the global south and its place in the international order, the defence minister also called for the UN Security Council to be reformed and made more representative, including with African representation. India and African countries work together in several regional mechanisms, including the IORA, IOC, and the antipiracy related institutions. For India, the shores of Africa along the Indian Ocean and the Red Sea are part of its Indo-Pacific policy.

The defence minister specifically mentioned the challenges of conflict, terrorism and violent extremism. India empathised with Africa as they sought peace, security, stability, growth and prosperity and the 10 principles of India's Africa policy enunciated by Prime Minister Modi while addressing the Uganda parliament in 2018 are consistent with this. India offers support to African capabilities to deal with terrorism and extremism, supporting UN peacekeeping missions and working for open and free oceans and seas. These are significant aspects of India's policy relevant to Africa.

The Indian Navy showed timely capacities and capabilities to implement the SAGAR initiatives through which emergency medical supplies, medical expert teams and food aid was provided during the Covid-19 pandemic to several African countries. It is recalled that during natural calamities the Indian Navy has assisted Mozambique, Madagascar and the nearby countries as well as provided food aid to Sudan, South Sudan, Djibouti and Eritrea around the Red Sea. The Gandhinagar Declaration was adopted as an outcome document of IADD 2022 like the Lucknow Declaration was adopted in 2020.

This envisages cooperation to provide training in sectors of mutual interest for which India would increase the number of training positions allocated to African countries, as well as the number of training teams which could go to African countries upon their request. India would remain committed to building capacities of African defence forces and look at joint exercises as well as providing HADR whenever required.

In a new offering, fellowships were offered for defence related experts from African countries to engage with the IDSA. The capabilities of India's defence industry were on view at the GandhinagarDefExpo and the 50 delegations from Africa had another opportunity to see how effectively India's enhanced technologies were now available for sharing with them. The nature of countries who are participating is interesting.

Delegations included those from Angola, Rwanda, Ethiopia, Mozambique Central African Republic, Mauritania, Madagascar, Botswana, Gambia, Ghana, Cabo Verde, Sao Tome and Principe and South Africa. Among these, Ethiopia and the Central African Republic, are currently engaged in civil strife over a period of years, which needs to be controlled. In Ethiopia an India military training team was situated for 5 years from 2009. Ethiopia also had the first ever Indian institution in Africa, the Harar Military Academy from 1958 to 1977. In the CAR, the Russian Wagner group is playing a major role to curb insurgency.

Rwanda is a small country with a major defence capability, which sees it despatch its troops into the DRC, Mozambique and beyond to maintain order. Its robust defence preparedness is perhaps an opportunity for it to look at Indian equipment. Mozambique is currently undergoing an insurgency in the northern Cabo Delgado province. It is also the recipient of large Indian investments in energy. There is scope to enhance the fledgling defence relationship with them. With Botswana, Ghana and South Africa, India has close relations in the defence sector. In Botswana, there was an Indian military team for over a decade. With Ghana, military exchanges have been regularly held. With South Africa, there is a good relationship, including through the IBSA exercises. Brahmos sales to South Africa are under discussion. With Madagascar India has been closely involved in upgrading their coast guard facilities. Cabo Verde and Sao Tome and Principe are among those countries where India has opened new embassies in recent years.

It is a welcome sign that relations with these countries are progressing to the point that their defence delegations are attending IADD and the DefExpo. With Egypt, the sales and servicing of Tejas are under discussion and this could be a model for other countries. Indian model of increasing training positions and offering more defence training teams can now be linked to export of Indian equipment. Training programs bring opportunities to showcase Indian equipment. African counterparts are seeking lower dependence on competing big powers and would welcome cost effective defence equipment for their own requirements.

https://www.news18.com/news/opinion/how-india-and-africa-are-redefining-defence-ties-6354085.html

THE ECONOMIC TIMES

Thu, 10 Nov 2022

French National Strategic Review Lists India as a Key Partner to Stabilise Indo-Pacific Region

France, in its just released National Strategic Review, has affirmed that it is committed to building partnership with its key strategic partner India besides Japan, Australia, Indonesia and Singapore, to stabilise the Indo-Pacific region. The Review released on Wednesday also referred to the modernisation of China's military apparatus that has enabled the People's Liberation Army (PLA) to support an increasingly assertive strategy, including on the military front, whether in the Indo-Pacific region, particularly with regard to the status quo in the Taiwan Strait, or in other regions of the world. "France's role as a balancing power in the Indo-Pacific must be reaffirmed.

To this end, France is committed to building partnerships with countries in the Indo-Pacific region, notably India, Australia and Japan, as well as Indonesia and Singapore. It develops its capacities of anticipation and strategic signalling, vis-à-vis its competitors, reaffirms and strengthens its position in the politico-military multilateralism of the region, by increasing its training capacity and, if necessary, by promoting the emergence of ad hoc structures. France will also promote the implementation of EU's strategy for the region and its partnership with the Association of Southeast Asian Nations (ASEAN)," according to the Strategic Review.

The Strategic Review expressed concern over PLA's ambitions and its impact on the region. "The modernisation of China's military apparatus continues and enables the PLA to support an increasingly assertive strategy, including on the military front, whether in the Indo-Pacific region, particularly with regard to the status quo in the Taiwan Strait, or in other regions of the world where Chinese diplomacy calls to clients, especially in Africa. The political nature of the PLA and the civil-military integration deployed in the technological, economic and information fields enable an unprecedented scope of hybrid actions. The latter is only constrained in practice and, at this stage, by the PRC's decision to challenge the international security architecture from the inside," according to the French Strategic Review document. The document will set a baseline for debate on France's 2024-2030 national defencebudget, which will come before the French parliament early next year.

<u>https://economictimes.indiatimes.com/news/defence/france-lists-india-as-key-partner-to-stabilise-indo-pacific-area/articleshow/95435429.cms</u>

नवभारत टाइम्स

गुरुवार, 10 नवंबर 2022

पहले पिनाका अब तोप...भारत के हथियारों का दीवाना हुआ आर्मीनिया, जानें पाकिस्तान-तुर्की कनेक्शन

अर्मेनिया और अजरबैजान के बीच जारी तनाव भारत के लिए असाधारण मौका बनता जा रहा है। पिनाका मिसाइल सिस्टम के बाद अब अर्मेनिया ने भारत के साथ एक बड़ी आर्टिलरी डील की है। हथियार सिस्टम की बड़ी कंपनी पुणे स्थित भारत फोर्ज ने एक बड़ा ऐलान किया है। भारत फोर्ज ने बताया है कि कल्याणी स्ट्रैटेजिक सिस्टम्स को अर्मेनिया से 155 एमएम की तोप का कॉन्ट्रैक्ट मिला है जो कि तीन साल के लिये है। यह कॉन्ट्रैक्ट 155 मिलियन डॉलर का है। यह खबर भारत सरकार की तरफ से लॉन्च किए गए आत्मनिर्भर भारत और मेक इन इंडिया के लिये एक बड़ी उपलब्धि है।

भारत के लिये गुड न्यूज

कंपनी की तरफ से बॉम्बे स्टॉक एक्सचेंज को एक नोटिफिकेशन भेजकर इस बात की जानकारी दी गई है। हालांकि कंपनी ने नोटफिकेशन में इस बात का खुलासा नहीं किया था कि ऑर्डर किस देश की तरफ से मिला है। उसने बस इतना ही बताया कि यह वह जोन है जहां पर फिलहाल कोई संघर्ष नहीं चल रहा है। कंपनी का कहना है कि यह ऑर्डर आत्मनिर्भर भारत के एजेंडे के लिये एक बड़े मौके की तरह है। अक्टूबर में भी भारत के रक्षा उद्योग के लिए अर्मेनिया से एक गुड न्यूज आई थी।

उस समय अजरबैजान के साथ जारी संघर्ष के बीच ही अर्मेनिया ने 2000 करोड़ रुपए के कॉन्ट्रैक्ट के साथ भारत में बने पिनाका मल्टी बैरल रॉकेट सिस्टम को खरीदने का ऐलान किया था। अर्मेनिया ने पिनाका को खरीदने के लिए अर्मेनिया ने अमेरिकी रॉकेट सिस्टम हीमर्स को भी रिजेक्ट कर दिया था। विशेषज्ञों की मानें तो यह कॉन्ट्रैक्ट न केवल बढ़ते ह्ए भारतीय रक्षा उद्योग के बारे में बताता है बल्कि यह भी बताता है कि किस तरह से पिछले कुछ वर्षों में भारत की रक्षा निर्यात नीति में बड़ा बदलाव हुआ है।

तुर्की-पाकिस्तान होंगे हैरान

अर्मेनिया और भारत का करीब आना तुर्की, अजरबैजान और पाकिस्तान के लिये बड़ा इशारा है। अर्मेनिया के साथ हुई यह डिफेंस डील इस तिकड़ी के लिये बुरी खबर है। तुर्की, अजरबैजान और पाकिस्तान के बीच इन दिनों कूटनीतिक और सैन्य संबंध गहराते जा रहे हैं। अर्मेनिया और भारत को इस तिकड़ी के खिलाफ ईरान का भी साथ मिलने लगा है। हाल ही में भारत के रक्षा मंत्री राजनाथ सिंह ने अपने अर्मेनियाई समकक्ष सुरेन पापिकयान से मुलाकात की थी। गुजरात में आयोजित डिफेंस एक्सपो से अलग यह मुलाकात तब हुई थी जब कुछ ही दिनों पहले भारत ने अर्मेनिया को हथियार देने का फैसला किया था। भारत और ईरान के बीच लंबे समय से द्विपक्षीय संबंध बरकरार हैं। अब इसमें अर्मेनिया भी शामिल हो गया है। अर्मेनिया ने अब खुद को एक ऐसे देश के तौर पर साबित कर दिया है जो मध्य एशिया में भारत का साथी बन सकता है। तुर्की-पाकिस्तान और अजरबैजान के बीच साझेदारी इस हिस्से में भारत के हितों को प्रभावित कर सकती थी।

कैसे हुई अजरबैजान की मदद

सितंबर 2020 में नागोरनो-काराबाख युद्ध के समय तुर्की और पाकिस्तान ने अजरबैजान की मदद की थी। इस युद्ध में मिली हार ने अर्मेनिया के रणनीतिकारों को एक ऐसे साथी की तलाश के लिये मजबूर कर दिया जो सैन्य, आर्थिक और कूटनीति के लिहाज से भरोसेमंद हो। उन्होंने फैसला किया कि 3200 किलोमीटर बसा देश भारत उनका मददगार साथी बन सकता है। युद्ध के समय पाकिस्तान और तुर्की खुलकर अजरबैजान के समर्थन में आये।

तुर्की के ड्रोन अजरबैजान को

तुर्की ने तो अजरबैजान को ड्रोन खासतौर पर युद्धक ड्रोन तक सप्लाई किये थे। विशेषज्ञों की मानें तो इस वजह से ही यह युद्ध अजरबैजान के पक्ष में चला गया था। तुर्की ने ये सभी कदम इसलिये उठाये क्योंकि वह मध्य एशिया में अपने कदम मजबूत करना चाहता था। जो आंकड़ें मौजूद हैं, तुर्की अब उन टॉप तीन देशों में शामिल है जो इसे सबसे ज्यादा हथियार सप्लाई करते हैं। दोनों देशों के बीच रक्षा सहयोग तेजी से बढ़ रहा है। इसी तरह से अब तुर्की, अजरबैजान के साथ भी करीबी बढ़ाता जा रहा है। तुर्की और अजरबैजान के बीच रक्षा सहयोग 75 मिलियन डॉलर तक पहुंच गया।

भारत का वह पहला हथियार

तुर्की और अजरबैजान को मात देने के लिए भारत ने साल 2020 से कदम उठाने शुरू किये थे। इस साल भारत और अर्मेनिया के बीच स्वाती वेपन लोकेशन रडार के लिये डील हुई जो कि 40 मिलियन डॉलर की थी। इसके दो साल बाद ही भारत और अर्मेनिया ने 245 मिलियन डॉलर की एक डील साइन की। इस डील के तहत भारत ने मिसाइल और दूसरे उपकरण अर्मेनिया को देने का फैसला किया। साफ है कि दोनों देशों के बीच मजबूत रिश्ते तुर्की और पाकिस्तान के लिये बुरी खबर हो सकते हैं।

<u>https://navbharattimes.indiatimes.com/world/other-countries/indian-weapon-export-big-deal-with-armenia-india-to-export-155-mm-artillery-bad-news-for-turkey-pakistan/articleshow/95432118.cms</u>



Fri, 11 Nov 2022

Firming Friendships with Indian Neighbours

Indo-Pacific Endeavour has returned to India for the third time, engaging in military-to-military exchanges, volunteer work in the community and concluding the regional partnership activities by sailing in company with Indian Navy ships. Army-to-Army engagement was one of the key focuses, with Australian soldiers joining their Indian counterparts for amphibious training and a session on humanitarian assistance and disaster relief (HADR) operations. Australian Army officer Captain Shaun Montgomery said both sides exchanged 'lessons learned' from HADR activities they have been involved in. "We were just two partners being open and honest about our experiences and adding a new lens to how each country operates to support HADR and defence aid to the civil community," Captain Montgomery said. "Both of our defence forces have significant experience in this area, so it was a positive exchange. The conversation was flowing."

HMAS *Adelaide* Commanding Officer Captain Troy Duggan said he was proud to see ADF members engaging across all levels during the three-day port visit to Visakhapatnam. "Though it was a short stay, we were welcomed with open arms by our friends in India," Captain Duggan said. "Our team met with Indian Defence Force leadership, showcased defence technologies with local industry and many of our members were approached for selfies in the street by the local population. Clearly, the people of Visakhapatnam were glad to host the ADF." *Adelaide's* Navigation Officer, Lieutenant Commander John Miller, helped coordinate the passage exercises with Indian Navy Ships *Jalashwa* and *Kavaratti*, which sailed for two days with the Australian Navy ships, conducting boat operations, helicopter deck landings and officer of the watch manoeuvres.

"These manoeuvres provide an excellent staging opportunity for our teams to gain experience and demonstrate what it is that we all bring to the table," Lieutenant Commander Miller said. "It also solidifies the mutual respect we have as mariners across our two navies." As the ships left each other's company, members on all ships lined the upper decks to cheer farewell in a traditional navy salute.

https://news.defence.gov.au/international/firming-friendships-indian-neighbours

THE ECONOMIC TIMES

Thu, 10 Nov 2022

Iran Hypersonic Missile Claim Raises Nuclear Watchdog Concern

An Iranian general claimed Thursday that the Islamic republic had developed a hypersonic missile capable of penetrating all defence systems, raising concerns from the UN nuclear watchdog. Hypersonic missiles, which like traditional ballistic missiles can deliver nuclear weapons, can fly at more than five times the speed of sound. "This hypersonic ballistic missile was developed to counter air defence shields," General Amirali Hajizadeh, the commander of the Islamic Revolutionary Guard Corps aerospace unit, was quoted as saying by Fars news agency. "It will be able to breach all the systems of anti-missile defence," he said, adding that he believed it would take decades before a system capable of intercepting it is developed.

The head of the International Atomic Energy Agency (IAEA) Rafael Grossi, speaking at a UN climate summit in Egypt, expressed concerns about the announcement. "We see that all these announcements increase the attention, increase the concerns, increase the public attention to the Iranian nuclear programme," Grossi told AFP. But he added that he does not see this as "having any influence" on negotiations over the Islamic republic's nuclear programme. The announcement comes after Iran admitted on Saturday that it had sent drones to Russia, but said it had done so before the Ukraine war. The Washington Post reported on October 16 that Iran was preparing to ship missiles to Russia, a report Tehran rejected as "completely false". It also comes at a time protests have rocked Iran since the September 16 death of Mahsa Amini after her arrest for allegedly flouting the Islamic republic's hijab dress code for women.

Stalled nuclear talks

Unlike ballistic missiles, hypersonic missiles fly on a trajectory low in the atmosphere, able to reach targets more quickly. North Korea's test of a hypersonic missile last year sparked concerns about the race to acquire the technology, which is currently led by Russia, followed by China and the United States. Both Iran and Russia are targeted by stringent sanctions -- Iran after the US unilaterally pulled out of the 2015 nuclear deal, and Russia since it invaded Ukraine in February. The two countries have responded to the sanctions by boosting cooperation in key areas to help prop up their economies. Iran on Wednesday hosted Russia's security chief Nikolai Patrushev for talks on subjects that the Russian side said included "the fight against terrorism and extremism" as well as measures to counter Western interference.

A hypersonic missile is manoeuvrable, making it harder to track and defend against. While countries including the United States have developed systems designed to defend against cruise and ballistic missiles, the ability to track and take down a hypersonic missile remains a question. Thursday's announcement comes against a backdrop of stalled talks on reviving the 2015 nuclear deal. The deal Iran reached with Britain, China, France, Germany, Russia and the US gave it relief from sanctions in return for guarantees it could not develop an atomic weapon. Iran has always denied wanting a nuclear arsenal. The deal collapsed after the US's unilateral withdrawal in 2018 under then president Donald Trump. The IAEA said Thursday it had seen "no progress" in discussions with Iran over undeclared nuclear material at three sites, a sticking point in the

talks aimed at reviving the accord. Iran has been enriching uranium well over the limits laid down in the 2015 deal with world powers, which started to unravel when the United States withdrew from it in 2018.

Warning to Saudi Arabia

Iran's claim to have developed a hypersonic missile follows its announcement on November 5 of the successful test flight of a rocket capable of propelling satellites into space. The US has repeatedly voiced concern that such launches could boost Iran's ballistic missile technology, extending to the potential delivery of nuclear warheads. In March, the US government imposed sanctions on Iran's missile-related activities. Iran on Wednesday warned its neighbours including Saudi Arabia that it would retaliate against moves to destabilise it amid the protests sparked by Amini's death. "I would like to say to Saudi Arabia that our destiny and that of other countries in the region are linked to each other," Intelligence Minister Esmail Khatib said. "Iran has so far adopted strategic patience but it cannot guarantee that it will maintain this strategic patience if hostilities against it continue. "If the Islamic republic decides to punish these countries, their glass palaces will collapse and they will no longer enjoy stability," said Khatib.

<u>https://economictimes.indiatimes.com/news/defence/iran-hypersonic-missile-claim-raises-nuclear-watchdog-concern/articleshow/95433383.cms</u>

THE ECONOMIC TIMES

Thu, 10 Nov 2022

Japan, US Hold Joint Arms Drills Amid China, N Korea Worry

Japan and the United States began a major joint military exercise on Thursday in southern Japan as the allies aim to step up readiness in the face of China's increasing assertiveness and North Korea's intensifying missile launches. The biennial "Keen Sword" drills kicked off at a Japanese air base in southern Japan and will also be held in several other locations in and around Japan through November 19. About 26,000 Japanese and 10,000 American troops, as well as 30 vessels and 370 aircraft from both sides, are to participate in the drills, according to the Japanese Defence Ministry. Australia, Britain and Canada will also join parts of the drills, it said.

Joint field trainings that include amphibious landing exercises are planned on southwestern Japanese remote islands, including Tokunoshima, Amami and Tsutarajima, as Japan has been bolstering its defence capability in the region amid growing tensions over China. China has reinforced its claims to virtually the entire South China Sea by constructing artificial islands equipped with military installations and airfields. Beijing also claims a string of islands that are controlled by Japan in the East China Sea, and has stepped up military harassment of self-ruled Taiwan, which it says is part of China to be annexed by force if necessary.

The joint exercise also comes on the heels of intensifying missile firings by North Korea, which has launched more than 30 of them this year, including one on Wednesday that fell in the sea between the Korean Peninsula and Japan. Last month, an intercontinental ballistic missile flew over northern Japan. Prime Minister Fumio Kishida, citing worsening security in the region, has

pledged to substantially increase Japanese military capability and possibly allow preemptive strike capability to attack enemy missile launch sites from afar. The plans are expected to be included in a revised national security strategy and mid- to long-term defence guidelines later this year.

A move to develop strike capability is a major shift for Japan's self-defence-only principle, though the country has rapidly expanded its military's role and capability in the past decade to work more closely with the United States and other partners in the region and Europe. Exercises like Keen Sword provide Japanese and US forces "opportunities to train together across a variety of mission areas in realistic scenarios to enhance readiness, interoperability, and build credible deterrence," US Forces Japan said in a statement on Thursday.

<u>https://economictimes.indiatimes.com/news/defence/japan-us-hold-joint-arms-drills-amid-china-n-korea-worry/articleshow/95419781.cms?from=mdr</u>

नवभारत टाइम्स

गुरुवार, 10 नवंबर 2022

रूस के परमाणु हथियारों पर बड़े हमले की साजिश कर रहा अमेरिका, बनाया खतरनाक प्लान, बड़ा दावा

रूस के रक्षा मंत्रालय की तरफ से यह दावा किया गया है कि अमेरिका रणनीतिक तौर पर गैर-परमाणू हथियारों की मदद से उसकी परमाणु क्षमताओं को निष्क्रिय करने में लगा है। मैगजीन मिलिट्री थॉट की तरफ से बताया गया है कि अमेरिका की योजना रूस की परमाणु क्षमता के बड़े हिस्से को प्रभावित करने की है। रूस की मीडिया की तरफ से इस आर्टिकल पर खासी चर्चा हो रही है। इसमें कहा गया है कि कैसे अमेरिका रणनीतिक रूप से जरूरी ऐसे गैर-परमाणु हथियारों को हासिल करना है जो कम समय में टारगेट को तबाह कर सकें। इस तरह के हथियारों पर किसी भी तरह के द्विपक्षीय या फिर अंतरराष्ट्रीय प्रतिबंध लागू नहीं होते हैं।

ताकि बदला न ले सके रूस

रूस की एजेंसी RIA नोवोस्ती की तरफ से एक आर्टिकल जारी किया गया है। इस आर्टिकल में लिखा है, 'अमेरिका इस तरह के माध्यमों का निर्माण कर रहा है जिसके बाद रूस के परमाणु हथियारों को अप्रभावी किया जा सके।' एजेंसी की तरफ से बताया गया है कि नाटो और अमेरिका ने प्रतिरोध की जगह अब पूर्वनिर्धारित एक्शन पर आगे बढ़ने पर फैसला कर लिया है।आर्टिकल के मुताबिक अमेरिका चाहता है कि वह रणनीतिक तौर पर ऐसी आक्रामक कार्रवाई कर सके जो यह सुनिश्चित करे कि रूस के ज्यादा से ज्यादा परमाणु हथियारों को नष्ट किया जा सके। अमेरिका, रूस की सेनाओं की तरफ से बदला लेने के फैसले से पहले हथियारों को नष्ट करने में लगा है।

रूस ने लगाया था आरोप

इस आर्टिकल में आखिरी में लिखा है कि अमेरिका जो कुछ भी कर रहा है, उसका रूस की सुरक्षा और खतरों से निबटने वाली तत्परता पर नकारात्मक प्रभाव पड़ेगा। इस आर्टिकल में राष्ट्रपति व्लादिमीर पुतिन के हालिया बयानों की मदद से इशारा किया गया है कि यूक्रेन पर हमले के बाद रूस परमाणु हथियारों की मदद भी ले सकता है। सितंबर में पुतिन ने पश्चिमी देशों पर आरोप लगाया था कि ये देश रूस के खिलाफ परमाणु ब्लैकमेलिंग में बिजी हैं।

किसके पास कितने हथियार

पुतिन ने यह आरोप तब लगाया था जब उन्होंने यूक्रेन में और ज्यादा सेना की तैनाती का आदेश दिया था। इसी संबोधन में ही पुतिन ने कहा था कि रूस अपनी सीमा की सुरक्षा करने के लिये हर उस माध्यम का प्रयोग करेगा जो उसके पास मौजूद हैं। पुतिन ने इसे क्षेत्रीय अखंडता का सवाल करार दिया था। रूस के पास 6,257 परमाणु हथियार हैं जबकि अमेरिका के पास 5,550 ही है। जनवरी में आर्म्स कंट्रोल एसोसिएशन की तरफ इस बात की जानकारी दी गई थी। पुतिन ने जो कुछ कहा, वही बात विशेषज्ञों ने भी कही। 27 अक्टूबर को हालांकि पुतिन ने कहा था कि राजनीतिक या फिर सैन्य रूप से परमाणु हथियारों के प्रयोग का कोई प्वाइंट नहीं बनता है।

<u>https://navbharattimes.indiatimes.com/world/rest-of-europe/us-russia-news-hindi-us-defence-official-confirm-to-working-on-neutralising-russian-nuclear-</u> weapons/articleshow/95429154.cms



Thu, 10 Nov 2022

NATO Secretary General Warns of Growing Cyber Threat

NATO Secretary General, Jens Stoltenberg, spoke today (10 November 2022) at NATO's 2022 Cyber Defence Pledge conference in Rome. Highlighting recent cyber-attacks against satellites, critical infrastructure and government departments, especially as part of Russia's illegal war against Ukraine, the NATO Secretary General warned of the real and growing threat from cyberspace. Mr Stoltenberg said, "Cyber is a constantly contested space and the line between peace, crisis and conflict is blurred. That is why NATO has taken the threat to cyberspace from state and non-state actors so seriously for so long. And why we have taken determined steps to guard against cyber-attacks. It is key to our collective defence." The Cyber Defence Pledge, agreed at NATO's Warsaw Summit in 2016, has seen Allies increase their investment in our cyber defences. Mr Stoltenberg added, "I call on Allies to recommit to cyber defence. With more money, more expertise, and enhanced cooperation. This is a vital part of our collective defence and we are all in this together." NATO's 2022 Cyber Defence Pledge Conference is held in Rome at the Ministry of Foreign Affairs and International Cooperation on 9-10 November. The Conference is co-hosted by Italy and the United States with the support of NATO's International Staff.

https://www.nato.int/cps/en/natohq/news 208889.htm



Thu, 10 Nov 2022

Future Wars: The Way Forward

By Brig Deepak Sinha

Over the years, national security issues have gained in importance and face constant and detailed scrutiny from a wide variety of practitioners, researchers, analysts and journalists. This is indeed an excellent development as it keeps the government and its security establishment, including the military, on its toes. It is no secret that they tend to use secrecy as a cover to hide their interminable turf battles and their ineptness and lack of clarity when things go wrong. The imbroglio in Eastern Ladakhis a good example of this phenomenon, where reasoned debate remains stymied for the most part by lack of verifiable information. While examination of past events allows for a forensic audit and subsequent corrective measures, what is equally important is the necessity into look to the future. Especially, how wars will be fought and won. Not only are we in the midst of a "clash of civilisations" that is upending existing geo-political equations, but we also face the challenge that disruptive technologies impact on warfare.

As weapons, organisations, doctrines and tactics are closely intertwined and interdependent, the importance of visualizing the future technological environment cannot be overstated. However, what makes this truly difficult and complex are factors such as rapid rate of technological obsolescence and the inevitable time lag between R&D, trials and introduction of the weapon system into service. Of necessity, it must remain in service for a couple of decades to be economically viable and provide an acceptable return on investment, apart from issues connected with skills development and training infrastructures. Off the shelf procurements, while feasible to a limited extent come with their own set of problems. The American experience in this regard is particularly illustrative and relevant in our context. The end of the Cold War left the United States as the only military power of consequence with relatively weak opponents and the possibility of large scale conventional wars drastically reduced. With strategic imperatives clearly defining the need for ensuring minimal casualties, and a rapid and successful termination of any crisis that impacted US interests or required US intervention, the military looked towards its economic and technological edge to achieve its objectives.

It embraced revolution in military affairs (RMA) and network centric warfare (NCW), based on superior information and communication technologies (ICT), as the cornerstone of its "Force

Transformation" agenda. This led to smaller high quality forces supported by precision munitions and a potent and highly effective command, control, communications, computers, intelligence, surveillance, target acquisition and reconnaissance (C4ISTAR) capabilities. This transformation paid off in the First Gulf War of 1991, and to an extent in the initial phases of the subsequent offensives in Afghanistan and Iraq. Its limitations were, however, clearly brought out in the continuing and protracted campaigns of attrition that followed as the challenge of asymmetric or irregular warfare accentuated the inadequate availability of "boots on the ground", lack of social and cultural awareness of the enemy and poor understanding of and training in counterinsurgency operations. Much of the blame for its poor showing lies on its leaderships fascination with technology and its version of RMA, along with its utter contempt for capabilities of its potential third world adversaries.

The ongoing Ukraine Conflict has to an extent cleared the air on the impact of transformative technologies. Whilst satellites, drones, RPVs, smart munitions etc have proved their worth, given the quantities that have been provided by NATO to Ukraine. They have, however, not really transformed the battlefield and it is the better trained and motivated Ukrainian Defence Forces, mostly equipped with Soviet Era weapon systems, that is giving the Russians a run for their money. As the American and Russian experiences show, we are in an era where any conflict is unlikely to be purely in the realm of the conventional. It will also incorporate irregular, information, cyber and other domains, in what is commonly referred to as Hybrid War. In such an environment technology has its place but is not the sole war winning factor as some analysts believe.

This should certainly give China pause as its military organisation, adapted from the Russian (Soviet) system, with its inherent leadership, logistics and manpower weaknesses, is attempting to transform itself into a force reliant wholly on high end technology. Whatever be said, given the American experience, this may not be the best way forward. It must be added that we on the other hand, have not been particularly adept at incorporating technology. Our advantage lies in an extremely motivated, trained and battle hardened force, which this Government has decided to reshape through its unviable Agnipath Scheme, for unfathomable reasons. Still, this can hardly be the reason for anyone to suggest that "In his first article since retirement, General MM Naravane (the former Chief) has exposed Indian Army's lack of understanding of present and future wars", as one prominent editor of a Defence Journal has done. This unseemly remark only suggests that he has probably let his ego get the better of his common sense and that, as American author JR Landsdale writes "is the way to give your soul to the devil, an inch at a time."

http://www.indiandefencereview.com/news/future-wars-the-way-forward/

Science & Technology News

अमरउजाला

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सबसे भारी रॉकेट एलवीएम-3 अब और ताकतवर, 450 किलो वजनी उपग्रह भी कर सकेगा प्रक्षेपित

भारत के सबसे भारी रॉकेट लॉन्च व्हीकल मार्क 3 (एलवीएम3) की अंतरिक्ष में उपग्रह व उपकरण प्रक्षेपित करने की क्षमता 450 किलो तक बढ़ा दी गई है। भारतीय अंतरिक्ष अनुसंधान संगठन (इसरो) द्वारा इसके क्रायोजेनिक इंजन सीई20 का बुधवार को किया ताजा परीक्षण सफल रहा। यह इंजन भारत में ही विकसित किया गया है। इसरो ने बताया कि पहली बार थ्रस्ट लेवल को बढ़ा कर 21.8 टन पर हॉट टेस्ट किया गया। हॉट टेस्ट यानी इंजन के संचालन से जुड़े सभी मानकों का 100 प्रतिशत परीक्षण, जिसमें इंजन की वास्तविक क्षमता मापी जाती है। परीक्षण के दौरान इंजन ने पहले 40 सेकंड तक करीब 20 टन थ्रस्ट लेवल पर काम किया। इसके बाद इसे थ्रस्ट कंट्रोल वाल्व (टीसीवी) की मदद से 21.8 टन तक पहुंचाया गया। परीक्षण में इंजन और उसका प्रदर्शन सामान्य पाए गए और चाहे गए परिणाम भी हासिल हुए। इसरो के अनुसार, एलवीएम3 की उपग्रहों को अंतरिक्ष में पहुंचाने की क्षमता बढ़ाने में इस परीक्षण से मदद मिलेगी। यह वृद्धि 450 किलो तक हो सकती है। इसके साथ अतिरिक्त प्रोपेलेंट भी लोड होगा।

तीन स्टेज का रॉकेट

एलवीएम3 तीन स्टेज का रॉकेट है। इसमें 4 टन तक के उपग्रह व उपकरण जियोसिंक्रोनस ट्रांसफर ऑर्बिट (जीटीओ) में पहुंचाने की क्षमता है। जीटीओ समुद्र सतह से 35,786 किमी ऊंचाई पर माना जाता है।

इन बदलावों से किया सुधार

- इसरो के अनुसार, पुराने इंजनों के मुकाबले सीई20 में बड़े बदलाव किए गए। इनमें टीसीवी शामिल हैं, जो रॉकेट के थ्रस्ट यानी धकेले की शक्ति को नियंत्रित करता है।
- साथ ही 3डी प्रिंटर से लिक्विड ऑक्सीजन और लिक्विड हाइड्रोजन ईंधन टरबाइन एग्जॉस्ट केसिंग बनाई गई, इन्हें इंजन में पहली बार लगाया गया।

https://www.amarujala.com/india-news/isro-successfully-tested-the-country-existing-ce-20cryogenic-engine-at-a-higher-thrust-level-of-21-8-tonnes



Thu, 10 Nov 2022

ISRO Successfully Conducts Hot Test of CE20 Cryogenic Engine for LVM3 Launch

The Indian Space Research Organisation (ISRO) successfully conducted the hot test of CE20 cryogenic engine indigenously developed for LVM3 at an uprated thrust level of 21.8 tonne for the first time late on Wednesday night. ISRO scientists said this will enhance the LVM3 payload capability up to 450kg with additional propellant loading. "The major modifications carried out on this test article compared to previous engines was introduction of Thrust Control Valve (TCV) for thrust control. In addition to this 3D printed LOX and LH2 turbine exhaust casings were inducted in the engine for the first time," ISRO said on Thursday. "During this test the engine operated with ~20t thrust level for first 40s, then thrust level was increased to 21.8t by moving thrust control valve. During the test, engine and facility performance was normal and required parameters were achieved", ISRO said.

HT had reported early November that ISRO is working to add to the weightlifting capacity of its heaviest rocket-- Launch Vehicle Mark-3-- for its second launch scheduled early next year. The space agency is expected to complete the qualifying tests for the semi-cryogenic stage of the LVM3 rocket in a couple of months, they said. "We are hopeful that by February or March next year, we will be able to launch the second batch of 36 satellites of OneWeb. All preparations for it are being done," a ministry official said, on condition of anonymity. ISRO has redesignated the launch vehicle as LVM-3 from GSLV Mk-III, which is India's heaviest launch vehicle. LVM-3 can carry up to four tonnes to a geostationary orbit and up to six tonnes to a low earth orbit.

"Induction of a high-propulsive SC120, along with an increased propellant loading of cryogenic upper stage, can increase this to up to six tonnes for GTO and 10 tonnes for LEO," an Isro scientist said, wishing to remain unnamed. Work on the semi cryo engine is on the last leg and qualification tests are in progress, scientists said. Stage and engine development stage is complete, the test stand is getting ready and the subsystem tests are going on at the testing facility at the Mahendragiri Liquid Propulsion Systems Centre. LVM3 is a three-stage vehicle with two solid motor strap-ons, a liquid propellant core stage and a cryogenic stage.

https://www.hindustantimes.com/india-news/isro-successfully-conducts-hot-test-of-ce20cryogenic-engine-for-lvm3-launch-101668062254580.html

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