Jan
2022

समाचार पत्रों से चयित अंश
Newspapers Clippings

A Daily service to keep DRDO Fraternity abreast with DRDO Technologies, Defence Technologies, Defence Policies, International Relations and Science & Technology

खंड : 47 अंक : 16 22-24 जनवरी 2022

Vol. : 47 Issue : 16 22-24 January 2022

रक्षा विज्ञान पुस्तकालय
Defence Science Library
रक्षा वैज्ञानिक सूचना एवं प्रलेखन केंद्र
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DRDO News

DRDO Technology News

REPUBLICWORLD.COM

Mon, 24 Jan 2022

DRDO exhibits India's defence tech prowess ahead of Republic Day

India's Defence Research and Development Organization (DRDO) on Sunday, Jan 23 released a video showcasing India's prowess in developing defence weapons

By Aakansha Tandon

With 73rd Republic Day around the corner, the festive fervour is in the air and adding to the festivities, India's Defence Research and Development Organization (DRDO) on Sunday released a video showcasing India's prowess in indigenously developing pre-eminent defence weapons & technologies.

DRDO exhibits India's prowess

The video released by the DRDO highlights the technologies developed in India for the Indian armed forces. The minute-long video features the Light Combat Aircraft Tejas and Rudram- the anti-radiation missile among others. These are the indigenously developed weapons featured by the Research & Development wing of the Ministry of Defence in the featured video:

1. Tejas Light Combat Aircraft
2. Indigenously developed Advanced Weapons and EW Suite for LCA Tejas
3. AESA Radar-Uttam
4. ASTRA- All-weather beyond visual Range Active Radar Homing Air to Air Missile
5. TARA- Tactical Advanced Range Augmentation
6. Rudram-1- New Generation Anti Radiation Missile
7. SAAW- Smart Anti Airfield Weapon
8. ASPJ-Advanced Self Protection Jammer
9. Gaurav- Long Range Glide Bomb

Beginning this year, the week-long Republic Day celebrations commenced on January 23 marking the 125th birth anniversary of the staunch freedom fighter Netaji Subhas Chandra Bose. Paying rich tributes to the stalwart national leader, PM Modi will be inaugurating the 3D hologram statue of Netaji at India Gate today. He had announced the development of a tall granite statue, of the leader and until its completion, the hologram statue will hold the place in the interim.

Notably, this year's Republic Day celebrations have been planned by the Ministry of Defence, Ministry of Culture and Ministry of Education. Considering the recent surge in COVID-19 cases, Defence Ministry has taken the initiative to invite citizens for watching the live streaming of Republic Day celebrations and Beating Retreat ceremony, as well as to show their solidarity to the Republic of India.

Several new elements have been added to the parade this year, including the laser projection on the South and North block walls, which will be followed by a drone show. "A minimum of 1000 drones will participate in the show," Major General Alok Kakkar informed.

Besides, ahead of the band performances on Republic Day, the Indian Naval contingent was seen rehearsing for the special day. The band was seen playing the iconic Bollywood song 'Monica oh my Darling', a video of the same was released by the Union government's Twitter handle and the rendition gave goosebumps to netizens.

https://www.republicworld.com/india-news/general-news/drdo-exhibits-indias-defence-tech-prowess-ahead-of-republic-day-watch-articleshow.html

Mon, 24 Jan 2022

Ahead of R-Day celebrations, DRDO shares video showcasing technologies developed for armed forces

The Defence Research and Development Organisation (DRDO) has shared a video showcasing the technologies developed by the organisation for the Armed Forces, ahead of the Republic Day parade.

New Delhi: The Defence Research and Development Organisation (DRDO) has shared a video showcasing the technologies developed by the organisation for the Armed Forces, ahead of the Republic Day parade.

The video, shared by news agency ANI, highlights technologies such as Tejas, Uttam, ASTRA, Tara, among others.

The following technologies have been showcased in the video:

- **Suite of Indigenously Developed Sensors, Weapons, and Electronic Warfare Systems**
- Tejas — Light Combat Aircraft (LCA)

Tejas is a single-engined, lightweight, highly agile, multi-role supersonic fighter. The aircraft with delta wing is designed for ‘air combat’ and ‘offensive air support’ with ‘reconnaissance’ and ‘anti-ship’ as its secondary roles.

- **Indigenously Developed Advanced Weapons and Electronic Warfare Suite for LCA Tejas**
- **Uttam — Advanced Electronically Scanned Array (AESA) Radar**

Uttam is an advanced active phased array radar (APAR) system. It is being developed by the Electronics and Radar Development Establishment (LRDE) for the HAL Tejas and other combat aircraft of the Indian Air Force. The development of Uttam started in 2008.

- **ASTRA — All Weather Beyond Visual Range Active Radar Homing Air-to-Air Missile**

ASTRA is India’s first beyond-visual-range (BVR) air-to-air missile indigenously designed and developed by the DRDO. The ASTRA missile, intended to engage and destroy aerial targets with high maneuverability and supersonic speeds, will serve the Indian Air Force (IAF) and the Indian Navy. ASTRA’s advanced air combat capabilities allow it to engage multiple high-performance targets.

- **TARA — Tactical Advanced Range Augmentation**

This is an advanced precision strike weapon meant for ground targets.

- **Rudram-1**

Rudram-1 is a new generation anti-radiation missile. It is an air-to-surface anti-radiation missile primarily meant for the suppression of enemy air defenses that can be launched from a range of

altitudes with large standoff distance. Rudram 1 is the first anti-radiation missile to be developed in India.

This is meant to destroy adversary radar and communication systems.

- **SAAW — Smart Anti-Airfield Weapon**

This is a long-range precision-guided and airfield weapon.

SAAW is designed to be capable of engaging ground targets with high precision up to a range of 100 kilometres, and was approved for procurement by the Indian Government for the Navy and the Air Force in September 2020.

- **ASPJ — Advanced Self Protection Jammer**

The ASPJ Pod is meant to provide protection against radars and anti-aircraft weapons. It contributes to the full-dimensional protection of fighter jets by improving individual aircraft's probability of survival.

- **Gaurav — Long Range Glide Bomb (LRGB)**

This is a precision-guided bomb.

https://news.abplive.com/science/watch-ahead-of-republic-day-celebrations-drdo-shares-video-showcasing-technologies-developed-for-armed-forces-1508230

Press Information Bureau
Government of India

Ministry of Defence

Sat, 22 Jan 2022 7:00PM

DRDO to display two tableaux during Republic Day parade 2022

Indigenous Sensor, Weapons & EW Suite for LCA Tejas and Air Independent Propulsion for submarines to be showcased

Defence Research and Development Organisation (DRDO) will display two tableaux during the forthcoming Republic Day Parade on January 26, 2022. The tableaux are 'Suite of Indigenously Developed Sensors, Weapons and Electronic Warfare Systems for LCA Tejas' and 'Air Independent Propulsion System (AIP)' developed for the submarines of Indian Navy.

The first tableau displays an indigenously-developed Advanced Electronically Scanned Array Radar called 'Uttam'; five different aerial launched weapons and an Electronic Warfare (EW) Jammer to further enhance the capabilities of fourth generation LCA (Light Combat Aircraft) Tejas. The 'Uttam' radar is highly compact and modular state-of-the-art sensor to provide situational awareness to the pilot. The radar is developed by Bangalore-based electronics laboratory.

The five aerial launched weapons include air–to-air missile 'Astra' which is an all-weather, active radar homing missile with beyond visual range striking capabilities; 'Rudram', a new generation anti-radiation missile with a capability to destroy adversary's radar and communication systems; 'Smart Anti Airfield Weapon, meant to destroy the ground targets and airfields; a long range guided glide bomb 'Gaurav' and 'Tactical Advanced Range Augmentation', an advanced precision strike weapon meant for ground targets. These weapons are developed using complex technologies by Hyderabad-based DRDO laboratories.

Tejas is fitted with 'Advanced Self Protection Jammer' designed to provide protection from acquisition radars, fire control radars, anti-aircraft artillery and airborne multirole radars. Developed by electronic laboratory at Hyderabad, it provides the electronic warfare capability for the LCA. Integration of these weapons, radar and EW systems with LCA is an important step towards increasing the indigenous content of systems and makes the LCA mission ready.

The second tableau showcases indigenously-developed AIP System for propelling the Indian Naval submarines underwater. The AIP System is powered by indigenously-developed fuel cells with a novel onboard hydrogen generator. It is one of the most advanced AIP Systems in the world where Fuel Cell Technology is used to generate onboard power. The AIP allows a submarine to be submerged for longer periods compared to conventional diesel-electric submarines and makes the sub-surface platform more efficient by making it quieter than even a nuclear submarine.

At present, the AIP is customised for P-75 class of submarine. Once fitted, it will allow the submarine to stay under water for longer time without the need to surface frequently. This will substantially enhance the underwater endurance of the submarine. This niche technology is available only with very few countries in the world. The DRDO has developed this technology with the collaboration of academia and industry.

https://pib.gov.in/PressReleasePage.aspx?PRID=1791821

पत्र सूचना कार्यालय
भारत सरकार

रक्षा मंत्रालय

Sat, 22 Jan 2022 7:00PM

गणतंत्र दिवस परेड 2022 में डीआरडीओ की दो झांकियां

एलसीए तेजस हेतु स्वदेशी सेंसर, हथियार व ईडब्ल्यू सुइट तथा
पनडुब्बियों हेतु एयर इंडिपेंडेंट प्रोपल्शन प्रदर्शित किए जाएंगे

रक्षा अनुसंधान एवं विकास संगठन (डीआरडीओ) दिनांक 26 जनवरी, 2022 को होने वाली गणतंत्र दिवस परेड के दौरान दो झांकियां प्रदर्शित करेगा। यह झांकियां 'हल्के लड़ाकू विमान तेजस के लिए स्वदेशी रूप से विकसित सेंसर, हथियार एवं इलेक्ट्रॉनिक युद्ध प्रणाली' और 'भारतीय नौसेना की पनडुब्बियों के लिए विकसित 'एयर इंडिपेंडेंट प्रोपल्शन सिस्टम' हैं।

पहली झांकी में स्वदेशी रूप से विकसित एडवांस्ड एलेक्ट्रॉनिकली स्कैन्ड एरे राडार 'उत्तम' तथा चौथी पीढ़ी के एलसीए (लाइट कॉम्बैट एयरक्राफ्ट) तेजस की क्षमताओं को और अधिक बढ़ाने के लिए पांच अलग-अलग एयर लॉन्च हथियार एवं इलेक्ट्रॉनिक वारफेयर (ईडब्ल्यू) जैमर को प्रदर्शित किया गया है। पायलट को स्थितिजन्य जागरूकता प्रदान करने के लिए 'उत्तम' रडार अत्यधिक कॉम्पैक्ट और मॉड्यूलर अत्याधुनिक सेंसर है। राडार को बैंगलोर स्थित इलेक्ट्रॉनिक्स प्रयोगशाला द्वारा विकसित किया गया है।

पांच एयर लॉन्च हथियारों में हवा से हवा में मार करने वाली मिसाइल 'अस्त्र' शामिल है, जो दृश्य सीमा से परे हमला करने में सक्षम एक सभी मौसमों में सक्रिय रडार होमिंग मिसाइल है, विरोधी के राडार और संचार प्रणालियों को नष्ट करने की क्षमता वाली एक नई पीढ़ी की विकिरण-रोधी मिसाइल 'रुद्रम' है; ज़मीनी लक्ष्यों और एयरफील्ड को नष्ट करने की क्षमता वाली 'स्मार्ट एंटी एयरफील्ड वेपन है, एक लंबी दूरी का गाइडेड ग्लाइड बम 'गौरव' तथा जमीनी लक्ष्यों के लिए सटीक वार करने वाला उन्नत स्ट्राइक हथियार 'टैक्टिकल एडवांस्ड रेंज ऑग्मेंटेशन' है। इन हथियारों को हैदराबाद स्थित डीआरडीओ प्रयोगशालाओं द्वारा जटिल तकनीकों का उपयोग करके विकसित किया गया है ।

तेजस को 'एडवांस्ड सेल्फ प्रोटेक्शन जैमर' से लैस किया गया है, जिसे एक्विज़िशन राडार, फायर कंट्रोल राडार, विमान-रोधी आर्टिलियरी एवं एयरबोर्न मल्टीरोल राडार से सुरक्षा प्रदान करने के लिए डिज़ाइन किया गया है। हैदराबाद में इलेक्ट्रॉनिक प्रयोगशाला द्वारा विकसित यह जैमर एलसीए के लिए इलेक्ट्रॉनिक युद्ध क्षमता प्रदान करता है। एलसीए के साथ इन हथियारों, राडार और इलेक्ट्रॉनिक वारफेयर सिस्टम का

एकीकरण सिस्टम की स्वदेशी सामग्री को बढ़ाने की दिशा में एक महत्वपूर्ण कदम है और एलसीए को मिशन के लिए तैयार करता है।

दूसरी झांकी भारतीय नौसेना की पनडुब्बियों को पानी के भीतर संचालित करने के लिए स्वदेशी रूप से विकसित एआईपी प्रणाली को प्रदर्शित करती है। एआईपी प्रणाली स्वदेशी रूप से विकसित फ्यूल सेल्स द्वारा संचालित है जिसमें एक उन्नत ऑनबोर्ड हाइड्रोजन जनरेटर है। यह दुनिया में सबसे उन्नत एआईपी सिस्टम में से एक है जहां ऑनबोर्ड बिजली उत्पन्न करने के लिए फ्यूल सेल प्रौद्योगिकी का उपयोग किया जाता है। एआईपी प्रणाली पारंपरिक डीजल-इलेक्ट्रिक पनडुब्बियों की तुलना में एक पनडुब्बी को लंबे समय तक पानी के भीतर बने रहने की अनुमति देती है और इनको परमाणु पनडुब्बी से भी शांत बनाकर अधिक सक्षम बनाती है।

वर्तमान में एआईपी प्रणाली को पनडुब्बी के पी-75 वर्ग के लिए अनुकूलित किया गया है। एक बार फिट होने के बाद यह पनडुब्बी को बार-बार सतह पर आने की आवश्यकता के बिना अधिक समय तक पानी के नीचे रहने की अनुमति देगी। यह पनडुब्बी की पानी के भीतर रहने की सहनशक्ति को काफी हद तक बढ़ाएगी। यह उत्तम तकनीक दुनिया के बहुत कम देशों के पास ही उपलब्ध है। डीआररडीओ ने इस तकनीक को शिक्षा जगत और उद्योग के सहयोग से विकसित किया है।

https://pib.gov.in/PressReleasePage.aspx?PRID=1791995

Sun, 23 Jan 2022

UAE - Vietnam - Philippines showed interest to acquire Indian Akash air defense missile system

According to information published by "The EurAsian Times" on January 22, 2022, it is reported that in December 2021, United Arab Emirates has shown interest to acquire the Indian-made Akash air defense missile system.

Indian army Akash Launcher units passed through the Rajpath, on the occasion of the 69th Republic Day Parade 2018, in New Delhi on January 26, 2018. (Picture source Wikimedia)

Another media has also reported that other countries in Asia also showed interest to acquire Akash Indian-made air defense missile systems, including Vietnam and the Philippines. Recently, the Indian government has approved the export of Akash. According to a statement published by Indian MoD, the export version of Akash would be different from the system in use by the Indian armed forces.

The Akash is a medium-range surface-to-air defense missile system developed and designed by India's state-owned Defence Research and Development Organisation (DRDO). The Akash missile system has the capability to destroy aerial targets such as fighter jets, cruise missiles, and air-to-surface missiles as well as ballistic missiles.

The development of the Akash missile system was started in 1983 with its first production in 2002. The first trial firings occurred in 1990 with the tenth stated test in September 1998. The missile system was developed based on the Soviet 2K12 (NATO Code SA-6 Gainful) surface-to-

air missile defense system. The missile system was formally inducted into the Indian Air Force on July 10, 2015, and in the Indian Army on May 5, 2015.

The launcher unit of the Akash missile can be mounted on truck or armored tracked chassis. The launch station consists of three ready-to-fire Akash missiles mounted on a turntable with a traverse of 360° and elevation from 8° to 75°.

An Akash battery consists of four 3D passive electronically scanned array radars and four launchers with three missiles each, all of which are interlinked. Each battery can track up to 64 targets and attack up to 12 of them. It also has battery level radar known as Rajendra, as well as a battery control center. It can track and attack multiple targets concurrently. A self-destructive device is also integrated into the missile.

The supersonic Akash missile has a range of around 25 km and up to the altitude of 18,000 m. It uses high-energy solid propellant for the booster and ramjet-rocket propulsion for the sustainer phase. Several variants of the missile- Akash MK1, Akash-MK2 with improved accuracy and higher ranges are under development by the Defence Research and Development Organisation (DRDO).

https://www.armyrecognition.com/defense_news_january_2022_global_security_army_industry/uae_-_vietnam_-_philippines_showed_interest_to_acquire_indian_akash_air_defense_missile_system.html

BULGARIANMILITARY.COM

Sun, 23 Jan 2022

BrahMos with semi-armor-piercing warhead goes to the Philippines

By Boyko Nikolov

- ***BrahMos sea-to-sea missile did a precise strike at 500 km***
- ***First-time export: Israel sells Sabrah hybrid tank with 105-mm gun to the Philippines***
- ***Top 5 best anti-aircraft missile systems in the World***

Manila: ($1=51.26 Philippine Peso) – The government of the Philippines has decided to buy from India coastal defense missile systems BrahMos with missiles capable of carrying 200 kg of semi-armor-piercing warheads. The information was confirmed by the State Information Agency of the Philippines – PNA.

BulgarianMilitary.com reminded that negotiations for the purchase of BrahMos supersonic missiles began in May last year, but due to the complicated epidemic situation in the world due to the spread of Kovid-19, the negotiations were temporarily suspended.

According to the Philippine Ministry of Defense, two BrahMos batteries will be purchased and will be deployed as a joint artillery unit and will participate in Coast Guard missions. A spokesman for the Philippine Army (PA), Col. Xerxes Trinidad, said the purchase was part of the 3rd horizon of the local RAFPMP program. BulgarianMilitary.com reminded us that the Philippine Army is currently implementing the 2nd horizon of this program, which means that Manila will acquire both batteries in the coming years.

BrahMos is a supersonic missile jointly developed by India and Russia, which is manufactured in India under license. Currently, only India has adopted this missile, developing a version of the three military warheads – land, air, sea. There are rumors that Russia may also include BrahMos as part of its military arsenal, but so far this information has not been confirmed.

The ground version of the BrahMos rocket, which the Philippines buys, is powered in series by a two-stage propulsion system – the first system launches the rocket with liquid fuel, the second system accelerates the rocket through a ramjet with liquid fuel. According to military experts, this type of BrahMos propulsion allows its range to be increased. Also, two-stage propulsion and the type of fuel used is a cheaper option than standard rocket fuel.

The decision of the Philippines to acquire BrahMos was made by the Philippine government in 2019 – long before negotiations with India began. According to unconfirmed information, $ 100 million was offered to the Philippines at the time as the credit line from New Delhi to start production. Even then, the Philippines began investigating the possibility of Manila buying the two batteries in two tranches and not relying on the credit line from India. The value of the deal is nearly $375 million but is still unknown how the Philippines will pay for both BrahMos systems.

BulgarianMilitary.com has a source in the Ministry of Defense of the Philippines who confirmed that one battery will be located in Ford Magsay. There is already a ground-based missile system 1LBMS Btry. According to our source, by the end of 2024, India has committed to supply the two BrahMos batteries and train the Philippine personnel who will operate them.

https://bulgarianmilitary.com/2022/01/22/brahmos-with-semi-armor-piercing-warhead-goes-to-the-philippines/

THE WEEK

Sun, 23 Jan 2022

India got a BrahMos order from Philippines. Is Vietnam next, asks R. Prasannan

By R Prasannan

Writing about Delhi's crazy cocktail circuit once, I described an arty-farty party where I had seen a lanky wine-drunk lady lighting a huge Havana. "She lit a miniature Tomahawk," I wrote.

A day later, I got a call from India's second-most famous missile scientist (after you-know-who) Dr A. Sivathanu Pillai. "I liked your article. But why did you compare the cigar to a Tomahawk?"

"Why not?" I countered. "It looked ludicrous."

To my Hollywood-dulled mind, it had looked even grotesque. As grotesque as it would have been, if Audrey Hepburn had been shown in that iconic poster of Breakfast at Tiffany's holding a huge Havana, instead of a cigarette in an elegantly slim holder. But since I did not want to discuss Hollywood posters with a missile scientist, I said sheepishly: "Isn't Tomahawk the most famous cruise missile?"

"It is, because people like you make it famous. You should have likened the cigar to BrahMos."

Coming from the father of BrahMos, it struck me like a homing missile. I had known enough about BrahMos as the fastest, smartest and the only supersonic cruise missile in the world, before which the Tomahawk was like an Ambassador before a Maybach. I had known that unlike the MiGs or the Jaguars, BrahMos was not a designed-abroad and made-in-India product.

It had been developed by the finest missile minds of India and Russia, who had joined hands, formed a consortium, compared notes, exchanged ideas, built teams, met challenges, faced failures, shared blames, and toasted successes together. I had also known that BrahMos was the only cruise missile in the world that could be launched from land to land, land to ship, ship to ship, ship to land, submarine to land, submarine to ship, airplane to land, and airplane to ship.

Yet why did it not come to my dull mind when I was looking for a missile metaphor? Simple: I was suffering from a mind block from which India's political class, military brass, diplomatic corps, bureaucratic babus and media hacks had been suffering—a mulish refusal to look at India as a builder of big arms.

The biggest success of BrahMos over the last two decades has been in breaking this mind block. Not only have Pillai and his successors Sudhir Mishra and Atul Rane built the world's most versatile missile, but also convinced the netas, the babus, the brass hats and the hacks that BrahMos packs the most precise and powerful punch ever packed into a cruise missile; and that any general, admiral or air marshal in the world would give his right arm to lay his hands (pardon the mixed metaphor) on a battery of BrahMos.

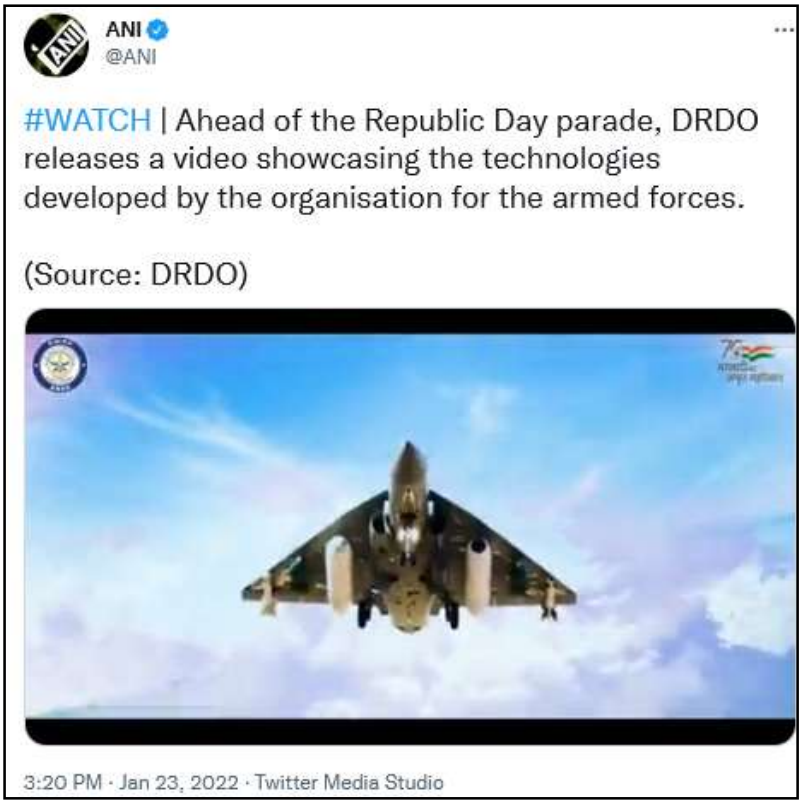
An early convert to their line of thinking was Prime Minister Narendra Modi. In his first outing as PM in 2014, Modi had landed on the deck of INS Vikramaditya, and told the commanders of the three services about the need for arms-buying India to sell arms.

We may be the world's most valued arms buyer, but as a seller we are small fry hawking nothing more lethal than pistols, rifles, radar parts, avionics consoles, airplane doors, and at the most a few unarmed Dhruv helicopters and an offshore patrol vessel once in a while. From all these we earned Rs10,000 crore last year—small change in the big bad market of military arms! In the sellers' market we are like a street hawker sitting outside Harrods.

All that may be changing. Last week, India received an order from the Philippines for three batteries of BrahMos—the first order that India has ever received for a big-ticket weapon. Next may be from Vietnam. Time to knock at the doors of Harrods?

https://www.theweek.in/columns/prasannan/2022/01/20/india-got-a-brahmos-order-from-philippines-is-vietnam-next-asks-r-prasannan.html

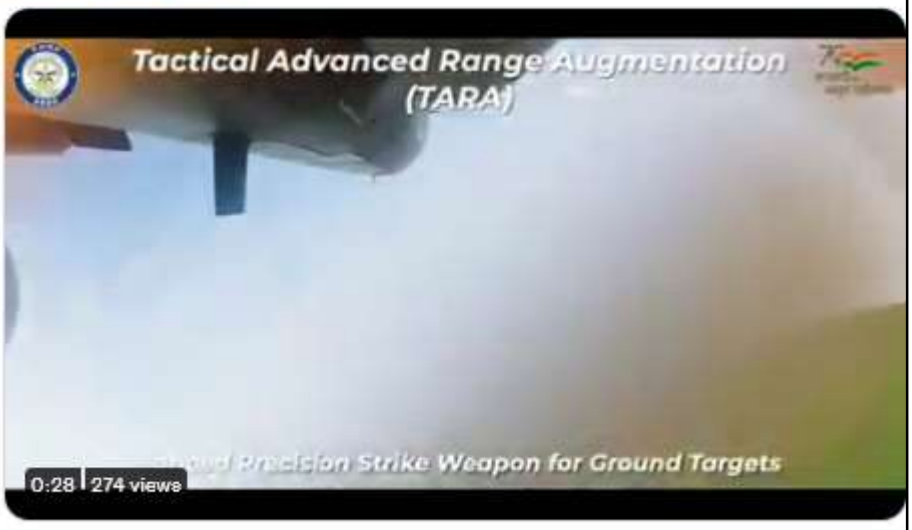
DRDO on Twitter



Prasar Bharati News Services पी.बी.एन.एस.
@PBNS_India

Indigenously developed Suite of Sensor, Weapons & EW System by DRDO will march on the iconic Rajpath on Republic Day 2022.

@DRDO_India



7:45 AM · Jan 24, 2022 · TweetDeck

DRDO @DRDO_India · Jan 23

वायु मुक्त प्रणोदन प्रणाली (ए आय पी) सैन्य क्षमताओं को मज़बूत करते हुए आत्मनिर्भर भारत को बढ़ावा देगी।

Showcasing the technological prowess, indigenously developed Air Independent Propulsion System is all set to mark its presence on #Rajpath this #RepublicDay2022. #QuantumLeap

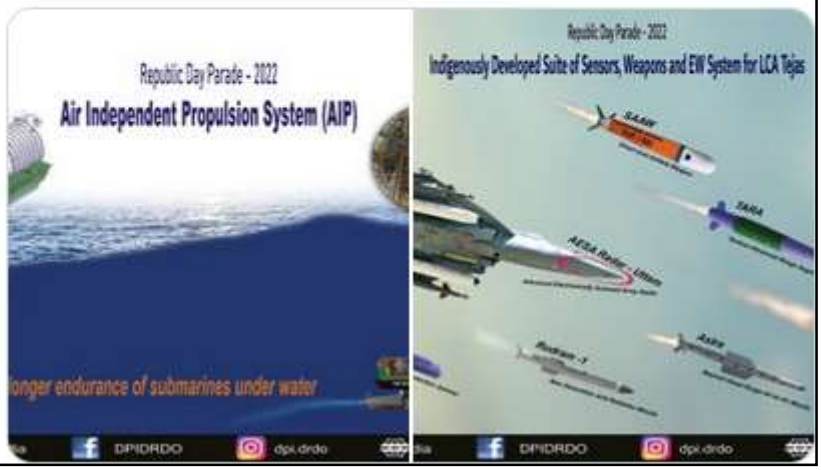
DRDO @DRDO_India · Jan 22

DRDO to display two tableaux during Republic Day Parade 2022
#AtmaNirbharBharat
#AdvancedTechnologies
pib.gov.in/PressReleasePa...

DRDO @DRDO_India · Jan 22

Marching this #RepublicDayParade, two DRDO tableaus with Advanced Defence Technologies -
- Suite of Sensors, Weapons & EW System for #LCATejas
- Air Independent Propulsion (AIP) System for Submarines

@DefenceMinIndia @adgpi @IAF_MCC @indiannavy @SpokespersonMoD
#AtmaNirbharta



Defence News

Defence Strategic: National/International

Press Information Bureau
Government of India

Ministry of Earth Science

Fri, 21 Jan 2022 3:47PM

Admiral R Hari Kumar, Chief of the Naval Staff calls on Union Minister Dr Jitendra Singh and discusses modalities to deepen cooperation in the “Deep Ocean Mission”, which is to be the torchbearer of India's "Blue Economy"

Ministry of Earth Sciences and Indian Navy will soon sign a MoU for knowledge sharing in the areas of design and development of underwater vehicle: Dr Jitendra Singh

Chief of the Naval Staff, Admiral R. Hari Kumar called on Union Minister of State (Independent Charge) Science & Technology; Minister of State (Independent Charge) Earth Sciences; MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space, Dr Jitendra Singh and discussed the modalities to deepen cooperation in "Deep Ocean Mission" which is to be the torchbearer of India's "Blue Economy".

The Minister said, "Deep Ocean Mission" is designed to explore India’s deep ocean for resources and develop deep-sea technologies for sustainable use of ocean resources. It will have an important bearing on India's future economy, he added.

Pertinent to mention that the Indian Navy is a member of Deep Ocean Council and it will be involved in launching and recovery of Man submersible in deep water, which will be developed under the Deep Ocean Mission. The Ministry of Earth Sciences and Indian Navy are to soon sign a MoU for knowledge sharing in the areas of design and development of underwater vehicles.

Dr Jitendra Singh recalled that during his Independence Day address from Red Fort last year, Prime Minister Narendra Modi had said that "Deep Ocean" Mission will take India's development to new heights in the 21st century. The Deep Ocean Mission is a mission mode project to support the Blue Economy initiatives of the Government of India.

Dr Jitendra Singh informed that the preliminary design of the manned submersible MATSYA 6000 is completed and realisation of vehicle is started with various organization including ISRO, IITM and DRDO roped-in to support the development. He said, it is designed to carry 3 people to a depth of 6000 metres in the ocean with suit of scientific sensors and tools.

Dr Jitendra Singh launched India’s First Manned Ocean Mission Samundrayaan at Chennai in October, last year and thus joined the elite club of nations such as USA, Russia, Japan, France and

China to have such underwater vehicles for carrying out subsea activities. The Minister informed that this niche technology shall facilitate Ministry of Earth Sciences, MoES in carrying out deep ocean exploration of the non-living resources such as polymetallic manganese nodules, gas hydrates, hydro-thermal sulphides and cobalt crusts, located at a depth between 1000 and 5500 metres.

The Modi Government had approved the Deep Ocean Mission (DOM) in June, 2021 to be implemented by the Ministry of Earth Sciences at a total budget of Rs. 4077 Crore for 5 years. DOM is a multi-ministerial, multi-disciplinary programme with emphasis on development of deep-sea technology that includes development of manned Submersible rated for 6000 metre water depth along with technologies for deep sea mining, exploration of deep-sea mineral resources and marine biodiversity, acquisition of a research vessel for ocean exploration, deep sea observations, and capacity building in Marine Biology.

https://pib.gov.in/PressReleasePage.aspx?PRID=1791489

पत्र सूचना कार्यालय
भारत सरकार

रक्षा मंत्रालय

Fri, 21 Jan 2022 3:47PM

नौसेनाध्यक्ष एडमिरल आर हरि कुमार ने केंद्रीय मंत्री डॉ. जितेंद्र सिंह से मुलाकात कर भारत की 'ब्लू इकोनॉमी' का भावी पथप्रदर्शक 'डीप ओशन मिशन' में सहयोग बढ़ाने के तौर-तरीकों पर चर्चा की

पृथ्वी विज्ञान मंत्रालय और भारतीय नौसेना जल्द ही जलमग्न वाहनों के डिजाइन और विकास के क्षेत्रों में जानकारी साझा करने के लिए एक समझौता ज्ञापन पर हस्ताक्षर करेंगे: डॉ. जितेंद्र सिंह

नौसेनाध्यक्ष, एडमिरल आर. हरि कुमार ने केंद्रीय विज्ञान और प्रौद्योगिकी एवं पृथ्वी विज्ञान राज्यमंत्री (स्वतंत्र प्रभार) पीएमओ, कार्मिक, लोक शिकायत, पेंशन, परमाणु ऊर्जा और अंतरिक्ष राज्यमंत्री डॉ. जितेंद्र सिंह से मुलाकात की और 'डीप ओशन मिशन' में सहयोग बढ़ाने के तौर-तरीकों पर चर्चा की, जो भारत की 'ब्लू इकोनॉमी' अर्थात नीली अर्थव्यवस्था का पथप्रदर्शक है।

डॉ. जितेंद्र सिंह ने कहा, संसाधनों के लिए भारत के गहरे महासागर में पता लगाने और महासागर के संसाधनों का सतत उपयोग करने के लिए गहरे समुद्र के लिये प्रौद्योगिकी विकसित करने को लेकर 'डीप ओशन मिशन' की परिकल्पना की गई है। उन्होंने कहा कि भारत के भविष्य की अर्थव्यवस्था पर इसका महत्वपूर्ण प्रभाव पड़ेगा।

भारतीय नौसेना डीप ओशन काउंसिल की सदस्य है और वह गहरे पानी में मानव चालित पनडुब्बी की लांचिंग और रिकवरी में शामिल रहेगी, जिसे डीप ओशन मिशन के तहत विकसित किया जाएगा। पृथ्वी विज्ञान मंत्रालय और भारतीय नौसेना जल्द ही जलग्न वाहनों का डिजाइन और विकास करने के क्षेत्रों में जानकारी साझा करने के लिए एक समझौता ज्ञापन पर हस्ताक्षर करने वाले हैं।

डॉ. जितेंद्र सिंह ने याद दिलाया कि पिछले साल स्वतंत्रता दिवस पर लाल किले से अपने संबोधन में प्रधानमंत्री नरेन्द्र मोदी ने कहा था कि 'डीप ओशन' मिशन 21वीं सदी में भारत के विकास को नई ऊंचाइयों

पर ले जाएगा। डीप ओशन मिशन भारत सरकार की नीली अर्थव्यवस्था की पहलों में मदद के लिए मिशन मोड में चलाई जा रही एक परियोजना है।

डॉ. जितेंद्र सिंह ने बताया कि मानवयुक्त सब्मर्सिबल मत्स्य-6000 का प्रारंभिक डिजाइन पूरा हो गया है और इसरो, आईआईटीएम एवं डीआरडीओ सहित विभिन्न संगठनों के समर्थन से इसकी प्राप्ति शुरू हो गई है। उन्होंने कहा कि वैज्ञानिक सेंसर और उपकरणों के साथ 3 लोगों को समुद्र में 6000 मीटर की गहराई तक ले जाने के लिए इसका डिजाइन किया गया है।

डॉ. जितेंद्र सिंह ने पिछले साल अक्टूबर में चेन्नई में भारत का पहला मानवयुक्त महासागर मिशन समुद्रयान लांच किया था और भारत इस तरह संयुक्त राज्य अमेरिका, रूस, जापान, फ्रांस और चीन जैसे देशों के उस इलीट क्लब में शामिल हो गया जिनके पास सागर की गहराई के कार्यकलापों के लिए इस तरह के पानी के भीतर चलने वाले वाहन हैं। डॉ. सिंह ने बताया कि इस विशेष प्रौद्योगिकी से पृथ्वी विज्ञान मंत्रालय को समुद्र में 1000 से 5500 मीटर के बीच की गहराई में स्थित पॉलीमेटेलिक मैंगनीज नोड्यूल, गैस हाइड्रेट्स, हाइड्रो-थर्मल सल्फाइड और कोबाल्ट क्रस्ट जैसे संसाधनों की खोज गहरे समुद्र में करने में सुविधा मिलेगी।

मोदी सरकार ने जून, 2021 में डीप ओशन मिशन (डीओएम) को मंजूरी दी थी, जिसके लिए पृथ्वी विज्ञान मंत्रालय द्वारा 5 साल के लिए कुल 4077 करोड़ रुपये का बजटीय प्रावधान किया गया था। डीओएम एक बहु-मंत्रालयी और बहु-विषयक कार्यक्रम है जिसमें गहरे समुद्र में प्रौद्योगिकी के विकास पर जोर दिया गया है जिसमें गहरे समुद्र में खनन, खनिज संसाधनों की खोज और समुद्री जैव विविधता, महासागरीय खोज, गहरे समुद्र में गहराई का अवलोकन और समुद्री जीव विज्ञान में क्षमता निर्माण के लिए एक अनुसंधान पोत के लिए प्रौद्योगिकी के साथ-साथ पानी की 6000 मीटर गहराई में चलने वाले मानवयुक्त सबमर्सिबल का विकास शामिल है।

https://pib.gov.in/PressReleasePage.aspx?PRID=1791582

Press Information Bureau
Government of India

Ministry of Defence

Fri, 21 Jan 2022 5:53PM

Army Chief visits Bhopal

General Manoj Mukund Naravane, Chief of Army Staff concluded a two day visit to Bhopal today. Lieutenant General JS Nain, Southern Army Commander was also present during the visit. The COAS was briefed by the Sudarshan Chakra Corps Commander and other commanders on operational preparedness and on the reforms being undertaken towards transforming the formation into a modern, cohesive, lean and agile war fighting force. The Army Chief was appreciative of the formation's high levels of operational preparedness despite the restrictions imposed by COVID-19 pandemic. He complimented their proactive approach in undertaking flood relief operations at Datia, Shivpuri, Sheopur, Morena, Ashoknagar and Jalon of Madhya Pradesh. The COAS also interacted with troops and exhorted them to continue working with zeal and be prepared for any future operational challenges.

The Army Chief later visited Headquarters Paschim Madhya Pradesh Sub Area. He appreciated the role of the Sub Area in assisting the civil administration in combating the COVID-19 pandemic by setting up Adhoc COVID Isolation Facilities, provision and repair of critical life-saving

equipment and augmentation of Civil Medical Infrastructure. The COAS also visited 3 EME Centre at Bairagarh Military Station and reviewed the training being imparted to mould future generation of soldiers of the Indian Army.

https://pib.gov.in/PressReleasePage.aspx?PRID=1791542

पत्र सूचना कार्यालय
भारत सरकार

रक्षा मंत्रालय

Fri, 21 Jan 2022 5:53PM

सेना प्रमुख ने भोपाल का दौरा किया

थल सेनाध्यक्ष जनरल मनोज मुकुंद नरवणे का दो दिवसीय भोपाल दौरा आज समाप्त हो गया। इस दौरान सेना की दक्षिणी कमान के कमांडर लेफ्टिनेंट जनरल जेएस नैन भी री नरवणे के साथ मौजूद थे। सुदर्शन चक्र कोर कमांडर और अन्य कमांडरों ने थल सेनाध्यक्ष (सीओएएस) को ऑपरेशन संबंधी तत्परता और सेना के विन्यास को आधुनिक, एकजुट, चुस्त तथा मुस्तैदी के साथ युद्ध लड़ने वाले बल में बदलने की दिशा में किए जा रहे सुधारों के बारे में जानकारी दी। सेना प्रमुख ने कोविड महामारी को लेकर लगाए गए प्रतिबंधों के बावजूद सेना के उच्च स्तर की ऑपरेशन संबंधी तैयारियों की सराहना की। उन्होंने मध्यप्रदेश के दतिया, शिवपुरी, श्योपुर, मुरैना, अशोकनगर और जालों में बाढ़ राहत अभियान चलाने में उनके सक्रिय दृष्टिकोण की सराहना की। सीओएएस ने सैनिकों के साथ भी बातचीत की और उन्हें उत्साह के साथ काम करना जारी रखने तथा भविष्य के किसी भी ऑपरेशन की चुनौतियों के लिए तैयार रहने का आह्वान किया।

सेना प्रमुख ने बाद में पश्चिम मध्य प्रदेश उप-क्षेत्र के मुख्यालयों का दौरा किया। उन्होंने एडहॉक कोविड आइसोलेशन सुविधाओं की स्थापना, महत्वपूर्ण जीवन रक्षक उपकरणों के प्रावधान और मरम्मत व सिविल मेडिकल इंफ्रास्ट्रक्चर के संवर्धन द्वारा कोविड-19 महामारी से निपटने में नागरिक प्रशासन की सहायता करने में उप-क्षेत्र की भूमिका की सराहना की। सीओएएस ने बैरागढ़ सैन्य-अड्डा के 3 ईएमई केंद्र का भी दौरा किया और भारतीय सेना के जवानों की भावी पीढ़ी को सांचे में ढालने के लिए दिए जा रहे प्रशिक्षण की समीक्षा की।

https://pib.gov.in/PressReleasePage.aspx?PRID=1791613

asianet newsable

Sat, 22 Jan 2022

China counters India's BrahMos deal, donates military aid to Philippines worth $20 million

The defence equipment was delivered to Manila on January 16, two days after the Philippines announced moving forward to procure three batteries of the supersonic BrahMos missile system.

By Vipin Vijayan

New Delhi: As a counter to the BrahMos export deal with India, China has donated arms worth around $20 million to the Philippines. The defence equipment was delivered to Manila on January 16, two days after the Philippines announced moving forward to procure three batteries of the supersonic BrahMos missile system.

The defence equipment donated by China includes rescue and relief equipment, drone systems, detectors, water purification vehicles, ambulances, firetrucks, X-ray machines, transport vehicles, EOD robots, bomb disposal suits, engineering equipment, dump trucks, forklifts, and earthmovers. The second batch of military items will be delivered soon.

India had recently secured its biggest-ever defence export deal worth $375 million from the Philippines to supply the BrahMos missile system.

As per the Philippines media outlet Inquirer, Defense Secretary Delfin Lorenzana informed that the donation was part of a pledge by his Chinese counterpart Gen Wei Fenghe during the Chinese official's visit to Manila in 2020. That is a big help, Lorenzana said, adding that it will help meet some of the country's large equipment shortfall.

Under the current leadership of President Rodrigo Duterte in the Philippines, Manila and Beijing have enhanced their relationship. The Duterte leadership has stressed a soft approach towards China despite an international tribunal's ruling that denied China's claim on territorial rights in the South China Sea in 2016. It is said that the soft stance adopted by Duterte is in exchange for loans and investments.

Recently, Chinese Foreign Minister Wang Yi had urged the next leader to continue with Duterte's foreign policy on China as the Philippines gears up for the presidential election. Wang Yi had said that the policy served the purpose of both countries. Duterte, who became the president in 2016, will step down after the May election in line with the country's one-term limit.

https://newsable.asianetnews.com/india-defence/china-counters-india-s-brahmos-deal-donates-military-aid-to-philippines-worth-20-million-r62e8l

asianet news हिन्दी

Sat, 22 Jan 2022

भारत ने फिलीपींस के साथ किया BrahMos Deal तो चीन ने दी 20 मिलियन डॉलर की सैन्य सहायता

भारत ने फिलीपींस के साथ सुपर सोनिक क्रूज मिसाइल ब्रह्मोस के निर्यात की डील फाइनल की तो इसके जवाब में चीन ने फिलीपींस को 20 मिलियन डॉलर की सैन्य सहायता दी है।

मनीला: भारत ने फिलीपींस के साथ सुपर सोनिक क्रूज मिसाइल ब्रह्मोस के निर्यात की डील (BrahMos Deal) **फाइनल की तो इसके जवाब में चीन ने फिलीपींस को** 20 **मिलियन डॉलर की सैन्य सहायता दी है। चीन ने** 16 **जनवरी को मनीला (फिलीपींस की राजधानी) को रक्षा उपकरण दिए। फिलीपींस द्वारा ब्रह्मोस मिसाइल प्रणाली की तीन बैटरियों की खरीद के लिए आगे बढ़ने की घोषणा के दो दिन बाद चीन ने यह कदम उठाया।**

चीन द्वारा दान किए गए रक्षा उपकरणों में बचाव और राहत उपकरण, ड्रोन सिस्टम, डिटेक्टर, जल शोधन वाहन, एम्बुलेंस, फायरट्रक, एक्स-रे मशीन, परिवहन वाहन, ईओडी रोबोट, बम डिस्पोजल सूट, इंजीनियरिंग उपकरण, डंप ट्रक, फोर्कलिफ्ट और अर्थमूवर शामिल हैं। सैन्य सामानों की दूसरी खेप जल्द ही पहुंचाई जाएगी।

भारत ने किया था 375 मिलियन डॉलर का सौदा

भारत ने हाल ही में ब्रह्मोस मिसाइल प्रणाली की आपूर्ति के लिए फिलीपींस से 375 **मिलियन डॉलर का अब तक का अपना सबसे बड़ा रक्षा निर्यात सौदा हासिल किया था। फिलीपींस के मीडिया आउटलेट**

इन्क्वायरर के अनुसार, रक्षा सचिव डेल्फिन लोरेंजाना ने बताया कि दान का वादा उनके चीनी समकक्ष जनरल वेई फेनघे द्वारा 2020 में मनीला की यात्रा के दौरान किया गया था। लोरेंजाना ने कहा कि यह एक बड़ी मदद है। यह देश के कुछ बड़े उपकरणों की कमी को पूरा करने में मदद करेगा।

दरअसल, फिलीपींस के राष्ट्रपति रोड्रिगो दुतेर्ते के वर्तमान नेतृत्व में मनीला और बीजिंग ने अपने संबंधों को आगे बढ़ाया है। 2016 में दक्षिण चीन सागर में क्षेत्रीय अधिकारों पर चीन के दावे को खारिज करने वाले एक अंतरराष्ट्रीय न्यायाधिकरण के फैसले के बावजूद दुतेर्ते नेतृत्व ने चीन के प्रति नरम दृष्टिकोण पर जोर दिया है। ऐसा कहा जाता है कि दुतेर्ते द्वारा अपनाया गया नरम रुख ऋण और निवेश के बदले में है।

बता दें कि फिलीपींस में राष्ट्रपति चुनाव होने वाले हैं। इसे देखते हुए हाल ही में चीन के विदेश मंत्री वांग यी ने अगले नेता से दुतेर्ते की विदेश नीति को जारी रखने का आग्रह किया था। वांग यी ने कहा था कि दुतेर्ते की विदेश नीति ने दोनों देशों के उद्देश्य को पूरा किया है। 2016 में राष्ट्रपति बने दुतेर्ते देश की एक कार्यकाल की सीमा के अनुरूप मई में चुनाव के बाद पद छोड़ देंगे।

https://hindi.asianetnews.com/world-news/china-counters-india-brahmos-deal-donates-military-aid-to-philippines-worth-20-million-dollar-r62pxn

ThePrint

Mon, 24 Jan 2022

Kamov choppers, submarine torpedoes among deals defence ministry will review this week

Ministry is reviewing all procurement under the 'Buy (Global)' category, under which equipment is bought directly from foreign manufacturers, amid govt's 'Atmanirbhar' push.

By Snehesh Alex Philip, Edited by Gitanjali Das

New Delhi: As the Narendra Modi government pushes for more indigenous systems in the military, this week the Ministry of Defence will undertake a review of several foreign procurement projects, some of which are almost in their final stages.

File photo of Scorpene-class submarine 'INS Vela', at the Naval Dockyard in Mumbai | ANI

Sources in the defence and security establishment told ThePrint that over 10 items are up for review by the Defence Procurement Board (DPB), including a deal with Russia for Kamov helicopters for the Army and Navy, as well as heavyweight torpedoes for Scorpene submarines.

The move is part of the defence ministry's review of all procurement under the 'Buy (Global)' category to push for 'Atmanirbhar' products in the critical sector that has been dominated by foreign purchases. Under this category, procurement is made directly from a foreign Original Equipment Manufacturer (OEM).

While defence services were earlier asked to prepare a list of procurement plans from abroad that could be replaced by indigenous items, sources said all projects are under review, including those in final stages. A review does not mean cancellation, they clarified.

The Defence Acquisition Council (DAC), headed by Defence Minister Rajnath Singh, had on 14 January decided to scrap a coast guard project for the procurement of 14 helicopters from abroad, besides all-terrain vehicles (ATVs) and short-range missiles.

Key deals under review

One of the key projects under review is heavyweight torpedoes for the Navy's Scorpene submarines, which are currently using Russian-made torpedoes that have been given a life extension.

According to the original plan, the Indian Navy was to procure 'Black Shark' torpedoes from Italian firm WASS, owned by the AgustaWestland chopper scam-tainted Italian firm Finmeccanica, which had rebranded itself as 'Leonardo' a few years ago.

The plan was that the Navy's immediate requirement of heavyweight torpedoes would be met by foreign procurement, while the long-term, larger requirement would be fulfilled through the indigenous manufacturing route.

However, the deal got cancelled in 2016, and a new proposal was initiated.

Sources said the Services are to decide if there is an alternate project available, adding that the torpedoes will most likely be procured from abroad since there is no functional indigenous alternative as of now.

Another key procurement under review is of Kamov helicopters, which is most likely to be shelved in favour of the indigenous product manufactured by state-run Hindustan Aeronautics Limited (HAL).

This is going to be big in terms of monetary value as the cumulative figure of this deal (including Army and Navy requirements) is over Rs 20,000 crore, sources said.

As reported earlier by ThePrint, this renewed focus by the defence ministry could have a ripple effect on the Navy's plan to acquire new utility helicopters through strategic partnership as HAL may also enter the fray. The programme otherwise was to be a collaboration between a foreign player and an Indian private firm.

Other deals under review this week include procurement of general-purpose machine guns, expendable aerial and anti-submarine warfare targets, etc.

https://theprint.in/defence/kamov-choppers-submarine-torpedoes-among-deals-defence-ministry-will-review-this-week/811042/

JAGRAN English

Sun, 23 Jan 2022

Jagran Explainer: How Saab's anti-armour weapon AT4 will help in modernising Indian Armed Forces

In a statement, Saab said that it was awarded the contract for the lightweight and fully disposable weapon after going through a "competitive programme".

New Delhi: As a part of the country's aim to modernise its defence forces, Swedish defence conglomerate Saab was on Thursday awarded a contract to supply single-shot anti-armour weapon AT4 to the Indian Army and the Indian Air Force (IAF).

In a statement, Saab said that it was awarded the contract for the lightweight and fully disposable weapon after going through a "competitive programme".

"The AT4CS AST [variant] offers a tandem warhead with a breach or blast mode, which is optimized to defeat enemies within buildings and to destroy structures, which can create a point of access into them," it said in a press release.

All about the AT4CS AST and how it will help in modernising Indian Armed Forces:

AT4CS AST is a lightweight and man-portable preloaded weapon system that is capable of destroying structures and other weapon systems such as helicopters, tanks, etc. AT4CS AST, as per

the makers, has an effective range of 20 to 300 metres and can penetrate armour as thick as 17.5 inches.


(pic credits: Official website of Saab)

AT4CS AST, which weighs around eight kg, also comes with an optical night sight that helps in low-light environment missions.

AT4CS comes with four variants. India, however, is only acquiring the anti-structure tandem-warhead (AST) variant which Saab says is very effective in confined spaces.

"The AT4 systems are combat-proven across the world. They are lightweight, single-shot, fully disposable and truly characterised by its ease of use and handling. This selection of the system through a competitive process underscores Saab's commitment to bringing to Indian forces the latest systems," Saab India Chairman and Managing Director (MD) Ola Rignell told The Hindu, adding that the weapon system is "combat-proven".

Meanwhile, Görgen Johansson, head of Saab's business area Dynamics, said, "We are honoured that the Indian armed forces, which are already users of our Carl-Gustaf system, have also selected Saab for their single-shot weapon need. The Indian Army and the Indian Air Force can be confident in the knowledge that they have the necessary firepower to give them the advantage."

https://english.jagran.com/india/jagran-explainer-how-saab-s-anti-armour-weapon-at4-will-help-in-modernising-indian-armed-forces-10038357

NDTV

Sun, 23 Jan 2022

Amid India-China border row, Army Commander talks of "Operation Snow Leopard"

Lt Gen Joshi said 2021 was a watershed year for the armed forces when they displayed boldness in standing up to the aggression on the LoC and LAC.

Udhampur (J&K): The 'Operation Snow Leopard' is still on with troops on alert and ready to meet any eventuality as the focus of disengagements in Ladakh continues to be through talks, Army's northern commander Lt Gen Y K Joshi said on Saturday.

Lt Gen Joshi, the General Officer-Commanding-in-Chief (GOC-in-C), was speaking at the northern command's investiture ceremony at its headquarters in Jammu and Kashmir, where the units involved in the Ladakh operation ran away with major share of the appreciation certificates.

He presented GOC-in-C's appreciation to 40 units and GOC-in-C's 'Certificates of Appreciation' to 26 units for their 'outstanding' and 'distinguished' performance in the command theatre.

The GOC-in-C's Appreciation was given to units for their performance in Operation Meghdoot, Operation Rakshak, Operation Northern Borders, and other operations.

The GOC-in-C's Certificates of Appreciation were given to units involved in Operation Snow Leopard, which was launched after China refused to move back and restore status quo ante in eastern Ladakh.

"The importance of both the union territories of J&K and Ladakh is well known and we have played our role as far as the security of this region is concerned with full dedication and devotion and are maintaining our complete dominance, whether it is Line of Control, Line of Actual Control (LAC), Actual Ground Position Line (AGPL) and International Border (IB)," the army commander said in his address.

He said the brave soldiers of the northern command foiled the aggressive designs of the enemy.

Referring to the developments in Ladakh in the wake of Chinese aggression, he said disengagement with People's Liberation Army (PLA) was completed from various areas in a peaceful manner and efforts are on through dialogue for disengagement from other areas.

However, the troops are maintaining alertness on the snow-bound peaks, he said.

On counter-insurgency campaign undertaken under Operation Rakshak, he said the people of Kashmir have rejected terrorism, separatism, and gun culture, and after many years, the number of terrorists has gone below 200 in the valley which is a "big achievement".

"The ceasefire along the LoC has provided relief to the border residents. But the attempts of infiltration of terrorists is going on, which are being foiled by our alert security personnel," he said.

He said 2021 was a watershed year for the armed forces when they displayed boldness in standing up to the aggression on the LoC and LAC "There has been a reduction in terrorist related incidents, stone pelting activities and protests as a result of tireless efforts of the security forces and the people of J&K," Joshi said.

He congratulated local police, the CRPF, and other agencies for their role in counter-insurgency operations.

Lt Gen Joshi said technology is being used to assist the troops in keeping vigil and maintaining security.

"We are fully inducting the state-of-the-art technology in our army," he said.

Referring to the current wave of COVID-19, he said like the previous two pandemic waves, the northern command is always there to help the government and the people.

"We are fully with you and ready to serve you," he said, saluting the healthcare workers of the command who reached out to the people without caring for their safety.

The Army Commander lauded all ranks of northern command for their dedication and devotion to duty in the highest traditions of the Indian Army.

https://www.ndtv.com/india-news/operation-snow-leopard-still-on-troops-on-alert-army-commander-2723330

Sun, 23 Jan 2022

चीन से निपटने के लिए 'Operation Snow Leopard' जारी, जानें भारतीय सेना का प्लान

By Chandrashekhar Gupta

उधमपुर (जम्मू-कश्मीर): सेना के उत्तरी कमान के कमांडर लेफ्टिनेंट जनरल वाई के जोशी ने कहा कि ऑपरेशन स्नो लेपर्ड अब भी जारी रहने के साथ ही सैनिक चौकन्ने हैं और किसी तरह की आकस्मिक घटना से निपटने के लिए तैयार हैं। शनिवार को उन्होंने कहा कि लद्दाख में वार्ता के माध्यम से सैनिकों एवं हथियारों को पीछे हटाने पर ध्यान देना जारी है। जनरल ऑफिसर-कमांडिंग इन चीफ जोशी ने जम्मू-कश्मीर में उत्तरी कमान के मुख्यालय में अलंकरण समारोह को संबोधित करते हुए कहा ये बातें कहीं।

समारोह में लद्दाख अभियान में शामिल इकाइयों के हिस्से सबसे ज्यादा प्रशस्ति-पत्र आए। उन्होंने कमान व्यवस्था में असाधारण और उत्कृष्ट प्रदर्शन के लिए 40 इकाइयों को जीओसी-इन-सी की प्रशस्ति और 26 इकाइयों को जीओसी-इन-सी का प्रशस्ति प्रमाण-पत्र दिया। ऑपरेशन मेघदूत, ऑपरेशन रक्षक, ऑपरेशन नॉर्दर्न बॉर्डर्स और कमान में अन्य अभियानों में इकाइयों के प्रदर्शन के लिए जीओसी-इन-सी का प्रशस्ति पत्र दिया गया।

ऑपरेशन 'स्नो लेपर्ड' में इकाइयों के प्रदर्शन के लिए जीओसी-इन-सी के प्रशस्ति प्रमाण-पत्र दिए गए। यह अभियान चीन द्वारा पूर्वी लद्दाख में वापस जाने और यथास्थिति बहाल करने से इनकार करने के बाद

शुरू किया गया था। सैन्य कमांडर ने अपने संबोधन में कहा, जम्मू-कश्मीर और लद्दाख दोनों केंद्र शासित प्रदेशों का महत्व भली भांति ज्ञात है और हमने इस क्षेत्र की सुरक्षा के संबंध में पूरे समर्पण से हमारी भूमिका निभाई है और हमारा पूरा वर्चस्व बरकरार रखा है चाहे वह नियंत्रण रेखा (LoC) हो, वास्तविक नियंत्रण रेखा (LAC), वास्तविक जमीनी स्थिति रेखा या फिर अंतरराष्ट्रीय सीमा हो।

उन्होंने कहा कि उत्तरी कमान के बहादुर सैनिकों ने दुश्मन के आक्रामक मंसूबों को नाकाम कर दिया। चीनी आक्रामकता के मद्देनजर लद्दाख में घटनाक्रमों का संदर्भ देते हुए, उन्होंने कहा कि पीपुल्स लिबरेशन आर्मी के साथ टकराव वाले स्थानों से पीछे हटने का कार्य कई इलाकों से शांतिपूर्ण तरीके से पूरा कर लिया गया है और वार्ता के जरिए अन्य इलाकों से पीछे हटने के प्रयास जारी हैं। हालांकि, उन्होंने कहा कि बर्फसे ढकी चोटियों में सैनिक पूरी तरह चौकन्ने हैं।

ऑपरेशन रक्षक के तहत चलाए गए आतंकवाद रोधी अभियान पर उन्होंने कहा कि कश्मीर के लोगों ने आतंकवाद, अलगाववाद और बंदूक संस्कृति को खारिज कर दिया है और कई वर्षों के बाद घाटी में आतंकवादियों की संख्या 200 से नीचे चली गई है जो एक 'बड़ी उपलब्धि' है।

जोशी ने कहा कि, एलओसी पर संघर्ष विराम ने सीमावर्ती क्षेत्रों के निवासियों को राहत प्रदान की है। लेकिन आतंकियों की घुसपैठ की कोशिशें जारी हैं, जिन्हें हमारे सतर्क सुरक्षाकर्मी नाकाम कर रहे हैं। उन्होंने कहा कि सशस्त्र बलों के लिए 2021 को ऐतिहासिक साल बताया जब सैनिकों ने एलओसी और एलएसी में आक्रामक मंसूबों के खिलाफ खड़े होने में साहस दिखाया।

लेफ्टिनेंट जनरल ने कहा कि, सुरक्षा बलों और जम्मू-कश्मीर के लोगों के अथक प्रयासों के परिणामस्वरूप आतंकवाद संबंधित घटनाओं, पथराव गतिविधियों और विरोध प्रदर्शनों में कमी आई है। उन्होंने स्थानीय पुलिस, सीआरपीएफ और अन्य एजेंसियों को आतंकवाद रोधी अभियानों में उनकी भूमिका के लिए बधाई दी।

https://hindi.news18.com/news/nation/omicron-community-transmission-in-india-become-dominant-in-multiple-metro-cities-report-says-3969728.html

The Indian EXPRESS

Sat, 22 Jan 2022

Why India needs a single agency to guard its borders

Ramesh Davesar writes: A national border guard, reporting to the army, will enhance border security

By Ramesh Davesar

For the last few years, along with usurping its neighbours' territories, starting with Doklam and followed by the Galwan crisis, China has escalated armed activities resulting in enhanced cross-border infiltration and armed intrusions. Similarly, the continued Pakistan-backed infiltration of terrorists poses fresh challenges to India.

India shares land borders with Pakistan, China, Nepal, Bhutan, Bangladesh and Myanmar, which stretch approximately

Two recent developments initiated by China have made our borders more vulnerable. China's Land Border Law (LBL) will enhance Beijing's aggressive posture and is aimed at resolving border disputes on its terms. Equally alarming is the move to build 628 "Xiaokang model border defence villages" along the 3,488 km Line of Actual Control (LAC), which is conceived as a tactic to consolidate Chinese claims over disputed areas and garner local support. Additionally, these villages are capable of acting as forward assembly and

administrative areas during hostilities. Two villages have already come up in the disputed area across Arunachal Pradesh. These developments warrant a comprehensive review of border management to ensure the all-weather security of our borders.

India shares land borders with Pakistan, China, Nepal, Bhutan, Bangladesh and Myanmar, which stretch approximately 15,106 km. In addition, we have an approximately 3,323 km-long LoC with Pakistan, which further extends to the rechristened 110 km stretch of "Actual Ground Position Line" (AGPL) dividing the Siachen glacier region. Further east, we have the 3,488 km LAC with China. We share maritime boundaries with Sri Lanka, Maldives, Bangladesh, Pakistan, Myanmar and Indonesia; we have a 7,683 km coastline and an approximately 2 million sq km exclusive economic zone (EEZ).

This makes India's task more complex than most other countries. This complexity is accentuated by the fact that along with the army, we have multiple other security agencies — the Central Armed Police Force (CAPF) and the Paramilitary Forces (PMF) — sharing the responsibility. While the army is deployed along the LoC and AGPL, the Border Security Force (BSF) looks after the international border with Pakistan and Bangladesh. Guarding the LAC has been assigned to the Indo-Tibetan Border Police (ITBP) and Assam Rifles. The Sashastra Seema Bal (SSB) is responsible for guarding the borders with Nepal and Bhutan. The Assam Rifles looks after our border with Myanmar. In a nutshell, in addition to the army, we have four agencies guarding borders with six neighbours. Conversely, maritime borders are guarded by a single agency — the Coast Guard.

Most countries have raised specialised and dedicated armed bodies for border security. For example, Iran has the Border Guard Command, Italy has the Border Police Service, Russia has created a Border Guard Service, whereas in the US, it is under Homeland Security. Closer home, in China, it is the People's Armed Police, while Pakistan has a Frontier Corps for its western border and the Rangers looking after the Indo-Pak Border. Most of these countries, based on threat perception and for better combat cohesion, have placed these organisations under the command of the armed forces.

In India, we have unwieldy arrangements. As a result, there is a lack of a coherent policy on training, planning and the conduct of guarding operations among various outfits. Overall coordination is also affected. Going by the instances along the western border, our adversary has often escalated violations by resorting to the prolonged use of military resources. Similarly, their modus operandi has also undergone a qualitative change whereby they have buttressed border security by co-opting military battle drills and sub-unit tactics such as sniping, launching raids and ambushes on the Loc/international border by deploying regular troops. Chinese provocations along the LAC are military operations. Clearly, the peace-time scenario is now by and large militarised.

In this scenario, India needs a single security agency adequately equipped, suitably armed and trained in advanced military drills and sub-unit tactics to guard our borders. The manpower and infrastructure should be created by pooling and merging the resources of the CAPF and Assam Rifles. Further, to augment the battle efficiency, a fixed percentage of manpower, including the officer cadre, should be drawn on deputation from the army. The proposed outfit, let's call it the National Border Guard, (NBG), should have the explicit mandate to effectively retaliate against cross-border transgressions and stabilise the situation till the operations are taken over by the armed forces.

To ensure the desired training and operational standards, the NBG should be designated as a paramilitary force under the Ministry of Defence and operate under the army. Finally, a collateral spin-off — an opportunity to prune the bulky CAPF into a cohesive, lean and efficient force. The ITBP and the SSB should be fully merged into the new outfit; the BSF and CRPF still have important internal security duties and can be partially merged. The reorganised Assam Rifles too should retain its role of conducting counter-insurgency operations and act as a reserve for the army for conventional operations.

https://indianexpress.com/article/opinion/columns/why-india-needs-a-single-agency-to-guard-its-borders-7735976/

THE WEEK

Sun, 23 Jan 2022

China may sell Pakistan hypersonic weapon to counter Indian S-400: Analyst

The Russian system enables IAF to down aircraft even in Pakistani airspace

The Indian Air Force is working to deploy its brand-new S-400 air defence system, acquired from Russia.

Hindustan Times recently reported that the first Indian S-400 unit would be operational in April and would be deployed in "depth areas to tackle the threat from China".

The Indian Air Force has previously described the S-400 as a 'game changer' given the air defence system's advanced sensors and array of missiles. The S-400 uses four types of surface-to-air missiles, with ranges from 40km to 400km. The missiles can shoot down multiple types of targets such as aircraft, cruise missiles, bombs and some types of ballistic missiles.

Chinese DF-17 hypersonic glide vehicles at a parade | China's Ministry of National Defense

The versatility of the S-400 has meant that Pakistan has considered its acquisition by India as a threat, as the system can shoot down aircraft even in Pakistani airspace.

An expert on China's military told *Defense News* last week that Beijing could allow Pakistan access to hypersonic weapons to counter the S-400. Hypersonic weapons, which fly at over five times the speed of sound, are difficult for most radars to track and existing surface-to-air missiles to engage. Richard D. Fisher is a senior fellow at the International Assessment and Strategy Center. He has testified in the US Congress about China's military advances and written extensively on Beijing's armed forces.

He told *Defense News*, "It is very likely that, to the degree that China has aided North Korea's new hypersonic glide vehicle (HGV) missile warhead, it has or will similarly assist a Pakistani HGV, or simply sell the DF-17... Or Beijing now has the option of allowing North Korea to sell its HGV to Pakistan."

A hypersonic glide vehicle is a type of hypersonic weapon that is mounted on a ballistic missile and released in the upper atmosphere, after which it glides to its target. According to US intelligence estimates, the DF-17 has a range of around 2,500km and moves at between five and 10 times the speed of sound. The Chinese military is believed to have inducted the DF-17 into service.

Pakistani analysts have previously argued in favour of developing hypersonic weapons to counter the deployment of the S-400.

Fisher also noted China could assist Pakistan by providing its upgraded surface-to-air missiles, which could deter the Indian Air Force from carrying out offensive operations. China has purchased from Russia both the S-400 and its predecessor, the S-300 missile system. China has developed indigenous versions of the S-300 called the HQ-9 family of surface-to-air missiles, which have already been sold to Pakistan.

Fisher told *Defense News*, "Like later variants of the S-300 family acquired by China, the HQ-9 featured a hard-to-jam phased array guidance and tracking radar, and its missile uses an active radar for terminal guidance."

Mansoor Ahmed, a senior fellow at the Pakistan-based think tank Center for International Strategic Studies, told *Defense News* that Pakistan could also turn for help to two allies that use the S-400. Ahmed referred to the possibility of military exercises with Turkey and China that "may at least indirectly help identify its [S-400's] strengths and weaknesses for exploring opportunities to suppress and defeat Indian S-400 systems". Turkey or China allowing Pakistan access to their S-

400 systems would allow Islamabad to develop electronic countermeasures to jam radars or craft specific flight plans for its fighter jets that reduce possibility of detection.

https://www.theweek.in/news/world/2022/01/23/china-may-sell-pakistan-hypersonic-weapon-to-counter-indian-s-400-analyst.html

THE ECONOMIC TIMES

Sat, 22 Jan 2022

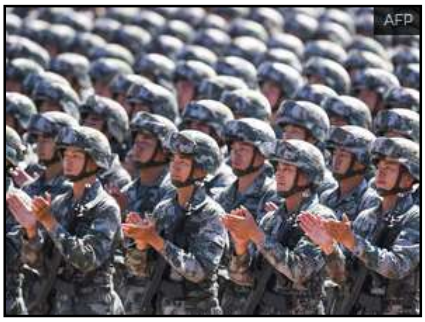
China adopted 'three-warfare' strategy aiming to expand global influence: French MoD think tank

By Dipanjan Roy Chaudhury

Synopsis

"Within the People's Liberation Army (PLA), the Strategic Support Force (SSF) is at the forefront, especially through its Network Systems Department. It has the resources and is entrusted with missions in the informational domain. More precisely, the principal actor identified in this domain is Base 311, headquartered in Fuzhou, which is dedicated to the implementation of the "Three Warfares" strategy.

Beijing is increasingly comfortable with infiltration and coercion and its influence operations have been considerably hardened in recent years, according to a recent report by IRSEM (Institute for Strategic Research of the French Ministry for the Armed Forces).



The report titled 'Chinese Influence Operations A Machiavellian Moment' claims that a Chinese Communist Party (CCP) policy that consists in eliminating internal and external enemies, controlling groups that could defy its authority, constructing a coalition around the Party to serve its interests, and projecting its influence abroad – and the "Three warfares," which represent the core of China's "political warfare," i.e. a form of non-kinetic proneness to conflict aimed at overcoming an opponent without a fight through the creation of an environment favorable to China. A wartime and peacetime undertaking, it encompasses public opinion, psychological, and legal warfare (the latter being close to what is called "lawfare" in English), according to the report.

The main actors implementing Chinese influence operations are emanations from the Party, the State, the Army, and the companies, report claimed. "Within the Party, this includes the Propaganda Department, which oversees ideology, controls the entire media spectrum and all the cultural production in the country; the United Front Work Department (UFWD), with its twelve offices reflecting its main targets; the International Liaison Department (ILD), which maintains relations with foreign political parties; the 610 Office, which has agents across the world acting outside any legal framework to eliminate the Falun Gong movement. The Chinese Communist Youth League (CYL) should also be included in this group, serving at once as a link toward young people, as an incubator for future Party executives, and as a force that can be mobilized when needed – even if it is not a formal structure of the Party but rather a mass organization."

Within the state, two bodies in particular are involved in influence operations: The Ministry of State Security (MSS), which is the main civilian intelligence agency, and the Taiwan Affairs Office (TAO), in charge of the propaganda aimed at Taiwan, claimed the report.

"Within the People's Liberation Army (PLA), the Strategic Support Force (SSF) is at the forefront, especially through its Network Systems Department. It has the resources and is entrusted with missions in the informational domain. More precisely, the principal actor identified in this domain is Base 311, headquartered in Fuzhou, which is dedicated to the implementation of the

"Three Warfares" strategy. It also operates media companies as civilian covers and a fake hotel to hide a training center."

The report further alleged that the public and private companies play an important role in collecting the data needed to decide who should be targeted by influence operations, when, and how. "Infrastructures are particularly useful in data collection – buildings and submarine cables for instance – as are new technologies: digital platforms such as WeChat, Weibo and TikTok, companies like Beidou and Huawei, and databases that provide insight into what researchers call China's "techno-authoritarianism" or "digital authoritarianism" are all used to prepare and feed influence operations abroad. The Joint Staff Department of the Central Military Commission, which has apparently inherited intelligence missions previously entrusted to the former 2APL, should also be included in this list."

"The actions carried out by Beijing in its influence operations abroad pertain to two main and non-mutually exclusive objectives: first, to seduce and captivate foreign audiences by crafting a positive representation of China, which can be illustrated by four specific narratives (the Chinese "model," its tradition, benevolence, and strength); and then, and above all, to infiltrate and coerce. Infiltration aims at slowly penetrating the opposing societies to hamper the very possibility of an action contrary to the Party's interests. Coercion corresponds to the progressive enlargement of the Chinese "punitive" or "coercive" diplomacy toward a policy of systematic sanctions against any state, organization, company, or individual that threatens the Party's interests. Both are generally carried out via a web of intermediaries. Overall, these practices target the following categories - Diasporas, with the dual objective of controlling them – so that they do not represent a threat for the Chinese power (Beijing carries out a transnational campaign of repression which, according to the NGO Freedom House, is the "most sophisticated, global, and complete in the world") – and mobilizing them to serve its interests," according to the report.

"The media, as Beijing's explicit goal is to establish "a new world media order." Indeed, the government has invested €1.3 billion annually since 2008 to impose a tighter control over its global image. The major Chinese media outlets have a global presence, in several languages, on several continents, and on all social networks, including those blocked in China (Twitter, Facebook, YouTube, and Instagram), and they invest large amounts of money to augment their digital audience artificially. Beijing also seeks to control the Chinese-language outlets abroad, which has proven so successful that the CCP now effectively enjoys a near-monopoly among them, and it also seeks to control the mainstream media."

The report concludes that while Chinese strategy has brought certain tactical successes, it has been a strategic failure overall, China being its own worst enemy in terms of influence. The abrupt degradation of Beijing's reputation since the arrival of Xi Jinping, particularly in the last couple of years, confronts China with a growing unpopularity problem that may indirectly come to weaken the Party, including vis-à-vis its own population, the report claimed.

https://economictimes.indiatimes.com/news/defence/china-adopted-three-warfare-strategy-aiming-to-expand-global-influence-french-mod-think-tank/articleshow/89036388.cms

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Sat, 22 Jan 2022

Understanding Pakistan's National Security Policy Document

By Manzoor Ahmad

Prime Minister of Pakistan Imran Khan launched a public version of the National Security Policy (NSP) document on 14 January which sets out the state's national security vision.[1] It is being flaunted by the Imran Khan-led government as the first such policy document with guidelines for achieving the set national security goals. Before releasing the public version of NSP, the original and classified document was approved in the federal cabinet on 28 December 2021.[2]

The document has been prepared by National Security Division (NSD) after seven years of consultations with relevant official stakeholders. The document is meant for five years, starting from 2022, and is supposed to be updated by NSD in demanding circumstances that have implications for Pakistan's security. It can also be updated whenever a new government is formed in the country.[3]

For a long time, there was a debate in Pakistan that the country lacks a comprehensive national security policy to secure national goals. Often the responses were seen as reactionary, right from joining the US block in the wake of the Cold War to joining the anti-Soviet war in Afghanistan and later participating in the US-led war on Afghanistan. In the form of NSP, an attempt has been made to bring traditional and non-traditional strands of security under one umbrella to provide overarching policy guidance.

The NSP is divided into eight sections. Placing economic security at the core, it seeks to identify some national security objectives and priority areas where it wants Pakistan's federal and provincial governments to invest resources in coming years. Though the document appears extensive on paper, it is silent on how the government of Pakistan and federating units can achieve those objectives. It also identifies many challenges that Pakistan faces, for a change going beyond India, but it does not offer any concrete solution that can help Pakistan to be different from what it has become.

On National Security and National Cohesion

The NSP in the second section conceptualises the national security policy. It places citizen's security and dignity at the centre. It envisions Pakistan safeguarding its sovereignty by "ensuring national cohesion and harmony, preserving territorial integrity, enhancing economic independence and ensuring the writ of the state."[4] Furthermore, the NSP identifies three challenges that Pakistan's national security face. These challenges are purely economic in nature. This is where the document seems to have broadened its scope as it looks beyond that perennial "eternal enemy" — India. The three challenges are external imbalance, vertical inequalities and horizontal inequalities. For long-term sustainability, addressing the external imbalance or higher foreign exchange outflow is seen as significant. The vertical inequality manifested in the gap between rich and poor is to be addressed by providing direct support to vulnerable citizens. The disparity in the economic development of various regions is seen as a major concern which the sub-nationalist elements exploit "to generate a narrative of grievance based on underdevelopment in their regions."[5] The horizontal inequalities or more precisely the regional aspirations are supposed to be addressed through development packages.

The NSP uses the catchphrase "unity in diversity" twice and sees it as a guiding principle for national cohesion. However, the document does not offer any solution to curb religious radicalisation in the country. Instead, it identifies Pakistan as "an Islamic state" and sees the unknown external hand involved in shaping the discourse around ethnic, religious and social differences. To counter this, the document calls for the promotion of undefined "inclusive national discourse" and bats for the preservation of the Islamic character as enshrined in the country's constitution. Can the preservation of Islamic character and promotion of inter-faith harmony really help Pakistan when the state is not ready to free the people from the narrow ideological paradigm of nationalism? The promotion of Pakistan as an Islamic state has proved counterproductive, and the fact that it is not achievable in the modern state system is entirely overlooked. As pointed out by Ashok Behuria in his recent book, the first and foremost step that can help Pakistan to reimagine itself as a stable state is to "deemphasize on Islam as a major referent in the conduct of state affairs".[6]

On India and Pakistan's Territorial Integrity

The fifth section of the document talks about the conventional military threats, maritime competition, deterrence in the South Asian region, space and cyber security issues. It also highlights the increasing role of military and law enforcement agencies in ensuring the defence and territorial integrity of the country.

At the centre of this section is India. Barring the three mentions of the Indian Ocean, the name of India appears 14 times in the document and only once it talks positively about it saying "Pakistan wishes to improve its relationship with India".[7] At all other mentions, the approach is negative. Expressing concerns over the alleged ceasefire violations by India, the document wants Pakistan to shift attention towards the Line of Control and the Working Boundary.

In the case of maritime security, the document without naming any country denounces the self-professed role of any one country as a net security provider in the wider Indian Ocean. The expansion of India's triad and investment in modern technologies is seen as something that disturbs the regional balance. Again, without naming India or Afghanistan, the policy document sees the prospects of violent conflict growing with the increase in what it calls "regressive and dangerous ideology" in Pakistan's immediate neighbourhood. The document does not rule out the possibility of use of force "as a deliberate policy choice" by "the adversary" and reiterates the commitment of defending the territory in response to any such misadventure. Such a scenario calls for a renewed focus on strengthening Pakistan's capabilities including the deterrence regime and an astute investment for modernisation of armed forces.

On Pakistan's Internal Security

The section on internal security is important in the sense that it talks about issues that have been challenging the writ of the state of Pakistan: Sub-nationalist movements, sectarianism and terrorism. Preventing the formation of alternative centres of power and authority and ensuring the writ of the state in all regions of the country is the policy objective underlined in this section.

Though the realisation that terrorism undermines state stability and national harmony seems timely; the solution offered to address them appears hollow and ineffective. The document aims to address the grievances by addressing the structural deficiency and a sense of deprivation in areas of recruitment and by promoting "a pluralistic anti-terror narrative". At the same time, the document downplays the challenge of sub-national movements by writing them off as "fringe" elements being exploited by "hostile intelligence agencies". It also sees the socio-economic disparity as an enabling factor for sub-national aspirations and seeks to employ a four-pronged strategy of engagement like distinguishing reconcilables from irreconcilables (most probably in Baluchistan), cutting off recruitment, constricting financial sources and pursuing targeted socio-economic policies to address this issue. In order to deal with violent extremist ideologies, the document seeks to promote a "united narrative" and expand de-radicalisation programmes. This indeed is going to be the biggest challenge as mainstreaming people who have been trained along the lines of an extremist ideology for decades is not going to be easy.

On Foreign Policy and Kashmir

The policy agenda in a section about foreign policy is set in the backdrop of the continuous changes in the geo-political arena. The document guides Pakistan to adopt a dynamic approach in a world where great power competition defines the race over resources and issue-based partnership is being preferred over regionalism as an alternative mechanism of cooperation. The approach is to leverage political relations for economic gains. Given Pakistan's geo-economic location, the document sees the country as a melting pot of regional and global economic interests. However, for this to happen, Pakistan would need to prove itself as a responsible state.

The policy document maintains that Pakistan is willing to have a mutually beneficial relationship with all major powers and is committed towards "normalization of relations with its neighbours based on mutual respect and sovereign equality including India".8 At the same time, it raises the issue of Jammu and Kashmir and blames India for having "hegemonic designs" and responsible for frozen bilateral ties. The document reiterates the same old policy about Jammu and Kashmir that "resolution of Jammu and Kashmir dispute remains a vital national security interest for Pakistan."9 There is an assertion that Pakistan would continue to provide moral, legal and diplomatic support to the people of Kashmir until they achieve the right to self-determination. It goes on to talk about India's arms build-up and access to advanced technologies and perceives India's inclusion into Nuclear Suppliers Group (NSG) despite being a non-signatory to NPT as a major concern.

Pakistan seeks to fulfil all the objectives mentioned in the document and those in the last section like health security, sustainable water management and gender security through what it calls the "whole-of-nation approach" which entails synergising collective effort. There is a hint towards breaking the inertia of the status quo and embracing change to forge a more prosperous Pakistan. However, the question is whether it is possible, if Pakistan continues to remain entangled with the past. Unless and until all institutions in Pakistan work together to define the statecraft in liberal terms and the secular elite stops forging unholy alliances with Islamists who keep on fostering an image of India as an "eternal enemy", a change seems unlikely.

- 1. "PM Imran Launches Public Version of First Ever National Security Policy", *Dawn*, 14 January 2022.
- 2. "Historic Achievement: NSA Announces Cabinets Approval of Pakistan First National Security Policy", *Dawn*, 28 December 2021.
- 3. "National Security Policy of Pakistan 2022–2026", National Security Division, Government of Pakistan, 2022.
- 4. Ibid., p. 7.
- 5. Ibid., p. 17.
- 6. Ashok K. Behuria, "Tehrik-e-Taliban Pakistan: Origin, Evolution and Future Portents", Knowledge World, New Delhi, 2021, p. 190.
- 7. National Security Policy of Pakistan, no.3, p. 36.
- 8. Ibid., p. 35.
- 9. Ibid.

https://www.idsa.in/idsacomments/understanding-pakistans-national-security-policy-mahmad-210122

The EurAsian Times

Mon, 24 Jan 2022

JF-17 Thunder: Argentine Ambassador visits Chinese Aerospace Firm in Beijing, discusses acquisition of Sino-Pak Jets — Reports

By Ashish Dangwal

Argentina's ambassador to China reportedly discussed the possible acquisition of JF-17 fighter jets with officials of the China National Aero-Technology Import & Export Corporation (CATIC) recently, an Argentinian news portal claimed.

Vaca Narvaja visited Beijing-headquartered CATIC and met with its vice president Wang Yaoxin and other officials. The meeting was part of Buenos Aires' "comprehensive strategy" for defense cooperation with the Asian nation, Pagina 12 reported.

The JF-17 'Thunder' has been designed and developed by China in collaboration with Pakistan to fulfill the Pakistan Air Force's airpower requirements. China calls it FC-1 Xiaolong.

The JF-17 and CM-400AKG anti-ship missile. (via Twitter)

Following the meeting, Vaca Narvaja said that the project "is historic" and "transcendental for our country and our defense system and will remain in the history of the Argentine armed forces".

The diplomat also noted that the cooperation with CATIC began when the current Minister of Defense Jorge Taiana was serving as the country's Foreign Minister and that the latest move marks a "continuity in the relationship with China" initiated by the then-Cristina Fernández de Kirchner government.

The two sides also highlighted the meeting between Secretary of International Affairs for Defense, Francisco Cafiero, and CATIC in May last year in Buenos Aires. A delegation from Argentina's armed forces is scheduled to visit China in March to assess CATIC's military solutions.

Vaca Narvaja emphasized the importance of military cooperation with China, adding that Chinese jets are not subject to the same restrictions as South Korean planes. The South Korean jets contain components from the United Kingdom, which prohibits any defense sale to Argentina.

The United Kingdom has vetoed the sale of weapons to Argentina after the Falklands War. The report also indicated that an understanding was reached at the meeting on the importance of the political relationship with China.

Argentina's President Alberto Fernández will also arrive in Beijing on February 4 on an official visit to mark the 50th anniversary of the establishment of diplomatic ties between the two countries and to attend the opening of the Winter Olympics.

China-Argentina Defense Cooperation

A Chinese delegation reportedly visited Argentina in early 2021 to discuss a massive arms transaction. Media reports said that Argentina had explored a potential acquisition of JF-17 fighter jets.

If the agreement goes through, China will provide the Latin American country with its modern fighter plane, which might open the door for future arms deals with other countries in the region.

Argentina previously inked a deal with China to purchase multiple military systems in 2015. The contract, for an estimated $1 billion, comprised warships, armored vehicles, and fighter jets.

Argentina's Defense Minister, Agustin Rossi, confirmed in the same year that the JF-17 would be on the shopping list.

These deals were struck during Cristina Fernandez de Kirchner's administration (2008–2015), a Left-wing leader who developed close ties with China, only to be canceled by the Mauricio Macri government after it came to power in December 2015.

The weapons deals were then revived by the current Peronist government in 2019, in which Kirchner is serving as the Vice President. Argentina's financial problems have long been a barrier to China exporting defense equipment to the country.

Ambassador Vaca Narvaja previously met with Jiao Kaihe, president of China North Industries Group Corporation Limited (NORINCO), a Chinese state company with which Buenos Aires is working on a project that includes the potential acquisition of 88 armored vehicles as well as the establishment of a manufacturing unit in Argentina.

The Argentine government apparently wants NORINCO to share technologies and develop a dual-use vehicle manufacturing unit with them. It is believed that negotiations are still underway. Vaca Narvaja argued that collaboration with China should include "productive links for the Argentine military ecosystem" as a core principle.

Argentina's Quest for New Fighter Jets

For decades, the Dassault Mirage III interceptor aircraft served as the backbone of Argentina's air force. The service finally retired these aging fighter jets in 2015.

Since then, the country has been without fighter interceptors even as its neighbors, Brazil and Chile, possess advanced combat jets. Argentina has attempted to purchase new aircraft from a number of Western countries, but an arms embargo imposed by the UK posed a big hurdle.

Argentina tried to purchase Gripen fighter jets in 2015, but Sweden dropped out owing to pressure from London. South Korea likewise retracted its offer to deliver fighter jets to the Latin American nation.

Previously, it was reported that Argentina was in talks with Pakistan to purchase 12 JF-17A Block III aircraft. However, its Defense Ministry later issued a statement rejecting these reports.

Meanwhile, India is also believed to have pitched its indigenous Tejas light combat aircraft to Argentina. Last year, Brigadier Xavier Julian Isaac chief of the Argentine Air Force, told a Spanish language publication that Buenos Aires had an engagement with India, "which is wanting to offer us the Tejas, but we are just in the first talks".

https://eurasiantimes.com/jf-17-thunder-argentine-ambassador-visits-chinese-aerospace-firm/

Sat, 22 Jan 2022

Faster technique for resetting quantum circuits proposed

Rebooting a quantum computer is a tricky process that can damage its parts, but now two RIKEN physicists have proposed a fast and controllable way to hit reset.

Conventional computers process information stored as bits that take a value of zero or one. The potential power of quantum computers lies in their ability to process 'qubits' that can take a value of zero or one—or be some fuzzy mix of both simultaneously.

"However, to reuse the same circuit for multiple operations, you have to force the qubits back to zero fast," says Jaw Shen Tsai, a quantum physicist at the RIKEN Center for Quantum Computing. But that is easier said than done.

A dilution refrigerator that houses qubits. Credit: RIKEN Center for Quantum Computing

One of the best current ways to hit reset for qubits built from tiny superconductors is to link the qubit to a photon—a particle of light—in a tiny device called a resonator. The qubit transfers its energy to the resonator, after which the photon in the resonator decays, releasing its energy to the environment. This process causes the qubit state to drop back to the ground state (zero). The trouble with this method is that permanent entanglement to a decaying photon rapidly degrades the qubit's quality, so that it rapidly ceases to be useful for future operations. "It's bad for the qubit, whose lifetime becomes short," says Tsai.

Now, Tsai and his RIKEN colleague Teruaki Yoshioka have devised a simulation to help find a better way of resetting the qubit, without harming it.

Based on their calculations, the pair proposed building a resonator that can be controlled using an additional junction made by sandwiching a superconducting material with an insulator, a normal metal, another insulator and another superconductor. This layered junction is controlled by applying a voltage. While the qubit operation is being carried out, the set-up is tuned so that the photon cannot decay. Only when the operation has been completed do the physicists change the voltage, allowing the photon to release energy. "This adjustable resonator is the key to our proposal," says Tsai.

The best current lab record for resetting a qubit is 280 nanoseconds, with 99.0% fidelity. "Our simulations suggest we could reset the qubit in 80 nanoseconds, with 99.0% fidelity," says Yoshioka.

The team is now testing this set-up, which is held at low temperatures using a dilution refrigerator, with promising results. "This device should be very useful if we can implement it in a quantum circuit," Tsai says.

The research was published in *Applied Physics Letters*.

More information: T. Yoshioka et al, Fast unconditional initialization for superconducting qubit and resonator using quantum-circuit refrigerator, *Applied Physics Letters* (2021). DOI: 10.1063/5.0057894

Journal information: *Applied Physics Letters*

https://phys.org/news/2022-01-faster-technique-resetting-quantum-circuits.html

ANI
South Asia's Leading Multimedia News Agency

Sat, 22 Jan 2022

Researchers develop antifreeze cream to prevent frostbite injuries

Washington [US], January 21 (ANI): A team of researchers has developed a cream that prevents frostbite injuries in mice when applied to the skin 15 minutes before severe cold exposure.

The study has been published in the 'ACS Applied Biomaterials Journal'.

Frostbite not only kills skin cells but can also harm deeper tissues like muscle and bone, sometimes causing secondary infections and permanent nerve damage. Common therapies, such as rapid rewarming of the affected limb, aim to reverse tissue freezing, but by the time of treatment, many cells have already died.

Recently, scientists have developed frostbite prevention strategies, such as electric heaters sewn into clothing or transgenic antifreeze proteins, but such approaches are often costly, impractical, or have safety concerns.

Therefore, Munia Ganguli and colleagues wanted to test the frostbite prevention properties of a combination of synthetic molecules commonly used in labs to cryopreserve cells. Dimethyl sulfoxide (DMSO) keeps ice crystals from forming inside cells, whereas poly(vinyl alcohol) (PVA) prevents ice crystals in the spaces between cells, which can damage membranes.

The researchers first tested the ability of different amounts of DMSO and PVA, alone or in combination, to prevent the death of cultured cells in a dish that was exposed to a freezing temperature. They found that 2 per cent DMSO combined with 1.6 mg/mL PVA yielded the highest cell survival (about 80 per cent), while protecting the cell membrane and cytoskeleton.

This combination, which the researchers called SynAFP, also allowed cells to divide and express proteins more normally after cold stress. Then, the team mixed SynAFP with a commercial aloe vera cream and applied it to the skin of mice 15 minutes before a cold challenge.

The cream reduced frostbite wound size, tissue damage, inflammation, and sped healing, compared with no treatment. The cream did not prevent frostbite when applied 30 minutes or more before the cold challenge; however, multiple applications did not damage the skin. The effects of the antifreeze cream in people, and how frequently it needs to be reapplied, must still be determined, the researchers said.

The authors acknowledged funding from the Defence Research and Development Organisation, the Department of Biotechnology Junior Research Fellowship, and the Council of Scientific & Industrial Research (CSIR). (ANI)

https://www.aninews.in/news/science/researchers-develop-antifreeze-cream-to-prevent-frostbite-injuries20220121184250/