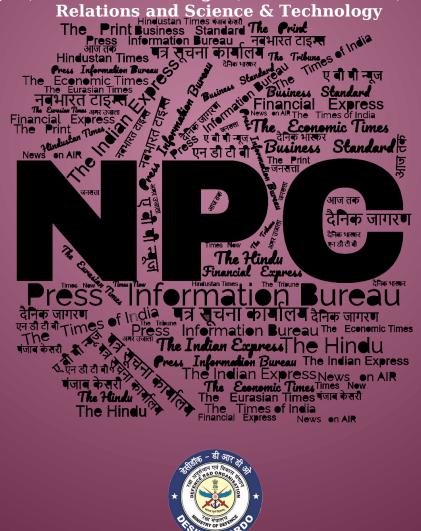
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अक्टूबर Oct 2023

# समाचार पत्रों से चयित अंश Newspapers Clippings

डीआरडीओ समुदाय को डीआरडीओ प्रौद्योगिकियों, रक्षा प्रौद्योगिकियों, रक्षा नीतियों, अंतर्राष्ट्रीय संबंधों और विज्ञान एवं प्रौद्योगिकी की नूतन जानकारी से अवगत कराने हेतु दैनिक सेवा

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रक्षा विज्ञान पुस्तकालय Defence Science Library रक्षा वैज्ञानिक सूचना एवं प्रलेखन केंद्र Defence Scientific Information & Documentation Centre मेटकॉफ हाउस, दिल्ली - 110 054 Metcalfe House, Delhi - 110 054

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DRDO is organising Cyber Swachhta Saptah during 23-27 Oct, to create awareness about cyber security. Lt Gen MU Nair, National Cyber Security Coordinator, in his special address spoke about the importance of cyber security in ever-changing technological landscapes.

During the event, Dr Samir V Kamat, Secretary DD R&D & Chairman DRDO, discussed the shared responsibility in ensuring cyber security to build a safe nation.

Speakers from the Industry presented emerging trends in cyber threats, security solutions, and best practices.

https://www.psuconnect.in/news/drdo-organises-cyber-swachhta-saptah/39749/

# नवभारत टाइम्स

#### Mon, 30 Oct 2023

### ताकत इतनी कि दुश्मन भी होगा हैरान, जल्द भारत का होगा अपना आयरन डोम, DRDO की तैयारी देखिए

भारत ने 2028-29 तक अपनी लंबी दूरी के एयर डिफेंस सिस्टम को सक्रिय रूप से तैनात करने की योजना बनाई है। यह सिस्टम 350 किमी तक की दूरी पर आने वाले स्टील्थ लड़ाकू विमानों, विमानों, ड्रोन, क्रूज मिसाइलों और सटीक-निर्देशित हथियारों का पता लगा सकता है। इसके साथ ही उन्हें नष्ट कर सकता है। भारतीय वायुसेना से जुड़े सूत्रों ने हमारे सहयोगी अखबार टाइम्स ऑफ इंडिया को बताया कि 'इंटरसेप्शन कैपिबिलिटी' से जुड़ा महत्वाकांक्षी 'प्रोजेक्ट कुशा' के तहत डीआरडीओ की तरफ से विकसित किए जा रही स्वदेशी लंबी दूरी की सतह से हवा में मार करने वाली मिसाइल (LR-SAM) सिस्टम, हाल ही में शामिल किए गए रूसी एस-400 ट्रायम्फ एयर डिफेंस सिस्टम के जैसा होगा।

#### मजबूत होगा एयर डिफेंस सिस्टम

मई 2022 में सुरक्षा पर कैबिनेट समिति की तरफ से 'मिशन-मोड' परियोजना के रूप में एलआर-एसएएम प्रणाली के विकास को मंजूरी गई थी। इसके बाद, रक्षा मंत्रालय ने पिछले महीने भारतीय वायुसेना के लिए 21,700 करोड़ रुपये की लागत से अपने पांच स्क्वाड़नों की खरीद के लिए आवश्यकता की स्वीकृति (एओएन) दी थी। इसमें लंबी दूरी की निगरानी और अग्नि नियंत्रण रडार के साथ मोबाइल एलआर-एसएएम में 150 किमी, 250 किमी और 350 किमी की दूरी पर शत्रु लक्ष्यों को मारने के लिए डिज़ाइन की गई विभिन्न प्रकार की इंटरसेप्टर मिसाइलें होंगी। एक सूत्र ने बताया कि यह विश्वसनीय 'क्षेत्रीय वायु रक्षा' में सक्षम होगा। इसमें सिंगल मिसाइल लॉन्च के लिए 80% और साल्वो लॉन्च के लिए 90% से कम नहीं होने की संभावना होगी।

#### एयरबोर्न वॉर्निंग एंड कंट्रोल सिस्टम होगा हिस्सा

डीआरडीओ के अनुसार, रणनीतिक और सामरिक रूप से कमजोर क्षेत्रों में व्यापक वायु रक्षा कवर प्रदान करने के लिए, एलआर-एसएएम कम-रडार क्रॉस-सेक्शन वाले उच्च गति वाले लक्ष्यों के खिलाफ प्रभावी होगा। उन्होंने कहा कि इसे 250 किलोमीटर की दूरी पर लड़ाकू साइज के टारगेट को मार गिराने के लिए तैयार किया जाएगा। इसमें AWACS (एयरबोर्न वॉर्निंग एंड कंट्रोल सिस्टम) और मिड-एयर रिफ्यूलर जैसे बड़े विमानों को 350 किलोमीटर की दूरी पर रोक दिया जाएगा।

#### ऑटोमेटिक एयर डिफेंस नेटवर्क

LR-SAM की फायरिंग यूनिट भारतीय वायुसेना के एकीकृत वायु कमान और कंट्रोल सिस्टम के साथ 'बातचीत' करने में सक्षम होंगे। यह एक पूरी तरह से ऑटोमेटिक एयर डिफेंस नेटवर्क है। इसमें एक दूसरे के साथ सैन्य राडार की विस्तृत सीरीज को एकीकृत करने के लिए डेटा लिंक नेटवर्क बनाए जा रहे हैं। साथ ही भारतीय हवाई क्षेत्र में निगरानी कमियों को दूर करने के लिए राडार भी शामिल होंगे। IAF को रूस-यूक्रेन युद्ध के कारण देरी के बाद अगले एक साल में पांच S-400 ट्रायम्फ स्क्वाड्रन में से बाकी दो मिलने की भी उम्मीद है। पहले तीन स्क्वाड्रन चीन और पाकिस्तान सीमा पर जरूरतों को पूरा करने के लिए उत्तर-पश्चिम और पूर्वी भारत में तैनात किए गए हैं।

https://navbharattimes.indiatimes.com/india/india-plan-to-deploy-long-range-air-defence-desi-irondome-by-2029/articleshow/104810798.cms

# THE TIMES OF INDIA

### India Aims to Deploy Indigenous Long-range Air Defence System by 2028-2029

India plans to operationally deploy by 2028-2029 its own long-range air defence system, which can detect and destroy incoming stealth fighters, aircraft, drones, cruise missiles and precision-guided munitions at ranges up to 350-km.

The "interception capabilities" of the indigenous long-range surface-to-air missile (LR-SAM) system, being developed by DRDO under the ambitious Project Kusha, will be "comparable" to the formidable Russian S-400 Triumf air defence system recently inducted by the IAF, sources told TOI on Sunday.

After the Cabinet Committee on Security in May 2022 cleared development of the LR-SAM system as a "mission-mode" project, the defence ministry last month accorded the acceptance of necessity (AoN) for procurement of five of its squadrons for the IAF at a cost of Rs 21,700 crore.

The mobile LR-SAM, with long-range surveillance and fire control radars, will have different types of interceptor missiles designed to hit hostile targets at 150-km, 250-km and 350-km ranges.

"It will be capable of reliable `area air defence' with single-shot kill probability of not less than 80% for single missile launch and not less than 90% for salvo launch," a source said.

Meant to provide comprehensive air defence cover to strategic and tactical vulnerable areas, the LR-SAM will be effective even against high-speed targets with low-radar cross-section, as per the DRDO.

"It will be geared to take out fighter-sized targets at a 250-km range, with larger aircraft like AWACS (airborne warning and control systems) and mid-air refuelers being intercepted at 350-km," he added.

Firing units of the LR-SAM will be able to "interact" with the IAF's integrated air command and control system (IACCS), which is a fully-automated air defence network with data links being progressively built to integrate the wide array of military radars with each other as well as with civilian radars to plug surveillance gaps in Indian airspace.

While the Army and Navy have their own air defence weapons, the IAF is overall responsible for guarding the country's airspace. From 'air superiority' fighters to ground-based missiles, the IAF has several weapon systems deployed for the task.

The ground systems range from the older Igla, OSA-AK-M and Pechora missiles to the newer Israeli low-level Spyder quick-reaction missiles (15-km range), indigenous Akash area defence missiles (25-km) and the Barak-8 medium-range SAM systems (over 70-km) jointly developed with Israel.

IAF is also hopeful of receiving the remaining two of the five S-400 Triumf squadrons over the next one year, under the \$5.43 billion contract inked in 2018, after a delay due to the Russia-Ukraine war. The first three S-400 squadrons, which destroy hostile targets at a range of 380-km, have been deployed in north-west and east India to cater for both China and Pakistan.

https://timesofindia.indiatimes.com/india/india-aims-to-deploy-desi-iron-dome-by-2028-2029/ articleshow/104806572.cms

### **Defence News**

### Defence Strategic: National/International



**Ministry of Defence** 

Sun, 29 Oct 2023

### Indian Army and Air Force Contingent Departs for India-Kazakhstan Joint Military Exercise KAZIND-2023

Indian Army and Indian Air Force contingent comprising 120 personnel departed for Kazakhstan today to take part in the 7th edition of Joint Military 'Exercise KAZIND-2023'. The Exercise will be conducted at Otar, Kazakhstan from 30th October to 11th November 2023.

Indian Army contingent comprises 90 personnel led by a Battalion from the DOGRA Regiment. The Kazakhstan contingent is mainly represented by personnel from Regional Command South of Kazakh Ground Forces. 30 personnel of Air Force from both sides will also participate in the current edition of the Exercise alongside the Army contingents.

The Joint Exercise between India and Kazakhstan was instituted as 'Exercise PRABAL DOSTYK' in the year 2016. After the second edition, the Exercise was upgraded to a company-level exercise and renamed as 'Exercise KAZIND'. The Exercise has been further upgraded as a Bi-service Exercise this year by including the Air Force component.

In this edition of the Exercise, both sides will practice conduct of Counter Terrorism operations in a sub-conventional environment under United Nations mandate. The contingents will jointly rehearse various tactical drills to include Raid, Search and Destroy Operations, Small Team Insertion and Extraction Operations etc. The scope of the Exercise also includes conduct of Counter Unmanned Aerial System Operations.

'Exercise KAZIND-2023' will provide an opportunity for both sides to gain an insight into the tactics, battle drills and procedures of each other, which is a prerequisite while operating under the ambit of the United Nations. The joint training will develop the necessary skills, resilience and coordination to conduct joint military operations in Semi-Urban and Urban environments.

Both sides will get a chance to practice drills on a wide spectrum of combat skills and mutually learn from each other. The Exercise will provide an opportunity for the contingents to exchange views and share the best practices. 'Exercise KAZIND-2023' will further strengthen the bond between the two armies.

https://pib.gov.in/PressReleasePage.aspx?PRID=1972735



### India Steps up Border Drone Defense to Wade off Hamas-like Attacks: Report

India is setting up a surveillance system with drones across its borders to wade off surprise attacks like the one from Hamas in Israel, according to people familiar with the matter.

The country's defense officials met with six home-grown vendors of surveillance and reconnaissance drones over the past week and an order is expected to be announced as soon as next month, the people said, asking not to be named as the information isn't public. The military is looking to have the system up and running across some parts of the border as early as May, the people added.

The move to monitor the borders all the time comes as tensions with neighboring China and Pakistan persist, especially along the Himalayas. While the war in Ukraine has made Prime Minister Narendra Modi's government reevaluate its armory, preparedness for war and priorities on the battlefield, the surprise Hamas attack has pushed the nation to implement some of the suggested measures quickly.

India has been caught out by surprise attacks in the past. In 2008, attackers from Pakistan, armed with assault weapons and grenades, infiltrated Mumbai by sea and laid siege to key landmarks in the city for three days, killing 166 people.

Also, India has alleged that drones are being used to move weapons and drugs across its western border. It might take almost 18 months to have the system cover the entire stretch of borders, and could cost as much as \$500 million annually, the people said.

So-called High-Altitude Pseudo Satellites, which are solar-powered drones that can operate for prolonged durations without landing, will be used for the system, they said. The 24/7 high-altitude long endurance drones will also act as a back-up to the traditional radar network along the borders, directly beaming images to local command centers.

A spokesperson for India's Defense Ministry didn't respond to a request for comment.

The drones deployed and the software backing them will be developed locally, the people said. The Indian military, which is heavily dependent on Russia for weapon platforms, is trying to boost local production amid a 10-year, \$250 billion military modernization effort.

The entire 14,000 miles (22,531 kilometers) that make up India's land borders and coastline will be under constant surveillance once the system is up, the people said. Earlier, New Delhi had hired two drones from the US when the current round of border tensions first flared with Beijing in the summer of 2020, for surveillance and reconnaissance.

https://www.hindustantimes.com/india-news/india-steps-up-border-drone-defense-to-wade-offhamas-like-attacks-report-101698388537722.html

# The Tribune

Sat, 28 Oct 2023

### Defence Ministry Identifies Fake Internet Domains Supposedly Set up by Pak Operatives for Targeting Defence Personnel

The Ministry of Defence (MoD) has identified about a dozen fake internet domains of official establishments that have supposedly been set up by Pakistani operatives and could be used to target defence personnel.

"It has been observed that few websites have been registered under '.in' domain which are originally hosted by Pakistan-based malicious actors. These websites are hosted to trap Indian defence personnel," a communique issued by the defence ministry recently states.

"Further research at national levels is in progress to identify more such domains. These domains can be used to launch spear phishing attacks against the Armed Forces," the communique adds.

The said websites are related to pay, accounts and welfare matters and bear such names likecoordbranch.in,ksb.csl.in,cgda.csl.in,coorddesk.in,e-admin.inandadmindesk.in, which could be used to extract sensitive information. The MoD has advised users to block the malicious URLs at perimeter security devices and sensitise all personnel about the phishing campaigns originating from these domains and ensure that they do not enter their NIC login credentials on these sites.

Any suspicious emails are to be forwarded to designated cyber security teams, without clicking on any link or opening any attachments, for forensic analysis and further guidelines and thereafter such emails are to be deleted from all folders.

The use of malware, bots and viruses via fake portals and emails is becoming increasingly common and there have been several instances where defence establishments and personnel have come under cyberattack through websites and social media apps.

Personal information and service details of individuals that could be used for manipulation or blackmail, official records and other operational or sensitive information are targets of cyberattacks.

https://www.tribuneindia.com/news/india/defence-ministry-identifies-fake-internet-domainssupposedly-set-up-by-pak-operatives-for-targeting-defence-personnel-557390

# THE MORE HINDU

Sat, 28 Oct 2023

### India Communicates to France Decision to Procure 26 Rafale Marine Jets

India has formally communicated to France its decision to procure 26 naval variant of the Rafale fighter aircraft for the Indian Navy, kick-starting the procurement process under an intergovernmental framework, people familiar with the matter said on Friday.

In July, the Defence Ministry approved the purchase of the Rafale (marine) jets from France, primarily for deployment on board the indigenously built aircraft carrier INS Vikrant.

The issue of procurement of the Rafale Marine jets is learnt to have figured during Defence Minister Rajnath Singh's recent visit to Paris.

It is learnt that India has sent a letter of request to the French government formally communicating its decision to procure the jets from Dassault Aviation under the government-to-government framework.

The negotiations on pricing and other details are expected to take place after the defence ministry receives a response from the French side, the people familiar with the matter said.

Earlier this month, Chairman and CEO of Dassault Aviation Eric Trappier visited New Delhi and discussed various aspects of the proposed procurement by India.

The Defence Ministry in July said the procurement of the jets along with associated ancillary equipment, including weapon systems and spares, would be based on an inter-governmental agreement (IGA) and that price and other terms of purchase will be negotiated with the French government after taking into account all relevant aspects.

The Indian Air Force bought 36 aircraft in fly-away condition. There is a thinking in the IAF that it should go for at least two more squadrons of the Rafale jets.

The defence and strategic ties between India and France have been on an upswing in the last few years.

In July, India and France announced a raft of ground-breaking defence cooperation projects, including the joint development of jet and helicopter engines and construction of three Scorpene submarines for the Indian Navy.

The two strategic partners also expressed commitment to cooperate in the co-development and coproduction of advanced defence technologies, including for the benefit of third countries.

https://www.thehindu.com/news/national/india-communicates-to-france-decision-to-procure-26rafale-marine-jets/article67468034.ece

## THE TIMES OF INDIA

Mon, 30 Oct 2023

### Made-in-T'gana Command Post Tanks to Roll out Today

Medak Ordnance Factory has unveiled a new tank, the Carrier Command Post Tracked (CCPT) vehicle.

The CCPT is designed and developed to carry out all tactical and technical fire control functions, enabling the effective deployment of self-propelled artillery guns.

It is the first of its kind, featuring a tracked chassis that houses the Artillery Combat Command and Control System (ACCCS). It is designed to accomplish fire control functions for all versions of artillery guns, both towed and self-propelled. The CCPT vehicle is a significant step in producing indigenous battle tanks.

The factory is one of the five production units of Armoured Vehicles Nigam (AVNL), operating as a defense public sector unit under the Ministry of Defense. A roll-out ceremony for the CCPT vehicles is scheduled to take place at the factory in Yeddumailaram, Sangareddy district,

Telangana, on October 30, 2023, with the presence of senior officials from DG Artillery, DRDO, DGQA, and BEL.

AVNL primarily manufactures armoured fighting vehicles, including main battle tanks and mine protected vehicles for the Indian armed forces. Some of AVNL's key products include the T-90 tank, T-72 tank, BMP-II (Sarath tank), and MBT Arjun. AVNL is also actively engaged in the development and production of new indigenous battle tanks tailored to meet the ever-changing dynamics of the battlefield.

The combat vehicles research and development establishment of DRDO has designed the CCPT. It is a re-engineered BMP vehicle with an extended chassis and additional bogey wheels. The CCPT is a common platform for command post functions of all the Indian artillery guns. Defence officials noted that "The CCPT carries special equipment, namely the integrated command control and communication system for artillery tracked (i3CAT), which BEL, Bengaluru, successfully developed."

In 2018, Ordnance Factory Medak Office, Kyasaram (OFMK) received an order for the supply of 43 vehicles. In 2021, OFMK successfully produced two CCPT vehicles under First Production Model (FoPM) for Indian Army towards trials. These vehicles proved their effectiveness on battlefield through successful completion of extensive tests in Babina, Uttar Pradesh, and Leh, indicating its capability to perform effectively in different terrains and climatic conditions.

https://timesofindia.indiatimes.com/city/hyderabad/made-in-tgana-command-post-tanks-to-rollout-today/articleshow/104809608.cms



Thu, 26 Oct 2023

### MILIPOL Exhibition Concrete Expression of India-France Dialogue on Homeland Security: French Minister

French Minister Sabrina Agresti-Roubache Thursday inaugurated the MILIPOL India exhibition here, saying the three-day event is a concrete expression of the importance of the dialogue between New Delhi and Paris, particularly on homeland security.

Milipol India, a new addition to the Milipol International Network of events dedicated to Internal Security is being hosted in Delhi's Pragati Maidan.

Inter Ads Exhibition Pvt Ltd, India and Comexposium, France are organising the event with the support of the Ministry of the Interior of France and India's Ministry of Home Affairs and the Ministry of External Affairs.

Speaking at an inauguration event, Sabrina, who is France's Minister of State for Citizenship, expressed that the event reflects the determination of French President Emmanuel Macron to make the Indo-Pacific a priority with India.

"This exhibition, which I have the honour of inaugurating alongside you, is a concrete expression of the importance of the dialogue between our two nations. Beyond this powerful symbol, the MILIPOL trade fairs are economic events with a strong international influence on an extremely dynamic global security market.," she said. "It comes at a time when we are celebrating the twentyfifth anniversary of Indo-French strategic partnership, for which Prime Minister Narendra Modi made a historic visit as a guest of honour on the national day of the French Republic," she added. The minister also remarked that the MILIPOL shows offer security solutions for businesses, saying, "they are at the forefront of the protection and security challenges of territories and their citizens. Today, we are delighted that this unique network of exhibitions, already established in Paris, Singapore and Doha, has found a home here in New Delhi."

Impressed by the response to MILIPOL India, Sabrina mentioned: "Due to the strength and dynamism of your business community, which immediately expressed interest in this new show. In fact, 95% of the exhibitors at the three-day MILIPOL are from the Indian business community."

Over 150 national and international exhibitors and many sponsors participated at the event.

Under 'Milipol India', one can witness the global stage where international sellers and buyers can meet and network, unveil the latest technology, showcase new trends and discuss the needs of the industry, under one roof for all solutions.

Countries like Canada, USA, France, UAE, Belgium, Brazil, Vietnam, Czech Republic and more have displayed their latest trend, technology and innovation.

The three-day parallel run conference will address wide segments of security. The conferences taken by Delhi Police, Nepal Armed Police Force, Hyderabad Police, Bangladesh Police, Maldives Police, High French Institute of Security Research, DRDO, Tihar Prison Delhi, NCB/Interpol/CBI, International Missions, Civil Defence is going to deliver many insights on the current challenges and solutions.

https://www.aninews.in/news/world/asia/milipol-exhibition-concrete-expression-of-india-francedialogue-on-homeland-security-french-minister20231026161144/



Sat, 28 Oct 2023

### India to Provide Additional Funding of LKR 23 Million for Training for Sri Lankan Military

India will provide additional funding of LKR 23 million (around Rs 58,75,900) for the training of Sri Lankan Armed Forces, the Indian High Commission here has said.

This was conveyed to Sri Lanka by the acting Indian High Commissioner Satyanjal Pandey when he met a senior local military delegation here on Friday.

"Army Delegation led by Maj Gen Chandana Wickramasinghe met Acting HC @DrSatyanjal to discuss the conduct of upcoming Exercise Mitra Shakti, a bilateral exercise between the Armies and Air Forces of India and Sri Lanka," the Indian mission posted on X.

"Additional funding of LKR 23 million for training of Sri Lankan Armed Forces announced by India," it said, without giving more details.

The Sri Lankan side conveyed its gratitude to India for the capacity-building support extended to the Sri Lankan armed forces and was looking forward to increased engagements, a release said.

https://www.financialexpress.com/business/defence-india-to-provide-additional-funding-of-lkr-23million-for-training-for-sri-lankan-military-3289689/

# THE ECONOMIC TIMES

### Armenia Seeks to Know Indian Way of Modernising Russian Arms

Armenia is keen to learn from India on how to modernise legacy defence equipment of Soviet and Russian make and operate them alongside defence equipment from the West, a senior defence officer of the Caucasian country has said. "India possesses several Soviet and Russian make defence equipment. It has successfully modernised Soviet and Russian era defence items. This is very impressive," Col Zhiriayar Amirkhanian, assistant to chief of defence staff, Armenian ministry of defence, told ET here. "We in Armenia are in possession of several Soviet and Russian-designed equipment and we want to learn from India's experience." Armenian military is also keen to learn from India how to operate Soviet and Russian-era equipment alongside defence equipment from the West and integrate them into overall military concept, said Col Amirkhanian who visited India this year. It might be noted that Armenia has signed a defence purchase pact with France.

Armenia is negotiating purchase of additional defence equipment from India and even exploring the possibility of joint ventures with India for local assembly of equipment, the senior officer said.

Armenia is also working with India for avail facilities of mid-level officers training and training for equipment that Armenia purchased from India. "We started our defence cooperation from 2017 and it has picked up in real momentum over the last few years. We are in regular dialogue with our Indian counterparts to improve collaboration," Col Amirkhanian said.

India has emerged as a credible weapons supplier as per Armenia's requirements, ET had reported earlier this week. The last consignment sent by India to Armenia included Pinaka multi-barrel rocket launchers, anti-tank missiles, rockets, and ammunition. The supply of weapons was reportedly made through Iran, which shares historical ties with Armenia.

Azerbaijan's use of drones is a key reason why Armenia has been purchasing the Pinaka system, since its "shoot and scoot" capability enables it to escape counter-battery fire. Its low cost and simplicity of use also make it an ideal weapons system for Armenia. The Armenian army can easily become familiar with this system as it is accustomed to using the Russian-made GRAD system.

People who did not wish to be identified told ET that despite some recent peace moves, Armenia remains worried that Azerbaijan may take advantage of chaos and conflicts in other parts of the globe and launch fresh military assault against Armenia over the next few weeks or months.

https://economictimes.indiatimes.com/news/defence/armenia-seeks-to-know-indian-way-of-modernising-russian-arms/articleshow/104763943.cms

## THE TIMES OF INDIA

Sun, 29 Oct 2023

#### China Kickstarts Xiangshan Forum in Absence of Defence Minister

Beijing Xiangshan Forum, China's biggest annual show of military diplomacy, started on Sunday, although the Asian power is still missing a defence minister, who typically hosts this event.

China hopes to use the forum to promote president Xi Jinping's vision for a safer world and draw developing countries closer, as it faces increased coordination between the United States and its allies to curtail its military ambitions.

Russian defence minister Sergei Shoigu was initially listed in the forum's agenda as the first guest speaker at Monday's opening ceremony, a sign that suggests China intends to give Russia, which invaded in Ukraine in 2022, centre stage at the forum. But as of Sunday, Shoigu's name was not on the agenda. The US defence department has sent a delegation led by Xanthi Carras, China country director in the Office of the Undersecretary of Defense.

This year's forum takes place at an awkward time for China, when it is without a defence minister, whose main role is to engage with foreign militaries.

On Tuesday, Beijing sacked defence minister Li Shangfu but did not name a replacement. Reuters reported last month that Li, who has been missing for two months, was being investigated for corruption. Chinese military leaders more senior than the defence minister have filled in for Li. State media reported that Zhang Youxia and He Weidong, ranked number two and three in the military, separately held bilateral meetings with the defence ministers from Laos, Mongolia and Vietnam on Saturday.

Zhang is due to make a speech at a dinner reception on Sunday and also give the keynote address on Monday, a task performed by the defence minister in previous years.

State news agency Xinhua reported that the number and level of foreign participants, including 22 defence ministers and 14 military chiefs, are the highest this year since the forum was first held in 2006. In particular, China is focusing its outreach to the Global South.

Zhao Yufei, an official with the event organiser, said the forum will call on developing countries to oppose bloc confrontation and a "Cold War mentality", which are two frequent criticisms Beijing have of the West. Two defence diplomats whose countries have sent ministers told Reuters the forum offers a rare opportunity to engage with senior Chinese defence officials and military leaders to build trust, which would be key in times of crisis.

Concerned about how open the forum can be, many in the West have either shunned it or are only sending small and low-level delegations, preferring instead to discuss international security issues at the Shangri-La Dialogue held annually in Singapore.

Some European countries, including France, plan to send a small delegation from their defence ministries, according to sources familiar with the matter.

Nato's delegation will be led by Wendin Smith, its security policy director, a Nato official said.

https://timesofindia.indiatimes.com/world/china/china-kickstarts-xiangshan-forum-in-absence-of-defence-minister/articleshow/104798285.cms



Fri, 27 Oct 2023

### US Military Says Chinese Fighter Jet Flew 'Within 10 Feet' of its Plane at 'Uncontrolled Excessive Speed'

US officials said a Chinese fighter jet had travelled alarmingly close to its own carrier over the South China Sea this week. A statement released by the US Indo-Pacific Command underscored the

potential for a mishap and voiced concern that the pilot was 'unaware of how close he came to causing a collision'. A similar incident in May had however prompted the Chinese government to demand that Washington end such flights over the South China Sea.

A statement released late on Thursday said the Shenyang J-11 twin-engine fighter had closed on the US Air Force plane at an "uncontrolled excessive speed" and put both aircraft at risk of collision. The US military said the Chinese plane had been "flying below, in front of, and within 10 feet of" its own B-52 aircraft.

Reports indicate that the Chinese Ministry of Foreign Affairs is yet to comment on the matter.

China has been increasingly assertive in advancing its claims over most of the South China Sea as its territorial waters – a position rejected by the US and other countries. The stance has also led to longstanding territorial disputes in one of the world's busiest trade routes. Last week, a Chinese coast guard ship and an accompanying vessel had rammed a Philippine coast guard ship and a military-run supply boat off a contested shoal in the waterway.

The latest developments came even as China's top diplomat visited Washington for several highlevel meetings. Wang Yi may also interact with President Joe Biden amid efforts to stabilise US-China ties. While reports of such an interaction remain unconfirmed, the diplomatic practice of reciprocity suggests it is likely -- Blinken had met with Xi when he visited China in June.

Ties between the two countries have become increasingly strained since the Trump administration slapped hefty tariffs on \$50 billion worth of Chinese goods in 2018. It had since deteriorated further over a range of issues, including rights abuses, the South China Sea, Taiwan, technology and the COVID-19 pandemic.

"China and the United States need to have dialogue. Not only should we resume dialogue, the dialogue should be in-depth and comprehensive," Reuters quoted the top Chinese official as saying on Friday.

https://www.livemint.com/news/world/us-military-says-chinese-fighter-jet-flew-within-10-feet-ofits-plane-at-uncontrolled-excessive-speed-11698397133147.html

### Science & Technology News



Press Information Bureau Government of India

**Ministry of Science & Technology** 

Sun, 29 Oct 2023

### India can Steer 6G Standardization & Become a Global Exporter of such Technologies: DST Secretary

Secretary Department of Science and Technology (DST) Professor Abhay Karandikar said that India with its' indigenous 5G technology in place, committed and dedicated team of researchers in academia, industry players and start-ups has an ecosystem to bring the country to a position of strength in terms of mobile network technologies, at the Indian Mobile Congress (IMC) on October 29, 2023.

"We have an opportunity to steer the 6G standardization in a way which we have not really thought of before, as well as become a global exporter of such technologies in the years to come," Professor Karandikar said at his session during Second International Workshop on 6G Standardization that took place as part of the IMC which was inaugurated by the Prime Minister on October 27, 2023.

"As you know that the 5G itself was a paradigm shift from 2G and 3G mobile networks, while 6G would be really a game changer and India presents a fertile use case scenario for influencing the 6G research and the standardization in a vastly different way," DST Secretary added.

He added that with the advent of mobile communication, India is contributing hugely to the massive escalation of global data volume and by 2030 India's share may increase to one third or even more of the total data generated from the standard mobile communication.

"We will have a variety of use cases from very high to a very low data rate, from very stringent latency environments to latency tolerant applications, heterogeneous radio access technologies and a range of access devices. This diversity in India will be a useful test scenario for cellular mobile communications, and also devices connected through Wi -Fi, drones, satellite, terrestrial networks, sensors as well as IoT," Professor Karandikar pointed out.

"However, we still have a long way to go as far as research in on standardization and filing patents is concerned. Also, a significant amount of work needs to be done in the core network itself. Core network will present huge scalability challenges and to overcome this, an efficient heterogeneous radio access technology which can help pumping in large volumes of data to the core networks would be very useful," he explained.

"The research challenges that these areas throw up, can be supported by the Department of Science and Technology through its initiatives like the National Mission for Cyber Physical Systems (NMICPS). Besides primary telephone connectivity, it can span communication in sectors of agriculture, health, transportation, logistics and so on. Besides, with the ANRF soon to be operational, some of these advanced areas can have new mechanisms of funding in place," Professor Karandikar stressed at the IMC.

He also visited the stalls put up at the IMC by the Technology Innovation Hubs set up under NMICPS and discussed about the technologies under display.

Dignitaries from the Government, academia and the Industry like Shri Apurva Chandra, Secretary Ministry of Information & Broadcasting, Shri V. Raghunandan, Secretary TRAI, Shri R K Upadhyay. C-DoT, Shri R R Mittar, Advisor, TEC attended the workshop, the different sessions and interacted about mobile network technologies, their standardization, their future and related issues during the 3 day IMC organized in New Delhi.

https://pib.gov.in/PressReleasePage.aspx?PRID=1972821



Sat, 28 Oct 2023

### Scientists Find Ways to Control Mosquito Causing Zika, Dengue

Offering a potential new way to control the spread of the mosquito causing Zika and Dengue, a team of Indian scientists has found that eggs of the mosquito can tolerate extended desiccation (the act or process of drying or removing moisture) by altering their metabolism.

The study is published in the open access journal PLOS Biology.

Researchers Anjana Prasad, Sunil Laxman, and colleagues at the Institute for Stem Cell Science and Regenerative Medicine in Bengaluru, India and the Indian Institute of Technology in Mandi, India

They explained that cells are made mostly of water, and desiccation is a potentially fatal event for any organism, since the structures of many proteins and other cellular molecules are dependent on adequate hydration.

"While many types of microbes have evolved mechanisms to survive drying out, only a few animals have. Among them is the mosquito Aedes aegypti, the carrier of a variety of viral diseases, including, Zika, dengue, yellow fever, and Chikungunya," said the study.

Aedes eggs require from 48 to 72 hours to hatch into larvae, and the authors first showed that eggs must be at least 15 hours old to survive desiccation; eggs that were dried out before this stage failed to hatch when rehydrated.

"Given the importance of Ae. aegypti as a primary vector for numerous viral diseases that affect nearly half the world's population," Laxman said, "as well as the rapid geographical expansion of this mosquito vector, these results provide a foundation for reducing Aedes egg survival and global spread. "Additionally, some of the specific inhibitors described here reduce desiccation resistance in Ae. aegypti eggs, as well as new ones affecting other steps in the egg desiccation tolerance pathway, may prove useful as vector-control agents."

Laxman added, "Aedes mosquito eggs can indefinitely survive after drying up completely, and hatch into viable larvae. The embryos rewire their metabolism upon drying, to protect themselves through desiccation, and revive after water becomes available again."

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