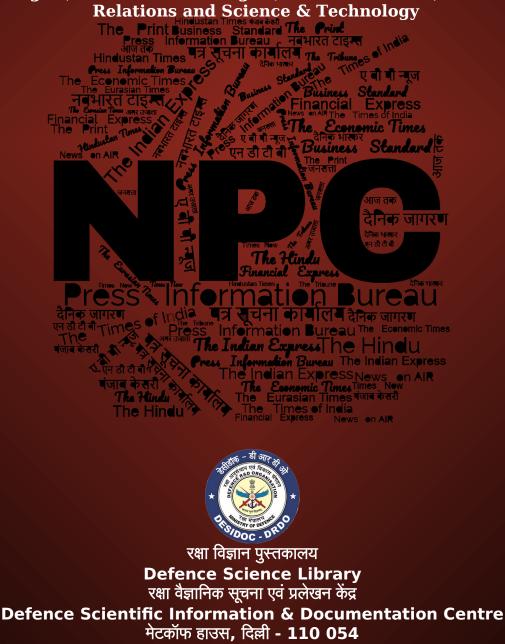
अगस्त Aug 2023 खंड/Vol. : 48 अंक/Issue : 152 11/08/2023

# 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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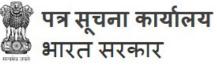
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### Defence Strategic: National/International



रक्षा मंत्रालय

Thu, 10 Aug 2023

### सिडनी, ऑस्ट्रेलिया में मालाबार-2023

भारतीय नौसेना के अग्रिम पंक्ति के स्वदेशी युद्धपोत आईएनएस सह्याद्री और आईएनएस कोलकाता अमेरिकी नौसेना (यूएसएन), जापान मैरीटाइम सेल्फ डिफेंस फोर्स (जेएमएसडीएफ) और रॉयल ऑस्ट्रेलियाई नौसेना (आरएएन) के जहाजों और विमानों के साथ 11 से 21 अगस्त, 23 तक सिडनी में निर्धारित मालाबार 2023 अभ्यास में भाग लेंगे।

मालाबार समुद्री अभ्यास की श्रृंखला 1992 में भारतीय नौसेना और अमेरिकी नौसेना के बीच एक द्विपक्षीय अभ्यास के रूप में शुरू हुई थी और भारत-प्रशांत क्षेत्र में चार प्रमुख नौसेनाओं को शामिल करने के साथ इस अभ्यास का विस्तार हुआ। 2020 में केवल रॉयल ऑस्ट्रेलियाई नौसेना (आरएएन) की भागीदारी हुई थी। इस वर्ष मालाबार का 27 वां अभ्यास है, जिसकी मेजबानी रॉयल ऑस्ट्रेलियाई नौसेना (आरएएन) द्वारा की जा रही है।

मालाबार 2023 का आयोजन दो चरणों में किया जाएगा। समुद्र तट चरण में एक-दूसरे के जहाजों में दौरे, पेशेवर आदान-प्रदान, खेल और समुद्री चरण की योजना तथा संचालन के लिए बातचीत जैसी व्यापक गतिविधियां शामिल हैं। समुद्री चरण में युद्ध के सभी तीन क्षेत्रों में विभिन्न जटिल और उच्च तीव्रता वाले अभ्यास शामिल होंगे, जिनमें हथियार चलाने के लाइव अभ्यास समेत सतह-रोधी, वायु-रोधी तथा पनडुब्बी रोधी अभ्यास किये जाएंगे। यह अभ्यास भारतीय नौसेना को अंतर-परिचालन को बढ़ाने और प्रदर्शित करने तथा अपने साथी देशों से समुद्री सुरक्षा संचालन में सर्वोत्तम तौर-तरीकों से लाभ उठाने का अवसर प्रदान करता है।

आईएनएस सह्याद्री स्वदेशी रूप से डिजाइन और निर्मित प्रोजेक्ट-17 श्रेणी के बहु-भूमिका वाले स्टील्थ फ्रिगेट का तीसरा जहाज है और वर्तमान में इसकी कमान कैप्टन राजन कपूर के पास है। आईएनएस कोलकाता स्वदेशी रूप से डिजाइन और निर्मित प्रोजेक्ट -15 ए श्रेणी के विध्वंसक का पहला जहाज है और इसकी कमान कैप्टन शरद सिनसुनवाल के पास है। दोनों जहाजों को मझगांव डॉक लिमिटेड, मुंबई में निर्मित किया गया है और ये जहाज सतह, हवा और पानी के नीचे के क्षेत्रों में खतरों का पता लगाने और उन्हें बेअसर करने के लिए अत्याधुनिक हथियारों और सेंसर से लैस हैं।

https://pib.gov.in/PressReleasePage.aspx?PRID=1947543



Press Information Bureau Government of India

**Ministry of Defence** 

Thu, 10 Aug 2023

### MALABAR-2023 at Sydney, Australia

Indian Navy's indigenous frontline warships INS Sahyadri and INS Kolkata will participate in Exercise MALABAR 2023 scheduled at/ off Sydney from 11 - 21 August 23 along with ships and aircraft from the US Navy (USN), Japan Maritime Self Defence Force (JMSDF) and the Royal Australian Navy (RAN).

MALABAR series of maritime exercise commenced in 1992 as a bilateral exercise between Indian Navy and US Navy and has grown in stature over the years to include four prominent navies in the Indo-Pacific Region. The 2020 edition witnessed the maiden participation of the Royal Australian Navy (RAN). This year marks the 27th edition of MALABAR which is being hosted by Royal Australian Navy (RAN).

MALABAR 2023 is scheduled to be conducted in two phases. The Harbour Phase involves wideranging activities such as cross-deck visits, professional exchanges, sports fixtures and several interactions for planning and conduct of the Sea Phase. The Sea Phase will include various complex and high intensity exercises in all three domains of warfare, encompassing anti-surface, anti-air and anti-submarine exercises including live weapon firing drills. The exercise provides an opportunity to the Indian Navy to enhance and demonstrate interoperability and also gain from the best practices in maritime security operations from its partner nations.

INS Sahyadri is the third ship of the indigenously designed and built Project-17 class multi-role stealth frigates and is presently commanded by Capt Rajan Kapoor. INS Kolkata is the first ship of the indigenously designed and built Project-15A class destroyers and is commanded by Capt Sharad Sinsunwal. Both ships have been built at Mazagon Dock Ltd, Mumbai and are fitted with state-of-the-art array of weapons and sensors to detect and neutralise threats in surface, air and underwater domains.

https://pib.gov.in/PressReleasePage.aspx?PRID=1947436

## THE ECONOMIC TIMES

Thu, 10 Aug 2023

#### Indian Ships to Participate in Malabar Naval Exercise in Australia

India's navy warships INS Sahyadri and INS Kolkata will participate in Exercise MALABAR 2023, which is being hosted by the Royal Australian Navy from August 11 to 21.

Other than India, US Navy (USN), Japan Maritime Self-Defence Force (JMSDF) and the Royal Australian Navy (RAN) are also participating in the exercise, according to the statement released by the Ministry of Defence.

It is pertinent to mention here that this is for the first time that the Royal Australian Navy is hosting the exercise.

The MALABAR series of maritime exercises started in 1992 as a bilateral exercise between Indian Navy and US Navy and has grown in stature over the years to include four prominent navies in the Indo-Pacific Region.

The 2020 edition witnessed the maiden participation of the Royal Australian Navy (RAN). This year marks the 27th edition of MALABAR which is being hosted by the Royal Australian Navy (RAN), the statement read.

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https://economictimes.indiatimes.com/news/defence/indian-ships-to-participate-in-malabar-navalexercise-in-australia/articleshow/102609369.cms

## THE ECONOMIC TIMES

Thu, 10 Aug 2023

#### Parliamentary Panel Compliments Defence Ministry for 'Synergised Efforts' to Ensure Self-Reliance in Military Equipment

A parliamentary panel on Thursday complimented the defence ministry for its "synergised efforts" to realise the objective of ensuring self-reliance in military hardware. The Standing Committee on Defence also noted that the expenditure on procurement from domestic sources has witnessed an increasing trend since 2018-19.

The percentage of procurement from domestic defence manufacturers stood at 63.6 per cent in 2020-21 as against 54 per cent in 2018-19, the panel said in a report tabled in Parliament.

Referring to the gap between projects of budgetary allocations and actual outlay in the defence budget, it recommended formulation of a method for pragmatic budgetary projections.

The committee observed that the tendency for greater projections in anticipation of higher allocation of funds at revised estimates stage is not desirable.

"The committee is happy to note that synergised efforts are being taken for realisation of the objective of 'Aatmanirbhar Bharat' (self-reliant India) in defence sectors," the report said.

The committee, headed by Jual Oram, expressed happiness over efforts undertaken to take up indigenisation of equipment for future projects.

The report said the committee has been apprised that there are some critical components that are not indigenously produced for various unavoidable reasons.

"In this regard, the committee hopes that the indigenisation cell constituted in defence public sector undertakings (DPSUs) will be able to successfully indigenize some of the critical equipment/items required for warships and submarines," it said.

The committee also noted that the cumulative order book status of the nine DPSUs, as on February, 2022, stood at Rs 2,48,487 crore.

"After examining the data furnished by the ministry regarding order book status of each DPSU, it is inferred that out of the nine DPSUs, Hindustan Shipyard Limited (HSL) and Mishra Dhatu Nigam Ltd (MIDHANI) have considerably low order book value when compared to the other DPSUs," the report said.

It said the order book position of Hindustan Aeronautics Ltd as of December 31, 2022 was Rs 83,707 crore.

This includes platform manufacturing order for Light Combat Aircraft (LCA) Tejas Mk1, LCA MK1A, and Light Combat helicopters.

The report also noted that there is around 17 per cent shortage of manpower in Coast Guard Organisation vis-a-vis sanctioned strength.

The committee also observed that there was a gap of around Rs 1 lakh crore in the demand by the armed forces and the actual allocation made in the defence budget for 2022-23.

The defence ministry conveyed to the panel that greater projections at budget estimates stage become a justification for enhanced allocation at revised estimates stage, adding additional funds are allocated by the finance ministry contingent upon spending capacity of the ministries/organisations.

"The committee also noted the assurance of the Ministry of Defence that operational preparedness of the defence services will not be affected and the Ministry of Finance will be approached for additional allocation of funds, if needed, at revised estimates stage," the report said.

"The committee, in this context, is of the considered view that in spite of the ministry's affirmation that operational preparedness of the services will not be compromised due to want of funds and the additional funds, if needed, will be sought at revised estimates stage, the huge mismatch between projected and allocated funds is a cause of concern," it said.

The committee said the tendency for greater projections in anticipation of greater allocation of funds at revised estimates stage is not desirable as it gives the impression of a huge gap between required and allocated defence budget.

"Therefore, the committee recommends that a method may be formulated by the Ministry of Defence in consultation with the Ministry of Finance for pragmatic budgetary projections," the report said.

https://economictimes.indiatimes.com/news/india/parliamentary-panel-compliments-defenceministry-for-synergised-efforts-to-ensure-self-reliance-in-military-equipment/articleshow/ 102618519.cms



Fri, 11 Aug 2023

#### Forces to Get Lightest Bullet-Proof Jackets Designed in IIT Delhi

Researchers at IIT Delhi, after three years, have designed a bullet-resistant jacket for Indian soldiers weighing two and a half kilograms lighter than the ones currently being used by the force.

Professor Naresh Bhatnagar, Dean of Research and Development said that currently, the bulletproof jackets worn by the Indian soldiers weigh about 10.5 kg.

However, the researchers at the institute have designed a lighter version of the jacket weighing just 8.2 kg.

"The Advanced Ballistic High Energy Defeat (ABHED) BIS level 5 and ABHED BIS Level 6 comply with the Indian Army's latest requirements and are capable of defeating eight AK-47 HSC and six Sniper API bullets respectively on 1000 sq cm panels after ageing with minimum back face deformation.

The R&D ballistic testing as per BIS standards has been conducted successfully at DRDO-TBRL Chandigarh and is ready for Technology Transfer by IIT Delhi to Indian Industry," added Professor Bhatnagar.

https://www.newindianexpress.com/cities/delhi/2023/aug/11/forces-to-get-lightest-bullet-proof-jackets-designed-in-iit-delhi-2604210.html

## THE ECONOMIC TIMES

Fri, 11 Aug 2023

### BHEL JV among 3 Bidders for Army's Guns Contract

A partnership of Bharat Heavy Electricals Ltd (BHEL) with Italy's Leonardo S.p.A (formerly Finmeccanica) is among three bidders for the supply of air defence guns to the Indian Army.

According to officials aware of the development, Larsen & Toubro and Advanced Weapons & Equipment India Ltd (AWEIL) of Kanpur are the other participants in bidding for developing and supplying this weapon.

AWEIL is among the seven new defence public sector undertakings formed by converting the Ordnance Factories.

"The bidders need to prepare a prototype of the weapon and then get it approved before the award of contract," a senior government official told ET. The estimated contract value is around ₹6,500 crore.

A request for proposal for these guns was issued by the defence ministry in October last year. Bids are expected to be opened this month.

These weapons will replace the 'in service' air defence guns held by the Indian Army. All bidders are contesting on the cost of supply while assuring localisation for the specifications sought by the Army.

The tender is for supply of 220 guns and 142,000 rounds of ammunition. The service life of these guns should be 25 years, while the shelf life of the ammunition be at least 10 years.

"The winner also is likely to get all subsequent orders for these guns and their spares, from Indian defence forces and other countries who are scouting for similar guns," a second official said.

This gun should have the capability to engage fighter and transport aircraft, helicopters, all types of remotely piloted aircraft or drones, cruise missiles and microlight aircraft, among others. It also needs to be able to move in all types of terrains and towed on metalled roads.

The winning bidder is bound to provide product support for maintenance, materials and spares for at least 25 years from the delivery of the last lot of guns. It will also give at least two years notice prior to closing the production line.

https://economictimes.indiatimes.com/news/defence/bhel-jv-among-3-bidders-for-armys-gunscontract/articleshow/102621199.cms

## THE ECONOMIC TIMES

Thu, 10 Aug 2023

#### India Important Partner to Champion Rules-based Order, Says UK at Army Chief's Ceremonial Welcome

The UK said it sees India as an important partner in the shared goal of championing the rules-based international order as it accorded a ceremonial welcome to Army Chief General Manoj Pande here on Thursday. The Guard of Honour at Horse Guards Parade in the heart of the UK capital marked the start of Gen. Pande's visit to the country, during which he will become the first Indian armed forces representative ever to represent King Charles III at the Sovereign's Parade at Royal Military Academy, Sandhurst.

"Investing in our relationships, especially that as important as India where together we can champion the rules-based international order, is a clear demonstration that the UK is open, outward-looking and confident on the world stage," the UK's Ministry of Defence (MoD) said in a statement. At the ceremonial welcome, Gen. Pande was received by the UK's Chief of the General Staff, Gen. Sir Patrick Sanders, before he inspected a Guard of Honour by the Number 7 Company Coldstream Guards, one of the oldest regiments in the British Army dressed in their iconic scarlet tunics and black bearskin caps. The MoD said the Band of the Grenadier Guards, conducted by Director of Music Captain Robert Smith, performed a bespoke programme of music in support of the occasion to illustrate the harmony between the two nations.

"Framed by the Old Admiralty on one side, No. 10 Downing Street on the other, and with a clear view of Buckingham Palace, it is here that the King takes the salute from the very same spot during the Trooping of the Colour ceremony for his official birthday in June," the MoD said in a statement.

"There was a powerful sense of faithful continuity about the ceremonial welcome. The regiments represented on parade are among the most historic in the British Army and have enjoyed a reputation of world renown for their dual role excellence in combat operations and ceremonial duties for almost 400 years," it said. Within the ranks at the ceremony was Guardsman Singh, born in Chandigarh and joining the Coldstream Guards inspired by stories he read online about the British Army. He moved to the UK in 2021 to pursue his dream of becoming a King's Guard.

"Today he had the great honour of being on parade in that role as a member of Number 7 Company Coldstream Guards. As General Manoj Pande inspected the ranks, he stopped to talk to Guardsman Singh, whose integration into the British Army is yet another example of how our two nations are working closer than ever," the MoD said. Following the inspection, the two generals retired to the grand historic offices overlooking Horse Guards Parade on Whitehall in the heart of London to discuss shared future military commitments and joint training opportunities.

Gen. Pande also had meetings with the Vice Chief of the Defence Staff, General Gwyn Jenkins RM, and the Commander of UK Strategic Command, General Sir Jim Hockenhull. The UK Chief of the General Staff also accompanied the visiting Indian Chief on a cultural tour of London.

The highlight of the Army Chief's visit is on Friday, when around 200 Officer Cadets, including 45 international cadets, of Commissioning Course 223 will pass out as Commissioned Army Officers at the Royal Military Academy, Sandhurst.

Gen. Pande has been given the privilege of being the "Sovereign's representative" at that parade and he will take the salute in place of King Charles III at the pass off parade. He is the first Indian representative ever to be afforded such an honour, the MoD said.

"The region is critical to our economy, our security, and to our interest in an open and stable international order. In this, India is an equal partner for the UK, and that friendship is highly valued, as today's Guard of Honour testifies," it said.

There have been a series of bilateral visits and military engagements between India and the UK since the beginning of this year, including the visit of the UK's Chief of the Defence Staff, Admiral Sir Tony Radakin, to India in April. Bilateral visits help increase understanding about shared military capabilities, objectives and priorities, all of which are seen as vital for a stronger India-UK strategic partnership.

Earlier this week, the Indian Army had announced the five-day visit for the historic Sovereign's Parade during which Gen. Pande will also be visiting the Indian Army Memorial room which occupies a place of pride in the Royal Military Academy, Sandhurst.

The talks will be focused on various matters of common interest, including defence cooperation, counter-terrorism efforts and strategic planning, officials said.

"This visit marks a momentous milestone in strengthening the diplomatic, military, and cultural ties between the two nations. It bears testimony to the enduring camaraderie that has flourished over the years, promoting mutual cooperation and understanding in the realms of defence and security," the Army said in a statement.

https://economictimes.indiatimes.com/news/defence/army-chief-general-manoj-pande-receivesceremonial-welcome-in-uk/articleshow/102608263.cms



Thu, 10 Aug 2023

#### Indian Navy Chief, German Air Force Chief Discuss Avenues of Collaboration to Bolster Defence Cooperation

Indian Navy Chief Admiral R Hari Kumar, on Thursday, met German Air Force Chief Lieutenant General Ingo Gerhartz and discussed new avenues of collaboration towards bolstering defence cooperation.

On the social media account X, formerly known as Twitter, Indian Navy said that both of them reaffirmed their commitment to Indo Pacific region.

"Adm R Hari Kumar #CNS & Lt Gen Ingo Gerhartz, Chief of the German Air Force met at South Block #NewDelhi. The Principals reaffirmed commitment to #IndoPacific region & discussed new avenues of collaboration towards bolstering Defence Cooperation & ops engagements," Spokesperson of the Indian Navy at IHQ MoD(Navy) said in a tweet.

On Wednesday, German Air Force chief Lieutenant General Ingo Gerhartz called on the Indian Air Force chief Air Chief Marshal VR Chaudhari in Delhi and the two discussed the ways to further strengthen cooperation between the two Air Forces.

Moreover, they also discussed issues of mutual interest during the meeting.

The Indian Air Force took to its official Twitter handle and said, "Lieutenant General Ingo Gerhartz, Chief of the German Air Force called on the CAS Air Chief Marshal VR Chaudhari in New Delhi today."

"Issues of mutual interest & means to further enhance cooperation between the two Air Forces were discussed during the meeting," the tweet added.

Germany is India's biggest trading partner in Europe, its 5th biggest trading partner in the world, the eighth largest source of FDI and the second most important partner in terms of technological collaborations, according to the Ministry of External Affairs.

There are a number of Indian organizations and associations active on the business/cultural front, cementing ties between India and Germany at the people-to-people level.

https://www.aninews.in/news/world/asia/indian-navy-chief-german-air-force-chief-discussavenues-of-collaboration-to-bolster-defence-cooperation20230810221613/



Thu, 10 Aug 2023

#### Indian Military Chiefs Visit Taiwan amid Escalating Threat from China

In a first, three recently-retired chiefs of the Indian armed forces visit Taiwan for participating in a crucial security dialogue seminar on Indo-Pacific organized by the Taiwan foreign ministry.

Former army chief Manoj Naravane, navy chief Karambir Singh, and air chief RKS Bhadauria delivered talks in Taipei for the Ketagalan Forum's 2023 Indo-Pacific Security Dialogue.

While the visit of all three former chiefs was private on invitation by the Taiwanese foreign ministry, it does highlight the new approach as far as the Indian foreign policies are concerned. The visit is also seen as an Indian representation of the conference.

During the conference, Karambir Singh talked about the current global security scenario and the importance of the Taiwan Strait which is an important issue in the world.

He said: "Chinese belligerence and intimidatory use of hard power leaves India disconcerted and New Delhi does not want the Chinese playbook replicated elsewhere as it is in the South China Sea". As China continues to see Taiwan as a part of its territory and has been pushing pressure on Taiwan through aggressive military tactics.

China has been openly violating the air space of Taiwan by sending its combat jets in the territory.

The former navy chief also said Taiwan Strait was turning into an "epicentre" of geopolitical confrontation.

India follows the 'One China policy' vis-a-vis Taiwan and does not have full diplomatic ties with Taipei. Taiwan operates in India through its economic and cultural centre in New Delhi.

It is only in 1991 that India started looking east seriously and revived the relations under India's Look East Policy (LEP). Later in 1995, Taiwan opened a representative office in Delhi as Taipei Economic and Cultural Center (TECC) and India established India-Taipei Association (ITA) for India in Taipei.

India's 'one China' policy has been a major constraint in improving the bilateral relation with Taiwan.

Experts point out that Indian foreign policies, especially towards Taiwan, require a bolder approach which can be favourable to its economic development. The visit suggests a shift in this direction.

https://www.financialexpress.com/business/defence-indian-military-chiefs-visit-taiwan-amid-escalating-threat-from-china-3206720/

## THE ECONOMIC TIMES

Thu, 10 Aug 2023

#### G20 Summit: Security Strengthened as Delhi Police Acquires Russian Dragunov Sniper Rifles and Deploys Skilled Marksmen at Key Locations

In preparation for the upcoming G20 Summit, the Delhi Police is acquiring Russian Dragunov sniper rifles, a move aimed at boosting security measures, said undisclosed sources in an interview with TOI. Skilled marksmen armed with these rifles will be strategically positioned atop high-end hotels in central Delhi, Aerocity, and other crucial spots across the city.

Although senior officers have chosen to keep mum on the matter, reliable police insiders suggest that instead of purchasing these rifles outright, the police force might secure them on loan from either the army or paramilitary units. A basic Dragunov SVD rifle comes at a price of Rs 2-3 lakh, with costs potentially reaching Rs 5 lakh depending on preferred accessories. For the limited duration of the G20 Summit, Delhi Police anticipates the need for 70-100 rifles, as confirmed by insiders to TOI.

Within the same TOI news report, sources at the Police Headquarters reveal that approximately 250 trained marksmen are ready for G20 duty. These professionals will work in shifts of eight hours each, and a pool of over two dozen marksmen will be on standby.

The choice of the Dragunov sniper rifle was not for its peak performance, but rather for its dependability and simplicity, explains an investigator familiar with the situation. The Dragunov is proficient at ranges of 700-800 meters, a capability deemed adequate by city police for use during the global summit scheduled for September.

The Russian Dragunov sniper rifle is renowned for its accuracy and long-range capability. It uses a powerful 7.62x54mmR cartridge that can penetrate body armor and soft targets at long ranges. To provide increased protection, expert marksmen armed with Dragunov rifles will be stationed atop high-end hotels in downtown Delhi, Aerocity, and critical places.

To ensure their effectiveness, the snipers will collaborate with around 50 spotters equipped with advanced night vision binoculars. These spotters will be stationed nearby and maintain close communication with the snipers, promptly alerting them to any unusual activities. Moreover, these spotters could also be deployed during Independence Day celebrations, assisting snipers positioned at the Red Fort and its vicinity.

Officials highlight that the Dragunov SVD is a reliable gas-operated rifle, designed for easy use, maintenance, and repair despite its long barrel. Officers affirm that marksmen have the capability to customize the sniper rifle with different sighting systems, suitable for both daytime and nighttime operations, based on the task and combat setting.

While the Dragunov allows for rapid follow-up shots due to its semi-automatic nature, it comes with certain limitations. Officers from the special weapons and tactics (SWAT) unit note that the ejection of fired cases could inadvertently disclose the sniper's position. Furthermore, the rifle's optimal range is within 500-700 meters.

The Indian army is a notable user of these rifles, with estimates suggesting that at one point, around 7,000 of these weapons were in service. Reports hint that an upgrade may be in the works rather than a complete replacement, as the army explores other advanced sniper options.

Security measures include more than just formidable weaponry. To vigilantly watch the city, a variety of measures, including drones and modern surveillance technology, are being used. The police are undertaking simulated exercises to assess the effectiveness of these security measures in order to strengthen their preparations.

In addition to the sniper rifles, Delhi Police is also acquiring communication devices, security equipment, and vehicles to enhance overall security measures. There are plans to introduce an advanced digital trunking radio system, aiming to enhance communication among police personnel. The force is also set to acquire modern tools for identifying liquid explosives and portable equipment for thorough vehicle inspections.

The G20 Summit is a major international event that brings together leaders from the world's leading economies. With strict security measures expected, the Delhi Police are making every effort to protect both delegations and the general public.

Complementing the use of Dragunov sniper rifles and marksmen, the Delhi Police are executing the following security strategies ahead of the G20 Summit:

Heightened Police Presence: The number of police personnel on active duty will be significantly increased.

Strategic Checkpoints: Essential locations will feature checkpoints and barricades.

Random Checks: Vehicles and pedestrians will undergo random searches to deter potential threats.

Aerial Surveillance: The police are incorporating drones and other surveillance technology for comprehensive oversight.

Drill Exercises: Mock drills are being carried out to gauge the effectiveness of security protocols.

The Delhi Police has stated unequivocally that security plans for the G20 Summit will be both rigorous and comprehensive. Every feasible precaution is being taken to ensure the summit's success, with a dedication to the safety of all guests and the general public.

Additional insights into the G20 Summit's security arrangements:

Collaboration with Intelligence Agencies: The Delhi Police are collaborating closely with the National Security Guard (NSG) and other intelligence bodies to fortify safety measures.

Thorough Testing: Security drills are being conducted to assess the efficiency of diverse security measures. Airspace Security: Partnership with the Indian Air Force has been established to secure the airspace around Delhi. Traffic Management: To ensure seamless traffic flow during the summit, collaboration with the Delhi government is ongoing.

The forthcoming G20 Summit holds immense significance for India, and the Delhi Police are steadfast in their determination to ensure its triumph. Their unwavering confidence in the foolproof nature of their security arrangements underscores their commitment to a safe and secure summit environment.

https://economictimes.indiatimes.com/news/defence/g20-summit-security-strengthened-as-delhipolice-acquires-russian-dragunov-sniper-rifles-and-deploys-skilled-marksmen-at-key-locations/ articleshow/102607382.cms



Thu, 10 Aug 2023

#### Biden Administration Notifies US Congress about GE-F414 Engine Deal with India

In a major development, the US State Department has notified the US Congress about the Biden Administration's decision to manufacture GE-F 414 jet engines through full transfer of technology (ToT) route in India for LCA Mark II aircraft to be produced by Hindustan Aeronautics Limited (HAL). The notification was sent to Congress on July 28 and the deal will stand approved after 30 days as per requirement.

The MoU between GE and HAL was signed on June 22, 2023 in Washington during Prime Minister Narendra Modi's three day visit to the US. It is understood that the US Congress will approve the engine manufacturing deal as it is in no way detrimental to American national security interests. While the Modi government is tight-lipped about the entire deal, it is understood that the GE F 414 engines will be used to power the LCA MK II, the AMCA Mark I and Twin Engine Deck Based Fighter (TEDBF) for Indian aircraft carrier developed by Aeronautical Development Agency (ADA) of the DRDO. It is learnt that at least 100 engines will be required to produce LCA Mark II fighter with some 200 engines needed for twin engine AMCA Mark I and TEDBF at the turn of this decade. The ADA is expected to develop the prototype of LCA Mark II by the end of 2024 or early 2025 with the program going on as per schedule.

#### LCA Mark II model

According to the joint statement issued at the end of PM Modi's June visit to the US, both the leaders have committed their governments to working collaboratively and expeditiously to support the advancement of "this unprecedented co-production and technology transfer proposal." While the LCA Mark I is powered by GE-404 engines, the much powerful GE-414 engine powers the multiple combat proven US F-18 multirole jet fighter.

Washington watchers told HT that the US Congress has a window of 30 days to raise clarifications if any to the deal and will be approved by the end of this month. Given that India-US are close

allies and partners in QUAD and in the Indo-Pacific, the notification to US Congress is seen as a formality as the bilateral relationship has had bipartisan consensus since the turn of the century.

The GE-F-414 deal was worked out by National Security Advisor Ajit Dioval with his US counterpart Jake Sullivan during the inaugural dialogue of initiative on Critical and Emerging Technologies (iCET) on January 31, 2023 in Washington.

https://www.hindustantimes.com/india-news/biden-administration-notifies-us-congress-about-gef414-engine-deal-with-india-101691647148534.html



Thu, 10 Aug 2023

#### China Sends Ships, Fighter Jets towards Taiwan in New Show of Force

China sent navy ships and a large group of fighter jets towards Taiwan, continuing its military pressure on the island, Taiwan's Defence Ministry said on August 10.

China claims self-ruled Taiwan as its own territory and has regularly sent flights toward the island in reaction to the island's political activities. In the past year, it has also sent navy vessels as well as drones to circle the waters near the island.

Taiwan's Defence Ministry said the Chinese People's Liberation Army sent 33 warplanes and six navy vessels between 6 a.m. on August 9 to 6 a.m. on August 10. The J-10 and J-16 fighter jets flew across the midline and to the southwest of Taiwan.

The Ministry said in an earlier statement on Wednesday that Taiwan's military tracked five of the ships as they sailed in coordination with the flights of the fighter jets.

The Ministry said it used land-based missile systems to track the aircraft, 10 of which crossed the midline of the Taiwan Strait, an unofficial boundary that had been considered a buffer between the island and mainland.

In response to escalating Chinese military pressure, Taiwan has been buying weapons and fighter jets to shore up its defences. In July, the U.S. announced a \$345 million package of sales to Taiwan that will include portable air defence systems, intelligence and surveillance capabilities, firearms and missiles.

https://www.thehindu.com/news/international/china-sends-ships-fighter-jets-towards-taiwan-innew-show-of-force/article67179166.ece

## THE MAR HINDU

Fri, 11 Aug 2023

#### North Korea's Kim Jong Un Dismisses Military Chief, Calls for War Preparations

North Korean leader Kim Jong Un has dismissed his top general and called for stepping up war preparations "in an offensive way", including boosting weapons production and conducting more drills, state media reported Thursday.

With a cigarette in hand, Kim was shown talking to a room full of uniformed top generals, and pointing at maps, images in state media showed, while he discussed "major military actions" against South Korea at a meeting of the Central Military Commission.

The Korean Central News Agency said the agenda of the meeting, which comes just days after Kim inspected key arms factories, was "the issue of making full war preparations" and ensuring "perfect military readiness for a war".

The meeting comes as Seoul and Washington prepare for major joint drills later this month, which the North views as rehearsals for invasion and has repeatedly warned could trigger "overwhelming" action in response.

At the meeting, Kim dismissed chief of the general staff Pak Su Il, replacing him with Vice Marshal Ri Yong Gil, KCNA said without giving further details.

Pak, who was promoted to the post late last year, may have been dismissed "because he did not demonstrate sufficient competence in the field of military operations," according to Cheong Seongchang, a researcher at the Sejong Institute.

"Kim Jong Un has shown a tendency to quickly replace officials when they are judged to be lacking in the ability to control and perform their duties," he said.

Ri may have been the "most suitable person" to replace Pak, as he has previously held the position for a long time, Cheong added.

Kim called for "all the munitions industrial establishments to push ahead with the mass-production of various weapons and equipment", the report said.

"He also called for actively conducting actual war drills to efficiently operate (the) newly deployed latest weapons and equipment," it added.

Kim reached an "important conclusion on further stepping up the war preparations of the KPA in an offensive way," KCNA reported, referring to the North's military.

The latest KCNA report appeared to be North Korea's "own response to the upcoming joint military training between Seoul and Washington," an official from Seoul's unification ministry told reporters.

Referring to photos carried by the North's Rodong Sinmun newspaper showing Kim pointing to what appeared to be a map of Seoul, he said: "I think he wanted to send a message to the South with a threatening action."

The meeting also discussed preparations for a massive parade to mark the 75th anniversary of the founding of North Korea on September 9.

Last month, Pyongyang held a major military parade to mark the 70th anniversary of the Korean War armistice, with analysts describing the event as "the largest, most overt North Korean display of nuclear-capable systems".

North Korea also held a large defence expo to coincide with the parade, with Kim giving the visiting Russian defence minister a tour of the country's newest and most advanced weaponry, including ballistic missiles and spy drones.

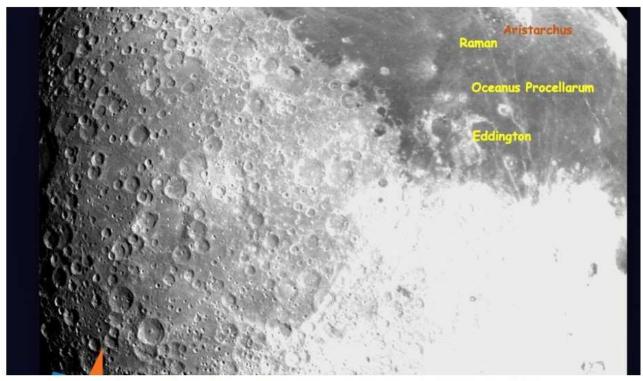
https://www.thehindu.com/news/international/north-koreas-kim-jong-un-dismisses-military-chiefcalls-for-war-preparations/article67180433.ece

### Science & Technology News



Thu, 10 Aug 2023

ISRO Releases Images of Earth and Moon Taken by Cameras on Board Chandrayaan-3 Spacecraft



Chandrayaan-3 mission: Moon imaged by Lander Horizontal Velocity Camera (LHVC) on August 6, 2023. | Photo Credit: ISRO

Indian Space Research Organisation (ISRO) has released two images taken by the Chandrayaan-3 spacecraft. The first image is of the Earth as viewed by the Lander Imager (LI) Camera. The photo was taken on July 14, when the Chandrayaan-3 mission was launched from the Satish Dhawan Space Centre in Sriharikota.

The second image is of the Moon captured by the Lander Horizontal Velocity Camera (LHVC) on board the spacecraft on August 6.

ISRO posted on its X social media platform: "Chandrayaan-3 Mission: Earth viewed by Lander Imager (LI) Camera on the day of the launch, Moon imaged by Lander Horizontal Velocity Camera (LHVC) a day after the Lunar Orbit Insertion."

LI camera was developed by Space Applications Centre (SAC), Ahmedabad, Gujarat, and LHV camera by the Laboratory for Electro-Optics Systems (LEOS), which is based in Bengaluru, Karnataka.

ISRO had earlier released a video of the Moon, as viewed by Chandrayaan-3 during Lunar Orbit Insertion, which took place on August 1.

On August 9, ISRO carried out the third orbit reduction manoeuvre of Chandrayaan-3 and the Chandrayaan-3 is just 1,437 km away from the moon.

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https://www.thehindu.com/sci-tech/science/isro-releases-images-of-earth-and-moon-taken-bycameras-on-board-chandrayaan-3-spacecraft/article67179212.ece



Fri, 11 Aug 2023

#### Weeks after Chandrayaan-3 Launch, Russia Blasts off Luna-25 in Race to Moon

Russia launched its first moon-landing spacecraft in 47 years on Friday in a bid to be the first nation to make a soft landing on the lunar south pole, a region believed to hold coveted pockets of water ice.

The Russian lunar mission, the first since 1976, is racing against India, which launched its Chandrayaan-3 lunar lander last month, and more broadly with the US and China, both of which have advanced lunar exploration programs targeting the lunar south pole.

A Soyuz 2.1v rocket carrying the Luna-25 craft blasted off from the Vostochny cosmodrome, 5,550 kilometres east of Moscow, at 2:11 am on Friday Moscow time, with its upper stage boosting the lander out of Earth's orbit toward the moon over an hour later, Russia's space agency Roscosmos confirmed.

The lander is expected to touch down on the moon on August 21, Russia's space chief Yuri Borisov told Interfax on Friday. Russian space agency Roscosmos previously pegged August 23 as the landing date.

"Now we will wait for August 21. I hope that a highly precise soft landing on the moon will happen," Borisov told workers at the Vostochny Cosmodrome after the launch, according to Interfax.

Luna-25, roughly the size of a small car, will aim to operate for a year on the moon's south pole, where scientists at NASA and other space agencies in recent years have detected traces of water ice in the region's shadowed craters.

There is much riding on the Luna-25 mission, as the Kremlin says the West's sanctions over the Ukraine war, many of which have targeted Moscow's aerospace sector, have failed to cripple the Russian economy.

The moonshot, which Russia has been planning for decades, will also test the nation's growing independence in space after its February 2022 invasion of Ukraine severed nearly all of Moscow's space ties with the West, besides its integral role on the International Space Station.

The European Space Agency had planned to test its Pilot-D navigation camera by attaching it to Luna-25, but severed its ties to the project after Russia invaded Ukraine.

"Russia's aspirations towards the moon are mixed up in a lot of different things. I think first and foremost, it's an expression of national power on the global stage," Asif Siddiqi, professor of history at Fordham University, told Reuters.

US astronaut Neil Armstrong gained renown in 1969 for being the first person to walk on the moon, but the Soviet Union's Luna-2 mission was the first spacecraft to reach the moon's surface in 1959, and the Luna-9 mission in 1966 was the first to make a soft landing there.

Moscow then focused on exploring Mars and since the 1991 fall of the Soviet Union, Russia has not sent scientific probes beyond Earth orbit.

#### MOON WATER?

Major powers such as the US, China, India, Japan and the European Union have all been probing the moon in recent years. A Japanese lunar landing failed last year and an Israeli mission failed in 2019. No country has made a soft landing on the south pole. An Indian mission, Chandrayaan-2, could not make it to the moon as its lander lost communication and subsequently crashed in 2019.

Rough terrain makes a landing there difficult, but the prize of discovering water ice could be historic -- large could be used to extract fuel and oxygen, as well as be used for drinking water.

"From the point of view of science, the most important task, to put it simply, is to land where no one else has landed," said Maxim Litvak, head of the planning group for the Luna-25 scientific equipment.

"There are signs of ice in the soil of the Luna-25 landing area, this can be seen from the data from orbit," he said, adding that Luna-25 would work on the moon for at least an Earth year, taking samples. Roscosmos said that it would take five days to fly to the moon. The craft will spend five to seven days in lunar orbit before descending to one of three possible landing sites near the pole --- a timetable that implies it could match or narrowly beat its Indian rival to the moon's surface.

India's Chandrayaan-3 is due to run experiments for two weeks.

With a mass of 1.8 tons and carrying 31 kilograms of scientific equipment, Luna-25 will use a scoop to take rock samples from a depth of up to 15 centimetres to test for the presence of frozen water.

https://www.indiatoday.in/world/story/russia-luna-25-moon-spacecraft-weeks-chandrayaan-3-launch-2419355-2023-08-11

## THE MORE HINDU

Thu, 10 Aug 2023

#### Soon, AI will let you Make a UPI Payment Using Voice

In a move to make United Payments Interface (UPI) more user-friendly and to increase its popularity, the Reserve Bank of India (RBI) has proposed incorporating Artificial Intelligence-powered conversational features on UPI, to enable digital payments through voice commands.

The RBI has also announced plans to enhance the transaction limit for small-value digital payments in offline mode from ₹200 to ₹500 with the overall limit being retained at ₹2,000 per payment instrument to contain the risks associated with relaxation of two-factor authentication.

"As AI is becoming increasingly integrated into the digital economy, conversational instructions hold immense potential in enhancing ease of use, and consequently reach, of the UPI system. It is, therefore, proposed to launch an innovative payment mode viz., 'Conversational Payments' on UPI," RBI Governor Shaktikanta Das announced on Thursday.

This feature will enable users to engage in a conversation with an AI-powered system to "initiate and complete transactions in a safe and secure environment".

"UPI has significantly contributed to positioning India as the leader of digital payments. The enhancements proposed by the central bank will further accelerate the adoption of UPI," said Mandar Agashe, founder & MD, Sarvatra Technologies.

"While payments through QR code are easy for everyone, the introduction of 'Conversational Payments' on UPI has the potential to take ease of payments to the next level. Those who find it difficult to navigate through a mobile application for making digital payments or want to save time, will now be able to execute UPI transactions with ease," he added.

This channel will be made available in both smartphone- and feature phone-based UPI channels, thereby helping in the deepening of digital payments' penetration in the country.

The facility will initially be available in Hindi and English and will subsequently be made available in more Indian languages. The RBI will soon issue instructions to its subsidiary, the National Payment Corporation of India (NPCI), which had developed the UPI system and now operates it.

Rahul Jain, chief financial officer (CFO), NTT DATA Payment Services India said, "This not only highlights the potential for 'Make-in-India' solutions to gain global recognition, particularly in technology-driven nations where AI is pervasive but also highlights India's pioneering role in the digital payments' domain."

He said Conversational Payments within the UPI framework would revolutionise the way users conduct transactions, harnessing the capabilities of advanced technologies such as AI. "It's plausible that the payment process will involve leveraging a Chatbot. The transaction itself will unfold in real-time conversation between two participants: a chat operator and the payment facilitator," he said.

"The chatbot will play a pivotal role by providing the user with a direct payment link or QR code. This mechanism will enable the user to execute the payment seamlessly during the ongoing conversation," Mr. Jain added.

"This AI-driven model ensures swift and secure transactions, safeguarding users within a consolidated environment. This will further enhance the user experience, offering a seamless, transparent, and highly convenient payment solution," he added.

#### NFC tech-enabled payments

In yet another improvement to the UPI ecosystem and to promote UPI-Lite, an on-device wallet introduced in September 2022, the RBI is also planning to facilitate offline transaction using Near Field Communication (NFC) technology.

NFC is a set of communication protocols that enables communication between two electronic devices over a distance of 4 cm or less.

"This feature will not only enable retail digital payments in situations where internet or telecom connectivity is weak or not available, it will also ensure speed with minimal transaction declines," the RBI said adding it would soon issue instructions to NPCI on this front too.

UPI-Lite was introduced to increase the speed of small-value transactions on UPI and to optimise processing resources for banks, thereby reducing transaction failures. This product has now gained traction and currently records more than 10 million transactions a month. The facility for offline transaction is expected to increase the number of transactions manifold.

Adelia Castelino, co-founder and MD, In-Solutions Global Ltd said, "The introduction of offline payments in UPI through NFC technology via UPI Lite will be a promising development. Offline payments can be particularly useful in situations where internet connectivity might be limited, ensuring that users can still make transactions seamlessly."

"Introducing NFC technology for offline payments as proposed by the RBI Governor promises faster low-value transactions and could transform payment ecosystems," he added.

Another important announcement was regarding enhancing the transaction limit for small-value digital payments in offline mode from ₹200 to ₹500.

Such small-value digital payments are conducted in offline mode using National Common Mobility Card (NCMC) and UPI Lite. It does not have two-factor authentication and these channels enable faster, reliable, and contactless mode of payments for everyday small-value payments, transit payments etc. There have been demands for enhancing the limits and the move could encourage wider adoption of this mode of payment.

"The RBI's proposal to enhance the transaction limit of small-value offline digital payments to ₹500 further enhances ease of use of UPI and deepens digital payment ecosystem in India," said Aryaman Vir, chief executive officer, Aurun WiseX.

https://www.thehindu.com/business/rbi-launches-conversational-offline-payments-via-upi-raises-upi-lite-limit-to-500-per-transaction/article67179397.ece



Fri, 11 Aug 2023

#### IIT-Delhi to Start Research Campus in Abu Dhabi, Studies to Begin Next Year

The Indian Institute of Technology (IIT) Delhi is all set to start a research-centric campus in Abu Dhabi, United Arab Emirates. Professor Rangan Banerjee, Director IIT-Delhi shared it on Thursday stating that the institute will contribute to the research and academic eco-system of UAE.

A temporary campus of IIT Delhi-Abu Dhabi is already assigned, and work for customisation of the existing facilities to IIT Delhi's requirements has already started. The campus will formally start its operations in a few months, and academic programs are expected to commence in early 2024.

Shantanu Rao, coordinator for the Abu Dhabi campus shared that in due course, the institution will migrate to a permanent campus. Other administrative, academic, and operational policies regarding IIT Delhi-Abu Dhabi are being developed and discussed in anticipation of the formal launch early next year.

The international campus of IIT-Delhi is expected to offer degrees at the UG, PG, and doctoral levels in a diverse range of programs covering energy and sustainability, artificial intelligence, computer science and engineering, healthcare, mathematics and computing and other disciplines of engineering, sciences, management, and humanities.

It was also shared that initially IIT-Delhi will arrange its own faculty for the international campus and foreign faculty will also be hired later.

#### Outreach events for Abu Dhabi students

A diverse range of multiple outreach events have been planned till the end of the year and beyond for maximum reach. At present (July-August 2023), a three-week mathematics immersion program is underway in Abu Dhabi, where selected high school students are being taught by IIT-Delhi faculty. This program is designed to be a rigorous in-class experience in mathematics.

#### 54th annual convocation

IIT Delhi's 54th Annual Convocation ceremony will be held on August 12, 2023. Dr. Gagandeep Kang, an eminent virologist and professor of microbiology at Christian Medical College, Vellore, will be the chief guest on the occasion.

#### Sessions from 2024

A temporary campus of IIT Delhi-Abu Dhabi is already assigned. It will formally start its operations in a few months, and academic programs to commence in early 2024.

https://www.newindianexpress.com/cities/delhi/2023/aug/11/iit-delhi-to-start-research-campus-inabu-dhabi-studies-to-begin-next-year-2604211.html

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