नवंबर Nov 2023

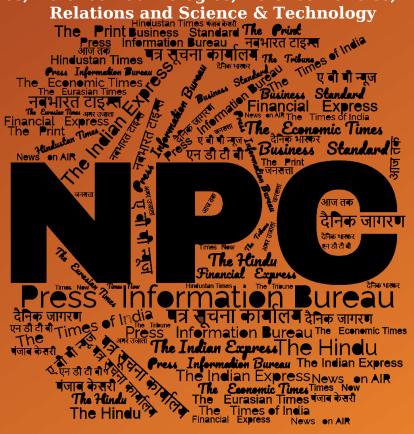
खंड/Vol.: 48 अंक/Issue: 209

08/11/2023

# 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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## **DRDO News**

## **DRDO Technology News**

## अमरउजाला

Tue, 07 Nov 2023

# DRDO: भारत ने सफलतापूर्वक किया 'प्रलय' बैलिस्टिक मिसाइल का परीक्षण, 500 किलोमीटर तक है मारक क्षमता

भारत ने मंगलवार को सफलतापूर्वक सतह से सतह पर मार करने वाली बैलिस्टिक मिसाइल प्रलय का परीक्षण किया। रक्षा अधिकारियों ने बताया कि यह परीक्षण ओडिशा तट पर अब्दुल कलाम द्वीप से किया गया। बता दें कि प्रलय मिसाइल डीआरडीओ द्वारा विकसित की गई है। अधिकारियों ने बताया यह परीक्षण सुबह 9.50 बजे किया गया और इसने अपने सभी उद्देश्यों को पूरा किया।

#### 500 किलोमीटर है मारक रेंज

ट्रैकिंग उपकरणों से मिसाइल की ट्रैजेक्टरी का विश्लेषण किया गया। बता दें कि प्रलय मिसाइल की रेंज 350-500 किलोमीटर है और यह 500-1000 किलो पेलोड ले जाने में सक्षम है। प्रलय मिसाइल एलएसी और एलओसी पर तैनाती के लिए विकसित की गई है। रक्षा अधिकारियों का कहना है कि चीन डोंग फेंग 12 और रूस की इस्केंडर मिसाइलों की तुलना भारत की प्रलय मिसाइल से हो सकती है। यूक्रेन युद्ध में रूस ने इस्केंडर मिसाइल का खूब इस्तेमाल किया है। बता दें कि पाकिस्तान के पास भी इस रेंज की बैलिस्टिक मिसाइल है।

गौरतलब है कि एक महीने पहले ही भारतीय वायुसेना ने लंबी दूरी की हवा से लॉन्च की जाने वाली ब्रह्मोस क्रूज मिसाइल का सफल परीक्षण किया था। वायुसेना ने बंगाल की खाड़ी में यह परीक्षण किया गया, जिसमें फाइटर जेट सुखोई-30 एमकेआई से ब्रह्मोस क्रूज मिसाइल लॉन्च की गई। यह मिसाइल 1500 किलोमीटर की दूरी तक अपने लक्ष्य को भेदने में सक्षम है। ब्रह्मोस मिसाइल भारत के सबसे घातक हथियारों में से एक है।

https://www.amarujala.com/india-news/india-successfully-test-fires-pralay-ballistic-missile-by-drdo-from-odisha-balasore-2023-11-07



Tue, 07 Nov 2023

### India Successfully Test-fires 'Pralay' Missile off Odisha Coast

India on November 7 successfully test-fired its surface-to-surface short-range ballistic missile (SRBM) 'Pralay' from the Abdul Kalam Island off the Odisha coast, a Defence official said.

The missile has been developed by the Defence Research and Development Organisation (DRDO).

The missile, launched around 9.50 am, met all its mission objectives, the official said.

A battery of tracking instruments monitored its trajectory along the coastline, he said.

'Pralay' is a 350-500 km short-range, surface-to-surface missile with a payload capacity of 500-1,000 kg, the official said.

'Pralay' has been developed for deployment along the Line of Actual Control (LAC) and Line of Control (LoC), he added.

https://www.thehindu.com/news/national/india-successfully-test-fires-pralay-missile-off-odisha-coast/article67507783.ece



Wed, 08 Nov 2023

## **Tactical Pralay Ready for Deployment along Borders**

India on Tuesday successfully flight tested the indigenously developed surface-to-surface tactical missile 'Pralay' from a defence facility off the Odisha coast. The user-associated launch of the missile will pave the way for its early induction in the Armed Forces.

Developed by Defence Research and Development Organisation (DRDO), the short range ballistic missile (SRBM), an amalgamation of technologies used in Prithvi Defence Vehicle (PDV) interceptor missile and Prahaar tactical missile, was test fired in full operational configuration from Abdul Kalam Island at about 10 am.

Defence sources said, the test met all its mission objectives. The missile followed the desired ballistic trajectory and reached the designated target with high degree accuracy, validating the control, guidance and mission algorithms. The missile was tested for its full range.

This was the third test of the missile and was conducted two years after two consecutive successful trials in 2021. The canisterised missile powered with solid propellant rocket motor has a strike range up to 500 km. The missile performs mid-air manoeuvres using manoeuvrable reentry vehicle (MaRV) to defeat anti-ballistic missile interceptors.

The much faster and accurate Pralay weighs around five tonne. With a payload of 1,000 kg it can travel a distance of 350 km and if the payload is halved, the missile can hit a target as far as 500 km. Fuelled by composite propellant, developed by Pune-based High Energy Materials Research Laboratory (HEMRL), the missile uses an inertial navigation system for mid-course guidance.

It can be compared with China's Dong Feng 12 (CSS-X-15), Russian 9k 720 Iskander and US Army's Precision Strike Missile (PrSM). Since India's most of the SRBMs are for strategic strike purposes, development of tactical Pralay was necessitated after the Army sought for a 500-km range SRBM that can carry sizeable payload.

https://www.newindianexpress.com/states/odisha/2023/nov/08/tactical-pralay-ready-for-deployment-along-borders-2631173.html

## **Defence News**

## Defence Strategic: National/International

## BusinessLine

Tue, 07 Nov 2023

## Army Aviation Corps Gets Wings with LUH, Drone Acquisition

The Army Aviation Corps (AAC) expects to start overcoming its capability deficiency from the Tactical Pralay ready for deployment along bordersnext year, rolling out the process of induction of Light Utility Helicopters (LUHs) to replace ageing fleet of Cheetahs and Chetaks besides Hermis 900 Star liner drones.

Through the next atleast four years, the AAC, which celebrated its 38th Raising Day on November 1, would be in a better operational position, having acquired different versions of indigenous helicopters and drones in adequate numbers to discharge its offensive, reconnaissance and surveillance roles. The Army gave up it's plan to have fixed wing aircraft a couple of years back.

The Army's aviation wing -- throttled with a changed mandate now, moving on from doing supporting role to performing combat duties in jointness with two other services of Indian Air Force and Indian Navy -- would require equivalent numbers of LUHs for reconnaissance and surveillance activities to replace about 250 Cheetahs and Chetaks it originally possessed primarily for logistical duties.

As of now, said sources, the AAC is operating just about 190 of them, with 70 per cent of their fleet being 30 year old that need urgent replacement, but they have the rare ability to operate in the world's highest battle field of Siachen.

#### Self-reliance in defence

The Army is looking to contract 100 LUHs from the state-owned Hindustan Aeronautics Limited (HAL). It has also issued request for information (RFI) for leasing of some number of similar copters due to limited production capacity of the HAL, informed defence sources. The AAC is in the process of finalising "good responses" it has got against the RFI so that request for proposal (RFP) could be issued for procurement of utility choppers on lease, elaborated defence sources. After some years, the Army will go back to HAL again for LUHs to realise government's push for self reliance in defence sector.

It will take ten to twelve years to replace the entire fleet of Chetaks and Cheetahs, with their phasing out starting from another three to four years from now, sources stated. Asked to draw comparison between two copters that are being phased out and the LUH, senior defence establishment sources stated that the ones which would be inducted are good and better than Chetaks and Cheetahs owing to fact that it has better load capacity and is fitted with auto pilot that

makes flying comfortable for the pilots. In the manual format, it's difficult for the pilots to fly such platforms more than 30 to 35 minutes, observed defence sources.

Similarly, the AAC raised, deployed and operationalised first squadron of Light Combat Helicopters (LCHs) this year but they are looking about 90 of them which are being armed with anti-tank guided Helina missiles manufactured by Bharat Dynamics Limited (BDL), said top defence establishment sources. The trial for firing the Helina missiles, developed by Defence Research and Development Organisation (DRDO), from the LCH have been completed and presently integration is going on, said defence sources. The HAL and the BDL have sought two years time to complete the integration process and the AAC is hoping to get about 80 missiles in their armoury in three years times. The remaining LCH squadron is expected to come up in 16 to 18 months, said defence sources without giving numbers owing to confidentiality.

Other than that the Army would be getting six Apache helicopters as part of ₹5691-crore worth deal signed in 2020 with US-based defence and aerospace company, Boeing. Defence sources ruled out additional orders for Apaches given that it is sufficient to meet Army's requirement with the jointness and theaterisation in the offing that provides operational bonding.

The inventory of Remotely Piloted Aircraft System (RPAs) or the drones AAC has will also go up, with next year's acquisition of satcom-enabled Hermis 900 Star liners that are being manufactured in Hyderabad by a joint venture of Elbit Systems of Israel and Adani Group of India. "The ongoing Israel-Hamas conflict will not create a problem since the airframes have already been made at Hyderabad and some equipment which had to come from Israel are already there," top defence officials said.

As of now, the land force already has Herons MK Is and its MK II version was inducted into the AAC this year. On top of it, the Army is in the process of acquiring eight MQ-9B armed predator drones from General Atomics of US. The overall deal for 31 predators are for three services and is valued at little over \$ 3 billion deal and the acquisition will take minimum three years.

 $\underline{https://www.thehindubusinessline.com/economy/logistics/army-aviation-corps-gets-wings-with-luh-drone-acquisition/article67509423.ece}$ 

## THE TIMES OF INDIA

Tue, 07 Nov 2023

## Jaishankar Co-chairs India-Malaysia Joint Commission Meeting, Reaffirms Defence and Maritime Cooperation

External Affairs Minister S Jaishankar co-chaired the 6th India-Malaysia Joint Commission meeting with his Malaysian counterpart Zambry Abdul Kadir in New Delhi on Tuesday.

The meeting was focused on the security, trade and finance sectors, as well as maritime cooperation between the two countries.

Additionally, both leaders exchanged views on Indo-Pacific, ASEAN, West Asia and other regional and global issues.

Taking to X, EAM Jaishankar shared about the meeting saying, "Co-chaired along with FM @ZambryOfficial the 6th India-Malaysia Joint Commission Meeting in New Delhi. Reviewed progress on our political, defence & security, trade and finance, health, energy, education, maritime

cooperation, culture, tourism and people-to-people cooperation. Also shared perspectives on the Indo-Pacific, ASEAN, West Asia and other regional and global issues."

Earlier today, External Affairs Minister S Jaishankar met with the Malaysian counterpart Zambry Abdul Kadir ahead of the India-Malaysia 6th Joint Commission meeting in New Delhi on Tuesday.

Taking to X, EAM Jaishankar shared about his meeting saying, "A warm welcome to Malaysian FM @ZambryOfficial in New Delhi. Our 6th Joint Commission Meeting this evening will take forward our Enhanced Strategic Partnership."

The Malaysian Foreign Minister arrived in the national capital for his first India visit in the late hours of Sunday and received a warm welcome.

The visit scheduled from November 5-8 is aimed at strengthening the Enhanced Strategic Partnership between the two countries.

"FM @ZambryOfficialof Malaysia arrives to a warm welcome on his first visit to India as Minister of Foreign Affairs @MalaysiaMFA. He will co-chair the 6th India-Malysia Joint Commission Meeting along with EAM @DrSJaishankar. The visit will strengthen the Enhanced Strategic Partnership between the two countries," Ministry of External Affairs spokesperson Arindam Bagchi posted on X (formerly Twitter).

"The Joint Commission Meeting will review the progress of Enhanced Strategic Partnership with Malaysia in the areas of political, defence, security, economic, trade and investment, health, science and technology, culture, tourism and people-to-people ties, and will also discuss regional and multilateral issues of mutual interest," the MEA said in a statement.

The official itinerary for the visit also includes a sit-down with Vice President Dhankhar on Tuesday.

The visit holds significant diplomatic importance, as it provides an opportunity to strengthen the existing ties between India and Malaysia and discuss various bilateral matters of mutual interest, the MEA stated.

https://timesofindia.indiatimes.com/india/jaishankar-co-chairs-india-malaysia-joint-commission-meeting-reaffirms-defence-and-maritime-cooperation/articleshow/105048129.cms



Tue, 07 Nov 2023

## Army Aviation Looking at Phasing out Cheetah, Chetak Helicopters from 2027

The Army is looking at phasing out its ageing fleet of Cheetah and Chetak choppers starting 2027, and considering induction of the light utility helicopters as the replacement besides exploring the option of leasing, sources said.

The Army Aviation Corps is currently operating around 190 Chetak, Cheetah and Cheetal helicopters, they said.

While the Army will be getting around 100 light utility helicopters (LUH), it is also looking at the option of taking choppers on lease to meet its requirement.

"We require around 250 light helicopters for the reconnaissance and surveillance activities. Out of these about 100 plus will be Light Utility Helicopters, and given the capacities that HAL has today, we have to look at alternative means also to replace the entire fleet of Cheetah and Chetaks," a source said. Hindustan Aeronautics Ltd (HAL) produces the LUH.

"We are looking at a couple of other options, like leasing options, where we lease a few helicopters for a few years, and subsequently if HAL is able to manufacture the balance numbers, maybe we can go to HAL too. But the focus is on indigenisation and picking up helicopters from within the country," the source said.

The timeframe for replacement of the Cheetahs and Chetaks is expected to be around 10-12 years. The sources also said that design issues in advanced light helicopters (ALH) have been resolved.

They added that the Light Utility Helicopters (LUH) are being fitted with auto-pilots, and will be ready for delivery by the end of 2024.

The trials on LUH fitted with auto pilot are undergoing, they said. It is learnt that there were some issues with the fitment of the autopilot in the LUH earlier.

The Army Aviation Corps, which currently has three brigades – two at the northern border, and one on the western border, is also planning to raise one more brigade.

The sources said the Army Aviation is also looking forward to induction of Apache Attack Helicopters next year onwards.

We are aiming at achieving an optimum balance of airlift and airstrike capability, and hence it is also processing the option of acquiring additional light combat helicopters, they said.

They also said integration of the HELINA missiles with the Advanced Light Helicopter (Weapon System Integrated) is under progress.

The Army Aviation Corps has recently celebrated its 38th Raising Day. The modernisation of Army Aviation began over two decades ago with the induction of multi-engine Dhruv helicopters.

While ALH gained a reputation as a reliable tactical lift platform, the induction of armed choppers since 2013 added strength to the Army Aviation's fire power.

Today, it has a modern Advanced Light Helicopter (ALH) Mk-III, ALH Weapon System Integrated (WSI) variant and Light Combat Helicopter (LCH).

The induction of remotely piloted aircraft systems (RPAS) has enhanced our surveillance as well as strike capability and transformed Army Aviation into a potent force multiplier capable of operating in combined combat teams concept, the sources said.

https://www.financialexpress.com/business/defence-army-aviation-looking-at-phasing-out-cheetah-chetak-helicopters-from-2027-3300190/



Wed, 08 Nov 2023

## Armed Forces Contract more Long Endurance Drones from Israel under Emergency Procurement

The three services have contracted two Medium Altitude Long Endurance (MALE) Unmanned Aerial Systems (UAS) each through the fourth tranche of emergency procurements sanctioned by

the government recently, all from Israel. The contracts have been concluded and the deliveries are expected early next year, multiple defence sources independently confirmed.

While the Army and Navy have procured the Hermes 900 manufactured by Elbit Systems, the Indian Air Force (IAF) has procured the Heron Mk2 from Israel Aerospace Industries (IAI). In 2021, the Army had contracted four Heron-Mk2 UAS which were inducted last year.

"The induction of Remotely Piloted Aircraft System (RPAS) Heron MKII and planned induction of Hermes 900 Star liners will not only boost the reconnaissance and surveillance capability of Indian Army but also their teaming with combat helicopters will prove to be a game changer in the third dimension," a defence source said.

Adani Aerospace and Defence in partnership with Elbit Systems – Adani Elbit UAV Complex – manufactures the complete carbon composite aerostructures for Hermes 900 and Hermes 450 in Hyderabad.

To questions if the conflict in West Asia may impact the delivery schedule, sources said the air frame for the Hermes 900 has already been made in Hyderabad. "Some equipment has to come in from Israel which has already come in. So there is no impact with respect to that," a source stated.

As reported by The Hindu earlier, in August 2021, the Army Aviation got control of the Army's Heron MALE UAS which were earlier under the Artillery. "The transfer of RPAS has further enhanced our surveillance as well as strike capability and transformed Army Aviation into a potent force multiplier capable of operating in combined combat teams concept and of performing varied tasks across the varied terrain of our country," the source cited earlier stated.

#### Heron upgrade

There is also a major upgrade plan lined up for all the Heron to Mk2 for weaponisation and facilitation of SATCOM capability estimated to cost of ₹21,000 crore. However, that has been long delayed and officials expressed confidence that it would be cleared soon.

Of the four Heron-MK2, two were deployed at Leh while the other two were in Eastern Command area late last year. Initially, the idea was to lease them IAI but after evaluation of the cost, the Army went for their purchase. As reported earlier, the Army is looking to create a separate cadre of UAV operators and the proposal is currently under consideration by the Army Headquarters.

Elbit Systems describes the Hermes 900 Starliner, as a "powerful and trend setting" MALE UAV that features adverse weather capabilities and qualified to be "safely integrated into civilian airspace and fly in the same environment with manned aircraft." It has an endurance of up to 36 hours and a service ceiling of 30,000 feet.

As reported by The Hindu last month, the Chief of Defence Staff (CDS) Gen. Anil Chauhan has ordered two studies to be conducted regarding major military platforms used by all three services, on Unmanned Aerial Vehicles (UAV) and armoured helicopters. Of these, the study on UAVs has since been completed with the recommendation for 31 MQ-9B High Altitude Long Endurance (HALE) UAVs and 155 Medium Altitude Long Endurance (MALE) UAVs.

A deal to procure 31 MQ-9B High Altitude Long Endurance drones from the U.S. is currently in advanced stages.

https://www.thehindu.com/news/national/armed-forces-contract-more-long-endurance-drones-from-israel-under-emergency-procurement/article67510035.ece



Tue, 07 Nov 2023

## IAF Northeast Wargames along China Border Showcase Joint Ops with Army, 'Sudarshan' S-400 Air Defence Missile Systems

The major aerial exercise 'Poorvi Akash' held across the northeastern states along the China border by the Indian Air Force included joint operations with the Army and involved high-tech lethal weapons such as the 'Sudarshan' S-400 air defence missile systems.

'Sudarshan' chakra is the main weapon of Bhagwan Shri Krishna. The Indian Air Force led by Air Chief Marshal VR Chaudhari has named the S-400 air defence missile systems imported from Russia after the Sudarshan chakra as Sudarshan.

"The Indian Air Force exercise had operations by major platforms including the S-400 air defence missile systems, the Rafale and Tejas fighter jets along with the Prachand light combat helicopters in the northeastern region," defence officials told ANI.

The wargames were carried out by the Eastern Air Command (EAC) codenamed 'Poorvi Akash' from October 30 to November 4.

The major exercise showcased the operational readiness capabilities of the Indian Air Force and the Eastern Air Command in particular, they said.

The Eastern Air Command (EAC) is one of the lethal arms of the Indian Air Force which controls air operations over a vast area of over three lakh square kilometres that straddles 12 states including the seven states of North-East India.

Officials said the objective of 'Exercise Poorvi Akash' was the application of air power in all its roles including defensive and offensive operations and reactions to various perceived threats and was conducted by day and night.

It also aimed at fine-tuning the synergy of operations undertaken jointly by the Indian Army and the IAF.

"The exercise comprised joint operations with the Eastern Command (EC) of the Indian Army in the challenging and varied terrain of the eastern sector and involved the activation of the entire Eastern Sector.

"The Garud Special Forces also participated in special missions along with the Special Forces (SF) of the Indian Army. The air defence assets of the two services were also deployed to simulate realistic battle scenarios," officials said highlighting the range of operations undertaken jointly by the two services.

Indian Air Force chief Air Chief Marshal VR Chaudhari was in the northeastern sector during the exercise while Chief of Defence Staff Gen Anil Chauhan had taken part in a tabletop exercise in Shillong prior to the beginning of Ex Poorvi Akash.

The CDS and services chiefs are working together to achieve jointness and integration among the forces as they move towards creating theatre commands for joint warfighting in the future.

A wide range of operations, maintenance and administrative activities were conducted to check operational preparedness and carry out realistic training.

As part of the exercise, the indigenous Light Combat Helicopter Prachand' also landed at a highelevation Advance Landing Ground on one of its first such deployments, carrying out joint training with ground forces, alongside other combat platforms and systems. The indigenously developed Light Combat Aircraft Tejas' and the heavy-lift Chinook Helicopters were among other air assets that were deployed in various missions as part of the exercise.

The exercise culminated on 04 November after a very huge number of sorties were conducted by the IAF and many synergy goals with the Army were achieved during its conduct.

https://www.aninews.in/news/national/general-news/iaf-northeast-wargames-along-china-border-showcase-joint-ops-with-army-sudarshan-s-400-air-defence-missile-systems20231107200823/



Tue, 07 Nov 2023

### **India's Request for 26 Rafale Naval Jets from France**

#### By Huma Siddqui

India has submitted a formal Letter of Request (LoR) to France for the acquisition of 26 Rafale naval configured jets. This request marks the continuation of a strategic partnership between the two nations and signifies India's commitment to strengthening its naval aviation capabilities. The French DGA (Direction générale de l'armement) defense procurement agency is now tasked with facilitating the contract negotiations, thereby advancing this significant defence agreement.

The beginning of this particular deal can be traced back to an announcement made by Indian Prime Minister Narendra Modi during his visit to France in July. The occasion was France's Bastille Day celebrations, where the Indian Prime Minister revealed the intent to procure these advanced naval fighter jets. The formal LoR was submitted a few days ago, officially initiating the negotiation process.

This request is noteworthy as it follows the successful delivery of 36 Rafale aircraft to India in the previous year. The Indian government's decision to select the Navy Rafale as the preferred choice to equip the Indian Navy with a state-of-the-art fighter was a testament to the aircraft's capabilities and the strategic significance of this partnership.

The LoR itself serves as a critical document in this process. It essentially outlines the specific requirements and capabilities that the Indian government seeks in the Rafale Marine aircraft to be acquired. It is important to highlight that this is a government-to-government deal, underlining the commitment and trust between the two nations.

The decision to pursue this agreement has been driven by a comprehensive evaluation process. An international competition initiated by the Indian authorities was followed by a rigorous trial campaign held here in India. During these trials, the Navy Rafale proved its ability to meet the operational requirements of the Indian Navy, demonstrating its suitability for deployment on the country's aircraft carriers.

#### **Rafale Marine for Indian Navv**

These 26 Rafale jets are intended to augment India's existing fleet of 36, which has already proven to be highly satisfactory for the Indian Air Force. This strategic choice positions India as the first country to operate both versions of the aircraft. This move not only bolsters India's air capabilities

but also enhances its maritime power projection, reinforcing its sovereignty and strategic position in the region.

Following the announcement in July, Eric Trappier, Chairman and CEO of Dassault Aviation, the manufacturer of Rafale, expressed his gratitude and commitment to meeting the Indian Navy's expectations. He remarked, "As we celebrate the 70th anniversary of our partnership with the Indian Forces, I would like to thank the Indian authorities for this new mark of confidence."

The acquisition of these Rafale aircraft is pivotal for the Indian Navy, especially in the context of its two aircraft carriers, INS Vikrant and INS Vikramaditya. These carriers have been operating MiG-29s and now require the advanced capabilities of the Rafale for their operations. The integration of indigenous missiles, including the Astra air-to-air missile, is among the requests that India will make as part of this agreement with France.

The financial aspect of this deal is substantial, with an estimated value of around Euro 5.5 billion. The clearance for this acquisition was granted by the defence acquisition council just prior to the Indian Prime Minister's visit to France for the Bastille Day parade in July. The proposed arrangement entails the Indian Navy receiving 22 single-seated Rafale Marine aircraft in addition to four trainer aircraft. These assets will significantly enhance the Indian Navy's operational capabilities and readiness.

The urgency of this acquisition is evident in the fast-track mode in which the Indian Navy and government are working to expedite the signing of the acquisition contract. The timely deployment of these highly capable aircraft on Indian carriers is essential to maintain an edge for New Delhi in the Indian Ocean region, where strategic interests and security considerations are of paramount importance.

https://www.financialexpress.com/business/defence-indias-request-for-26-rafale-naval-jets-from-france-3299446/

## THE TIMES OF INDIA

Tue, 07 Nov 2023

### UN Security Council Fails to Agree on Israel-Hamas War as Gaza Death Toll Passes 10,000

The UN Security Council on Monday failed again to agree on a resolution on the monthlong Israel-Hamas war.

Despite more than two hours of closed-door discussions Monday, differences remained. The US is calling for "humanitarian pauses" while many other council members are demanding a "humanitarian cease-fire" to deliver desperately needed aid and prevent more civilian deaths in Gaza.

"We talked about humanitarian pauses and we're interested in pursuing language on that score," US deputy ambassador Robert Wood told reporters after the meeting. "But there are disagreements within the council about whether that's acceptable."

UN Secretary-General Antonio Guterres earlier Monday told reporters he wanted an immediate humanitarian cease-fire in Gaza and a halt to the "spiral of escalation" already taking place from the occupied West Bank, Lebanon and Syria to Iraq and Yemen.

Guterres said international humanitarian law, which demands protection of civilians and infrastructure essential for their lives, is clearly being violated and stressed that "no party to an armed conflict is above" these laws. He called for the immediate unconditional release of the hostages Hamas took from Israel to Gaza in its Oct. 7 attack.

China, which holds the Security Council presidency this month, and the United Arab Emirates, the Arab representative on the council, called Monday's meeting because of the "crisis of humanity" in Gaza, where more than 10,000 people have been killed in less than a month.

UAE Ambassador Lana Nusseibeh said all 15 council members "are fully engaged" and efforts will continue to try to narrow the gaps and reach agreement on a resolution.

https://timesofindia.indiatimes.com/world/rest-of-world/un-security-council-fails-to-agree-on-israel-hamas-war-as-gaza-death-toll-passes-10000/articleshow/105030752.cms

## The Tribune

Wed, 08 Nov 2023

### **NATO Freezes Security Treaty**

NATO member countries that signed a key Cold War-era security treaty froze their participation in the pact on Tuesday just hours after Russia pulled out, raising fresh questions about the future of arms control agreements in Europe.

The alliance said its members who signed the treaty are now freezing their participation in the pact.

Most of NATO's 31 allies have signed the Treaty of Conventional Armed Forces in Europe, which was aimed at preventing Cold War rivals from massing forces at or near mutual borders.

https://www.tribuneindia.com/news/world/nato-freezes-security-treaty-560602



Tue. 07 Nov 2023

### China Deploys New Infantry Fighting Vehicles along Taiwan Strait

The Eastern Theater Command (ETC) of China's People's Liberation Army (PLA) has inducted a new type of 8×8 infantry fighting vehicles (IFVs) in an equipment awarding ceremony in eastern Guangdong.

According to a video recently released by state-owned broadcaster China Central Television (CCTV), the 145th Medium Combined Arms Brigade of the 73rd Group Army under the ETC inducted an unknown number of new IFVs – probably Type 19 (also designated as Type 22) – in the ceremony.

The 73rd Group Army is headquartered in Xiamen – roughly 10 km from Taiwan's Kinmen Islands in the Taiwan Strait – and is responsible for handling disputes that may arise in the stretch of water.

The new vehicles – deployed for the first time with the PLA – feature a hull identical to the ZBL-09 (also known as Type 09) IFV in service with the PLA and a new turret.

Although the vehicle's specifications have not been disclosed, it is possible that the new hull features redesigned suspension and automotive components to support a higher gross vehicle weight (GVW).

The higher GVW allows the vehicle to carry a greater payload than the ZBL-09, possibly resulting in better armour protection and heavier mission systems deployed on the platform.

This new design is consistent with Western design trends, where the maximum GVW of 8×8 IFVs has typically increased from around 21 tonnes – as in ZBL-09 – to over 35 tonnes.

https://www.janes.com/defence-news/news-detail/china-deploys-new-infantry-fighting-vehicles-along-taiwan-strait

## THE TIMES OF INDIA

Tue, 07 Nov 2023

### US Attack Submarine Enters Persian Gulf in Message to Iran

The Pentagon deployed the nuclear-powered USS Florida attack submarine to the Persian Gulf region as the US makes a show of force to deter Iran, according to US defense officials.

The Florida's arrival was confirmed by the officials after the US Central Command posted on X, formerly Twitter, about an "Ohio-class" submarine in the region without specifying whether it was of the type that carries nuclear-armed ballistic missiles.

#### — CENTCOM (@CENTCOM)

The Florida, though nuclear powered, doesn't carry nuclear weapons. It is one of four US Navy submarines converted from carrying sea-launched nuclear missiles to Tomahawk land-attack weapons and commandos.

The Florida's arrival intensifies the Defense Departments' efforts to dissuade Iran from carrying out what it says are proxy attacks on Israel, or more attacks on American forces in Iraq and Syria.

The Florida can carry as many as 154 Tomahawk missiles or as many as 66 Navy SEAL commandos, who can clandestinely leave the vessel through forward bow compartments.

Its deployment to the Persian Gulf is at least its second this year. The Navy in April released a photograph of the Florida cruising through the Suez Canal en route to the Red Sea after a Mediterranean deployment.

Earlier: US Vows to Hold Iran Responsible for Attacks on Troops in Region

Two US carrier strike groups — the USS Gerald R. Ford and Dwight D. Eisenhower — are in the eastern Mediterranean, and last week conducted joint operations including missile defenses and operating each other's aircraft off their decks.

Separately, the Navy's Fifth Fleet in the Persian Gulf announced last week that it conducted in late October its first-ever launch of a weapon from one of the unmanned drones in its Task Force 59, which now patrols the gulf via remote control.

https://timesofindia.indiatimes.com/world/middle-east/us-attack-submarine-enters-persian-gulf-in-message-to-iran/articleshow/105034927.cms

## **Science & Technology News**

# Press Information Bureau Government of India

**Ministry of Science & Technology** 

Tue, 07 Nov 2023

From the Educated Unemployed of the Past, we are now Seeking to Move on into an Era of Educated Employable Science Entrepreneurs with the Introduction of i-PhD which would, in other Words, be an Industry Linked Academic Degree in Science PhD, Says Dr Jitendra Singh

Union S&T Minister addresses the 7th Convocation of Academy of Scientific and Innovative Research (AcSIR)

AcSIR has emerged as the largest institution providing Doctoral education in India: Dr Jitendra Singh

"It is not only quantitative, also qualitative, - excellence as well as innovation, and then a wide range, - it's excellent, innovative and also versatile": Dr Jitendra Singh

From the educated unemployed of the past, we are now seeking to move on into an era of educated employable Science entrepreneurs with the introduction of i-PhD which would in other words be an Industry linked degree in PhD.

Addressing the 7th Convocation of Academy of Scientific and Innovative Research (AcSIR) in New Delhi today, Union Minister Dr Jitendra Singh said, this Academy is a unique academic platform which awards a Degree in Science that is employable and includes a curriculum underlined by the nuances of entrepreneurship.

The Union Minister of State (Independent Charge) Science & Technology, MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space said that in the short span of 12 years since its inception in the year 2011, the AcSIR has emerged as the largest institution providing Doctoral education in India.

"The Academy is rich not only quantitatively, but also qualitatively, maintaining standards of excellence as well as innovation, and at the same time covering a wide range of science streams, - it's excellent, innovative and also versatile," he said.

AcSIR is the largest Academic Institution for doctoral research in India having awarded 577 PhD degrees in 2022 and with more than 7,000 students currently registered for PhD. Presently, AcSIR is ranked 3rd by "Scimago Institutions Ranking" (2022), 11th by "Nature index" (2021-22) and 12th by National Institutional Ranking Framework (NIRF) (2023) in the Research Category among the academic institutions in India.

Calling for institutionalizing the linkage of Industry with our scientific endeavours, Dr Jitendra Singh said, this will help create sustainable Startups.

"We have to sustain this Startup movement in the country that we are witnessing, we have to have a very strong Industry to sustain the more than 1 lakh Startups in the country," he said.

Dr Jitendra Singh said, the Government led by Prime Minister Shri Narendra Modi has provided an enabling milieu with his initiatives such as the Aroma Mission & Lavender Cultivation and opening up the Space sector.

"Right from the beginning, we need to have Industry as a stakeholder... And wherever the StartUp outcomes were found lucrative, it was noticed that many youngsters from the Corporate sector quit their jobs and joined them. And I am glad that i-PhD and similar courses introduced at AcSIR are a step in that direction, of institutionalizing the integration of scientific research and innovation with Industry," he said.

With the unlocking of Space Technology, Dr Jitendra Singh said, the common masses of the country have been able to witness the launch of the mega space events like Chandrayaan-3 or Aditya-L1. About 10,000 students and common people came to see the Aditya launch and some 1,000 media persons witnessed the Chandrayaan-3 landing on the moon. Advocating synergy of Science, Research, Academia, Startups and Industry, Dr Jitendra Singh said the Anusandhan National Research Foundation (NRF) and the new National Education Policy (NEP-2020) will create the right ecosystem to realise PM Modi's Vision of Viksit Bharat @2047.

Dr Jitendra Singh said, the NRF will bridge the demarcation between the Public and Private sector and there will be integration. The NEP-2020, he said, will set free India's youth as they will no longer be "prisoners of their aspiration" as the Policy now empowers them to choose or change subjects freely depending on their aptitude, skill, interest and other factors.

https://pib.gov.in/PressReleasePage.aspx?PRID=1975357



Wed, 08 Nov 2023

## ISRO's Aditya L1 Captures X-Ray Glimpse of Benign Solar Flare

While on its way to the L1 point to get an unobstructed view of the Sun, another scientific instrument on-board India's first solar observatory Aditya-L1 was turned on at the end of last month. The instrument that detects high energy X-rays emitted by the Sun observed a "benign" solar flare, ISRO said on Tuesday.

The spacecraft that will travel 1 per cent of the distance to the Sun – the farthest of any India-made satellite – has been on its trajectory towards the L1 point for over six weeks. After exiting the Earth's orbit in September, the spacecraft was to take around 110 days to reach the L1 point. "The spacecraft will start braking to get into the orbit around the L1 point in the first week of January," an ISRO scientist said.

The High Energy L1 Orbiting X-ray Spectrometer (HEL1OS) payload was switched on by the space agency on October 27. While it is currently "undergoing fine-tuning of thresholds and calibration operations", it took the first measurements on October 29. These measurements were found to be consistent with the US Geostationary Operational Environmental Satellites (GOES) satellite, the space agency said. "This was the first observation made by the instrument. During this ten hour observation, it detected a benign C -class solar flare.

Other than the solar flare, the HEL1OS observation also detected evidence of these impulsive events that were seen weakly in the GEOS data.
https://indianexpress.com/article/technology/science/isros-aditya-l1-captures-x-ray-glimpse-of-benign-solar-flare-9018084/
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