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2024

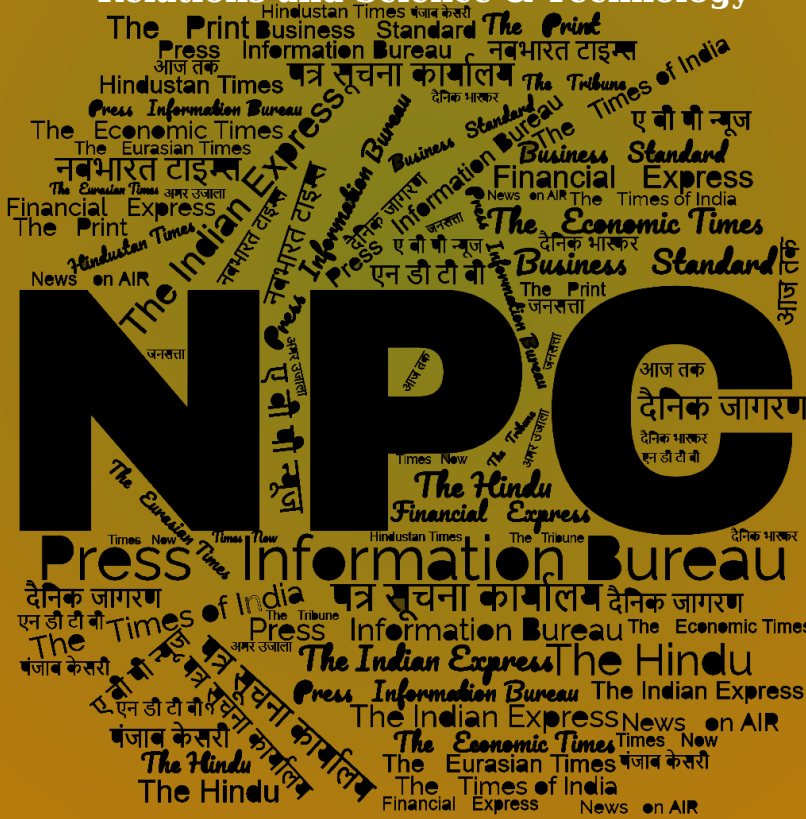
खंड/Vol. : 49 अंक/Issue : 59

27/03/2024

# 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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Tue, 26 Mar 2024

### लड़ाकू विमानों के पायलटों के लिए देश में बनेंगे एंटी ग्रेविटी सूट, DEBEL ने विकसित की तकनीक

लड़ाकू विमानों के पायलटों को गुरुत्वाकर्षण बल झेलने की क्षमता प्रदान करने वाला एंटी ग्रेविटी सूट यानी गुरुत्वाकर्षण विरोधी सूट अब देश में ही बनने से विदेश पर से निर्भरता खत्म होगी। रक्षा अनुसंधान एवं विकास संगठन (डीआरडीओ) की शाखा रक्षा जैव-इंजीनियरिंग और इलेक्ट्रो मेडिकल प्रयोगशाला (डीईबीईएल) ने यह सूट बनाने की तकनीक विकसित कर ली है। आत्मनिर्भर भारत और मेक इन इंडिया की मुहिम को आगे बढ़ाते हुए डीईबीईएल ने रक्षा मंत्रालय के डीपीएसयू (सरकारी क्षेत्र के रक्षा उपक्रम) टूप कम्फर्ट्स लिमिटेड (टीसीएल) कंपनी की चेन्नई के आवाडी स्थित आयुध वस्त्र निर्माणी यानी ओसीएफ को प्रौद्योगिकी हस्तांतरित करेगा।

#### क्या होता है एंटी ग्रेविटी सूट

भारत में कुल 2000 विमान हैं जिनमें से सभी बलों में एक हजार लड़ाकू विमान हैं। इन लड़ाकू विमानों के पायलट एंटी ग्रेविटी सूट पहनकर उड़ान भरते हैं। यह सूट पायलट के शरीर में उड़ान के समय खून के बहाव को नियंत्रित रखता है। अधिकारी के अनुसार, जी गुरुत्वाकर्षण बल को मापने की इकाई है। जमीन पर सामान्यतः एक जी यानी एक गुरुत्वाकर्षण बल का अनुभव होता है। सामान्यतः एक मनुष्य तीन जी तक का गुरुत्वाकर्षण बल झेल सकता है। जबकि एक फाइटर पायलट को अधिकतम पांच जी तक का गुरुत्वाकर्षण बल झेलने के लिए प्रशिक्षण दिया जाता है।

#### अब भारत में बनाए जाएंगे जी-सूट

जब बल इससे अधिक बढ़ता है तो पायलट की मुश्किलें भी बढ़ जाती हैं। वर्तमान में ये सूट विदेश से आयात किए जाते हैं। एक सूट की औसत कीमत 3.50 लाख रुपये तक है। प्रौद्योगिकी हस्तांतरित होने के बाद अब भारत में ही ये सूट बनाए जाएंगे।

#### पैरों की नसों को नियंत्रित रखता है विशेष सूट

गुरुत्वाकर्षण बल अधिक होने पर रक्तस्राव दिल से आगे नहीं बढ़ पाता है। खून सिर्फ पैरों में या फिर टखने में ही जमने का अंदेशा बढ़ जाता है। यदि खून एक जगह जमा हो जाए तो पायलट बेहोश हो सकते हैं और जिंदगी खतरे में भी पड़ सकती है। विशेष एंटी ग्रेविटी-सूट पैरों की नसों को नियंत्रित रखता है और पायलट के शरीर में खून का संचार दिल से दिमाग तक बना रहता है। यह सूट पायलट को नौ जी से ज्यादा मात्रा का गुरुत्वाकर्षण बल झेलने में सक्षम बनाता है।

#### चार किलोग्राम तक होता है एंटी जी सूट का वजन

एक स्टैंडर्ड जी-सूट का वजन सामान्यतः चार किलोग्राम तक होता है। यह सूट विशेष रूप से विकसित उच्च शक्ति, हल्के वजन वाले अरामिड कपड़े से निर्मित है। अरामिड कपड़ा उच्च तापमान से बचाने में प्रभावी रहता है। ये

अग्रिरोधी और गुरुत्वाकर्षण विरोधी होता है। सभी मौसमी स्थितियों से बचाने के लिए विशेष कोटिंग की जाती है। उच्च स्तर पर गुरुत्वाकर्षण बल की जरूरत अधिक होती है। ऐसे में पायलट लड़ाकू विमान का पूरा प्रयोग करके दुश्मन के युद्धक विमान को आसानी से नष्ट कर सकते हैं।

### विदेश पर से अब होगी खत्म

डीआरडीओ की शाखा डीईबीईएल ने एंटी जी सूट की तकनीक विकसित करने की उपलब्धि हासिल की है। सूट के लिए अब विदेश पर से निर्भरता खत्म होगी। डीईबीईएल के सहयोग से प्रौद्योगिकी हस्तांतरित होते ही ओसीएफ, आवाडी में सूट का उत्पादन शुरू किया जाएगा।-राजीव शर्मा, महाप्रबंधक, टीसीएल

<https://www.jagran.com/news/anti-gravity-suits-will-be-made-in-the-country-for-pilots-of-fighter-planes-debel-developed-the-technology-23683248.html>



*Tue, 26 Mar 2024*

## **Former DRDO Scientist Dr. Narayana Murthy Assumes Role as DIAT Vice Chancellor**

Dr. B.H.V.S. Narayana Murthy, a distinguished defence scientist and former Director General (Missiles & Strategic Systems) at DRDO, has been appointed as the new Vice Chancellor of the Defence Institute of Advanced Technology (DIAT) in Pune. Dr. Murthy officially assumed the role on March 20, 2024, following his appointment by the Appointment Committee of Cabinet.

Throughout his illustrious career, Dr. BHVS Narayana Murthy has been celebrated for his pioneering research and development in indigenous design and advanced Avionics technologies for defence and aerospace applications in India. Graduating in Electronics and Communication Engineering from REC Warangal, he went on to complete his M.Tech from JNTU Hyderabad and earned a Ph.D. in Computer Science from IIIT Hyderabad before joining DRDO in 1986.

Dr. Murthy's contributions to the field have earned him prestigious accolades, including the Honorary Fellowship of the Computer Society of India and recognition as a Fellow of the Indian National Academy of Engineering (INAE) and Indian Society of Systems for Science and Engineering. He has also been the recipient of esteemed awards such as the Rocket and Related Technologies Award by the Astronautical Society of India, the Agni Award for Excellence in Self-Reliance, and multiple DRDO Performance Excellence Awards.

In light of his appointment, the Registrar, Deans, and Heads of Departments at DIAT extended their congratulations to Dr. B.H.V.S. Narayana Murthy, expressing confidence in his leadership and vision for the institute.

<https://www.punekarnews.in/pune-former-drdo-scientist-dr-narayana-murthy-assumes-role-as-diat-vice-chancellor/>



**Press Information Bureau**  
Government of India

**Ministry of Defence**

*Tue, 26 Mar 2024*

## **BRO Connects Strategic Nimmu-Padam-Darcha Road in Ladakh**

Border Roads Organisation (BRO) connected the strategic Nimmu-Padam-Darcha road in Ladakh on March 25, 2024. This 298-km road will connect Manali to Leh through Darcha and Nimmu on Kargil – Leh Highway. The road is now the third axis apart from Manali-Leh and Srinagar-Leh which connects Ladakh to the hinterland.

The Nimmu-Padam-Darcha road derives its strategic importance from the fact that it is not only shorter vis-a-vis the other two axes, but crosses only one pass; Shinkun La (16,558 feet) on which tunnel work is about to commence by the BRO. This will result in the road having all weather connectivity to the Ladakh region. The connectivity will strengthen the defence preparedness and provide a boost to the economic development in the Zaskar valley.

DG Border Roads Lt Gen Raghu Srinivasan said that in January, when the River Zansakar was frozen, the equipment and personnel were mobilised and the work of establishing the connectivity was completed. He exuded confidence that the work on black topping the road will start soon. With construction of Shinkun La tunnel commencing, the third all weather axis to Ladakh will be established, he added.

<https://pib.gov.in/PressReleasePage.aspx?PRID=2016417>

## **The Tribune**

*Tue, 26 Mar 2024*

## **Jaguar Fighters Getting New Generation Missiles; IAF Approaches Industry to Modify Two Planes as Pilot Project**

Less than a decade after the IAF began re-equipping its Jaguar deep penetration strike aircraft with new navigation and attack avionics, the fleet is in for another upgrade, with the Air Force equipping these aircraft with new generation close combat missiles. The missiles, which would be integrated with the aircraft's new Display Attack Ranging Inertial Navigation-III (DARIN-III)

avionics and helmet mounted display, will enable pilots to engage targets from 500 meters to over 25 kms, depending upon the flight configuration, target orientation and altitude.

The IAF has approached the industry to initially modify and re-equip two aircraft with the new generation missiles, identified in some reports as European firm MBDA's Advance Short Range Air-to-Air Missile, to match different types of radar systems.

The new missiles will have infrared guidance, giving them 'fire-and-forget' capability and enable Jaguars to successfully engage various types of combat aircraft, transport platforms as well as cruise missiles and unmanned aerial vehicles, sources added.

The project will involve studying the Jaguar's existing DARIN-III avionics, developing technical specifications, modification of the existing software, airframe and wing pylons, ground and flight trials and final certification. At present, the IAF operates around 120 twin-engine Jaguars, equipping six squadrons – No 5, 6, 14, 16, 27 and 224, based at Ambala, Jamnagar and Gorakhpur, forming a crucial element of its strike capability and tactical reconnaissance. Some Jaguars have also been modified for the maritime role with anti-ship missiles.

In 1979, 40 aircraft were imported from the UK followed by licence manufacture of 150 aircraft by state-run Hindustan Aeronautics Limited, with aircraft rolling off the assembly lines as late as 2007. India is the sole remaining Jaguar operator, with other users — France, UK, Oman, Nigeria and Ecuador — having retired them.

The Jaguars were initially armed with the Matra R-550 Magic short range air-to-air missile, with the employed in an unconventional position on over-the-wing pylons as a means of self-defence during strike missions. A few years ago, India procured 31 decommissioned Jaguar airframes from France and two each from the UK and Oman, along with several thousand aero-spares to replace some aircraft lost due to attrition and ensure serviceability of the existing fleet.

Jaguars have conducted reconnaissance missions during Operation Pawan in Sri Lanka. During the 1999 Kargil conflict, Jaguars carried out photo-recce sorties along the Line of Control and were also used to bomb enemy positions with guided munitions as well as unguided bombs. These have also participated in several multi-national exercises in India as well as overseas.

Jaguars have undergone three upgrade programmes with the incorporation of different versions of the DARIN. The latest upgrade, DARIN-III, which commenced recently, includes a new cockpit layout with dual multi-function display, new synthetic aperture radar with a range of 250 kms for surface targets and 150 kms for aerial targets, enhanced electronic countermeasures, new fire control radar, inertial navigation system with terrain mapping and geodetic height correction system and an engine and flight instrument system.

<https://www.tribuneindia.com/news/india/jaguar-fighters-getting-new-generation-missiles-iaf-approaches-industry-to-modify-two-planes-as-pilot-project-604331>



*Tue, 26 Mar 2024*

## **Gaganshakti 2024: India's Show of Strength and Preparedness**

Countdown begins for Gaganshakti-2024, a crucial 10-day wargame aimed at testing the Indian Air Force's (IAF) preparedness to counter potential threats from both Pakistan and China



simultaneously. This upcoming exercise is expected to surpass the scale of the 2018 all-air force drill, which saw the participation of nearly 1150 aircraft.

Gaganshakti-2024 seeks to evaluate integrated war-fighting strategies and tactics in collaboration with the Indian Army and the Indian Navy.

Following the aftermath of Operation Balakot and subsequent skirmishes with the Pakistan Air Force (PAF), the IAF has strengthened its arsenal with advanced weaponry. This includes the induction of French Rafale fighter jets, indigenous Light Combat Helicopters (LCH) like Prachand, and C-295 transport aircraft. The integration of BrahMos supersonic cruise missiles with Sukhoi fighter jets, along with the addition of Meteor beyond-visual-range air-to-air missiles (BVRAAM) to the Rafale fleet, has significantly enhanced the IAF's combat capabilities.

Furthermore, the acquisition of Russian S-400 surface-to-air missiles and the indigenous Astra Beyond Visual Range (BVR) Air-to-air missile has augmented the IAF's air defence capabilities. The deployment of the LCA 'Tejas' aircraft, particularly along the western and northern frontiers, underscores India's commitment to leveraging indigenous technology for defence preparedness.

### **NOTAM**

With Gaganshakti-2024 set to commence from April 1st to 10th, 2024, a Notice to Airmen (NOTAM) issued by the IAF hints at the extensive scope of the wargames.

### **Strained Relations with China**

Against the backdrop of strained relations with China, intensified by clashes in the Galwan Valley, the IAF's swift response underscores the importance of readiness and preparedness in safeguarding national interests.

Deployments such as the Light Combat Helicopter (LCH) in Eastern Ladakh and Rafale jets conducting long-duration flights in the Indian Ocean Region demonstrate the IAF's proactive stance in countering regional threats. The impending wargames are expected to highlight network-centric operations, incorporating unmanned aerial vehicles (UAVs) and swarm drones, in line with evolving combat doctrines.

Gaganshakti-2024 follows in the footsteps of Vayu Shakti, a mega firepower demonstration conducted by the IAF in the Thar desert, and precedes Tarang Shakti, the IAF's first multinational exercise slated for August. With participation from allies such as the US, Germany, France, Australia, and neighbouring countries, Tarang Shakti underscores India's commitment to strengthening defence cooperation and interoperability.

### **Background**

Since the landmark Brasstacks exercise in 1987, India has made significant strides in military preparedness, transitioning from defensive posturing to a more assertive stance in safeguarding its national interests. Gaganshakti-2024 serves as a testament to India's evolving defence capabilities and its resolve to meet emerging security challenges head-on.

<https://www.financialexpress.com/business/defence-gaganshakti-2024-indias-show-of-strength-and-preparedness-3437354/>

*Tue, 26 Mar 2024*

## **Indian Army's Integral Role in Exercise GAGAN SHAKTI**

In a testament to seamless inter-service cooperation, the Indian Army is playing a pivotal role in supporting the Indian Air Force (IAF) for the upcoming Exercise GAGAN SHAKTI-2024. Set to unfold over 10 days from April 1st to 10th, 2024, the exercise spans various regions, including the Western and Northern fronts. Notably, the exercise will feature fighter planes and helicopters engaging pseudo targets at the Pokhran Field Firing Ranges in Rajasthan.

The Indian Army's support encompasses facilitating the movement of approximately 10,000 IAF personnel and ammunition to validate key aspects of the Operational Rail Mobilisation Plan (ORMP) of the IAF. This involves meticulously devising and executing a comprehensive rail move plan from clusters across India for both the onward and return journeys in accordance with the Operational Plan.

Key initiatives undertaken by the Indian Army include:

- Operating 12 passenger trains, equipped with all essential amenities such as meals and bedding, stationed at strategic locations including Bangalore, Chennai, Chandigarh, Delhi, and Kanpur. These trains, named 'Sanyukta Express,' symbolize the spirit of inter-service camaraderie. Departing within three days from March 25th, 2024, they will transport personnel nationwide, with return journeys scheduled for April 2024.
- Providing liaison and movement support through Movement Control Organisations (MCOs) positioned along the route, working in coordination with a Control Cell at Army Headquarters to oversee movement as per operational requirements.
- Deploying two ammunition trains to transport critical supplies from depots to designated exercise areas, enhancing operational readiness.
- Facilitating additional troop movements by attaching railway coaches to Express trains to cater to the logistical needs of smaller contingents.

Through these concerted efforts, the Indian Army underscores its commitment to fostering seamless inter-service collaboration, bolstering the nation's defence capabilities and readiness for Exercise GAGAN SHAKTI-2024.

<https://www.financialexpress.com/business/defence-indian-armys-integral-role-in-exercise-gagan-shakti-3437336/>

*Tue, 26 Mar 2024*

## **India-UK Ties: Warships of Indian Navy and UK Navy Exercise in Arabian Sea**

In a significant step towards strengthening military ties with India the UK's Littoral Response Group (LRG) arrived in Chennai on Tuesday as the first engagement of its deployment to the Indian Pacific region. These are part of the plans to raise the complexity of the exercises.



In a statement British High Commission said, “The Royal Fleet Auxiliary (RFA) Argus and RFA Lyme Bay conducted maritime exercises with the Indian Navy as they entered the Arabian Sea and will now undergo essential maintenance at the Larsen & Toubro shipyard in Kattupalli near Chennai.”

This is the first time a Royal Navy vessel will undergo maintenance at an Indian shipyard – a direct result of the logistics-sharing agreement signed between the UK and India in 2022.

Brigadier Nick Sawyer, Defence Advisor, British High Commission, said, “The visit of the Littoral Response Group attests to the UK’s capability and commitment to the Indo Pacific. The sight of Royal Navy ships undergoing essential maintenance at an Indian shipyard is yet another example of the India-UK Logistic Exchange Memorandum of Agreement in practice. It also signals the continued growing importance of the strategic defence partnership between the UK and India as we build towards achieving the ambition set out in the India-UK 2030 Roadmap.”

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"It also signals the continued growing importance of the strategic defence partnership between the UK and India as we build towards achieving the ambition set out in the India-UK 2030 Roadmap," he added.

Following the completion of its maintenance in India, the Littoral Response Group will operate in the Indo-Pacific to conduct training, exercises, and wider engagement with allies and partners.

Earlier, during Defence Minister Rajnath Singh's UK visit, India and UK agreed that the latter would send its naval groups-- Littoral Response Group and Carrier Strike Group -- to the Indian Ocean Region, in addition to holding multiple joint military exercises and expanding defence cooperation with India.

Notably, this was the first visit of an Indian Defence Minister to the UK in more than 20 years.

In the coming years, the UK and India will also embark on more complex exercises between their respective militaries, building up to a landmark joint exercise to be conducted before the end of 2030, supporting shared goals of protecting critical trade routes and upholding the international rules-based system, the UK government informed in a release.

<https://economictimes.indiatimes.com/news/defence/uk-royal-navy-vessels-arrive-in-chennai-for-joint-maritime-exercise-enhanced-cooperation/articleshow/108797818.cms>



*Tue, 26 Mar 2024*

## **Sensing China Threat, India Joins Race to Mine New Sea Patch**

Earlier this month, India applied to the International Seabed Authority (ISBA), Jamaica, for rights to explore two vast tracts in the Indian Ocean seabed that aren't part of its jurisdiction. The application to explore one of these regions, a cobalt-rich crust long known as the Afanasy Nikitin Seamount (AN Seamount), is a gambit by India. Rights to the region have already been claimed by Sri Lanka under a separate set of laws, The Hindu has learnt, but India's application is part-motivated by reports of vessels by China undertaking reconnaissance in the same region, a highly placed official, who declined to be identified, confirmed to The Hindu.

The AN Seamount is a structural feature (400 km-long and 150 km-wide) in the Central Indian Basin, located about 3,000 km away from India's coast. From an oceanic depth of about 4,800 m it rises to about 1,200 metres and — as surveys from about two decades establish — rich in deposits of cobalt, nickel, manganese and copper. For any actual extraction to happen, interested explorers — in this case, countries — must apply first for an exploration licence to the ISBA, an autonomous

international organisation established under the United Nations Convention on the Law of the Sea (UNCLOS).

These rights are specific to areas that are part of the open ocean, meaning ocean — whose air, surface and sea-bed — where no countries can claim sovereignty. Around 60% of the world's seas are open ocean and though believed to be rich in a variety of mineral wealth, the costs and challenges of extraction are prohibitive. Currently no country has commercially extracted resources from open oceans.

However, another UNCLOS-linked body, the Commission on the Limits of the Continental Shelf, which decides on the limits of a country's continental shelf, may impede India's exploration ambitions.

### **Exclusive rights**

Countries have exclusive rights up to 200 nautical miles, and its underlying sea-bed from their borders. Some ocean-bound states may have a natural stretch of land, connecting their border and the edge of the deep ocean that extends beyond this 200, as part of their so-called continental shelf. To claim so, however, a country must give a detailed scientific rationale, complete with underwater maps and surveys to show this unbroken land-connect to a scientific commission appointed by the ISBA. If such a claim is approved, then such a country will have primacy to explore and potentially exploit the living and non-living resources in the region.

Normally, claims to the continental shelf do not extend beyond 350 nautical miles from their coast. "However, there is a provision under which countries along the Bay of Bengal can apply a different set of criteria to make claims on the extent of their continental shelf. Using this, Sri Lanka has claimed up to 500 nautical miles. Whether they are actually awarded so we have to wait and see but India has staked a claim for exploration because we have noted Chinese presence. If we don't at least stake a claim now, then this could have consequences in the future," the official told The Hindu.

If a region isn't formally classified as being part of a country's continental shelf, then it is considered 'high sea' and open to any country to approach the ISBA and ask permission for exploration.

"For the application for cobalt-rich ferromanganese crust, the Commission noted that the area of the application [by India] lies entirely within an area submitted to the Commission on the Limits of the Continental Shelf by another state [Sri Lanka]. The Commission has sought comment in writing from the applicant [India] on this matter," says a report by the ISBA based on proceedings this month and available on the organisation's website.

A high-level delegation from India led by the Ministry of Earth Sciences was in Jamaica, the ISBA headquarters, this month, presenting scientific evidence to buttress India's claims to exploration. The ISBA has in turn asked India to clarify on multiple points. A final decision is expected later this year. Along with the application for AN Seamount, India has also applied for permission to explore another region, spanning 3,00,000 square km, called the Carlsberg Ridge in the Central Indian Ocean to investigate for polymetallic sulphides, which are large smoking mounds near hydrothermal vents that are reportedly rich in copper, zinc, gold and silver.

Like Sri Lanka, India too has staked a claim for its continental shelf up to 350 nautical miles from its border but has yet to be awarded so. It has previously garnered exploration rights to two other large basins in the Central India Ocean and has undertaken surveys.

India applied to the International Seabed Authority (ISBA), Jamaica, for rights to explore two vast tracts in the Indian Ocean seabed that aren't part of its jurisdiction. The application to explore one of these regions, a cobalt-rich crust long known as the Afanasy Nikitin Seamount (AN Seamount),

is a gambit by India. The AN Seamount is a structural feature (400 km-long and 150 km-wide) in the Central Indian Basin, located about 3,000 km away from India's coast. From an oceanic depth of about 4,800 m it rises to about 1,200 m and — as surveys from about two decades establish — rich in deposits of cobalt, nickel, manganese and copper.

These rights are specific to areas that are part of the open ocean, meaning ocean — whose air, surface and sea-bed — where no countries can claim sovereignty. Around 60% of the world's seas are open ocean and though believed to be rich in a variety of mineral wealth, the costs and challenges of extraction are prohibitive.

<https://www.thehindu.com/sci-tech/science/sensing-china-threat-india-joins-race-to-mine-new-sea-patch/article67995397.ece>



*Tue, 26 Mar 2024*

## **India Supports Philippines amidst South China Sea Tensions**

Amidst escalating tensions in the South China Sea due to aggressive actions by China towards Philippine vessels, India has expressed its unwavering support for the Philippines in upholding its sovereignty.

During a press conference in Manila, External Affairs Minister S Jaishankar reaffirmed India's commitment to assisting the Philippines in maintaining peace and freedom in the Indo-Pacific region.

The latest incident occurred near Second Thomas Shoal in the Spratly Islands, where a routine Philippine mission to resupply troops on the BRP Sierra Madre was disrupted. Following this event, Deputy Foreign Ministers from both countries engaged in discussions to address the issue.

Later the minister called on Philippine President Bongbong Marcos and sought his direction for expanding the bilateral ties and boosting collaboration between the two democracies. During the meeting he also conveyed President Droupadi Murmu and Prime Minister Narendra Modi's personal greetings to him.

Jaishankar Posted on X

“Honoured to call on President @bongbongmarcos of the Philippines. Conveyed the personal greetings of President @rashtrapatibhn and PM @narendramodi,” Jaishankar posted on X.

“Valued his warm sentiments towards the partnership. His guidance for taking it to new areas will strengthen collaboration between our two democracies,” he said.

Earlier in the day, during his meeting with his counterpart, Jaishankar also briefed him on the Indian Navy's deployments in the Red Sea and the Arabian Sea to counter threats. The Indian Navy's role in rescuing the Philippines crew was appreciated.

In response to a question, Jaishankar said: “As the world changes, it is essential that India and the Philippines cooperate more closely to shape the emerging model. Every country has the right to uphold and enforce its national sovereignty.”

Additionally, Philippines Secretary for Foreign Affairs, Enrique Manalo reaffirmed that India and the Philippines have a strong interest in ensuring a free, open, and inclusive Indo-Pacific and are discussing the issue on a regular basis.

## **What's going on in the South China Sea?**

Tensions between China and the Philippines have intensified in the South China Sea as disputes over reefs escalate. A recent clash near Second Thomas Shoal in the Spratly Islands marked a significant escalation. The Philippines' routine mission to resupply troops on the BRP Sierra Madre, a grounded navy vessel, was disrupted. Following this incident, deputy foreign ministers from both nations engaged in a phone call.

### **China, Philippines Deputy FMs hold phone call**

The Philippines Department of Foreign Affairs, in a statement said that Manila conveyed its "strong protest against the aggressive actions" undertaken by China's Coast Guard and Chinese maritime militias against the Philippine mission near the Second Thomas Shoal in the South China Sea. The department said it has also instructed its mission in Beijing to lodge a formal complaint over the incident.

China's Vice Foreign Minister Chen Xiaodong talked with Maria Theresa Lazaro, the Philippine deputy foreign secretary. They addressed concerns regarding the Philippines' supply transportation to the military ship grounded on Ren'ai Reef. Manila vehemently protested against the aggressive actions of the China Coast Guard and Chinese Maritime Militia. Both countries remain steadfast in their positions, unwilling to compromise. The situation in the region continues to be tense, with no signs of immediate resolution. The international community closely monitors the developments, wary of any further escalation.

The dispute underscores broader geopolitical tensions in the region and raises concerns about the potential for military conflict. Efforts to find a peaceful resolution to the dispute have so far yielded limited progress. The coming days will likely see continued diplomatic manoeuvring and heightened military presence in the area. The two countries are moving ahead on Quick Impact Projects in agriculture, health and capacity building. Indian companies have been active in the ASEAN nation, as much as in the digital infrastructure as in the physical one. There is considerable interest in the Indian corporate sector in stepping that up.

As two seafaring nations of the Indo-Pacific, maritime cooperation holds great potential. Last year, the two countries signed agreements on enhanced maritime cooperation and white shipping.

In terms of the engagement with ASEAN, the Philippines will take over as India's country coordinator later this year. "We look forward to its steering India-ASEAN cooperation, especially in regard to reviewing the trade agreement, to building connectivity and to deepening people-to-people contacts," said Jaishankar in his opening statement at the press conference.

<https://www.financialexpress.com/business/defence-india-supports-philippines-amidst-south-china-sea-tensions-3437141/>



*Tue, 26 Mar 2024*

## **'Won't Jeopardise our Defence': Japan to Sell Fighter Jets to other Nations**

Japan's Cabinet on Tuesday approved a plan to sell future next-generation fighter jets that it's developing with Britain and Italy to other countries, in the latest move away from the country's postwar pacifist principles. The contentious decision to allow international arms sales is expected

to help secure Japan's role in the joint fighter jet project and is part of a move to build up the Japanese arms industry and bolster its role in global security.

The Cabinet also endorsed a revision to Japan's arms equipment and technology transfer guidelines to allow co-produced lethal weapons to be sold to countries other than the partners.

Chief Cabinet Secretary Yoshimasa Hayashi said the changes are necessary given Japan's security environment, but stressed that Japan's pacifist principles remain unchanged.

"In order to achieve a fighter aircraft that meets the necessary performance and to avoid jeopardising the defence of Japan, it is necessary to transfer finished products from Japan to countries other than partner countries," Hayashi told reporters."

He added that Tokyo will follow a strict approval process for jet sales. "We have clearly demonstrated that we will continue to adhere to our basic philosophy as a peaceful nation," he said.

Japan has long restricted arms exports under the country's pacifist constitution, but has rapidly taken steps to deregulate amid rising regional and global tensions, especially from nearby China.

The decision on jets will allow Japan to export lethal weapons it co-produces to other countries for the first time. Japan is working with Italy and the UK to develop an advanced fighter jet to replace its ageing fleet of American-designed F-2 fighters, and the Eurofighter Typhoons used by the UK and Italian militaries. Japan, which was previously working on a home-grown design to be called the F-X, agreed in December 2022 to merge its effort with a British-Italian program called the Tempest for deployment in 2035.

The joint project, known as the Global Combat Air Program or GCAP, is based in the UK.

Japan hopes the new plane will offer advanced capabilities Japan needs amid growing tensions in the region, giving it a technological edge against regional rivals China and Russia.

Because of its wartime past as an aggressor and the devastation that followed its defeat in World War II, Japan adopted a constitution that limits its military to self-defence.

The country has long maintained a strict policy to limit transfers of military equipment and technology and ban all exports of lethal weapons. Opponents have criticised Prime Minister Fumio Kishida's government for committing to the fighter jet project without providing an explanation to the public or seeking approval for the major policy change.

To address such concerns, the government is limiting exports of co-developed lethal weapons to the jet for now, and has promised that no sales will be made for use in active wars.

<https://www.indiatoday.in/world/story/japan-approves-plan-to-sell-fighter-jets-to-other-nations-in-latest-break-from-pacifist-principles-2519522-2024-03-26>

## THE TIMES OF INDIA

Wed, 27 Mar 2024

### **US & Israeli Defence Chiefs Meet to Discuss Gaza Plans as Tensions between Allies Spike**

US defence leaders met with Israel's minister of defence on Tuesday as the US warned against a ground invasion of the southern Gaza city of Rafah, but rising tensions between the two allies put any progress in question.



In remarks at the start of the Pentagon meeting, defence secretary Lloyd Austin said they would discuss alternative ways to target Hamas in Rafah, and he described civilian casualties in Gaza as "far too high" and aid deliveries as "far too low." But he also repeated the belief that Israel has the right to defend itself and the US would always be there to help.

Israeli defence minister Yoav Gallant, meanwhile, emphasised the ongoing threats to Israel, and said the meeting would address ways to destroy Hamas and get the Israeli hostages released. Austin made no mention of threats to limit or condition future military aid to Israel on humanitarian gains, a growing sentiment among members of Congress. And Gallant only said that the meeting would include discussions about the important cooperation between the two countries to "ensure Israel's military edge and capabilities."

The meeting, which also included chairman of the Joint Chiefs of Staff, comes as tensions have spiked between the US and Israel, stemming from the widespread global frustration over the escalating humanitarian crisis in Gaza and political discord surrounding efforts to achieve a ceasefire.

On Monday, Israeli PM Netanyahu cancelled a high-level visit to Washington this week in protest over the UNSC decision to call for an immediate ceasefire. The US abstained, deciding not to use veto power, and the resolution passed 14-0. Israel says it cannot defeat Hamas without going into Rafah.

<https://timesofindia.indiatimes.com/world/us/us-israeli-defence-chiefs-meet-to-discuss-gaza-plans-as-tensions-between-allies-spike/articleshow/108801094.cms>

## Science & Technology News

THE  HINDU

Tue, 26 Mar 2024

### ISRO's POEM-3 Mission Accomplishes Zero Orbital Debris Mission

The Indian Space Research Organisation (ISRO) on March 25 said that it has achieved another milestone as the PSLV Orbital Experimental Module-3 (POEM-3) met its fiery end through a re-entry into the Earth's atmosphere.

The ISRO said that milestone was achieved on March 21, 2024 and that the PSLV-C58/XPoSat mission has practically left zero debris in orbit.

The PSLV-C58 Mission was accomplished on January 1, 2024.

"After completing the primary mission of injecting all satellites into their desired orbits, the terminal stage of PSLV was transformed into a 3-axis stabilized platform, the POEM-3. The stage was de-orbited from 650 km to 350 km, which facilitated its early re-entry, and was passivated to remove residual propellants to minimize any accidental break-up risks," the ISRO said.

POEM-3 was configured with a total of 9 different experimental payloads to carry out technology demonstrations and scientific experiments on the newly developed indigenous systems. Out of

these, 6 payloads were delivered by NGEs through IN-SPACe. The mission objectives of these payloads were met in a month.

<https://www.thehindu.com/sci-tech/science/pslv-accomplishes-zero-orbital-debris-mission-isro/article67991525.ece>



*Wed, 27 Mar 2024*

## **IIT-Madras Partners with French Firm for Deep-tech Innovation**

The Indian Institute of Technology-Madras (IIT-M) has partnered with the French aerospace and defence firm, Starburst Accelerator (SARL), to set up an innovative hub for start-ups. The institute has received a fund of €100 million.

The institute will enable the firm to set up accelerator programmes to boost aviation, space and defence ecosystem in India. A memorandum of understanding (MoU) for the purpose was signed on Monday. François Chopard, founder and CEO, SARL; Cedric Vallet, innovation and venture director, SARL; V. Kamakoti, IIT-M director; and Manu Santhanam, dean, ICSR, were the signatories.

Mr. Chopard said that the collaboration was aimed at creating a robust ecosystem that supported innovation in deep-tech and production in India.

Mr. Kamakoti said that such collaborations with accelerators to nurture start-ups in emerging sectors were crucial.

<https://www.thehindu.com/news/national/tamil-nadu/iit-madras-partners-with-french-firm-for-deep-tech-innovation/article67994019.ece>



*Wed, 27 Mar 2024*

## **ISRO will Conduct START 2024 During April-May**

The Indian Space Research Organisation (ISRO) will conduct the Space science and Technology Awareness Training (START) 2024 programme during April and May.

In this connection, ISRO solicits Expression of Interest (EOI) to host START-2024 in educational institutes, universities, colleges within India who are offering UG and PG courses in physical sciences and technology.

The main objective of the training programme is to attract the youngsters to the fields of space science and technology.

The training modules will comprise introductory level topics on various verticals of space science and technology. In addition to these, there will be sessions on Indian space exploration programmes and research opportunities.

Post-graduate students and final year undergraduate students of physical sciences (Physics and Chemistry) and technology (e.g. Electronics, Computer Science, Mechanical, Applied Physics,

Radiophysics, Optics & Opto-electronics, Instrumentation and other associated subjects) studying in educational institutes, universities and colleges within India are eligible to be considered for the training.

Last date for online registration of EOI through <https://jigyasa.iirs.gov.in/START> by institutes, colleges, universities is April 2.

Student registration opens on April 8 and ends on April 12.

<https://www.thehindu.com/news/cities/bangalore/isro-will-conduct-start-2024-during-april-may/article67994444.ece>

