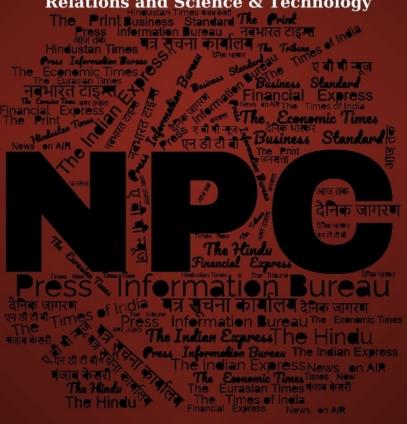
अगस्त Aug 2025 खंड/Vol.: 50 अंक/Issue: 150

12/08/2025

# समाचार पत्रों से चयनित 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**

### डीआरडीओ का डिजाइन किया खदान क्षेत्र अंकन उपकरण एमके-2 सेना में शामिल

Source: Jansatta, Dt. 12 Aug 2025

भारतीय सेना की अभियानगत दक्षता बढ़ाने के लिए रक्षा अनुसंधान एवं विकास संगठन (डीआरडीओ) का डिजाइन किया गया यांत्रिक खदान क्षेत्र अंकन उपकरण 'एमके-2' को सेना में शामिल किया गया है। सेना ने सोमवार को एक्स पर एक पोस्ट में यह जानकारी दी।

सेना ने लिखा कि अभियानगत दक्षता बढ़ाने की दिशा में स्वदेशी नवाचार के माध्यम से युद्ध तत्परता को मजबूत करते हुए भारतीय सेना ने यांत्रिक खदान क्षेत्र अंकन उपकरण एमके-2 को शामिल किया है। पोस्ट में एमके-2 की कुछ तस्वीरें भी साझा की गई हैं। सेना ने कहा कि डीआरडीओ की डिजाइन की गई और बीईएम लिमिटेड द्वारा निर्मित यह प्रणाली आत्मनिर्भरता की भावना का प्रतीक है और कोर ऑफ इंजीनियर्स की लड़ाकू क्षमताओं को, महत्त्वपूर्ण रूप से मजबूत करती है।

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## **Defence News**

### भारत और श्रीलंका तटरक्षक बल में समुद्री सहयोग पर बैठक

Source: Punjab Kesari, Dt. 12 Aug 2025

नई दिल्ली, (पंजाब केसरी) : नई दिल्ली में भारतीय और श्रीलंका तटरक्षक बलों के बीच 8वीं उच्च स्तरीय बैठक हुई। इस बैठक में समुद्री प्रदूषण, खोज-बचाव, और कानून प्रवर्तन जैसे विषयों पर चर्चा हुई। दोनों देशों ने क्षेत्रीय समुद्री सुरक्षा, पर्यावरण संरक्षण और सहयोग को आगे बढाने पर सहमति जताई। यह साझेदारी हिंद महासागर क्षेत्र में स्थिरता और सामरिक सहयोग को और मजबूत करेगी। इस बैठक में श्रीलंकाई प्रतिनिधिमंडल का नेतृत्व रियर एडिमरल वाई.आर. सेरासिंघे ने किया, जो श्रीलंका कोस्ट गार्ड के महानिदेशक हैं. वहीं, भारतीय

प्रतिनिधिमंडल की अगुवाई भारतीय तटरक्षक बल के महानिदेशक परमेश शिवमणि ने की। श्रीलंकार्ड प्रतिनिधिमंडल 10 अगस्त से 14 अगस्त 2025 तक भारत के दौरे पर है और यह यात्रा 2018 में दोनों देशों के बीच हए समझौता ज्ञापन के अंतर्गत हो रही है। बैठक के दौरान यह सहमति बनी कि दोनों देश भविष्य में और अधिक समन्वय के साथ काम करेंगे, बेहतरीन कार्यप्रणालियों को साझा करेंगे और समुद्री सुरक्षा को मजबूत करने के लिए संयुक्त प्रयास करेंगे। दोनों पक्षों ने यह भी दोहराया कि साझा समुद्री क्षेत्र में पर्यावरण संरक्षण और सुरक्षा को प्राथमिकता दी जाएगी।

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# India-Sri Lanka Coast Guards hold 8th High-Level Meeting to boost maritime cooperation

Source: The Statesman, Dt. 12 Aug 2025

The 8th High-Level Meeting (HLM) between the Indian Coast Guard (ICG) and Sri Lanka Coast Guard (SLCG) was held here today. Calling the meeting another milestone in the strong and enduring maritime partnership between the two countries, a statement from the Ministry of Defence stated that the discussions centered on strengthening cooperative engagements in the fields of marine pollution response, maritime search and rescue, and maritime law enforcement, along with enhanced capacity building and technical assistance initiatives.

The Sri Lankan delegation was led by Director General SLCG Rear Admiral Y.R. Serasinghe and the Indian delegation headed by ICG Director General Paramesh Sivamani. Both sides reaffirmed their commitment to work closely in addressing contemporary maritime challenges, ensuring safety, security, and environmental stewardship in the shared maritime domain.



The meeting underscored the mutual resolve of ICG and SLCG to deepen operational coordination, share best practices, and further promote regional maritime stability through sustained cooperation, the release stated. The SLCG delegation is visiting India from August 10-14, 2025, for the HLM and other professional interactions under the framework of the Memorandum of Understanding signed between the ICG and SLCG in 2018.

https://www.thestatesman.com/india/india-sri-lanka-coast-guards-hold-8th-high-level-meeting-to-boost-maritime-cooperation-1503469941.html

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# In service for 20 years, IAF's Embraer VIP jets set for complete facelift

Source: The Tribune, Dt. 12 Aug 2025

After being in service for about 20 years, the Indian Air Force's Embraer-135 business jets that are used for transporting the nation's top civilian and military leaders are set to undergo a complete facelift.

The works to be undertaken involve complete repainting of the aircraft as well as a total overhaul and refurbishment of the cockpit and the passenger cabin. This will include changing internal fittings and panels, polishing surfaces, and replacing all furnishings, upholstery, curtains, shades, and flooring.

According to sources, one aircraft will be refurbished at a time to ensure that three aircraft are available for operations, sources said. The entire project will be completed within a period of two years, with work on one aircraft expected to take about five months. The IAF has approached a Gurugram-based aviation firm to carry out the work.

The IAF has four Embraer jets that are deployed with the Air Headquarters Communications Squadron base at Palam in New Delhi. The squadron also operates two large Boeing 777 jetliners for use by the President, Vice-President and Prime Minister, three Boeing 737 Business Jets and six modified Mi-17 helicopters.

Manufactured by Brazil, the Embraers entered IAF in September 2005 and are extensively used by top leaders on official visits. These have a range of 7,500 km and a cabin capacity of 14 passengers.

The twin-engine Embraer jet replaced the aged HS-748 Avro twin turboprop engine that was of British origin. Bearing 'K' series registration numbers, these aircraft are christened Meghdoot, Vayudoot, Nabhdoot and Gagandoot.

The Air Wing of the Border Security Force (BSF) also has one Embraer-135 on its fleet strength for the Ministry of Home Affairs, which replaced its previous Avro aircraft.

In addition, three Netra Airborne Early Warning aircraft (AEW) used the Embraer-135 as the platform. These were extensively modified by the Defence Research and Development Organisation (DRDO) with an externally mounted overhead radar system, electronic warfare and navigation equipment, and work consoles.

There are also reports that the IAF is acquiring six used Embraer-145 jets for conversion into AEW aircraft by the DRDO in collaboration with Embraer. These would be more advanced and capable variants of the existing Netra.

The Brazilian aerospace major, which manufactures several types of military and civilian aircraft, is looking at expanding its footprint in India. The company has nearly 50 aircraft of 11 different types currently operating in India.

It has established a subsidiary in India to expand its presence in defence, commercial aviation, and business aviation sectors. The company is also exploring opportunities for Maintenance, Repair and Overhaul (MRO) facilities in India.

Beyond maintenance, the company is also partnering with Mahindra Defence Systems to bid for the IAF's Medium Transport Aircraft (MTA) program with the C-390 Millennium, potentially involving 40–80 aircraft. This bid includes plans for local assembly, maintenance, repair, and overhaul (MRO), and technology transfer, indicating a long-term commitment to India's aerospace ecosystem.

https://www.tribuneindia.com/news/defence/in-service-for-20-years-iafs-embraer-vip-jets-set-for-complete-facelift/

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### Op Sindoor delivered heavy damage in 90 hrs

Source: The Tribune, Dt. 12 Aug 2025



E had at least five confirmed fighter jet kills and one large aircraft, which could be either an elite aircraft or an Airborne Early Warning and Control (AEW&C) aircraft, at a distance of 300 km.

So, we all know what happened: that unfortunate incident of Pahalgam. You know how we were trying to achieve some things diplomatically and, at the same time, we had to give them a befitting reply. We had also said that this time we must send the message across loud and clear to the terrorists and their leadership. So we discussed a few options and decided on those nine targets.

The red dots that you see on the map were the seven targets that were very close to the border and LoC and they were to be taken out by the army with their integral weapons. And those two blue dots were the two main headquarters complexes, that is Bahawalpur and Muridke, that were to be taken out by the Indian Air Force. All

of us were working together, including naval assets — their weapons were used too.

The date was decided—the intervening night of May 6-7th. The date and time was based on weather, based on what patterns we were seeing across the border, of their movements and actions.

We had decided to undertake our action in one go, to address all nine targets. They were all hardened structures, so we decided to go with long-range weapons. To keep ourselves safe, and restrict ourselves to attacking only terrorist targets. And minimum civilian casualties.

There were some buildings where we had intelligence of their senior leadership staying, some buildings where other people stay and, of course, the main building where their congregations took place. I will show you some of the pictures of what we achieved before and after satellite pictures. You can see the damage clearly. All adjacent buildings are fairly intact. Besides the satellite pictures, we also had a lot of input from the local media, which was giving us the inside pictures. It's all on the open net, available.

I want to bring out something here. When we did Balakot, we had something similar. I have a slide on that. But we could not get anything from inside and it became a big issue; trying to tell our own people as to what we have achieved. This time we had human intelligence, so we had a very clear picture of the inside — there has been huge damage. I'm very happy that this time we

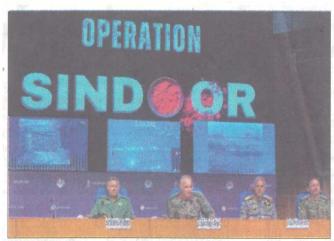
were able to take care of that ghost of Balakot and tell the world what we achieved.

Much damage was done on the other seven targets by the Army. Once we were confident about our achievement, a message was sent to their DGMO by our DGMO — that we had no intent to strike military targets; our objective was only to strike terrorist infrastructure. and take revenge for Pahalgam. And that we can call it off here. But they, unfortunately, did not agree. They said: "Aap ne humain mara hai, ab hum marenge, phir dekhenge, phir baat karenge."

We continued to be cautious. We knew they would do something. So, the 7th-8th night and 8th-9th night, those two nights of May, a lot of munitions, drones, small-scale weapons intended to saturate our systems at our airfields and army installations—were spotted. Of course, that created a little bit of panic in the public. They started spotting even low-earth orbit satellites and reporting them as drones! It was becoming very difficult to filter out, but our local commanders did exceptionally well.

They took charge and neutralised many drones using our own anti-drone systems and anti-aircraft guns. Our anti-drone systems really worked very well. We survived those attacks without any damage.

We got an intelligence report on May 9th evening that they are planning something big and the next 48 hours are very critical. We decided that if they attack our military installations, we will reply with the mil-



ONE TEAM: There was full synchronisation between the forces. PTI

We, the forces, decided what would be our rules of engagement. We decided the escalation ladder we wanted to ride on. itary attacking their installations. We took the call that since they were mostly attacking us by air force and our air force bases are under threat, we should respond without waiting. Sure enough, their aircraft tried to penetrate our defences.

Our air defence systems did a wonderful job. The S400 system has been a game-changer. The range of that system ensured that they were not able to use their long-range bombs.

In Balakot, if you remember, some bombs had fallen very close to the Army area, but this time since we were ready to use our long-range surface-to-air guided weapons, they were deterred. Initially, we found a very massive buildup taking place. But once the first missile was fired from our side from the ground, we certainly found a dissipation of that buildup.

On May 9-10th night, there were a large number of attacks. Our airfields in Adampur, Srinagar, Awantipur took the brunt. They tried to penetrate various classes of drones, including weaponised ones. We were able to neu-

tralise most of their weapons.

That night we decided we would go in no holds barred. Once again, it was not to attack anything in particular, but to give them that feeling, that look, we can attack you deep inside at will wherever we want to.

Like this command and control centre at Nur Khan base or at Raheem Yar Khan base the attacks were based on specific intelligence. As far as the Sukkur airfield is concerned. we attacked their UAV hangar and a radar site. You have the visuals available here. This is the hangar which is been flattened and this is the radar site before and after. An AEW&C hangar was attacked and here we have a very clear hint that there was an aircraft inside when this attack took place.

Sargodha, we've grown up in our Air Force dreaming about days like this, that someday, we'll get a chance to go there. And so it just happened that I got my chance just before I retired. So, we attacked the airfield... not the southern installations because we thought that may lead to unnecessary escalation.

This last slide is on the Jacobabad airfield. Here's an F-16 hangar, an open source photograph which shows that one half of the hanger is gone and I'm sure there were some aircraft inside which have got damaged there.

So, if I can just sum it up. We were able to get at least two command and control centres in Murid and Chaklala. We attacker three hangars — the Sukkur UAV hangar, the Bhulari AEW&C hangar and the

Jacobabad F-16 hangar. We have indications of at least one aircraft seen in that AEW&C hangar and a few F-16s which were under maintenance there.

Besides, there are a large number of UAVs, drones and missiles which have fallen in our territory. We have recovered a lot of wreckage which is now being studied so that we can make out where they were launched from, what route they followed, what kind of systems they have.

So, I can say that this was more of a high-tech war and in about 88-90 hours, we were able to achieve so much damage that it was very clear that if they continue, they will only pay more and more.

That's when they sent a message through their DGMO "ki hum baat karna chahte hain", which was accepted from our side — a decision taken at the highest level.

What were the reasons for our success? There was very clear political will, very clear directions which were given to us without any kind of restrictions. We, the forces, decided what would be our rules of engagement. We decided the escalation ladder we wanted to ride on. We decided how we wanted to control the escalation. Full freedom was given to us to plan and execute.

There was full synchronisation between the forces, between all four of us — the CDS and the three chiefs.

Excerpted from the 16th edition of Air Chief Marshal LM Katre Memorial Lecture delivered at HAL, Bengaluru, on August 9, 2025

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### Forces conduct drill at Farakka Barrage in WB

Source: The Asian Age, Dt. 12 Aug 2025

Kolkata, Aug. 11: In a first since the political turmoil in Bangladesh, the Indian armed forces conducted a two-day joint training exercise at Farrakka Barrage in Murshidabad of West Bengal.

The barrage is barely 18 km away from Sahibganj in the neighbouring country.

The high-threat response drill saw the three Indian Army, Navy and Air Force carrying out a helocasting phase on August 7 and 8.

In this phase, the Special Forces (SF) commandos from the Army and Navy-Para (SF) and MARCOS respectively-used the helocasting technique and low-level water insertion from an IAF Mi-17 V5 helicopter — PTI

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### China expanding presence in Indian Ocean: Parl panel

Source: The Asian Age, Dt. 12 Aug 2025

AGE CORRESPONDENT NEW DELHI, AUG. 11

The Chinese People's Liberation Army (Navy) — PLA(N) is undergoing a significant capability accretion and has commissioned over 15 units per year in the last decade, and the PLA(N) has already surpassed the United States Navy as the largest Navy in the world through an accelerated construction programme,

the ministry of defence (MoD) has informed a parliamentary committee on external affairs that tabled a report in Parliament on Monday.

The parliamentary report mentioned that just last year, 20 Chinese research vessels operated in the Indian Ocean Region (IOR) for a duration of 862 days, which has been the highest number of days since 2020. The parliamentary panel

THE REPORT mentioned that just last year, 20 Chinese research vessels operated in the region for a duration of 862 days, which has been the highest number of days since 2020

report further stated that the "Pakistan Navy is also undergoing a major capability development, programme with the induction of four Type 054A/P

frigates from China, four MILGEM-class corvettes from Turkey and eight Hangor/Yuan-class air-independent propulsion-capable submarines from China, state-of-the-art air-craft and unmanned assets, among others".

The report stated, "Two carrier battle groups are operational, and a third and much more potent aircraft carrier, Fujian, is at an advanced stage of precommissioning trials.

With this capability augmentation, China has been consolidating its position in the IOR through frequent deployments of PLA(N) ships, submarines and aircraft.

In the past decade, Chinese deployments in the IOR have seen a considerable rise, Chinese submarines are also known to have frequently been deployed in the Indian Ocean Region since 2013.

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### **Play the Forward Defence**

Source: The Economic Times, Dt. 12 Aug 2025

Trade has never been the strongest suit in the India-US relationship. If anything, it's been an area of concern, often singled for special focus by previous US administrations. Yet, the partnership flourished, largely driven by a shared security logic that in the long term, America's biggest competitor and India's foremost threat will be the same: China.

This has not changed. China has grown in strength as a competitor to the US, while Operation Sindoor has shown that military collaboration and interoperability between Beijing and Rawalpindi has now reached a point where Pakistan is almost another of China's theatre commands. No amount of political conversation is going to diminish that arrangement for India, just as crafting intermittent deals to coexist with China is not going to create pathways for the MAGA agenda to progress.

Both India and the US, divergent as they stand today, still have to face up to this common security matrix, regardless of Trump's disruptive ways around trade. His preference for tariff-led coercion has led to a situation where the US has embraced Pakistan over Taiwan, which is at odds with Washington's overall security priorities.

In this backdrop, the way forward for India is to return to basics, and build on security convergences that inform the foundation of its strategic partnership with the US. And, here, the answer probably lies in the relationship's defence folder.

When Trump brought in India's Russian oil purchases into the tariff equation, he also mentioned defence procurements from Moscow. In reality, purchases from Russia have been on the decline, in comparison with the increase in orders from the US. Yet, they rankle Trump. Why?

Let's start with the ask to purchase F-35s. His words have not been followed up by a formal offer, largely because Pentagon, which has to construct the offer, is struggling to tailor it for a potential customer who already has the Russian S-400 missile defence system.

The US had evicted Turkiye, a Nato member, from the F-35 programme in 2019 because it had purchased S-400s. Ankara is currently in the middle of hectic lobbying in Washington to get Trump to allow Turkiye's re-entry into the programme. The US position, so far, has been to not expose F-35 to S-400 as both go up against each other on the battlefield.

Unlike Turkiye, which bought S-400s despite warnings from the US, India did so because it was turned down by the Obama administration. Trump, in his first term, reviewed Obama's position and went on to offer the US-made THAAD (Thermal High Altitude Area Defence) missile defence system. But India, by then, had already firmed up the S-400 deal with Russia. It's believed that the US was open to discussing both F-35s and THAAD. But the ground had shifted.

What Trump 1.0 did make good was to successfully reverse the US position on selling armed Predator drones to India. Until then, the go-ahead was for only selling surveillance version of one-of-its-kind HALE (high-altitude long endurance) UAVs to India. The Biden administration went along with Trump's approval and closed the \$4 bn MQ-9B Predator drones deal just months before the 2024 US presidential elections.

So far, China has not developed a match to MQ-9Bs, which could give India a distinct edge as deliveries start 3 years on. Post-Op Sindoor, however, there is talk to make a case for increasing the number beyond the current order of 31 UAVs spread across all three services.

Given that Trump 1.0 had invested his political capital on this equipment, India ought to move quickly if it needs more, and insist on the same costs. Delays increase the price, as India has discovered with P-8I Poseidon aircraft. In February, both sides identified purchase of 6 additional P-8Is in their joint statement. But those discussions have got held up because of a 50% increase from the original 2021 offer.

Meanwhile, India has made more emergency procurement requests post- Op Sindoor, which are in the US pipeline for approvals. Availability and access to the US military inventory was also an advantage in the build-up following the Galwan clashes with China.

Overall, India's difficult security environment requires massive shifts in procurement policies, especially in speeding up the process itself. Besides strategic advantages, Washington's unique FMS (foreign military sales) programme helps cushion political decisions as it has the backing of US government.

For now, India is hoping that Trump and Putin agree to a deal soon, which could involve a ceasefire and sanctions relief to Russia. That could put a pause on India's extra 25% Trump penalty for purchasing Russian oil, if Washington so determines.

But it's worth revisiting the strategic core of the relationship for more proactive options on the defence and security front. After all, US supported India by designating The Resistance Front (TRF) as a terrorist organisation linked to LeT and backed its case in the UN.

India is also fighting a DAP (di-ammonium phosphate) fertiliser crisis because China stopped shipments. Russia is one of the countries with whom a long-term arrangement is planned. Here, US penalties on India add a layer of uncertainty to the economics of the deal.

So, along with hoping for a US-Russia deal, India must work for quick outcomes on defence - the one area of convergence, where there's urgency on the Indian side, with clear benefit to the US.

https://economictimes.indiatimes.com/opinion/et-commentary/why-answer-to-india-us-relation-stands-in-defence-folder-not-in-trade/articleshow/123243383.cms?from=mdr

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# Lieutenant General Simon Stuart, Chief of Australian Army, Commences Four-Day Visit to India

Source: Press Information Bureau, Dt. 11 Aug 2025

Lieutenant General Simon Stuart, Chief of the Australian Army, has arrived in New Delhi on an official visit to India from 11 to 14 August 2025. The visit aims to further strengthen bilateral defence cooperation and enhance strategic engagement between the two nations.

The visit commenced with a solemn wreath-laying ceremony at the National War Memorial, where General Stuart paid homage to the fallen heroes of the Indian Armed Forces. This was followed by a Guard of Honour at South Block and a formal call-on with General Upendra Dwivedi, Chief of the Army Staff.

The Chief of Australian Army was briefed on India's security perspective, Operation SINDOOR, and recent advancements in technology absorption within the Indian Army. He also met senior leadership of the Indian Armed Forces, including General Anil Chauhan, Chief of Defence Staff; Admiral Dinesh Kumar Tripathi, Chief of Naval Staff; Air Marshal Amar Preet Singh, Chief of Air

Staff; and Shri Rajesh Kumar, Defence Secretary. On the sidelines of the visit, the Regimental Sergeant Major of the Australian Army met the Army Subedar Major of the Indian Army at South Block, fostering camaraderie and collaboration between all ranks.



On 12 August, General Stuart will travel to Agra to visit the 50 (Independent) Parachute Brigade and interact with all ranks. He will also visit the iconic Taj Mahal before returning to New Delhi to deliver a keynote address at the National Defence College.

On 13 and 14 August, the Chief of the Australian Army will proceed to Pune, where he will interact with Lieutenant General Dhiraj Seth, General Officer Commanding-in-Chief, Southern Command, and visit the National Defence Academy, Khadakwasla. He is scheduled to address the cadets on leadership, joint training, and cooperation. During the two-day visit, he will also participate in other defence cooperation engagements.



This high-level visit reaffirms the strong and growing India–Australia defence partnership and underscores the shared commitment of both nations towards a stable, secure, and rules-based Indo-Pacific region.

https://www.pib.gov.in/PressReleasePage.aspx?PRID=2155075

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## Science & Technology News

### चाँद पर परमाणु ऊर्जा सयंत्र बनाने की होड़

Source: Jansatta, Dt. 12 Aug 2025

मिसीसिपी, 11 अगस्त (द कन्वरसेशन)।

चंद्रमा पर उतरना, वहां ध्वज फहराना, वहां की मिट्टी अनुसंधान के लिए लाना अब पुरानी बात है। अब नई अंतिरक्ष दौड़ पृथ्वी के इस इकलौते उपग्रह पर स्थायी निर्माण और ऊर्जा आपूर्ति को लेकर शुरू हो गई है, जिसमें परमाणु ऊर्जा संयंत्र अहम भूमिका निभा सकते हैं।

खबरों की मानें तो अप्रैल 2025 में चीन ने वर्ष 2035 तक चंद्रमा पर परमाणु ऊर्जा संयंत्र बनाने की योजना पेश की थी, जो उसके प्रस्तावित अंतरराष्ट्रीय चंद्र अनुसंधान केंद्र को ऊर्जा देगा। इसके जवाब में अगस्त में अमेरिका के कार्यवाहक नासा प्रशासक सीन डफी ने कहा कि अमेरिका वर्ष 2030 तक चंद्रमा पर अपना परमाणु रिएक्टर चालू कर सकता है। यह नया भले ही लगे, लेकिन यह चौंकाने वाली खबर कतई नहीं है। विशेषज्ञों के अनुसार, यह अचानक शुरू हुई होड़ नहीं है। नासा और अमेरिकी ऊर्जा विभाग लंबे समय से छोटी परमाणु ऊर्जा प्रणालियों पर काम कर



नार्ग और अमेरिकी ऊर्जा विभाग लंबे समय से छोटी परमाणु ऊर्जा प्रणालियों पर काम कर रहे हैं, जो चंद्रमा पर अड्डों, खनन कार्यों और दीर्घकालिक निवास के लिए बिजली उपलब्ध करा सकें। अंतरिक्ष कानून विशेषज्ञ मानते हैं कि यह हथियारों की होड़ नहीं बल्कि रणनीतिक बुनियादी ढांचे की दौड़ है। कानूनी रूप से प्रतिबंधित नहीं परमाणु ऊर्जा का अंतरिक्ष में इस्तेमाल नया विचार नहीं है।

रहे हैं, जो चंद्रमा पर अड्डों, खनन कार्यों और दीर्घकालिक निवास के लिए बिजली उपलब्ध करा सकें।

अंतिरक्ष कानून विशेषज्ञ मानते हैं कि यह हथियारों की होड़ नहीं बल्कि रणनीतिक बुनियादी ढांचे की दौड़ है। कानूनी रूप से प्रतिबंधित नहीं परमाणु ऊर्जा का अंतिरक्ष में इस्तेमाल नया विचार नहीं है। 1960 के दशक से अमेरिका और सोवियत संघ ने रेडियोआइसोटोप जनरेटर का उपयोग किया है, जो छोटे स्तर के रेडियोधर्मी ईंधन से उपग्रहों, मंगल रोवर्स और वायजर मिशनों को शक्ति प्रदान करते हैं। संयुक्त राष्ट्र की 1992 का 'बाह्य अंतरिक्ष में परमाणु ऊर्जा स्रोतों के उपयोग से संबंधित सिद्धांत' नामक गैर-बाध्यकारी प्रस्ताव यह रेखांकित करता है कि सौर ऊर्जा अपर्याप्त होने

पर परमाणु ऊर्जा आवश्यक हो सकती है। यह प्रस्ताव सुरक्षा, पारवर्शिता और अंतरराष्ट्रीय परामर्श के दिशा-निर्देश तय करता है। अंतरराष्ट्रीय कानून में कहीं भी चंद्रमा पर शांतिपूर्ण उद्देश्यों से परमाणु ऊर्जा के उपयोग पर रोक नहीं है, लेकिन पहला सफल देश भविष्य के आचरण और कानूनी व्याख्याओं के लिए मानक तय कर सकता है।

अमेरिका, चीन और रूस समेत प्रमुख देशों ने 1967 की बाह्य अंतरिक्ष संधि पर हस्ताक्षर किए हैं, जो यह तय करती है कि सभी देश एक-दूसरे के हितों का 'उचित ध्यान' रखें। इसका अर्थ है कि यदि कोई देश चंद्रमा पर परमाणु रिएक्टर लगाता है, तो अन्य देशों को उसके आसपास काम करने के लिए कानूनी और भौतिक रूप से सीमाएं होंगी। संधि के अन्य अनुच्छेद भी इसी तरह के आचरण की सीमाएं तय करते हैं। हालांकि, वे सहयोग को भी बढ़ावा देते हैं। सभी देशों को चंद्रमा और अन्य ग्रहों पर स्वतंत्र रूप से पहुंचने का अधिकार है, लेकिन वे संप्रभुता का दावा नहीं कर सकते।

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The Tribune The Statesman पंजाब केसरी जनसत्ता The Hindu The Economic Times Press Information Bureau The Indian Express The Times of India Hindustan Times नवभारत टाइम्स दैनिक जागरण The Asian Age
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