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समाचार पत्रों से चयित अंश Newspapers Clippings

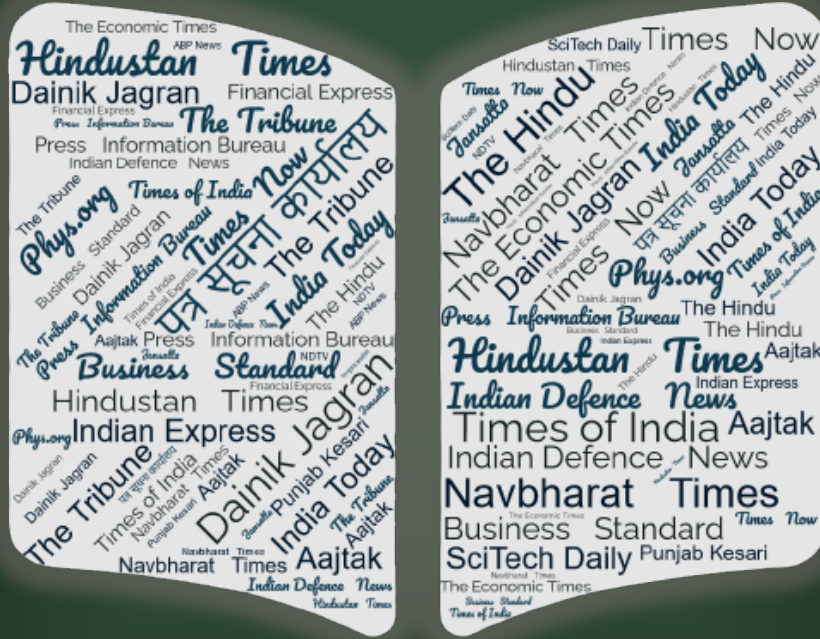
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CONTENTS

S. No.	TITLE	Page No.
	Defence News	1-16
	Defence Strategic: National/International	1-16
1.	रक्षा मंत्री ने नई दिल्ली में फ्रांस के सशस्त्र बल मंत्री के साथ चौथी भारत-फ्रांस वार्षिक रक्षा वार्ता आयोजित की	<i>पत्र सूचना कार्यालय</i> 1
2.	Defence Ministers of India, France Discuss Defence Industrial Cooperation	<i>The Hindu</i> 2
3.	Jaishankar Meets French Armed Forces Minister Lecornu, Discusses Contemporary Strategic Developments	<i>The Print</i> 3
4.	Australian Army is Conducting Training Ops with India in Rajasthan	<i>Asianet News</i> 4
5.	Why India-Australia Defence Exercise is Another Warning Shot Across China's Bows	<i>Firstpost</i> 5
6.	भारत-मलेशिया संयुक्त सैन्य अभ्यास हरिमऊ शक्ति-2022 मलेशिया के क्वांग स्थित पुलाई में शुरू	<i>पत्र सूचना कार्यालय</i> 8
7.	India-Malaysia Joint Military Exercise 'Harimau Shakti-2022' Begins in Kluang	<i>The Economic Times</i> 9
8.	बॉर्डर पर सेना को हथियारों की सप्लाई में होगी देरी! आयुध कारखानों के निगमीकरण पर लगा सवाल	<i>अमर उजाला</i> 10
9.	Canada to Boost Defence, Cyber Security in Indo-Pacific Policy, Focus on 'Disruptive' China	<i>Reuters</i> 13
10.	100-Mile Strike Weapon Weighed for Ukraine as Arms Makers Wrestle with Demand- Sources	<i>The Economic Times</i> 14
11.	NATO's Flagship Cyber Defence Exercise Kicks off in Estonia	<i>NATO OTAN</i> 16
	Science & Technology News	17-22
12.	ICHR, ISRO to Trace India's Roots as 'Vishwa Guru' of Science, Tech	<i>Hindustan Times</i> 17
13.	Agnikul Cosmos Sets Up India's First Private Space Vehicle Launchpad at Sriharikota	<i>The Hindu</i> 19
14.	India's SARAS Radio Telescope Provides Astronomers Clues to the Nature of Universe's First Stars and Galaxies	<i>Press Information Bureau</i> 20
15.	Five New Advanced Navigation Satellites for Strategic Needs	<i>The New Indian Express</i> 21
16.	चीन अपने अंतरिक्ष स्टेशन में भेजेगा 3 सदस्यीय दल, चंद्रमा के लिए मानव मिशन का खुलासा	<i>नवभारत टाइम्स</i> 22



पत्र सूचना कार्यालय
भारत सरकार

रक्षा मंत्रालय

सोमवार, 28 नवंबर 2022

रक्षा मंत्री ने नई दिल्ली में फ्रांस के सशस्त्र बल मंत्री के साथ चौथी भारत-फ्रांस वार्षिक रक्षा वार्ता आयोजित की

रक्षा मंत्रालय 'मेक इन इंडिया' पर ध्यान देते हुए रक्षा औद्योगिक सहयोग को बढ़ाने के तरीकों पर चर्चा की

समुद्री सहयोग को मजबूत करने और द्विपक्षीय अभ्यासों का दायरा एवं गहराई बढ़ाने के तौर-तरीकों पर भी विचार-विमर्श किया गया

रक्षा मंत्री श्री राजनाथ सिंह ने आज नई दिल्ली में फ्रांसी के सशस्त्र बल मंत्री श्री सेबेस्टियन लेकोर्नू के साथ चौथी भारत-फ्रांस वार्षिक रक्षा वार्ता आयोजित की। यह बैठक बेहद सौहार्दपूर्ण वातावरण में हुई। वार्ता में द्विपक्षीय, क्षेत्रीय, रक्षा एवं रक्षा औद्योगिक सहयोग के मुद्दों से जुड़े विभिन्न आयामों पर विस्तृत चर्चा की गई। दोनों मंत्रियों ने दोनों देशों के सैन्य बलों के बीच जारी सहयोग की समीक्षा की, जो हाल के वर्षों में काफी बढ़ा है। उन्होंने समुद्री सहयोग को मजबूत करने और द्विपक्षीय अभ्यासों के दायरे एवं गहराई को बढ़ाने के तरीकों पर चर्चा की। उन्होंने इस बात पर संतोष व्यक्त किया कि भारत और फ्रांस ने हाल ही में वायु सेना स्टेशन जोधपुर में अपने द्विपक्षीय वायुसेना-अभ्यास 'गरुड़' का सफलतापूर्वक आयोजन किया है।

वार्ता के दौरान विचार के प्रमुख क्षेत्रों में 'मेक इन इंडिया' पर ध्यान देने के साथ-साथ रक्षा औद्योगिक सहयोग था। भविष्य के सहयोग तथा संभावित सह-उत्पादन के अवसरों पर चर्चा की गई। दोनों मंत्रियों ने सहमति व्यक्त की कि दोनों देशों के तकनीकी समूहों को अगले साल की शुरुआत में मिलना चाहिए और सहयोग के प्रमुख मुद्दों को आगे बढ़ाना चाहिए। मंत्रियों ने अनेक रणनीतिक एवं रक्षा मुद्दों पर अपनी आपसी सहमति पर बातचीत की और हिंद-प्रशांत क्षेत्र पर ध्यान देने के साथ द्विपक्षीय, क्षेत्रीय तथा

बहुपक्षीय मंचों पर सहयोग बढ़ाने के लिए मिलकर काम करने की प्रतिबद्धता साझा की। फ्रांस हिंद महासागर आयोग (आईओसी) और इंडिया स्कैन नेवल सिम्पोज़ियम (आईओएनएस) का वर्तमान अध्यक्ष है और दोनों देश इन मंचों में निकट सहयोगी हैं।

भारत की अपनी यात्रा के अंतर्गत श्री सेबेस्टियन लेकोर्नू ने कल दक्षिणी नौसेना कमान मुख्यालय की एक दिवसीय यात्रा की और भारत के पहले स्वदेशी विमान वाहक युद्धपोत आईएनएस विक्रांत का दौरा किया। फ्रांस के सशस्त्र बल मंत्री ने कहा कि वह आईएनएस विक्रांत से बेहद प्रभावित थे। फ्रांस, भारत के सबसे भरोसेमंद रणनीतिक साझेदारों में से एक है और दोनों देश 2023 में अपनी रणनीतिक साझेदारी के 25 साल पूरे होने का जश्न मनाने के लिए उत्सुक हैं।

<https://pib.gov.in/PressReleasePage.aspx?PRID=1879695>



Mon, 28 Nov 2022

Defence Ministers of India, France Discuss Defence Industrial Cooperation

India and France on Monday discussed defence industrial cooperation with a focus on 'Make in India' as well as means to strengthen maritime cooperation and increase the scope and complexity of bilateral exercises. This was discussed during the 4th India-France annual defence dialogue chaired by Defence Minister Rajnath Singh and his visiting French counterpart Sebastien Lecornu. "During the dialogue, one of the key areas of discussion was defence industrial cooperation with a focus on 'Make in India'. Future collaborations and potential co-production opportunities were discussed. The Ministers agreed that the technical groups from both the countries should meet early next year and take the key cooperation issues forward," a Defence Ministry statement said. This is the first visit of Mr. Lecornu to India as French Minister of Armed Forces.

"A wide range of bilateral, regional and defence industrial cooperation issues were discussed during the dialogue," Mr. Singh said on Twitter. The Ministers reviewed the ongoing military-to-military cooperation, which has increased substantially in recent years, the statement said, also noting that they recognised their convergences on a number of "strategic and defence issues and shared the commitment to work together on enhancing cooperation in bilateral, regional and multilateral fora, with a focus on the Indo-Pacific region." France is the current chair of Indian Ocean Commission (IOC) and Indian Ocean Naval Symposium (IONS) and both countries cooperate closely in these fora.

During the two-day visit, Mr. Lecornu made a day-long trip to Headquarters of Southern Naval Command in Kochi on Sunday and also went onboard the indigenous aircraft carrier INS Vikrant. "The French Minister acknowledged India's indigenous potential and self-reliance. The discussions ranged from enhancing cooperation in areas of mutual interest to the maritime

challenges in the IOR,” the Navy said in a statement. The visiting French Minister also met External Affairs Minister S. Jaishankar and the National Security Advisor Ajit Doval.

“The Armed Forces Minister’s visit to India reaffirms France’s engagement in the Indo-Pacific and India’s centrality in the French strategy for the region,” the French Embassy said in a statement. It comes in a year that has seen an acceleration of the French and Indian armed forces’ endeavours towards even greater interoperability through joint air, navy, and army exercises, such as IMEX 22 in March, Varuna in March-April, and the recently-concluded Garuda in October-November, it noted. The two Air Forces recently held their bilateral Air Exercise ‘Garuda’ at Air Force Station, Jodhpur. Ahead of the dialogue, Mr. Lecornu visited the National War Memorial and paid tribute to India’s soldiers who have laid down their lives in the line of duty and also inspected a triservice guard of honour.

<https://www.thehindu.com/news/national/defence-ministers-of-india-france-discuss-defence-industrial-cooperation/article66196123.ece/amp/>

ThePrint

Mon, 28 Nov 2022

Jaishankar Meets French Armed Forces Minister Lecornu, Discusses Contemporary Strategic Developments

External Affairs Minister Dr S Jaishankar today welcomed French Minister of Armed Forces Sebastien Lecornu and held discussions on contemporary strategic developments. Dr S Jaishankar tweeted, “Welcomed French Minister of Armed Forces @SebLecornu to MEA this evening. A wide ranging discussion on contemporary strategic developments.” Notably, Sebastien Lecornu has arrived in India for a three-day visit from November 26-28. Earlier in the day, Lecornu held fourth India-France annual defence dialogue with Defence Minister Rajnath Singh in New Delhi. During the meeting, the two leaders discussed bilateral, regional, defence and defence industrial cooperation issues, according to a press release issued by Ministry of Defence. Singh and Lecornu reviewed the defence cooperation and discussed ways to strengthen maritime cooperation.

The two leaders reviewed the ongoing military-to-military cooperation which has increased substantially in recent years. They discussed means to strengthen maritime cooperation and increase the scope and complexity of bilateral exercises. They noted with satisfaction that India and France successfully conducted their bilateral Air Exercise ‘Garuda’ in Jodhpur. During the dialogue, Rajnath Singh and Sebastien Lecornu discussed defence industrial cooperation with a focus on ‘Make in India’. The two leaders spoke about future cooperation and potential co-production opportunities. Singh and Lecornu agreed that the technical groups should meet early next year and take forward the key cooperation issues. Rajnath Singh and Sebastien Lecornu recognised their convergences on a number of strategic and defence issues. Both sides shared the commitment to work together on enhancing cooperation in bilateral, regional and multilateral fora, with a focus on the Indo-Pacific region.

Sebastien Lecornu also held a meeting with National Security Advisor Ajit Doval. Emmanuel Lenain, French ambassador to India, in a tweet, said, “At their meeting today in #Delhi, French

Minister for the Armed Forces @SebLecornu & India's NSA Ajit Doval shared close assessments of major global and regional security issues, and agreed to intensify France India #counterterrorism cooperation." Earlier in the day, French Minister for the Armed Forces Sebastien Lecornu was accorded the Guard of Honour in New Delhi after he was received by his Indian counterpart in the national capital on Monday. Lecornu also laid a wreath at National War Memorial, as he began the Delhi leg of his visit. On Sunday, the French minister of armed forces visited India's indigenous aircraft carrier INS Vikrant in Kochi. According to the Ministry of Defence press release, "The French Minister of Armed Forces stated that he was highly impressed with INS Vikrant. France is one of India's most trusted strategic partners and both countries look forward to celebrating 25 years of their strategic partnership in 2023."

<https://theprint.in/world/jaishankar-meets-french-armed-forces-minister-lecornu-discusses-contemporary-strategic-developments/1240015/>



Mon, 28 Nov 2022

Australian Army is Conducting Training Ops with India in Rajasthan

Armies of India and Australia will kick-start a bilateral training exercise in Rajasthan on Monday. According to the defence ministry, the 'Austra Hind 22' exercise -- to be conducted till December 11 -- will be a yearly event that will be conducted alternatively in both countries. The 2022 edition of the exercise is taking place at the Mahajan Field Firing Ranges from November 28 to December 11. Soldiers from the 13th Brigade of the Australian Army's 2nd Division are participating in 'Austra Hind 22'. Troops from the Dogra Regiment are representing the Indian Army. Besides building positive military relations, the exercise is aimed at imbibing each other's best practices and promoting the ability to operate together while undertaking multi-domain operations in semi-desert terrain under a United Nations peacekeeping mandate.

The two armies are expected to share best practices in techniques, tactics and procedures to carry out tactical operations at the company and platoon levels to neutralize hostile threats. A statement from the Ministry of Defence said that 'casualty evacuation and planning logistics at battalion and company level, training on new generation equipment and specialist weapons, surveillance and communication equipment are also planned'. Personnel from both sides will engage in tasks like joint tactical drills, sharing special arms skills and raiding a hostile target. Besides promoting understanding and interoperability between the two armies, the joint exercise will further help strengthen ties between the two countries.

<https://newsable.asianetnews.com/video/india-defence/australian-army-is-conducting-training-ops-with-india-in-rajasthan-rm1u03>

Why India-Australia Defence Exercise is Another Warning Shot Across China's Bows

The India-Australia bilateral training exercise entitled 'Austra Hind 22' kicked off today in Rajasthan. The exercise between the two armies, which will continue till 11 December, will be a yearly event that will occur in India and Australia alternatively. "Bilateral training exercise 'AUSTRA HIND 22' between contingents of the Indian Army and the Australian Army is scheduled to take place at Mahajan Field Firing Ranges (Rajasthan) from 28 November to 11 December, 2022. This is the first exercise in the series of AUSTRA HIND with participation of all arms and services contingent from both armies," the ministry had said in a statement on Sunday.

Let's take a closer look at this exercise and why it is a warning to China:

What do we know about the exercise?

The Australian Army contingent comprises soldiers from the 13th Brigade of the 2nd Division, while the Indian Army is being represented by troops from the Dogra Regiment. The aim of the exercise is to build positive military relations, imbibe each other's best practices and promote the ability to operate together while undertaking multi-domain operations in semi-desert terrain under a UN peace enforcement mandate.

This joint exercise will enable the two armies to share best practices in tactics, techniques and procedures for conducting tactical operations at company and platoon level for neutralising hostile threats. "Training on new generation equipment and specialist weapons, including snipers, surveillance and communication equipment to achieve a high degree of situational awareness apart from casualty management, casualty evacuation and planning logistics at battalion/company level are also planned," the defence ministry added. During the exercise, participants will engage in a variety of tasks ranging from joint planning, joint tactical drills, sharing basics of special arms skills and raiding a hostile target. The joint exercise, besides promoting understanding and interoperability between the two armies, will further help in strengthening ties between India and Australia, the ministry further said.

Why is this a warning to China?

The exercise comes amid India's lingering border stand-off with China in Ladakh and tensions on the rise between Beijing and Canberra. New Delhi is conducting a series of military drills with friendly nations including members of the QUAD – the grouping seen as a counter-balance to the rise of Beijing in the Indo-Pacific. India earlier in November deployed its multi-role stealth frigate INS Shivalik, anti-submarine corvette INS Kamorta and the long-range maritime patrol aircraft P-8I during the Exercise Malabar, as per Outlook.

The Australian Navy was part of the Malabar naval exercise hosted by India in November 2020 as well as last year. As per Eurasian Times, Admiral Hari Kumar speaking during the Naval Commanders' conference said India's credibility at home, in the region and across the world was underscored after the maiden concurrent deployment of Indian Navy ships across six continents

on 15 August. In the last six months, operational deployments have also emphasised India's credibility, with a footprint covering all major oceans of the world, he added. "All this is said to be India's signal that it will challenge China's hegemonistic activities in the Indo-Pacific and the IOR in particular. And in this, India is not alone. India has solid support from Australia, Japan, and the United States in maintaining a rules-based order in the Indo-Pacific," the Eurasian Times article concluded.

India is also slated to conduct a battalion-level exercise with the US Army in Uttarakhand's Auli – only 100 kilometres from the line of actual control (LAC) – allowing the Indian army to rehearse for high-altitude combat. Joint exercises with three members of the Association of South East Asian Nations (ASEAN) are also in the offing, as per *Outlook*. Meanwhile, Australia is locked in a spat with its largest trading partner China in the wake of the COVID-19 pandemic – with no indication that things are set to ease – even as it deepens ties with India.

Australia deepens military, economic ties with India

Australia in September held exercise 'Pitch Black' – a mega air combat exercise that witnesses the participation of around 100 aircraft and 2,500 military personnel from 17 countries including India. The Royal Australian Air Force (RAAF) considers "Pitch Black" as its "capstone" international engagement activity with the air forces of strategic partners and allies. The Indian Air Force tweeted a video of an Australian aircraft providing midair refuelling for two Russian-designed Indian Air Force Sukhoi Su-30MK fighters which participated in the exercise. Defence and security ties between India and Australia have been on an upswing in the last few years. In June 2020, the two countries elevated their ties to a comprehensive strategic partnership and signed a landmark deal for reciprocal access to military bases for logistics support.

As per the Sydney Morning Herald, when Anthony Albanese met Xi Jinping the handshake was merely 'polite' and the language 'cautious'. Lisa Singh, chief executive of the Australia India Institute, which promotes research and understanding about the two nations, told the newspaper 2022 has been a "watershed moment" in India-Australia ties. "This has been the most impactful year for the relationship that I've seen," she said.

For good reason.

While India's goods exports to Australia stood at \$8.3 billion and imports from the country aggregated to \$16.75 billion in 2021-22, that figure is expected to witness a massive increase after the Australian Parliament in November approved the India-Australia Economic Cooperation and Trade Agreement (ECTA).

The agreement, signed in April, paved the way for the rollout of the pact on a mutually agreed date—a move which would help in almost doubling the two-way commerce to \$45-50 billion in about five years. Meanwhile, as per The Print, Indian officials hope ECTA will give rise to a larger pact — the Comprehensive Economic Cooperation Agreement (CECA). Top official sources told The Print New Delhi is hopeful it will now be able to tap into Australia's vast and rich mineral resources enabling it to reduce dependence on China. Sources also said India will be able to now import coking coal and uranium from Australia for zero duty even as New Delhi will seek to enhance services trade between both the "complimentary economies".

ECTA, which was signed on 2 April, would provide duty-free access to Indian exporters of over 6,000 broad sectors including textiles, leather, furniture, jewellery and machinery in the Australian market. Labour-intensive sectors which would gain immensely include textiles and

apparel, few agricultural and fish products, leather, footwear, furniture, sports goods, jewellery, machinery, and electrical goods. Commerce and Industry Minister Piyush Goyal said the agreement is likely to push the bilateral trade to USD 45-50 billion in the next five-six years from the present \$31 billion. “Australia will open 100 per cent of their lines (products) with no restriction on even quota. This is the first time Australia has done for any country...We see job opportunities when Australian investment comes here,” Goyal told reporters.

Soon after getting approval from the Executive Council of Australia and assent from the Indian President, both the countries will fix a date and implement the pact. Though the minister did not commit to any date, official sources said the agreement could be implemented from 1 January next year.

Our Free Trade Agreement with India has passed through parliament,” Australian Prime Minister Anthony Albanese said in a tweet. Replying to the tweet, Prime Minister Narendra Modi tweeted, “Thank you PM @AlboMP! The entry into force of IndAus ECTA will be greatly welcomed by our business communities, and will further strengthen the India-Australia Comprehensive Strategic Partnership.” Goyal said there will be harmonisation of codes and customs regime on both sides so that “we can enter into force at an early date”.

While Albanese said that meeting, the first between an Australian prime minister and the Chinese president for six years, was an “important step towards the stabilisation of the Australia-China relationship”, it stood in stark contrast to his meet with Prime Minister Narendra Modi where the body language was described as ‘effusive’. “So wonderful to see my friend @narendramodi and to celebrate the rich connections between our two countries and our people,” Albanese later tweeted.

The Mutual Logistics Support Agreement (MLSA) allows the militaries of the two countries to use each other’s bases for repair and replenishment of supplies, besides facilitating scaling up of overall defence cooperation. Australian trade minister said in a statement that the ECTA will enter into force 30 days (or another mutually agreed time) after the respective parties have confirmed in writing that they have completed their domestic requirements. “The Albanese government has worked hard to expeditiously advance all processes necessary” to ensure that Australia is in a position to implement the free trade agreements before the end of 2022, the statement said. Australia’s Minister for Trade and Tourism Don Farrell said they will work closely with the Indian government to implement the trade agreement “as soon as possible”.

Under the pact, Australia is offering zero-duty access to India for about 96.4 per cent of exports (by value) from day one. This covers many products that currently attract 4-5 per cent customs duty in Australia. The Australian Parliament has also approved an amendment to the the Double Taxation Avoidance Agreement (DTAA), a move which would help the Indian IT sector in operating in that market. It would stop the taxation on the offshore income of Indian firms providing technical support in Australia. Goyal said Indian IT sector is the “biggest gainer” of that amendment. “If the tax will go, they can see a quantum jump in their business with Australia,” he added. The move, as per estimates, may lead to savings of about USD 200 million each year for over 100 Indian IT firms operating in Australia.

About beginning of talks for expanding the scope of the India-Australia Economic Cooperation and Trade Agreement, Additional Director General of Foreign Trade (DGFT) Tapan Mazumder said it may start from January next year. Issues which can figure in that meeting include government procurement and digital trade. Goyal also said for the “first time”, India has got

visas for Indian chefs and yoga instructors and also got a commitment that every child going to study in Australia will get an opportunity to work there depending on the level of education. This is the first agreement with a developed country after a decade, he added. He also said the pact will help farmers growing grapes for making wine to explore more business opportunities in Australia.

“Today there are 6,000 grape farmers (in India) who grow grapes for wine purpose...wine industry has welcomed it wholeheartedly. It will help attract investments, new farmers can also come in the sector,” he added. Commenting on the move, Federation of Indian Export Organisations (FIEO) Director General Ajay Sahai said the agreement has opened vistas of opportunities for domestic exports as over 98 per cent of the tariff lines will have tariff advantage from day one. “We will also get duty-free imports of critical raw material like coal, alumina, manganese, copper, nickel, wool, hides and skin. It will impart further competitiveness to our manufacturing and exports,” Sahai added.

The Confederation of Indian Alcoholic Beverage Companies (CIABC) Director General Vinod Giri said the pact will take the trade ties between the two nations to newer heights. “The FTA is a win-win for both. On one hand it would open up the Indian market for quality Australian wines, and on the other it would help Indian wine industry evolve further benefiting from the expertise and investment from their Australian counterparts,” Giri said.

<https://www.firstpost.com/explainers/explained-why-india-australia-defence-exercise-is-another-warning-shot-across-chinas-bows-11710571.html>



पत्र सूचना कार्यालय
भारत सरकार

रक्षा मंत्रालय

सोमवार, 28 नवंबर 2022

भारत-मलेशिया संयुक्त सैन्य अभ्यास हरिमऊ शक्ति-2022 मलेशिया के क्लांग स्थित पुलाई में शुरू

भारत-मलेशिया संयुक्त सैन्य अभ्यास ‘हरिमऊ शक्ति-2022’ आज 28 नवम्बर को मलेशिया के क्लांग स्थित पुलाई में शुरू हुआ जो 12 दिसम्बर, 2022 तक चलेगा। हरिमऊ शक्ति अभ्यास भारत और मलेशियाई सेना के बीच किया जाने वाला वार्षिक प्रशिक्षण अभ्यास है और यह 2012 से आयोजित किया जा रहा है। इस वर्ष इस अभ्यास में भारतीय सेना की गढ़वाल राइफल्स रेजिमेंट और मलेशियाई सेना की रॉयल मलय रेजिमेन्ट भाग ले रही हैं और वह इस दौरान अपने विभिन्न अभियानों से प्राप्त अनुभवों को एक दूसरे के साथ साझा करेंगी ताकि दुर्गम वन क्षेत्रों में किए जाने वाले विभिन्न अभियानों की योजना बनाने और उन्हें पूरा करने के संबंध में पारस्परिक समन्वय को बढ़ाया जा सके। इस अभ्यास के दौरान

वन क्षेत्रों में पारम्परिक अभियानों के लिए बटालियन स्तर की कमांड प्लानिंग एक्सरसाइज़ (सीपीएक्स) और कंपनी स्तर की फील्ड ट्रेनिंग एक्सरसाइज़ (एफटीएक्स) की जाएगी।

संयुक्त अभ्यास कार्यक्रम में बटालियन स्तर पर रसद की योजना बनाने के अलावा एक संयुक्त कमांड पोस्ट, संयुक्त निगरानी केंद्र की स्थापना, हवाई संपत्ति विशेषज्ञता, तकनीकी प्रदर्शन, दुर्घटना प्रबंधन और हताहतों को निकालना शामिल है। संयुक्त फील्ड ट्रेनिंग एक्सरसाइज़, संयुक्त युद्ध चर्चा और संयुक्त प्रदर्शन दो दिवसीय अभ्यास के साथ समाप्त होंगे, जहां सामरिक कौशल बढ़ाने, बलों के बीच अंतर-संचालन क्षमता बढ़ाने और सेना से सेना के संबंधों को बढ़ावा देने पर विशेष जोर दिया जाएगा। "हरिमऊ शक्ति अभ्यास" भारतीय सेना और मलेशियाई सेना के बीच रक्षा सहयोग बढ़ाएगा और इस तरह दोनों देशों के बीच द्विपक्षीय संबंधों को और बढ़ावा देगा।

<https://pib.gov.in/PressReleasePage.aspx?PRID=1879528>

THE ECONOMIC TIMES

Mon, 28 Nov 2022

India-Malaysia Joint Military Exercise 'Harimau Shakti-2022' Begins in Kluang

A joint military exercise between troops of India and Malaysia began on Monday that aims to enhance inter-operability in planning and execution of various operations in jungle terrain, the defence ministry here said. The India-Malaysia joint military exercise, 'Harimau Shakti-2022', commenced at Pulai, Kluang, Malaysia and will culminate on December 12. The exercise is an annual training event between the Indian Army and the Malaysian Army, being conducted since 2012, it said. "Combat-experienced troops of the Garhwal Rifles Regiment of the Indian Army and the Royal Malay Regiment of the Malaysian Army are participating in the exercise this year to share experiences gained during operations in order to enhance inter-operability in planning and execution of various operations in jungle terrain," the ministry said in a statement.

The scope of this exercise involves a command planning exercise at the battalion level and company-level field training exercise on sub-conventional operations in jungle terrain, it said. The joint exercise schedule includes the establishment of a joint command post, joint surveillance centre, sharing expertise in employment of aerial assets, technical demonstrations, casualty management and casualty evacuation apart from planning logistics at the battalion level, the statement said. Joint field training exercises, joint combat discussions and joint demonstrations will culminate with a two-day validation exercise, where special emphasis will be on enhancing tactical skills and enhancing inter-operability between the forces and to promote army-to-army relations, the ministry said. Exercise Harimau Shakti will enhance the level of defence cooperation between the Indian Army and the Malaysian Army, which in turn will further foster the bilateral relations between the two nations, it added.

<https://economictimes.indiatimes.com/news/defence/what-led-to-appointment-of-asim-munir-as-paks-new-army-chief/articleshow/95829966.cms>

अमर उजाला

सोमवार, 28 नवंबर 2022

बॉर्डर पर सेना को हथियारों की सप्लाई में होगी देरी! आयुध कारखानों के निगमीकरण पर लगा सवाल

41 आयुध निर्माणियों को सात निगमों में विभाजित करने के दौरान, सभी निर्माणियां 17,000 करोड़ रुपये तक का उत्पादन लक्ष्य हासिल कर रही थीं। तब रक्षा मंत्रालय का दावा था कि निगमीकरण के बाद ये कारखाने अगले 5 वर्ष में 35,000 करोड़ रुपये का उत्पादन मूल्य प्राप्त करेंगे। केंद्र सरकार द्वारा गत वर्ष 220 साल पुराने 41 आयुध कारखानों को 7 निगमों में तब्दील कर दिया गया था। इन्हीं आयुध कारखानों के कर्मचारियों के मान्यता प्राप्त संगठन, एआईडीईएफ, बीपीएमएस और सीडीआरए ने निगमों के कामकाज को लेकर एक विशेष रिपोर्ट तैयार की है। एआईडीईएफ महासचिव सी. श्रीकुमार ने बताया कि बॉर्डर पर तैयार इंडियन आर्मी को टैंक, वर्दी एवं छोटे हथियारों की सप्लाई में देरी हो सकती है।

आयुध कारखानों के निगमीकरण पर प्रश्नचिन्ह लग गया है। दूसरे शब्दों में कहें तो भारतीय सेना को हथियार व दूसरे उपकरण मुहैया कराने के लिए जिम्मेदार ये निगम, राष्ट्र की सुरक्षा की राह में बाधा बन सकते हैं। इसके खतरनाक परिणाम सामने आ रहे हैं। राष्ट्रीय सुरक्षा के जोखिम के अलावा ये निगम, सरकारी खजाने पर भारी पड़ रहे हैं। रक्षा क्षेत्र के तीनों मान्यता प्राप्त कर्मचारी संगठनों ने रक्षा मंत्री राजनाथ सिंह को पत्र लिखकर, आयुध कारखानों के निगमीकरण के फैसले पर दोबारा से विचार कर उसे वापस लेने की मांग की है।

एआईडीईएफ महासचिव सी. श्रीकुमार ने कहा- भारत सरकार ने

आक्रामक पड़ोसियों से राष्ट्र की सुरक्षा के चलते अपने सशस्त्र बलों को हथियारों, गोला-बारूद और ड्रूप कम्फर्ट आइटम सहित अन्य उपकरणों से लैस करने के लिए 41 आयुध कारखानों का निर्माण किया था। इनके आधुनिकीकरण पर भारी धनराशि खर्च हुई है। इन कारखानों में तकनीकी रूप से सक्षम और समर्पित जनशक्ति, जिन्होंने वर्षों से जटिल हथियार व अन्य उपकरण तैयार करने में महारत हासिल की है, वह भी राष्ट्रीय संपत्ति का हिस्सा है। अब एक सोची समझी के साजिश के तहत इन कारखानों का अस्तित्व खत्म करने का प्रयास किया जा रहा है। रक्षा मंत्रालय और सशस्त्र सेना मुख्यालय में बैठे लोग, जानबूझकर आयुध कारखानों को पर्याप्त वर्क लोड नहीं दे रहे हैं। केंद्र सरकार ने कहा था कि आयुध कारखानों के निगमीकरण से इनकी दक्षता, स्वायत्तता और जवाबदेही में सुधार होगा। कॉर्पोरेटाइजेशन के बाद यहां कोई सुधार नहीं दिख रहा है। स्थिति दिन-ब-दिन खराब होती जा रही है। कर्मियों के तीनों संगठन, इस संबंध में तथ्यों और आंकड़ों के साथ, केंद्र सरकार से चर्चा करने को तैयार हैं।

कैसे पूरा होगा 5 वर्ष में 35,000 करोड़ रुपये का टारगेट

41 आयुध निर्माणियों को सात निगमों में विभाजित करने के दौरान, सभी निर्माणियां 17,000 करोड़ रुपये तक का उत्पादन लक्ष्य हासिल कर रही थीं। तब रक्षा मंत्रालय का दावा था कि निगमीकरण के बाद ये कारखाने अगले 5 वर्ष में 35,000 करोड़ रुपये का उत्पादन मूल्य प्राप्त करेंगे। विडंबना यह है कि सरकार ने इन निगमों को यह लक्ष्य हासिल करने के लिए काम का बोझ देने की बजाए इन्हें बर्बाद करने की कोशिश शुरू कर दी। एआईडीईएफ महासचिव के मुताबिक, 2023-24 में 50 प्रतिशत कारखानों में काम ही नहीं है। सरकार, आउटसोर्सिंग पॉलिसी पर चल रही है। टैंक, धनुष गन, छोटे हथियार, गोला बारूद एवं ड्रेस की सप्लाई और इनकी गुणवत्ता पर निगमीकरण का असर दिखने लगा है। बतौर श्रीकुमार, वाइस आर्मी चीफ ने इस बाबत रक्षा मंत्री को पत्र लिखा था। उसमें निगमों का प्रदर्शन ठीक नहीं बताया गया है। सेना को समय पर माल की सप्लाई, एक चुनौती बनती जा रही है। सीएमडी, ट्रेड यूनियनों से बात नहीं कर रहा है। इन सब बातों के चलते बॉर्डर पर सेना की तैयारी प्रभावित हो सकती है।

जिन अफसरों ने निगमीकरण का खाका तैयार किया, वे चले गए

पहले टैंक एवं दूसरे हथियारों का उत्पादन, तैयारी एवं सप्लाई के मामले में आयुध कारखाने एक दूसरे की मदद करते थे। इसके चलते आर्मी को उसकी जरूरत की सामग्री समय पर मिल जाती थी। अब सात निगम बना दिए गए हैं। ये एक दूसरे को मदद नहीं देते। निगमीकरण का खाका तैयार करने वाले ज्यादातर अफसर अब, रक्षा उत्पादन से हट गए हैं। वे अपने कैडर में वापस चले गए हैं। कुछ अधिकारी प्राइवेट क्षेत्र में आ गए तो कोई विदेश चला गया। इनमें संजय जाजू, पुनीत अग्रवाल, राजकुमार और संदीप जैन आदि शामिल हैं। इन सभी लोगों की आयुध कारखानों को निगम में तबदील कराने में अहम भूमिका थी। अब ये लोग, डिफेंस प्रोडक्शन से दूर चले गए हैं। ऐसे में अगर कुछ गलत होता है कि किसकी जिम्मेदारी होगी। सीएमडी इस तरह का व्यवहार कर रहे हैं जैसे कि वे डीपीएसयू के सर्वोच्च अधिकारी हों। टीसीएल के तहत 4 आयुध निर्माणियों को खत्म करने की तैयारी हो चुकी है। आर्मी उपकरणों की सप्लाई का टेंडर, निजी संस्थानों को देने का निर्णय लिया जा रहा है। टीसीएल ग्रुप ऑफ फैक्ट्रीज को टेंडर प्रक्रिया में जानबूझकर भाग लेने से रोका गया है। केंद्र सरकार को राष्ट्रीय सुरक्षा के हित में अपने फैसले पर पुनर्विचार करना चाहिए।

अस्तित्व को लेकर अनिश्चितता का माहौल है

2023-2024 में टीसीएल के तहत लगभग सभी आयुध निर्माणियों के पास कोई वर्कलोड नहीं है। बाकी के 6 निगमों (MIL, AVNL, AWEIL, IOL, GIL और YIL) के तहत संचालित हो रही निर्माणियों के संबंध में आने वाले वर्षों में कार्यभार के बारे में अनिश्चितता है। इनके अस्तित्व को लेकर रक्षा मंत्रालय का कोई सकारात्मक दृष्टिकोण नहीं है। जीसीएफ, जबलपुर जैसे आयुध निर्माणी में इस समय पर्याप्त कार्यभार के बावजूद अधिकांश नौकरियां आउटसोर्स की जा रही हैं। इस वजह से लक्ष्य को पूरा करने में देरी होती है।

बाहर से खरीदे गए कई पुर्जों पर आयुध निर्माणियों के कर्मचारियों को दोबारा से काम करना पड़ता है। इससे जनशक्ति और सार्वजनिक धन की बर्बादी होती है। जब निर्माणियों में संयंत्र और जनशक्ति आसानी से उपलब्ध होती है, तो इसके बावजूद निगम, बड़े पैमाने पर आउटसोर्सिंग का सहारा क्यों ले रहे हैं। नतीजा, स्थापित क्षमता का कम उपयोग होने के कारण उत्पादन की लागत बढ़ा जाती है। फाइलों में एवीएनएल व एडब्ल्यूईआईएल आदि के पास कार्यभार उपलब्ध है, लेकिन भौतिक रूप से सामग्री और घटक आदि प्रदान करने में अड़चन आ रही है। बड़े पैमाने पर सेवानिवृत्ति के कारण जनशक्ति की भारी कमी हो गई है। इससे उत्पादन, उत्पादकता और लक्ष्य प्रभावित होता है।

सेवानिवृत्त अधिकारियों को क्यों मिल रहा है दोबारा मौका

एमआईएल जैसे कुछ आयुध निर्माणी निगमों में उत्पादन की लागत को और ज्यादा बढ़ाने के लिए सेवानिवृत्त अधिकारियों को पुनर्जगार दिया जा रहा है। आयुध निर्माणियों के निगमीकरण से पहले रक्षा मंत्रालय आयुध निर्माणियों को दोष देता था कि यहां पर कार्य संस्कृति बहुत खराब है। यदि ऐसा है तो तथाकथित खराब कार्य संस्कृति के लिए जिम्मेदार अधिकारियों को आयुध निर्माणियों में कैसे पुनर्नियुक्त किया जा रहा है। इसकी जांच की जरूरत है।

कर्मचारी संगठनों के अनुसार, इन निगमों द्वारा लाभ का दावा खोखला और सच्चाई से परे है। इसमें सच सामने लाने के लिए एक स्वतंत्र और कैग ऑडिट की भी जरूरत है। एक साल के भीतर आयुध कारखानों में दुर्घटनाएं बढ़ी हैं। विशेष रूप से एमआईएल में नियमित दुर्घटनाएं हो रही हैं। इनमें कॉर्डॉइट फैक्ट्री अरुवनकाडु और ऑर्डनेंस फैक्ट्री खमरिया शामिल हैं। 29 सितंबर को खमरिया में हुए भीषण विस्फोट में एक मजदूर की मौत हो गई और 5 मजदूर गंभीर रूप से घायल हो गए। 24 नवंबर को कॉर्डॉइट फैक्ट्री अरुवंकडू में हुई दुर्घटना में 2 डीएससी जवान विस्फोट के कारण गंभीर रूप से घायल हो गए। निगमीकरण के बाद कर्मचारियों का मनोबल और प्रेरणा बहुत बुरी तरह गिर गई है। सभी तथ्यात्मक स्थिति को ध्यान में रखते हुए आयुध निर्माणियों के 76 हजार रक्षा असैनिक कर्मचारी, निगमीकरण के फैसले पर पुनर्विचार करने और इसे वापस लेने की अपील करते हैं।

<https://www.amarujala.com/amp/india-news/defense-factory-delay-in-arms-supply-to-army-on-border-question-raised-on-corporatization-of-ordnance-factory>



Mon, 28 Nov 2022

Canada to Boost Defence, Cyber Security in Indo-Pacific Policy, Focus on 'Disruptive' China

Canada launched its long-awaited Indo-Pacific strategy on Sunday, outlining spending of C\$2.3 billion (\$1.7 billion) to boost military and cyber security in the region and vowed to deal with a "disruptive" China while working with it on climate change and trade. The plan, detailed in a 26-page document, said Canada would tighten foreign investment rules to protect intellectual property and prevent Chinese state-owned enterprises from snapping up critical mineral supplies. Canada seeks to deepen ties with a fast-growing Indo-Pacific region of 40 countries accounting for almost C\$50 trillion in economic activity. But the focus is on China, which is mentioned more than 50 times, at a moment when two-way ties are frosty.

Four cabinet ministers at a news conference in Vancouver took turns detailing the new plan, saying the strategy was crucial for Canada's national security and climate as well as its economic goals. "We will engage in diplomacy because we think diplomacy is a strength, at the same time we'll be firm and that's why we have now a very transparent plan to engage with China," said Foreign Minister Melanie Joly. In Beijing, a foreign ministry spokesman said Canada's new strategy was "full of ideological bias, exaggerating and speculating the so-called China threat, and making groundless accusations and attacks against China".

China is strongly dissatisfied with this, resolutely opposes it and has already made stern representations to the Canadian side," the spokesman, Zhao Lijian, added. Prime Minister Justin Trudeau's Liberal government wants to diversify trade and economic ties that are overwhelmingly reliant on the United States. Official data for September show two-way trade with China made up less than 7% of the total, versus 68% for the United States. Canada's outreach to Asian allies also comes as Washington has shown signs of becoming increasingly leery of free trade in recent years. The document underscored Canada's dilemma in forging ties with China, which offers significant opportunities for Canadian exporters, even as Beijing looks to shape the international order into a more "permissive environment for interests and values that increasingly depart from ours," it added.

Challenge China

Yet, the document said cooperation with the world's second-biggest economy was necessary to address some of the "world's existential pressures," including climate change, global health and nuclear proliferation. "China is an increasingly disruptive global power," it said. "Our approach is shaped by a realistic and clear-eyed assessment of today's China. In areas of profound disagreement, we will challenge China." Tension with China soared in late 2018 after Canadian police detained a Huawei Technologies executive and Beijing then arrested two Canadians on spying charges. All three were released last year, but relations remain sour.

This month, Canada ordered three Chinese companies to divest their investments in Canadian critical minerals, citing national security. The document, in a section mentioning China, said Ottawa would review and update legislation enabling it to act "decisively when investments from

state-owned enterprises and other foreign entities threaten our national security, including our critical minerals supply chains." In a statement, Perrin Beatty, the president of the Canadian Chamber of Commerce, said, "Because the region is both large and diverse, one size definitely does not fit all." Canada's priorities would need to be very nuanced both between and within countries, he added.

The document said Canada would boost its naval presence in the region and "increase our military engagement and intelligence capacity as a means of mitigating coercive behavior and threats to regional security." That would include annual deployment of three frigates, from two now, as well as participation of Canadian aviators and soldiers in regional military exercises, Defense Minister Anita Anand said at a separate news conference. Canada belongs to the Group of Seven major industrialized nations, which wants significant measures in response to North Korean missile launches. The document said Ottawa was engaging in the region with partners such as the United States and the European Union. Canada needed to keep talking to nations it had fundamental disagreements with, it said, but did not name them.

<https://www.reuters.com/world/americas/canada-launches-new-indo-pacific-strategy-focus-disruptive-china-2022-11-27/>

THE ECONOMIC TIMES

Mon, 28 Nov 2022

100-Mile Strike Weapon Weighed for Ukraine as Arms Makers Wrestle with Demand- Sources

The Pentagon is considering a Boeing proposal to supply Ukraine with cheap, small precision bombs fitted onto abundantly available rockets, allowing Kyiv to strike far behind Russian lines as the West struggles to meet demand for more arms. U.S. and allied military inventories are shrinking, and Ukraine faces an increasing need for more sophisticated weapons as the war drags on. Boeing's proposed system, dubbed Ground-Launched Small Diameter Bomb (GLSDB), is one of about a half-dozen plans for getting new munitions into production for Ukraine and America's Eastern European allies, industry sources said.

GLSDB could be delivered as early as spring 2023, according to a document reviewed by Reuters and three people familiar with the plan. It combines the GBU-39 Small Diameter Bomb (SDB) with the M26 rocket motor, both of which are common in U.S. inventories. Doug Bush, the U.S. Army's chief weapons buyer, told reporters at the Pentagon last week the Army was also looking at accelerating production of 155 millimeter artillery shells - currently only manufactured at government facilities - by allowing defense contractors to build them. The invasion of Ukraine drove up demand for American-made weapons and ammunition, while U.S. allies in Eastern Europe are "putting a lot of orders," in for a range of arms as they supply Ukraine, Bush added.

"It's about getting quantity at a cheap cost," said Tom Karako, a weapons and security expert at the Center for Strategic and International Studies. He said falling U.S. inventories help explain the rush to get more arms now, saying stockpiles are "getting low relative to the levels we like to keep on hand and certainly to the levels we're going to need to deter a China conflict." Karako also noted that the U.S. exit from Afghanistan left lots of air-dropped bombs available. They

cannot be easily used with Ukrainian aircraft, but "in today's context we should be looking for innovative ways to convert them to standoff capability."

Although a handful of GLSDB units have already been made, there are many logistical obstacles to formal procurement. The Boeing plan requires a price discovery waiver, exempting the contractor from an in-depth review that ensures the Pentagon is getting the best deal possible. Any arrangement would also require at least six suppliers to expedite shipments of their parts and services to produce the weapon quickly. A Boeing spokesperson declined to comment. Pentagon spokesman Lt. Cmdr. Tim Gorman declined to comment on providing any "specific capability" to Ukraine, but said the U.S. and its allies "identify and consider the most appropriate systems" that would help Kyiv. Although the United States has rebuffed requests for the 185-mile (297km) range ATACMS missile, the GLSDB's 94-mile (150km) range would allow Ukraine to hit valuable military targets that have been out of reach and help it continue pressing its counterattacks by disrupting Russian rear areas.

GLSDB is made jointly by SAAB AB and Boeing Co and has been in development since 2019, well before the invasion, which Russia calls a "special operation". In October, SAAB chief executive Micael Johansson said of the GLSDB: "We are imminently shortly expecting contracts on that." According to the document - a Boeing proposal to U.S. European Command (EUCOM), which is overseeing weapons headed to Ukraine - the main components of the GLSDB would come from current U.S. stores. The M26 rocket motor is relatively abundant, and the GBU-39 costs about \$40,000 each, making the completed GLSDB inexpensive and its main components readily available. Although arms manufacturers are struggling with demand, those factors make it possible to yield weapons by early 2023, albeit at a low rate of production.

GLSDB is GPS-guided, can defeat some electronic jamming, is usable in all weather conditions, and can be used against armored vehicles, according to SAAB's website. The GBU-39 - which would function as the GLSDB's warhead - has small, folding wings that allow it to glide more than 100km if dropped from an aircraft and targets as small as 3 feet in diameter.

Industry Motivation

At a production plant in rural Arkansas, Lockheed Martin is redoubling efforts to meet surging demand for mobile rocket launchers known as HIMARS, which have been successful in hitting Russian supply lines, command posts and even individual tanks. The No. 1 U.S. defense contractor is working through supply chain issues and labor shortages to double production to 96 launchers a year. Lockheed Martin has posted more than 15 jobs related to the production of HIMARS, including supply chain quality engineers, purchasing analysts, and testing engineers, according to its website.

"We've made investments in terms of infrastructure in the factory where we build HIMARS," said Becky Withrow, a sales leader at Lockheed Martin's missile unit. Despite the increase in demand, Lockheed Martin's chief financial officer told Reuters in July that he did not expect significant Ukraine-induced revenue until 2024 or beyond. The CFO of Raytheon Corp, another major U.S. defense contractor, echoed that timeline in an interview with Reuters this summer. HIMARS fires Guided Multiple Rocket Launch System missiles (GMLRS), which are GPS-guided rounds with 200-pound (90kg) warheads.

Lockheed Martin make about 4,600 of the missiles per year; more than 5,000 have been sent to Ukraine so far, according to a Reuters analysis. The U.S. has not disclosed how many GMLRS

rounds have been supplied to Ukraine. Repurposing weapons for regular military use is not a new tactic. The NASAMS anti-aircraft system, developed by Kongsberg Defence and Aerospace and Raytheon, uses AIM-120 missiles - originally meant to be fired from fighter jets at other aircraft. Another weapon, the Joint-Direct Attack Munition (JDAM), ubiquitous in U.S. inventories, is a standard unguided bomb that has been fitted with fins and a GPS guidance system.

<https://economictimes.indiatimes.com/news/defence/100-mile-strike-weapon-weighed-for-ukraine-as-arms-makers-wrestle-with-demand-sources/articleshow/95818946.cms>



Mon, 28 Nov 2022

NATO's Flagship Cyber Defence Exercise Kicks off in Estonia

Cyber Coalition 22, one of the world's largest cyber defence exercises, started on Monday (28 November 2022), bringing together some 1,000 cyber defenders from 26 Allies, as well as Finland and Sweden, Georgia, Ireland, Japan, Switzerland, the European Union, and participants from industry and academia. Over the course of five days, participants will train to tackle real-life cyber challenges such as cyber-attacks on power grids, programmes and NATO and Allied assets while in operations – boosting their ability to defend networks and operate together in cyberspace.

Cyber Coalition 22 provides a unique platform for collaboration, experimentation, sharing of experience, and developing best practices. By working together, individual participant – as well as their organisations, nations and NATO – enhance their cyber resilience. Cyber Coalition is a long-planned NATO exercise, and has taken place annually since 2008. It takes place in Tallinn, Estonia, as well as remotely, from national capitals and other locations. Cyber defence is a core task of NATO's collective defence. At the Madrid Summit in June 2022, NATO Allies committed to further their efforts to enhance their cyber defence capabilities, as well as their cooperation with the industry and other key stakeholders such as the EU.

https://www.nato.int/cps/en/natohq/news_209405.htm

ICHR, ISRO to Trace India's Roots as 'Vishwa Guru' of Science, Tech

The Indian Council of Historical Research (ICHR) and the Indian Space Research Organization (Isro) have decided to work together to trace the history of India's contribution in the field of science and technology using evidence from ancient scriptures, with the objective of establishing India as the "vishwa guru" (global leader) in several scientific domains, officials said on Monday. ICHR and Isro will shortly sign a Memorandum of Understanding (MoU) to take up the project titled "History of Indian Science and Technology". The project, which will cost ₹1.5 crore, will see the production of six volumes, two each dedicated to the ancient, medieval and modern periods.

ICHR member secretary Umesh Ashok Kadam said that the project will involve a pool of academicians from the sciences, and historians. "There is a huge amount of information available in our ancient dharam granthas (religious scriptures) about India's rich history of science and technology but, unfortunately, that has not been tapped by historians as yet who refute it and call it myth. We will read the texts properly and understand their historical and scientific content." A top Isro official hailed the move, saying the project will bring modern and ancient knowledge together. "Isro is happy to be on board. We recently had a conference where we discussed our aim to bring modern knowledge of science and ancient knowledge together. This is what holds us apart from the rest of the world and we need to embrace our history," he said, asking not to be named.

Kadam said that people should not ascribe motives to ICHR.

"ICHR is a body that is completely dedicated to academics and it has nothing to do with politics. Let our work come out and then decide for yourself. Our work will be released in the public domain and if it is not up to the mark people won't follow it. The people who accuse ICHR of being "politically driven" themselves belong to "politbureaus"," he added, while referring to the politbureau of the Communist Party of India (Marxist) that raised concerns over ICHR's concept note titled "India: mother of democracy" on November 18.

ICHR recently launched a project to "rewrite" India's history – from the time of the Indus Valley civilisation till present day — using sources available in vernacular languages and scripts, with an aim to give "due credit" to dynasties who have been "missed out" and "correct" texts that have been written in a "Euro-centric" way, HT reported on November 22. Kadam said that while academics, including Indian ones accept "astronomical or astrological theories" of the Egyptians, Greeks and Persians at face value, they term those involving Indian rishis (sages) as "myths". "The problem is that the true history of India has gradually become legend and the legend has become myth. Now, we have to review that myth and reassess the legend and tell the world

about India's true contribution in the sciences. The rishis should not be seen as religious personalities. They should be seen as academicians.”

He added that ICHR decided to involve Isro in the project because everything related to astronomy, astrology and mathematics is related to space. “We are preparing a concept note further detailing the project and it will be shared with ISRO soon.” Describing India's contribution in STEM (science, technology, engineering, and mathematics), ICHR's member secretary said that Indian mathematicians gave the basis of mathematics “zero” to the world, and also calculated the value of pi. “India has contributed to the field of metallurgy. The world has learnt from India how to make steel and how to mix metals. India's contribution in arms and ammunition is also immense. Even in ancient times, India had advanced arms and ammunition techniques which the world discovered much later. All this knowledge has travelled from India to other continents.”

Kadam added that the project will also cover India's contribution in the field of maritime navigation, extraction and distillation, medicine and cosmetics, and irrigation and water resources. “The knowledge of Indians in weather forecasting is commendable... Even our shepherds can predict when it is going to rain. When their sheep and goats start sniffing the ground, the shepherds get to know that it will rain in the next six hours.” He said that “Marxist historians” did not talk about people like Jagdish Chandra Bose” when they talked about environmental science. “Jagdish Chandra Bose was completely against patenting the research. He said that he would keep it open for everyone for the betterment of society.”

The approach will be scientific, Kadam said. “A team of geologists, geographers, mathematicians, and engineers will provide inputs and suggestions. All we want to do is to have a proper historical understanding of what exact contribution has been made in the field of science, and technology in the ancient, medieval and modern world by India and to establish that India has always been the ‘vishwa guru’ in the field of science and technology.”

IIT-Hyderabad professor M Vidyasagar said that there have been some areas where India's contribution has been downplayed so far. “There has been a massive downplay of Indian contribution in the field of astronomy and metallurgy. We were very strong in these fields. Not just ancient but even medieval India was extremely advanced in astronomy. Earlier, there was essentially no difference between astronomy and astrology. Astrology is determining your future based on planetary motion but in order to do that you first have to determine planetary positions. People in India developed a lot of skills in predicting the planetary motions including things like eclipses, and start and end of sessions. We were pretty advanced in all these things to determine astronomical predictions,” he said.

Vidyasagar welcomed Isro's involvement in the project. “It is important to involve people who know about contemporary science and technology. I think with the involvement of Isro the information will be scientifically evaluated without any ideological influence,” he said. ICHR also plans to launch a similar project to trace India's economic history soon. “We want to do a project with the AYUSH ministry and trace India's contribution in the field of medicine,” Kadam said.

<https://www.hindustantimes.com/cities/delhi-news/ichr-isro-to-trace-india-s-roots-as-vishwa-guru-of-science-tech-101669658190982.html>

Agnikul Cosmos Sets Up India's First Private Space Vehicle Launchpad at Sriharikota

Chennai headquartered space-tech start-up Agnikul, has set up India's first-ever launchpad that will be operated by a private player, at Sriharikota. The facility was inaugurated by S. Somanath, chairman, Indian Space Research Organisation (ISRO) and Secretary, Department of Space, recently. "The first exclusive launch pad for a private launch vehicle has come up at the Satish Dhawan Space Center (SDSC). Now India can travel to space from one more space platform. Thanks to Agnikul," Mr. Somanath said. The facility, which was designed by Agnikul and executed in support with ISRO and IN-SPACe (Indian National Space Promotion and Authorization Center), has two sections to it: the Agnikul launchpad (ALP) and the Agnikul mission control center (AMCC) All critical systems connecting these two sections, which are 4 km away from each other, are redundant to ensure 100% operationality during countdown. The launchpad is specifically built keeping in mind the necessity to support liquid stage controlled launches, while also addressing the need for ISRO's range operations team to monitor key flight safety parameters during launches. Additionally, it has the ability to, as necessary, share data and other critical information with ISRO's Mission Control Center. Srinath Ravichandran, co-founder & CEO, Agnikul said, "The ability to launch from our own launchpad while still working with ISRO's launch operations teams is a privilege that we have been granted by ISRO & IN-SPACe." Moin SPM, co-founder, Agnikul said, "The new reforms that have been brought in by the Department of Space truly accommodate everyone's dream of going to space."

First launch to be technology demonstrator

Agnikul's first launch, which will be a controlled and guided mission, a vertical launch, using its patented engine will happen from this launchpad. The mission will be a technology demonstrator that will mirror Agnikul's orbital launch but at a reduced scale. Agnibaan is Agnikul's highly customizable, two-stage launch vehicle, capable of taking up to 100 kg payload to orbits around 700 km high (low Earth orbits) and enables plug-and-play configuration. Agnilet is the world's first single-piece 3-D printed engine fully designed and manufactured in India and was successfully test-fired in early 2021, making Agnikul the first company in the country to test its engines at ISRO. Agnibaan and Agnilet will be used in the Agnikul's first launch. Founded in 2017 by Srinath Ravichandran, Moin SPM and Professor S.R. Chakravarthy from IIT Madras, Agnikul is an IIT Madras incubated startup. It became the first Indian company to sign an agreement with ISRO in December 2020. The agreement signed under the IN-SPACe initiative sanctioned Agnikul access to the Indian space agency's expertise and facilities to build Agnibaan and its launchpads. IN-SPACe was conceived in June 2020 following the Central government's decision to open up the space sector and enable the participation of Indian private sector in the gamut of space activities. It acts as a single-window, independent, nodal agency which functions as an autonomous agency in Department of Space.

<https://www.thehindu.com/news/national/tamil-nadu/chennai-based-agnikul-cosmos-inaugurates-first-launchpad-mission-control-center-at-sriharikota/article66194809.ece>



**Press Information Bureau
Government of India**

Ministry of Science & Technology

Mon, 28 Nov 2022

India's SARAS Radio Telescope Provides Astronomers Clues to the Nature of Universe's First Stars and Galaxies

Scientists have determined properties of radio luminous galaxies formed just 200 million years post the Big Bang, a period known as the Cosmic Dawn thus providing an insight to the properties of the earliest radio loud galaxies that are usually powered by supermassive black holes. Humans in their curiosity about how the early stars and galaxies formed and what they looked like have tried to capture the faint signals arising from the depths of the cosmos through a number of ground and space-based telescopes peering into the sky for a better understanding of the Universe. Shaped Antenna measurement of the background Radio Spectrum 3 (SARAS) telescope -- indigenously designed and built at Raman Research Institute -- was deployed over Dandiganahalli Lake and Sharavati backwaters, located in Northern Karnataka, in early 2020.

In a first-of-its-kind work, using data from SARAS 3, researchers from the Raman Research Institute (RRI), Bengaluru, the Commonwealth Scientific and Industrial Research Organisation (CSIRO) in Australia, along with collaborators at the University of Cambridge and the University of Tel-Aviv, estimated the energy output, luminosity, and masses of the first generation of galaxies that are bright in radio wavelengths. Scientists study the properties of very early galaxies by observing radiation from hydrogen atoms in and around the galaxies, emitted at a frequency of approximately 1420 MHz. The radiation is stretched by the expansion of the universe, as it travels to us across space and time, and arrives at Earth in lower frequency radio bands 50-200 MHz, also used by FM and TV transmissions.

The cosmic signal is extremely faint, buried in orders of magnitude brighter radiation from our own Galaxy and man-made terrestrial interference. Therefore, detecting the signal, even using the most powerful existing radio telescopes, has remained a challenge for astronomers. Results from the paper by Saurabh Singh from RRI and Ravi Subrahmanyan from CSIRO published in the journal *Nature Astronomy* on November 28, 2022, have described how even non-detection of this line from the early Universe can allow astronomers to study the properties of the very first galaxies by reaching exceptional sensitivity. "The results from the SARAS 3 telescope are the first time that radio observations of the averaged 21-centimeter line have been able to provide an insight to the properties of the earliest radio loud galaxies that are usually powered by supermassive black holes," said Subrahmanyan, former director of RRI and currently with Space & Astronomy CSIRO, Australia, and an author of the paper. "This work takes forward the results from SARAS 2, which was the first to inform the properties of earliest stars and galaxies."

"SARAS 3 has improved our understanding of astrophysics of Cosmic Dawn, telling us that less than 3 percent of the gaseous matter within early galaxies was converted into stars, and that the earliest galaxies that were bright in radio emission were also strong in X-rays, which heated the cosmic gas in and around the early galaxies," said Singh, one of the authors of the paper titled 'Astrophysical Constraints from the SARAS 3 non-detection of the Cosmic Dawn Sky-Averaged

21 cm Signal'. In March this year, Singh, along with Subrahmanyan and SARAS 3 team, used the same data to reject claims of the detection of an anomalous 21-cm signal from Cosmic Dawn made by the EDGES radio telescope developed by researchers from Arizona State University (ASU) and MIT, USA. This refusal helped restore confidence in the concordant model of cosmology that was brought into question by the claimed detection.

In March this year, Singh, along with Subrahmanyan and SARAS 3 team, used the same data to reject claims of the detection of 21-cm signal from Cosmic Dawn made by the EDGES radio telescope developed by researchers from Arizona State University (ASU) and MIT, USA. "We have now got constraints on the masses of the early galaxies, along with limits on their energy outputs across radio, X-ray, and ultraviolet wavelengths," Singh noted. Further, using a phenomenological model, SARAS 3 has been able to put an upper limit to excess radiation at radio wavelengths, lowering existing limits set by the ARCADE and Long Wavelength Array (LWA) experiments in the US.

"The analysis has shown that the 21-cm hydrogen signal can inform about the population of first stars and galaxies ", shared another author, Dr. Anastasia Fialkov from the Institute of Astronomy, University of Cambridge. "Our analysis places limits on some of the key properties of the first sources of light, including the masses of the earliest galaxies and the efficiency with which these galaxies can form stars," said Fialkov. Since its last deployment in March 2020, SARAS 3 has undergone a series of upgrades. These improvements are expected to yield even higher sensitivity towards detecting the 21-cm signal. Currently, the SARAS team is assessing several sites in India for its next deployment. "These sites are fairly secluded and pose several logistical challenges for deployment. However, they seem promising from science's viewpoint and, with new upgrades, seem ideal for our experiment", adds Yash Agrawal, a member of the SARAS team.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1879653>



Sun, 27 Nov 2022

Five New Advanced Navigation Satellites for Strategic Needs

By SV Krishna Chaitanya

The Indian Regional Navigation Satellite System, NavIC, will soon be expanded as Indian Space Research Organisation (ISRO) is building five more advanced navigation satellites with a focus on meeting country's strategic sector needs. More importantly, an indigenously developed rubidium atomic clock will be part of the new satellites. ISRO Chairman S Somanath told this daily, "One of the four atomic clocks onboard the first navigation satellite to be launched next month or by end of this financial year will be a desi one."

ISRO's Space Application Centre in Ahmedabad has developed the atomic clocks. This is a significant step as these clocks are critical for measuring precision location data. For NavIC to be fully operational and provide accurate real-time positioning and time services, at least seven satellites — three geostationary, four geosynchronous orbits — should be functional. Two more will be standby satellites. Between 2013 and 2018, India successfully placed eight navigation

satellites of which a few are currently non-functional due to reported malfunctioning of atomic clocks. Somanath said, “NavIC is still operational and services are being provided with limited satellites. We have got approval for building five new navigation satellites. One is almost ready.”

Tapan Misra, former director of SAC under whose leadership these atomic clocks were developed, said, “Atomic clocks are critical to measure the distance between satellite and the object on the ground. India is among the few nations to have developed this technology.” India decided to have its own navigation system in 1999 after the US refused to share GPS data that would provide vital details on Pakistani troop’s position during the Kargil War. NavIC was a culmination of two decades of work. ISRO is also gearing up for a busy schedule with many launches of PSLV, GSLV and SSLV lined up.

<https://www.newindianexpress.com/thesundaystandard/2022/nov/27/five-new-advanced-navigation-satellitesfor-strategic-needs-2522483.html>

नवभारत टाइम्स

सोमवार, 28 नवंबर 2022

चीन अपने अंतरिक्ष स्टेशन में भेजेगा 3 सदस्यीय दल, चंद्रमा के लिए मानव मिशन का खुलासा

अमेरिका के साथ गहरी प्रतिस्पर्धा के बीच चीन अपने निर्माणाधीन अंतरिक्ष केंद्र में मंगलवार को तीन सदस्यीय एक दल भेज रहा है। इसके साथ ही चीन ने चंद्रमा के लिए मानव मिशन की अपनी योजना का भी खुलासा किया। चाइना मैन्ड स्पेस एजेंसी (सीएमएसएम) ने घोषणा की कि अंतरिक्ष यात्रियों को शेनझोऊ-15 यान के जरिए भेजा जाएगा। अंतरिक्ष यान उत्तर-पश्चिम चीन में स्थित जियुक्वान उपग्रह प्रक्षेपण केंद्र से भेजा जाएगा। इस मिशन के तहत तीन अंतरिक्ष यात्रियों - फी जुनलॉन्ग, डेंग शिंगमिंग और झांग लू को भेजा जाएगा। सीएमएसएम के निदेशक के सहायक जी किमिंग ने मीडिया को बताया कि फी इस मिशन के प्रमुख होंगे। तीन सदस्यीय दल करीब छह महीने तक कक्षा में रहेगा।

इस अवधि के दौरान अंतरिक्ष स्टेशन का निर्माण पूरा हो जाने की उम्मीद है। उन्होंने बताया कि अंतरिक्ष यान को लॉन्ग मार्च-2एफ नामक रॉकेट से भेजा जाएगा और इसके लिए रॉकेट में जल्दी ही प्रणोदक भरा जाएगा। सरकारी समाचार एजेंसी शिन्हुआ ने बताया कि अंतरिक्ष यात्री अगले साल मई में लौटेंगे। अपने अंतरिक्ष स्टेशन से जुड़ने के लिए चीन द्वारा भेजा जाने वाला यह तीसरा मानव मिशन है। इस अंतरिक्ष स्टेशन के तैयार हो जाने के बाद चीन एकमात्र देश बन जाएगा जिसका अपना अंतरिक्ष स्टेशन होगा। रूस का अंतरराष्ट्रीय अंतरिक्ष स्टेशन (आईएसएस) कई देशों की एक सहयोगी परियोजना है। चीनी अंतरिक्ष स्टेशन (सीएसएस) के रूस द्वारा तैयार आईएसएस के लिए प्रतिस्पर्धी बनने की उम्मीद है।

<https://navbharattimes.indiatimes.com/world/china/china-will-send-a-three-member-crew-to-its-space-station/articleshow/95826697.cms>

