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समाचार पत्रों से चयित अंश

Newspapers Clippings

डीआरडीओ समुदाय को डीआरडीओ प्रौद्योगिकियों, रक्षा प्रौद्योगिकियों, रक्षा नीतियों, अंतर्राष्ट्रीय संबंधों और विज्ञान एवं प्रौद्योगिकी की नूतन जानकारी से अवगत कराने हेतु दैनिक सेवा

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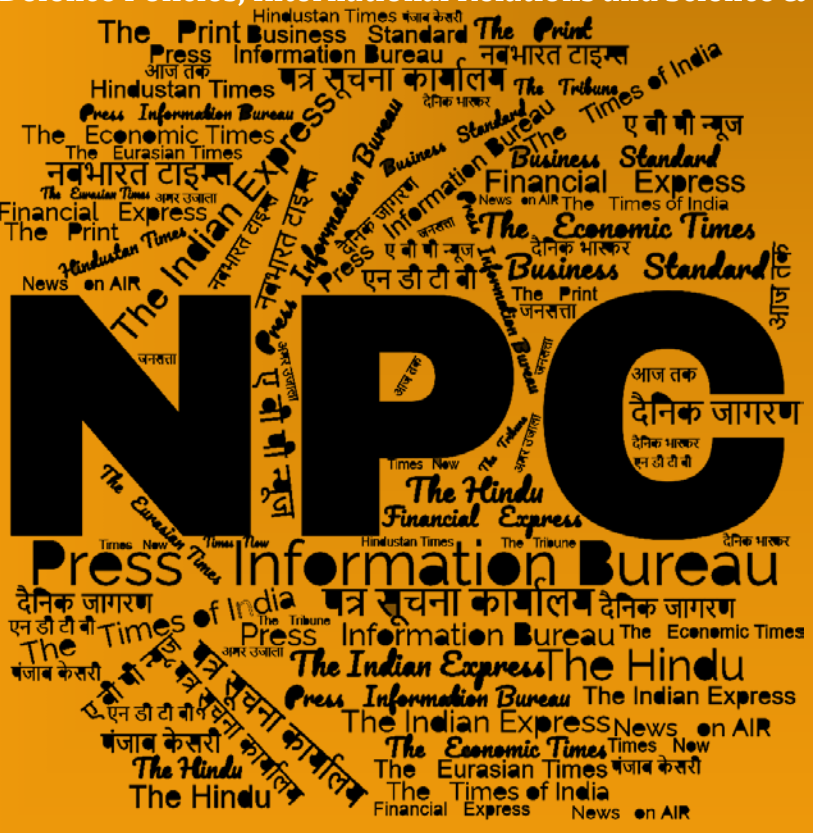

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CONTENTS

DRDO News

DRDO Technology News

Press Information Bureau
Government of India

Ministry of Defence

Thu, 09 Feb 2023

रक्षा अनुसंधान एवं विकास संगठन एयरो इंडिया 2023 कार्यक्रम के दौरान विभिन्न प्रकार की स्वदेशी रूप से विकसित तकनीकों और प्रणालियों का प्रदर्शन करेगा

रक्षा अनुसंधान एवं विकास संगठन (डीआरडीओ) ने देश में रक्षा अनुसंधान और विकास इकोसिस्टम के विभिन्न हितधारकों को एकीकृत करने के प्रयास के साथ ही 14वें एयरो इंडिया एयर शो के दौरान स्वदेशी रक्षा प्रौद्योगिकियों तथा प्रणालियों के समृद्ध अनुभव को प्रदर्शित करने की योजना बनाई है। यह कार्यक्रम 13 से 17 फरवरी, 2023 तक बेंगलुरु में आयोजित किया जाएगा। इस दौरान, रक्षा अनुसंधान एवं विकास संगठन स्वदेशी रूप से विकसित उत्पादों तथा प्रौद्योगिकियों की एक विस्तृत श्रृंखला दर्शाएगा। डीआरडीओ भारतीय पवेलियन में अपने प्रमुख उत्पादों को दिखाने के अलावा कई प्रदर्शनियां, हवाई करतब और सेमिनार आयोजित करेगा। इसमें एयरोनॉटिकल सिस्टम्स, मिसाइल्स, आर्मामेंट्स, इलेक्ट्रॉनिक्स, माइक्रो इलेक्ट्रॉनिक डिवाइसेस और कम्प्यूटेशनल सिस्टम्स, सोल्जर सपोर्ट टेक्नोलॉजीज, लाइफ-साइंसेज तथा नवल एंड मैटेरियल साइंस सहित अन्य उत्पादों का प्रदर्शन शामिल होगा। यह कार्यक्रम प्रधानमंत्री श्री नरेन्द्र मोदी के 'आत्मनिर्भर भारत' दृष्टिकोण को आगे बढ़ाने में डीआरडीओ द्वारा की गई हालिया प्रगति को प्रदर्शित करेगा।

डीआरडीओ का पवेलियन 12 क्षेत्रों में वर्गीकृत 330 से अधिक उत्पादों का प्रदर्शन करेगा, जिनमें लड़ाकू विमान और यूएवी, मिसाइल तथा सामरिक प्रणाली, इंजन एवं प्रपल्शन सिस्टम, हवाई निगरानी प्रणाली, सेंसर इलेक्ट्रॉनिक युद्धक व संचार प्रणाली, पैराशूट और ड्रॉप सिस्टम, आर्टिफिशियल इंटेलिजेंस मशीन लर्निंग व साइबर प्रणालियां, सामग्री, लैंड सिस्टम तथा युद्ध सामग्री, जीवन सहयोगी सेवाएं और उद्योग एवं शैक्षणिक आउटरीच शामिल हैं। 12 क्षेत्रों में से प्रत्येक में ये प्रमुख उत्पाद हैं:

एएमसीए, एलसीए तेजस एमके2, टीईडीबीएफ, आर्चर, तपस अनमैन्ड एरियल व्हीकल, अभ्यास, लड़ाकू विमान और यूएवी क्षेत्र से स्वायत्त स्टील्थ विंग फ्लाइंग टेस्ट बेड; मिसाइल तथा सामरिक प्रणाली क्षेत्र से आकाश, अस्त्र, क्यूआरएसएएम, हेलिना, नाग, प्रलय; एफएसीईसीयू, गियरबॉक्स मॉड्यूल, कावेरी ड्राई इंजन प्रोटोटाइप, इंजन और प्रोपल्शन ज़ोन से छोटा टर्बो फैन इंजन; एईडब्ल्यूएंडसी-नेत्र, एईडब्ल्यूएंडसी-एमके II, एमएमएमए विमान, आईएफएफ, हवाई निगरानी प्रणाली क्षेत्र से एएएयू मॉडल; टीडब्ल्यूआईआर, बीएफएसआर-एसआर, भरणी, अश्लेषा, आत्रु, एएसपीजे पॉड, सेंसर्स इलेक्ट्रॉनिक वारफेयर एंड कम्युनिकेशंस सिस्टम्स ज़ोन से एलईओपी; मिलिट्री कॉम्बैट पैराशूट सिस्टम, ब्रेक पैराशूट, पैराशूट और ड्रॉप सिस्टम्स ज़ोन से पी-16 हैवी ड्रॉप सिस्टम; हेलीकॉप्टर मॉडल के साथ एयरबोर्न सोनार, नवल सिस्टम्स ज़ोन से एयर लॉन्चड डायरेक्शनल सोनोबॉय; डीडीसीए, इंडिजिस, एयर वारफेयर सिमुलेशन सिस्टम, आर्टिफिशियल इंटेलिजेंस मशीन लर्निंग एंड साइबर सिस्टम ज़ोन से क्यूआरएनजी; सामग्री क्षेत्र से एफएसएपीडीएस, टाइटेनियम मिश्रित धातु; एएसआरईएम, निगरानी आरओवी, भूमि प्रणाली और युद्ध सामग्री क्षेत्र से सुमित्रा; इंटीग्रेटेड लाइफ सपोर्ट सिस्टम, लाइफ सपोर्ट सर्विसेज ज़ोन से हेलीकॉप्टर ऑक्सीजन सिस्टम और उद्योग एवं शैक्षणिक आउटरीच जोन से वान्केल रोटरी इंजन, जेट फ्यूल स्टार्टर, रेडियो अल्टीमीटर। भारतीय पवेलियन में डीआरडीओ के पांच उत्पाद प्रदर्शित होंगे। इनमें एईडब्ल्यूसीएंडसी-एमके II, एएमसीए, एलसीए तेजस एमके2, टीईडीबीएफ और आर्चर (इमेज इंटेलिजेंस विद वेपन पेलोड्स) शामिल हैं।

इस मेगा शो में डीआरडीओ की भागीदारी एलसीए तेजस, एलसीए तेजस पीवी6, एईडब्ल्यूएंडसी-नेत्र और तपस यूएवी के उड़ान प्रदर्शन द्वारा की जाएगी। स्टैटिक डिस्प्ले में एलसीए तेजस एनपी1/एनपी5 और एईडब्ल्यूएंडसी-नेत्र भी शामिल हैं। इस भागीदारी को स्वदेशी मीडियम एल्टीट्यूड लॉन्ग एंड्यूरेंस क्लास यूएवी तापस-बीएच (उन्नत निगरानी के लिए टैक्टिकल एरियल प्लेटफॉर्म - बियॉन्ड होराइजन) के उड़ान की शुरुआत से भी प्रदर्शित किया जाएगा। तपस-बीएच अपनी क्षमताओं को दर्शायेगा और व्यावसायिक दिनों में स्टैटिक के साथ-साथ हवाई प्रदर्शनों को भी कवर करेगा और इस दौरान हवाई वीडियो को पूरे आयोजन स्थल पर लाइव स्ट्रीम किया जाएगा। तपस डीआरडीओ की तीनों सेवाओं आईस्टार आवश्यकताओं का समाधान है। यूएवी 18 से अधिक घंटे की समय की स्थायित्व क्षमता के साथ 28000 फीट की ऊंचाई पर कार्य करने में सक्षम है। डीआरडीओ इस आयोजन के दौरान दो सेमिनार भी आयोजित कर रहा है। एयरो इंडिया इंटरनेशनल सेमिनार का 14वां द्विवार्षिक संस्करण 'एयरोस्पेस एंड डिफेंस टेक्नोलॉजीज - वे फॉरवर्ड' विषय पर 12 फरवरी को एयरोनॉटिकल सोसाइटी ऑफ इंडिया के सहयोग से सीएबीएस, डीआरडीओ द्वारा आयोजित किया जा रहा है। यह सेमिनार एक प्रमुख कार्यक्रम है, जिसे एयरो इंडिया के प्रीक्वल के रूप में आयोजित किया जाता है। डीआरडीओ, भारतीय वायु सेना, हिंदुस्तान एयरोनॉटिक्स लिमिटेड, अंतर्राष्ट्रीय संगठनों एवं प्रमुख शैक्षणिक संस्थानों के कई प्रतिष्ठित मुख्य वक्ता एयरोस्पेस और रक्षा में अत्याधुनिक तकनीकों तथा उन्नति के बारे में जानकारी प्रदान करने के लिए भाग लेंगे। डीआरडीओ संगोष्ठी के दौरान विमानन और एयरोस्पेस (आईडब्ल्यूपीए) में भारतीय महिला पेशेवरों को भी सम्मानित करेगा।

दूसरा सेमिनार 14 फरवरी को डीआरडीओ के एरोनॉटिक्स रिसर्च एंड डेवलपमेंट बोर्ड (एआरएंडडीबी) द्वारा आयोजित किया जा रहा है। रक्षा मंत्री श्री राजनाथ सिंह इसका उद्घाटन रकरेंगे और इस दौरान रक्षा राज्य मंत्री श्री अजय भट्ट विशिष्ट अतिथि होंगे। कार्यक्रम का विषय 'स्वदेशी एयरो इंजनों के विकास के लिए आगे की राह सहित फ्यूचरिस्टिक एयरोस्पेस प्रौद्योगिकियों का स्वदेशी विकास' है। इस बैठक में प्रतिष्ठित प्रतिभागियों में अकादमिक, भारतीय निजी उद्योग, स्टार्ट-अप, पीएसयू और डीआरडीओ के सदस्य शामिल हैं।

14 फरवरी को संगोष्ठी के दौरान कई गतिविधियों का आयोजन किया जाएगा। मिग-29के के लिए स्वास्थ्य उपयोग एवं निगरानी प्रणाली, नौसेना स्टाफ के उप प्रमुख को सौंपी जाएगी, इसे प्रौद्योगिकी विकास निधि (टीडीएफ) के माध्यम से विकसित किया गया है। इसके अलावा कई अन्य गतिविधियां आयोजित होंगी अर्थात् तेजस के एएमएजीबी में सीवीआरडीई द्वारा विकसित एयरक्राफ्ट बियरिंग्स के लिए सीईएमआईएलएसी प्रमाणपत्र सौंपना; सिस्टम फॉर एडवांस मैन्युफैक्चरिंग असेसमेंट एंड रेटिंग हेतु एक वेब पोर्टल (www.samar.gov.in) का शुभारंभ; डीआरडीओ एक्सपोर्ट कम्पेंडियम, डीआरडीओ मोनोग्राफ 'नॉन डिस्ट्रक्टिव इवैल्यूएशन ऑफ सॉलिड रॉकेट्स एंड मिसाइल सिस्टम्स, एरोनॉटिक्स रिसर्च एंड डेवलपमेंट बोर्ड की मैगजीन 'पुष्पक 2022' तथा डीआरडीओ एक्सपोर्ट कॉम्पेंडियम का विमोचन। डीआरडीओ सेमिनार के दौरान 15 उद्योगों को डीआरडीओ द्वारा विकसित 11 प्रौद्योगिकियों के लिए प्रौद्योगिकी के हस्तांतरण के उद्देश्य से 16 लाइसेंसिंग समझौते (एलएटीओटी) भी सौंपेगा।

एयरो इंडिया 2023 में डीआरडीओ की भागीदारी भारतीय एयरोस्पेस समुदाय के लिए आत्मनिर्भरता एवं राष्ट्रीय गौरव की भावना के साथ सैन्य प्रणालियों तथा प्रौद्योगिकियों के स्वदेशी विकास को बढ़ावा देने का एक उत्कृष्ट अवसर है। यह सहयोग के लिए एक मंच प्रदान करेगा और स्वदेशी रक्षा उत्पादों के निर्यात को बढ़ावा देने के उद्देश्य से नए अवसर भी विकसित करेगा। प्रणालियों और प्रदर्शनीय वस्तु को समझाने तथा दर्शाने के लिए वैज्ञानिकों के साथ विभिन्न सत्रों में बातचीत की उम्मीद की जाती है।

https://pib.gov.in/PressReleasePage.aspx?PRID=1897821

INDIA TODAY

Thu, 09 Feb 2023

Aero India 2023: DRDO to Showcase Variety of Indigenously-Developed Technologies, Systems

The Defence Research and Development Organisation (DRDO) has planned a showcase of indigenous defence technologies and systems during the 14th Aero India, which will be held in Bengaluru between February 13 and 17. The DRDO will display a wide range of indigenously-

developed products and technologies other than numerous exhibits, flight displays and seminars, including the display of recent advancements made by the DRDO under the Aatmanirbhar Bharat. The event will also mark the flying debut of an indigenous Medium Altitude Long Endurance class tactical aerial platform for advanced surveillance beyond the horizon (UAV TAPAS-BH). The TAPAS-BH will showcase its capabilities and cover the static as well as aerial displays on business days. The aerial video shall be live-streamed throughout the venue.

The 14th Biennial edition of Aero India International Seminar on the theme 'Aerospace and Defence Technologies - Way Forward' is being organised by CABS, DRDO, in association with the Aeronautical Society of India. The last edition of Aero India was limited for business visitors and was not open to the general public. The event was also one of the first largest hybrid aero show. Delegation from 43 countries along with 530 companies participated in the event.

Hindustan Aeronautic Limited (HAL), the nodal agency that organises defence events in the country, will organise the aero show this year. Since restrictions for international travelers were eased in the country, organisers are expecting that this year's registration will exceed all previous editions.

https://www.indiatoday.in/india/story/aero-india-2023-drdo-showcase-variety-indigenously-developed-technologies-systems-2332774-2023-02-09

Defence News

Defence Strategic : National/International

The Indian EXPRESS

Fri, 10 Feb 2023

efence Ministry Announces Bandhan Ceremony at Aero India, says it will Witness Significant MoUs and Product Launches

The Bandhan ceremony which will witness the signing of a substantial number of MoUs, Transfer of Technology Agreements by Defence Research Development Organisation (DRDO), major announcements and product launches by the private and the public sector will be organised on February 15 on the sidelines of Aero India 2023. The Ministry of Defence (MoD) Thursday announced that Union Defence Minister Rajnath Singh will be the chief guest at the event and Karnataka Chief Minister Basavaraj Bommai will also be present at the occasion.

The CEOs of major private defence companies and the chief managing directors of the defence public sector units will participate in the event. "Bandhan event is aimed at forging and renewing partnerships between business entities for innovative collaboration and strategic transformation

of the defence manufacturing sector in the country. It will provide an ideal platform to the defence public sector units, private defence companies and foreign vendors to ink business pacts to enhance defence collaboration and cooperation. It will also strengthen the domestic defence ecosystem and give a major boost to defence manufacturing and exports," the ministry said.

"These business to business (B2B) engagements have immense business potential and will go a long way in scaling up the global engagement of Indian Defence Companies. These MoUs and transfer of technologies (ToTs) would also pave the way for more foreign direct investment (FDI) in defence for enhanced defence manufacturing including manufacturing in the defence industrial corridors," it further said.

https://indianexpress.com/article/cities/bangalore/defence-ministry-bandhan-ceremony-aero-india-mous-product-launches-8435288/lite/

ThePrint

Fri, 10 Feb 2023

Why Navy Plan to Fit Scorpene Subs with Made-in-India Propulsion Tech won't Materialise Before 2024

By Snehesh Alex Philip

The plan to fit the indigenous Air-Independent Propulsion (AIP) system on Scorpene submarines may not work out "soon", as was envisaged, because the process ahead is quite tedious, ThePrint has learnt. Sources in the defence and security establishment said all tests conducted so far on the AIP system, which allows a conventional submarine to stay underwater for a longer duration, were part of developmental trials and results are based on the Defence Research and Development Organisation's (DRDO) own studies.

The DRDO has tied up with Larsen & Toubro and Thermax — its industry partners — to manufacture the AIP system. Last month, the defence ministry had issued a statement saying that in a major boost to 'Aatmanirbhar Bharat', the fuel cell-based AIP system of DRDO's Naval Materials Research Laboratory (NMRL) "will soon be fitted onboard INS Kalvari".

According to the sources, INS Kalvari, which was commissioned in 2017, is scheduled to come in for refit only in mid-2024. This means that even if all trials are completed, the AIP can be fitted onboard the submarine only next year.

"AIP is not a simple ply-and-play system. The hull of the submarine has to be cut and the AIP section added to it. This would mean that the length of the submarine would increase, which brings into play various considerations," a source said.

A second source added that the AIP system has to be tested at multiple levels to ensure foolproof integration. As part of the agreement, France's Naval Group will certify the AIP design for integration in the submarines. The road ahead will include detailed design certification of the energy module, which will be performed by the NMRL along with Indian industry. The Naval Group will be the lead agency for integrating the AIP with the submarine. According to the original plan, the last two of the Scorpene-class submarines were to be fitted with indigenous

AIP technology at the building stage itself, but late development of the system meant the plan had to be tweaked to ensure AIP fitment during the refit stage.

Force-multiplier effect

It was in March 2021 that the DRDO completed the first full-fledged test of the AIP system on land. Sources had then told ThePrint that the endurance mode was for 14 days and max power mode was for two days.

AIP has a force-multiplier effect on the lethality of diesel-electric submarines and the system can even be more silent than a nuclear submarine.

Conventional diesel-electric submarines must surface from time to time, usually every two-four days, to recharge their batteries by using generators driven by air-breathing diesel engines.

However, when it surfaces or uses a snorkel, the submarine is most vulnerable to detection. With AIP technology now, electricity will be generated while the submarine is operating underwater.

Even though the submarine will still have to surface unlike a nuclear-powered one, the period of submersion will be longer than usual and it can stay underwater for two more weeks.

AIP systems are capable of providing power for recharging the batteries, for propulsion and for other electrical equipment of the submarine.

While AIP systems generally generate power through the reverse electrolysis of oxygen and hydrogen, DRDO's AIP system functions on phosphoric acid fuel cell technology, which means that no highly inflammable hydrogen has to be stored on board.

https://theprint.in/defence/why-navy-plan-to-fit-scorpene-subs-with-made-in-india-propulsion-tech-wont-materialise-before-2024/1364301/

ThePrint

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India-based SamKalpa Systems Partners with US Firm COMSPOC to Strengthen India's Space Defence

SamKalpa Systems, an India-based company, announced a joint venture with COMSPOC, a US-based enterprise software platform for Space Situational Awareness. The new partnership, named Vedcomspoc, aims to provide accurate, timely, and scalable solutions for identifying potential threats in space, tracking and simulating space events, and performing assessments for proactive Space Traffic Management and Awareness.

VEDCOMSPOC is the only solution that can accept any form of observation and provide solutions in all orbital regimes — from VLEO to Cislunar and interplanetary.

In the current geopolitical climate, governments are becoming more aware of the importance of protecting their space assets and safeguarding them against potential threats. With rival nations rapidly developing and launching new space capabilities, the security of satellites has become an increasingly critical aspect of national defence strategies. As space becomes a central aspect of

communication, collaboration, and research for nations, it is imperative that governments and organizations ensure the safety of their space assets.

In a statement, CEO Ravnish Luthra of SamKalpa expressed the company's commitment to the "Make in India" initiative by creating an India-specific layer on top of a military-grade space situational awareness (SSA) platform, which is powered by a physics engine consisting of 13 million lines of rocket science code. Luthra said, "SamKalpa formed a joint venture with COMSPOC to establish VEDCOMSPOC, a local entity that will further develop the engine and provide SSA solutions not only in India but also for other friendly countries. The aim of Vedcomspoc is to advance India's progress and make it a leader in the field of space situational awareness." Luthra emphasized the importance of space systems as a critical component of modern defence systems and stated that being prepared to defend space assets makes India stronger.

"Vedcomspoc seeks to strengthen India's space domain awareness by providing an enterprise software platform that delivers high accuracy, low latency, and high-capacity SSA across all orbital regimes," he said. Paul Graziani, CEO of COMSPOC, further noted that India is now in a remarkable position to take its space capabilities to an international level.

He expressed his desire to collaborate closely with both the US and Indian governments to exchange information in the areas of space domain awareness and space traffic management. Graziani emphasized the significance of international collaboration in space situational awareness as the number of objects in space continues to escalate. With a large number of satellites, debris, and other objects orbiting the Earth, he stressed the importance of countries working together to guarantee the security of their space-based assets.

Today's space operational environment is congested, contested, and competitive. Over 7,000 satellites are operating in Earth's orbit, among a total population of just over 24,000 catalogued objects; the rest of the objects are "dead" satellites and a significant amount of space debris.

Debris is created from launch and on-orbit operations when satellites are decommissioned (and improperly disposed), and when satellites fragment or break up in space.

There are governments that recognize the importance of protecting their space assets from potential threats, as well as mitigating or countering the capabilities of adversary assets, as part of their national defence strategy.

Some countries, including rivals, are quickly developing, building and launching greater capacities. As space becomes progressively central to the way that nations communicate, collaborate, and conduct research, it is becoming increasingly vital for governments and organizations to secure their satellites from threats.

Samkalpa is a Deeptech company specializing in providing cutting-edge solutions to the Indian Aerospace and Defence sector. Through partnerships with global technology leaders and a focus on customization, Samkalpa is dedicated to delivering high-quality, innovative products and services that meet the changing needs of its clients.

Their goal is to help organizations stay ahead of the curve in a rapidly evolving world by optimizing their operations through software development, data analysis, and expert consulting. With a team of highly skilled engineers and domain experts, Samkalpa looks beyond surface-level problems to offer future-focused solutions. Meanwhile, COMSPOC is a leading provider of solutions for addressing challenges in the space operational environment, arising from both

intentional threats and hazards such as space debris. With a technology base that spans over 31 years, including core products and 12 years of SSA enterprise solutions, COMSPOC's software is the only commercially available processing software that has been numerically validated by the US Air Force. With a technology readiness level of 9 and a decade of experience providing flight safety services for 60 per cent of all commercial satellites in orbit, COMSPOC has a mature technology that has been used in military, international, commercial, and civil applications.

https://theprint.in/india/india-based-samkalpa-systems-partners-with-us-firm-comspoc-to-strengthen-indias-space-defence/1364140/

INDIA TODAY

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Why American F-35 Stealth Jet is Eyeing Aero India Debut

Indian military observers are surprised by the possible debut of the F-35 stealth fighter jet of the US Air Force at the Aero India 2023, being held in Bengaluru from February 13 to 17. The fighter jet is expected to participate in both static and flying displays at the Indian Air Force's Yelahanka airbase, the venue of the air show.

Indian defence scientists are already working on an indigenous stealth fighter jet, an airplane designed to avoid detection by enemy radars and air defence systems. The Advanced Medium Combat Aircraft (AMCA), a fifth-generation fighter with stealth features, is in an advanced stage of development, with the critical design review completed by the Aeronautical Development Agency of the DRDO (Defence Research and Development Organisation).

The AMCA project is critical for the IAF. The world's fourth largest air force is grappling with a fast-depleting combat fleet, down to 31 squadrons against the sanctioned strength of 42. The US government has never offered the F-35 to India. The fighter jet is co-developed in partnership by eight countries and manufactured by Lockheed Martin. At present it is flown by 14 air forces and navies in the world. "The F-35 has never been offered to India. And now, when we (India) are so close to making our own stealth fighter jet, the US may pitch it for the Indian market," predicted a military aviator, who believes that by getting the F-35 to participate in Aero India, the US may try to influence the Indian Navy's upcoming procurement of fighter jets for aircraft carrier INS Vikrant. That jet deal is currently locked in a fierce competition between France's Rafale-M and the F/A-18 Super Hornet of the US. The manufacturers of both aircraft claim to have satisfied the Indian Navy during technical demonstrations.

The AMCA project is in the last leg of securing approvals before entering the manufacturing stage. It will take India into an elite club of countries with fifth-generation stealth jets. The F-35 and F-22 Raptors of the US, the Su-57 Felon of Russia and Chinese J-20 are the only operational fifth-generation aircraft in the world. Union minister of state for defence Ajay Bhatt has stated in Parliament that due to some very special features, fifth-generation fighter aircraft are costlier than their fourth-generation cousins. But the AMCA, being indigenous, would come cheaper than a similar imported aircraft. In 2009, the Union government had allocated a meagre Rs 90 crore, followed by an additional Rs 447 crore, for a feasibility study for designing India's future

fighter jet. The initial development cost of the AMCA is anticipated to be around Rs 15,000 crore. In comparison, the F-22 Raptor cost around Rs 1.86 lakh crore and was developed over two decades (1983-2003) while development of the F-35 cost about Rs 1.06 lakh crore over 16 years (1995-2011).

https://www.indiatoday.in/india-today-insight/story/why-american-f-35-stealth-jet-is-eyeing-aero-india-debut-2332704-2023-02-09

THE HINDU

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Investing in Defence Ties with India to Uphold Favourable Balance of Power in Indo-Pacific: Pentagon

The U.S. is making investments in defence ties with India to uphold a favourable balance of power in the Indo-Pacific, a top Pentagon official told lawmakers on February 9, indicating that strengthening ties with New Delhi is one of the key factors to address the pacing challenge from China. "Earlier this month, the U.S. government launched the inaugural technology initiative with India, including in-depth discussions about opportunities for co-production of major defence platforms," Ely Ratner, the Assistant Secretary of Defense, Indo-Pacific Security Affairs, told members of the Senate Foreign Relations Committee during a Congressional hearing on China.

"We are making significant investments in our defence ties with India to uphold a favourable balance of power in the Indo-Pacific region," he said.

Deputy Secretary of State Wendy Sherman said the U.S. has invested in the Quad partnership with India, Australia, and Japan.

"We are aligning with like-minded partners around the world to strengthen our shared interests and values – of democracy, openness, and fairness – and to address the challenges posed by the PRC (People's Republic of China)," she said.

Senator Roger Wicker, Chairman of the Senate Foreign Relations Committee said that Beijing, for decades, has been active and aggressive in expanding its claims of sovereignty and territory.

"In the last 60 years, China almost risked a nuclear conflict with the Soviet Union, fought a war with Vietnam and engaged in multiple bloody skirmishes with India as recently as last month to assert their territorial claim," he said.

It continues to make egregious territorial claims in the South and East China Sea, all in the name of expanding the reach of the Chinese Communist Party, Mr. Wicker said.

"Americans saw firsthand President Xi's disregard for our own sovereignty over the past week, as a Chinese spy balloon violated U.S. airspace uncontested for several days -- just the latest in Beijing's string of provocative actions," he told his Senatorial colleagues. Congresswoman Young Kim, who serves as Chairwoman of the House Foreign Affairs Subcommittee on the Indo-Pacific, claimed that India and other countries have been the target of surveillance balloons from China. "The balloon has been shot down, and I thank those who bravely completed the

mission. However, many questions remain, and intelligence reports show what we all knew: this was neither a coincidence nor something to be taken lightly," she said.

Ms. Kim claimed that the surveillance balloon was part of a larger programme by the Chinese Communist Party (CCP) that has collected information on military assets in Indo-Pacific countries such as Taiwan, Japan, India and the Philippines. "We also know this balloon does not even scratch the surface of the CCP's surveillance capabilities. Millions of Americans are spied on every day through Tik Tok and other state-affiliated applications and technologies. "Whether in air space or cyberspace, we cannot allow the CCP to spy on us. We cannot allow the CCP to threaten our way of life and the American Dream," Ms. Kim added.

https://www.thehindu.com/news/international/investing-in-defence-ties-with-india-to-uphold-favourable-balance-of-power-in-indo-pacific-pentagon/article66492460.ece

THE HINDU

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Exploring the Blue in the India-France Partnership

By Harsh V. Pant, Ankita Dutta

The celebration by India and France of 25 years of their strategic partnership (January 26) presents an important opportunity for both to introspect on their relations. Signed in 1998, the time-tested strategic partnership has continued to gain momentum over shared values and aspirations of peace, stability and, most importantly, their desire for strategic autonomy. There are no real substantive disagreements between the two nations. France has emerged as a key trading partner of India with annual trade of $12.42 billion in 2021-22. It is the 11th largest foreign investor in India with a cumulative investment of $10.31 billion from April 2000 to June 2022, which represents 1.70% of the total foreign direct investment inflows into India.

More importantly, it has emerged as a key defence partner for India, becoming the second largest defence supplier in 2017- 2021. France has emerged as a major strategic partner for India with crucial defence deals and increased military to military engagement. A key example of this is the inducting of the French Scorpene conventional submarines, being built in India under technology transfer agreement of 2005, and the Indian Air Force having received 36 Rafale fighter jets. The Tata group has also tied up with Airbus to manufacture C-295 tactical transport aircraft in Vadodara, Gujarat. This line is expected to be expanded into other civilian and military aircraft manufacturing in a joint venture with France. These relations are further fortified with the robust network of military dialogues and regularly held joint exercises — Varuna (navy), Garuda (air force), and Shakti (army). The importance of the defence partnership was further underscored in the recent statement by the French Ambassador to India, Emmanuel Lenain — that France is a willing partner for India as it builds its national industrial base for the defence industry and for critical strategic defence projects. As the complexities in the international geopolitical order have emerged, both countries have worked towards a deepening and broadening of their cooperation. France was among the first countries with which India signed a civil nuclear deal. Paris also played a critical role in limiting India’s isolation in the non-proliferation order after the 1998 nuclear tests. In a sign of expanding cooperation, France supports India’s bid for permanent

membership of the United Nations Security Council as well as its entry into the Nuclear Suppliers Group. An area of importance for both is climate change, where India has supported France in the Paris Agreement expressing its strong commitment towards mitigating climate change impact. New Delhi and Paris, as part of their joint efforts on climate change, launched the International Solar Alliance in 2015.

Maritime ties

The deepening of the strategic partnership is also visible in their maritime cooperation. India and France are resident powers of the Indian Ocean and in the Indo-Pacific. The importance of the Indian Ocean Region was visible during the visit of French President Emmanuel Macron's visit to New Delhi in 2018 when the leadership of both countries welcomed the "Joint Strategic Vision of India-France Cooperation in the Indian Ocean Region" which presented a blueprint for a strengthening of ties. In operational terms, Franco-Indian joint patrolling in the Indian Ocean signals New Delhi's intent to engage with like-minded partners in expanding its footprint in the Indian Ocean.

Maritime security has further gained momentum as both countries have articulated their common vision for a free, fair and open Indo-Pacific. As both countries share a comprehensive strategy for the Indo-Pacific (it seeks to provide comprehensive solutions for maritime security, regional cooperation, climate change adaptation), India and France in September 2022 agreed to set up an Indo-Pacific Trilateral Development Cooperation Fund that will support sustainable innovative solutions for countries in the region. The two partners have formed a trilateral grouping with the United Arab Emirates to ensure maritime domain awareness and security from the east coast of Africa to the far Pacific.

While there are divergences over the Ukraine crisis, there is a broad understanding of each other's position and both countries are working together to coordinate on playing a constructive role in the crisis. It also needs to be noted that Mr. Macron and Prime Minister Narendra Modi are among the few world leaders who have maintained open communication channels with Russian President Vladimir Putin and Ukraine's President Volodymyr Zelenskyy. Both countries share concerns over the rise of China and its aggressive behaviour, regionally and globally, and have committed to working together to ensure that there is no imbalance in the Indo-Pacific.

Much potential

India's partnership with France is built on common values and goals. Both have underlined the 'importance of maintaining strategic autonomy with a shared understanding of global risks in many domains. There is a high-level India-France political dialogue that is ongoing in defence, maritime, counterterrorism and the Indo-Pacific. They are now forging ahead with cooperation in issues such as digitisation, cyber, green energy, a blue economy, ocean sciences, and space'.

India and France understand each other's interests and dependencies, be it in relation to China or Russia. In the marking of a long strategic partnership, a common interest in enhancing strategic autonomy and improving resilience, there is much ground ahead for further collaboration.

https://www.thehindu.com/opinion/op-ed/exploring-the-blue-in-the-india-france-partnership/article66490647.ece

INDIA TODAY

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Misguided Approach, says Beijing as Australia set to Remove Chinese Cameras from Defence Sites

China has responded to reports that Australia is set to remove Chinese surveillance cameras from defence sites. China's foreign ministry said the government has always encouraged enterprises to carry out foreign investment in accordance with local laws. The ministry spokesperson said Beijing is opposed to the "misguided approach" that generalised the concept of national security and abused state power to discriminate against Chinese enterprises.

"We hope that Australia will provide a fair, just, and non-discriminatory environment for the normal operation of enterprises and do more things that are conducive to mutual trust and cooperation between both sides," the ministry said. This comes after Australia's Department of Defence announced to strip its buildings of Chinese-made security cameras to ensure they are "completely secure".

The decision to remove the camera equipment follows similar decisions in the United States and the United Kingdom, which have also taken measures to ban Chinese-made cameras at sensitive sites, fearing Chinese companies could be forced to share intelligence with Beijing's security services. "It's a significant thing that's been brought to our attention, and we're going to fix it," Australian Defence Minister Richard Marles said of the decision.

An audit found that at least 913 Chinese-made cameras had been installed across more than 250 Australian government buildings, including the departments of defence, foreign affairs, finance, and the attorney general's office, according to official figures.

The cameras and security equipment made by Hangzhou Hikvision Digital Technology and Dahua Technology Co. were found in almost every department except the Agriculture Department and the Department of the Prime Minister and Cabinet. Hikvision and Dahua, which are partly state-owned Chinese firms, have been blacklisted in the US for allegedly helping the Chinese government carry out a "campaign of repression" against the Uighur minority in the Xinjiang region through "high-technology surveillance."

In the UK, a group of 67 parliamentarians and members of the House of Lords called for the government to ban Hikvision and Dahua in July last year, following reports their equipment had been used to track Uighurs.Hikvision said it was "categorically false" to paint the company as "a threat to national security." "No respected technical institution or assessment has come to this conclusion," the company told AFP news agency. "Our products are compliant with all applicable Australian laws and regulations and are subject to strict security requirements."

Australian Prime Minister Anthony Albanese said he was not concerned about how China might react to the removal of cameras. "We act in accordance with Australia's national interest. We do so transparently, and that's what we will continue to do," Albanese said.

https://www.indiatoday.in/world/story/misguided-approach-says-beijing-as-australia-set-to-remove-chinese-cameras-from-defence-sites-2332601-2023-02-09

Science & Technology News

Fri, 10 Feb 2023

SpaceX Test-Fires Engines of Most Powerful Rocket ever Built

SpaceX's Super Heavy booster had a successful test-firing on Thursday when the engines of the most powerful rocket ever built came to life for a brief period. The booster is one half of the company's Starship rocket system and is designed to eventually send astronauts to the Moon and beyond in the coming months.

In what is called "static fire", 31 of the Super Heavy's 33 Raptor rocket engines fired for roughly 10 seconds at SpaceX's facilities in Boca Chica, Texas, chief executive Elon Musk tweeted shortly after the test, which was shown during a livestream.

"Team turned off 1 engine just before start & 1 stopped itself, so 31 engines fired overall," Musk tweeted. "But still enough engines to reach orbit!" When it makes its maiden flight, Starship will become the most powerful operational rocket system in history. The rocket, which is almost as tall as a 23-story building, remained clamped down vertically in place atop a platform adjacent to a launch tower as giant sheets of orange flames erupted from the base of the rocket and clouds of smoke billowed into the air. When put together with its upper-stage Starship spacecraft, the entire vehicle will stand taller than the Statue of Liberty at 394 feet (120 meters) high.

Musk's ambitious plans for the spaceship include colonising Mars. The company will soon attempt to launch the powerful, next-generation rocket for the first time in an uncrewed flight to space. It isn't clear if it will conduct another static-fire test of the Super Heavy, with all 33 engines. The test mission will lift off from Texas and land off the coast of Hawaii, and could happen "in the next month or so," SpaceX President Gwynne Shotwell said Wednesday. "Keep in mind, this first one is really a test flight," Shotwell said. "The real goal is to not blow up the launch pad, that is success."

NASA has picked the Starship capsule to ferry its astronauts to the Moon as part of the Artemis 3 mission, set for 2025 at the earliest.

https://www.wionews.com/science/spacex-test-fires-engines-of-most-powerful-rocket-ever-built-560476