

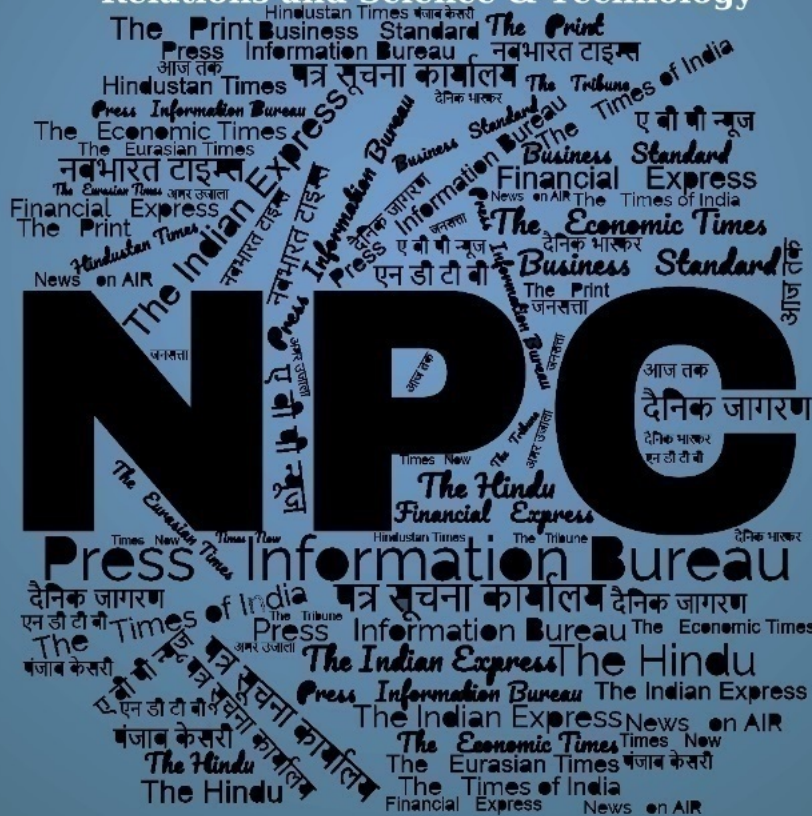
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समाचार पत्रों से चयनित अंश Newspapers Clippings

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

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अमरउजाला

Tue, 25 Jun 2024

Stryker Deal: सेना के लिए अमेरिकी स्ट्राइकर लेने पर क्यों अड़ी सरकार? जबकि DRDO का बनाया WHap है उससे बेहतर!

हाल ही में अमेरिकी राष्ट्रीय सुरक्षा सलाहकार जेक सुलिवन भारत की यात्रा पर थे। इस दौरान अन्य रक्षा समझौतों के अलावा लेटेस्ट जनरेशन इनफ्रैट्री कॉम्बैट व्हीकल्स (ICVs) स्ट्राइकर के संयुक्त निर्माण को लेकर अंतिम दौर की बातचीत हुई है। उम्मीद है कि जल्द ही इस योजना को अमली जामा पहना दिया जाएगा। वहीं, इस डील को लेकर रक्षा विशेषज्ञ कह रहे हैं कि ऐसे समय में जब मोदी सरकार का पूरा जोर 'मेक इन इंडिया' पर है, तो स्वदेशी व्हील्ड आर्मर्ड प्लेटफॉर्म (WhAP) की बजाए सरकार अमेरिकी आर्मर्ड व्हीकल Stryker को क्यों खरीदना चाहती है। जबकि स्वदेशी WhAP व्हीकल अमेरिकी Stryker से कहीं ज्यादा बेहतर है।

रक्षा मंत्रालय ने स्ट्राइकर की खरीद के लिए तीन चरण की योजना का प्रस्ताव रखा है। इसके तहत फॉरेन सेल्स रूट (एफएमएस) के जरिए स्ट्राइकर की सीमित ऑफ-द-शेल्फ खरीद के बाद, संयुक्त उत्पादन भारत में होगा। वहीं, इससे भारत में ही स्ट्राइकर जैसे आर्मर्ड व्हीकल्स बनाए जाने लगेंगे। वहीं, स्ट्राइकर को पूर्वी लद्दाख और सिक्किम जैसे हाई एल्टीट्यूड इलाकों में चीनी सीमा पर तैनात किया जाएगा।

पुरानी रूसी **BMP** को हटाना चाहती है सेना

रक्षा सूत्रों के मुताबिक सेना आने वाले सालों में 2,000 से अधिक पुराने पड़ चुके रूसी मूल के BMP-II वाहनों को चरणबद्ध तरीके से हटाना चाहती है। इनकी जगह पर लेटेस्ट जनरेशन इनफ्रैट्री कॉम्बैट व्हीकल्स की जरूरत है। इसके अलावा सेना को बड़ी संख्या में जल-थल संचालन (एंफीबियस) में इनफ्रैट्री कॉम्बैट व्हीकल्स की भी आवश्यकता है। जबकि स्ट्राइकर एंफीबियस नहीं है। इसके लिए सेना को स्वदेशी विकल्पों पर विचार करना होगा। स्ट्राइकर के वैरिएंट्स की बात करें, तो इसमें इन्फ्रैट्री कैरियर व्हीकल, मोबाइल गन सिस्टम, मेडिकल इवेक्वेशन सिस्टम, फायर सपोर्ट (आईसीवी), एंटी टैंक गाइडेड मिसाइल कैरियर और टोही व्हीकल्स शामिल हैं।

अमेरिकी सेना में काफी पॉपुलर है स्ट्राइकर

स्ट्राइकर को पहली बार 20 साल पहले ऑपरेशन इराकी फ्रीडम II के दौरान इस्तेमाल किया गया था। इसी ऑपरेशन के दौरान 3 ब्रिगेड, सेकंड इन्फ्रैट्री डिवीजन (अब 1-2 स्ट्राइकर ब्रिगेड कॉम्बैट टीम) को अपना उपनाम 'घोस्ट सोल्जर्स' मिला था। इस आर्मर्ड व्हीकल में सवार लोगों को रॉकेट-प्रोपेल्ड ग्रेनेड जैसे पारंपरिक हथियारों से सुरक्षित रखने में मदद मिलती थी। सद्दाम की सेना की हार के बाद आईईडी का इस्तेमाल बढ़ गया। ऐसे ही एक आईईडी ब्लास्ट में स्ट्राइकर को काफी नुकसान हुआ, लेकिन चालक दल सुरक्षित बच गया। जिसके बाद अमेरिकी सशस्त्र बलों के बीच यह काफी पॉपुलर हो गई और इसके बारे में यह कहा जाने लगा कि स्ट्राइकर न केवल आपको लड़ाई में ले जा सकता है, बल्कि आपको घर भी सुरक्षित पहुंचा सकता है।

सैन्य सूत्र बताते हैं कि इस साल फरवरी में मौजूदा आर्मी चीफ जनरल मनोज पांडे अमेरिका दौरे पर गए थे। जहां उन्होंने अमेरिकी सेना की वन कोर के हेडक्वार्टर का भी दौरा किया था और स्ट्राइकर यूनिट से जानकारी ली थी। भारत और अमेरिका ने 10 नवंबर को टू प्लस टू वार्ता के दौरान 8 पहियों वाले स्ट्राइकर इनफैंट्री कॉम्बैट व्हीकल के संयुक्त निर्माण पर चर्चा की थी।

WhAP के मुकाबले स्ट्राइकर में कम पावर का इंजन

वहीं सैन्य विशेषज्ञों ने स्ट्राइकर की कम पावर को लेकर चिंता जताई है, क्योंकि इसमें कैटरपिलर सी7 350 हॉर्स पावर इंजन लगा है, और हाई एल्टीट्यूड में इसे ऑपरेट करने में दिक्कत होगी। हालांकि अमेरिका ने स्ट्राइकर को 750 हॉर्स पावर इंजन के साथ अपग्रेड करने की पेशकश की है। लेकिन विशेषज्ञों का कहना है कि इससे मेक इन इंडिया के तहत भारत में बन रहे स्वदेशी WhAP व्हीकल के लिए दिक्कत पैदा होगा।

स्ट्राइकर डील से आत्मनिर्भर भारत को होगा नुकसान

सैन्य विशेषज्ञ और आईएफ से रिटायर्ड अधिकारी विजेंदर के ठाकुर कहते हैं कि अमेरिकी स्ट्राइकर डील स्वदेशी रूप से विकसित WhAP को खत्म कर देगी। इससे मेक-इन-इंडिया, आत्मनिर्भर भारत अभियान को बेकार हो जाएगा। स्ट्राइकर के स्थानीय निर्माण से रोजगार के अवसर तो पैदा होंगे, लेकिन इससे भारत में WhAP बनाने की घरेलू क्षमता को बढ़ावा नहीं मिलेगा। पिछले दशक में, दो भारतीय कंपनियों- टाटा मोटर्स और महिंद्रा - ने भारतीय सेना के निर्धारित मानकों के अनुसार डीआरडीओ की देखरेख में ऐसे व्हीकल्स बनाने के लिए समझौता किया था। लेकिन अब स्ट्राइकर को खरीदने की जरूरत क्यों पड़ी, इसे समझना मुश्किल है। वह भी उस समय पर जब भारत ने पहले ही स्थानीय स्तर पर WhAP बनाने की क्षमता हासिल कर ली है।

वहीं एक अन्य रिटायर्ड अधिकारी के. सिंह भी विजेंदर ठाकुर की बात से सहमत हैं। वे कहते हैं कि इससे WhAP की जरूरत केवल एंफीबियस जरूरतों के लिए ही रह जाएगी, और बाकी कामों के लिए केवल स्ट्राइकर ही इस्तेमाल किया जाएगा। इसके अलावा फ्यूचर इंफैंट्री कॉम्बैट व्हीकल्स का (FICV) का भविष्य भी खतरे में पड़ जाएगा। वहीं, जब इंडिजिनियस डिजाइंड एंड मैनुफैक्चर्ड (IDDM) व्हीकल्स मौजूद हैं, तो सरकार स्ट्राइकर की डील को आगे क्यों बढ़ा रही है?

कनाडा को फायदा क्यों पहुंचाना चाहती है सरकार?

डिफेंस एक्सपर्ट और सीनियर जर्नलिस्ट शिव अरुर कहते हैं कि जब टाटा, महिंद्रा, कल्याणी आदि जैसी कंपनियां पहले से ही ICV पर काम कर रही हैं, तो स्ट्राइकर को भारत में अमेरिका के साथ मिलकर बनाना पूरी तरह से मूल्यपूर्ण है। स्ट्राइकर का पूरा इकोसिस्टम कनाडा में है, तो ऐसे में भारत सरकार को कनाडा को फायदा क्यों पहुंचाना चाहिए। शिव कहते हैं कि यह भारत-अमेरिका डीटीटीआई (डिफेंस टेक्नोलॉजी और ट्रेड इनिशिएटिव) की पूरी तरह से बर्बादी है।

स्ट्राइकर एक 8-व्हील ड्राइव कॉम्बैट व्हीकल है, जिसे जनरल डायनेमिक्स लैंड सिस्टम्स-कनाडा ने अमेरिका के लिए विकसित किया है। इसमें 350 हॉर्सपावर वाला कैटरपिलर C7 इंजन लगा है, इसकी रेंज 483 किलोमीटर है और यह अधिकतम 100 किमी/घंटा की गति से चल सकता है। इसमें बेहतर सुरक्षा के लिए बोल्ट-ऑन सिरेमिक कवच लगा है और यह इम्प्रोवाइज्ड एक्सप्लोसिव डिवाइस (आईईडी) का ब्लास्ट भी झेल सकता है।

हाई एल्टीट्यूड में कामयाब रहा है **WhAP**

डिफेंस सेक्टर की दिग्गज कंपनियों टाटा, महिंद्रा और कल्याणी ने रक्षा अनुसंधान एवं विकास संगठन (DRDO) के साथ मिलकर व्हीलड आर्मर्ड प्लेटफॉर्म (WhAP) नामक कॉम्बैट व्हीकल बनाया है। इस प्लेटफॉर्म का शुभारंभ दिल्ली में डिफेंस एक्सपो 2014 में किया गया था। वहीं हाई एल्टीट्यूड जगहों पर भी इसका परीक्षण किया जा चुका है भारतीय सेना इसकी क्षमताओं से प्रभावित हुई थी।

दिधी में डीआरडीओ प्रयोगशाला में रिसर्च एंड डेवलपमेंट एस्टेब्लिशमेंट (इंजीनियर्स) के पूर्व डायरेक्टर डॉ. एस. गुरुप्रसाद के मुताबिक WhAP काफी बेहतरीन है और उच्च तकनीक पर बेस्ड है। इसका परीक्षण हाई एल्टीट्यूड पर भी किया जा चुका है। सेना भी इसके प्रदर्शन से काफी प्रभावित थी। वहीं स्ट्राइकर के विपरीत, WhAP एंफीबियस है।

WHAP vs Stryker ये हैं खूबियां

WhAP स्ट्राइकर के मुकाबले कई गुना बेहतर है। WhAP 2+9 लोगों को ले जा सकता है, जबकि स्ट्राइकर 3+8 लोगों को ले जा सकता है। WhAP का वजन 21.5 टन है, जबकि स्ट्राइकर का वजन 19.35 टन है। WhAP का पावर-टू-वेट रेशियो 25 है, जबकि स्ट्राइकर का 17.24 है। इसके अलावा WhAP में एंफीबियस क्षमता और परमाणु सेंसर भी हैं, जो स्ट्राइकर में नहीं हैं। इसमें 600 हॉर्सपावर का इंजन लगा है। WhAP 101 किमी प्रति घंटे की अधिकतम गति प्राप्त कर सकता है और इसकी अधिकतम सीमा 500 किमी है। जबकि स्ट्राइकर की अधिकतम रफ्तार 96.5 किमी प्रति घंटा है। वहीं एंफीबियस मोड में WhAP ऑनबोर्ड वॉटर जेट के साथ 10 किमी प्रति घंटे तक की रफ्तार से नदी को पार कर सकता है। इसमें कोंग्सबर्ग 30-मिमी तोप लगी है, जिसे रिमोट से ऑपरेट किया जा सकता है। इसमें 40-मिमी ग्रेनेड लांचर लगे हैं। इसमें एंटी-टैंक मिसाइलें या 12.7 मिमी मशीन गन भी लगाई जा सकती हैं।

टाटा पहले ही केंद्रीय अर्धसैनिक बलों और भारत-तिब्बत सीमा पुलिस (आईटीबीपी) को इसकी डिलीवरी कर चुकी है। जिनका इस्तेमाल लद्दाख में किया जा रहा है। वहीं इनकी कीमत लगभग 23 करोड़ के आसपास आती है, जबकि स्ट्राइकर की कीमत 45 से 47 करोड़ रुपये के आसपास है।

<https://www.amarujala.com/india-news/as-india-signs-stryker-deal-with-us-know-drdo-whap-technology-infantry-combat-vehicle-aatmanirbhar-bharat-news-2024-06-25>

ThePrint

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India's 15-yr quest for anti-tank missile: Israeli Spike, DRDO option, back to US for Javelin talks

About 15 years after the initial decision was taken only to be spiked later for an Israeli system and then for an indigenous solution, India and the US are back to the negotiating table for the joint production of the shoulder mounted Javelin anti-tank guided missiles. Several experts in the defence sector that ThePrint spoke to hardly expressed any surprise at the turn of events.

They said that the US' dogged pursuit of the deal and failure of the Defence Research and Development Organisation (DRDO) to come out with a credible alternative has turned the wheel back to where it started. It is reported that the discussions on the joint production of the missiles took place recently during a high-level visit from the US to India. The recent high profile visit was that of US National Security Adviser Jake Sullivan this month during which a number of key issues including military cooperation was discussed.

While fresh talks have been held, it was way back in August 2010 that India publicly announced its plans to acquire the Javelins, a system that has proved to be a killer in the hands of Ukrainians against the Russians.

In a written reply in the Lok Sabha, the then Defence Minister A.K. Antony informed Parliament that his ministry was planning to issue a Letter of Request to the US for procurement of 3rd Generation Anti-Tank Guided Missile (ATGM), Javelin.

He had said that the procurement was being planned under the US FMS (Foreign Military Sale) route and would involve transfer of technology. Under the FMS route, the defence ministry would directly negotiate with the US government, without the involvement of the manufacturer of the missile system.

India was required to pay the price which the US government pays to its contractors, plus a nominal fee as administrative charges. In 2010, the Army had a shortfall of 44,000 ATGMs of various kinds against a sanctioned holding strength of about 81,000. The Army till then was only operating the 2nd generation 2-km-range Milan of Russian origin and 4-km-range Russian Konkurs ATGMs. However, news came in 2012 that the Javelin deal hit a roadblock over transfer of critical technology and reluctance of the American government to participate in the field trials.

Manufactured under a joint venture of Raytheon and Lockheed Martin, the missile till then had been showcased only at joint exercises held between both the countries. And then in 2014 after the Modi government took over, India decided to buy 8,356 Spike anti-tank guided missiles and 321 launchers from Israel for Rs 3,200 crore, rejecting the US offer of Javelin missiles that Washington was lobbying hard for.

India will outright buy 8,356 missiles and 321 launchers from Israeli firm Rafael Advanced Defence Systems followed by transfer of technology (ToT) to defence PSU Bharat Dynamics Limited for large-scale manufacture. At that time, it was said that the Army needed about 40,000 Spike systems to fully equip its 382 infantry battalions and 44 mechanised infantry units. So while the Army was set to finally induct the Israeli ATGMs, the DRDO started pitching for the indigenous MT-ATGM (Man Portable Anti-Tank Guided Missile). DRDO's contention was that MP-ATGM will be a third generation 'fire and forget' ATGM derived from India's NAG ATGM.

Based on the claims of the DRDO, the defence ministry had in January 2015 approved the DRDO project to make a man-portable version of the Nag missile with a probable completion date of around July 2018. Accordingly in 2017, India cancelled plans to induct the Spike ATGM much to the surprise of the Israelis.

However, following a visit to India in January 2018, Israeli Prime Minister Benjamin Netanyahu said he was informed by the Indian government that it decided to put the Spike deal back on track. Earlier that month in 2018, Rafael had said it received a letter from India's Ministry of Defence cancelling the deal worth about USD 500 million.

The US kept at it and offered joint production of the Javelin under the now defunct Defense Technology and Trade Initiative (DTTI) route in 2019. But, India kept buying small volumes of Spike to beef up its Army even as it waited for the indigenous solution. The Indian MP-ATGM is still under development and has been tested several times with the objective of proving the technology's superiority.

The system consists of the MP-ATGM, Launcher, Target Acquisition System, and Fire Control Unit. However, an ANI report said that the Indian forces are looking at "shoulder-fired missile systems that are less in weight and can be carried in difficult terrain by troops without engaging too

many of them to carry it". This meant that the Indian solution is heavier than what the Army wanted and beats the whole idea of it being easily portable. It is reported that the Indian partner for joint production of the Javelin system would be identified at a later stage, as discussions have just started.

<https://theprint.in/defence/israeli-spike-delayed-native-solution-back-to-us-for-javelin-talks-indias-15-yr-search-for-atgms/2140053/>



Wed, 26 Jun 2024

DRDO का नया सिस्टम तैयार, अंधेरे में भी दिखेगी घुसपैठियों की हरकत, जानिए खासियत

राजस्थान सहित अन्य फ्रंटियर में भारत-पाक अंतरराष्ट्रीय सीमा से घुसपैठ करना अब आसान नहीं होगा। डीआरडीओ ने आर्टिफिशियल इंटेलीजेंस आधारित एक ऐसा सिस्टम तैयार किया है, जो घने कोहरे, आंधी और अंधेरे में भी एक किलोमीटर दूर से ही घुसपैठिए को पहचान अलर्ट कर देगा।

बीएसएफ अभी इसके लिए थर्मल इमेजर का इस्तेमाल कर रहा है, जो विशेष परिस्थितियों में काम नहीं करता। वैज्ञानिकों ने इस उपकरण का परीक्षण ऐसे स्थानों पर किया, जहां थर्मल इमेजर काम नहीं करता। परीक्षण सफल रहने पर भारत पाक अंतरराष्ट्रीय सीमा और वास्तविक नियंत्रण रेखा पर इसकी तैनाती पर विचार चल रहा है।

इस उपकरण को डीआरडीओ की देहरादून स्थित प्रयोगशाला ने तैयार किया है। इसे वीडियो एंड इमेज प्रोसेसिंग, एनहांसमेंट एंड रिकग्निशन सिस्टम (वीआईपीईआरएस) का नाम दिया गया है। इसमें थर्मल कैमरा लगा है, जिससे मिले चित्रों के आधार पर एआई सिस्टम इंसान की पहचान करने में सक्षम है।

क्या है नया सिस्टम

- परीक्षण के दौरान देखा गया कि यह सवा किलोमीटर दूर उत्पन्न होने वाली हलचलों को कैमरे में कैद कर लेता है।
- निर्धारित रेंज में कोई घुसपैठ की कोशिश करेगा तो यह सिस्टम एक अलार्म पैदा करेगा, इससे बीएसएफ तुरंत हरकत में आ जाएगी।
- नव विकसित सिस्टम स्वचालित है तथा इसे एक बार स्थापित करना होता है।

<https://www.patrika.com/sri-ganganagar-news/drdo-new-system-speciality-which-will-identify-and-alert-the-intruder-from-a-kilometer-away-indo-pak-international-border-latest-news-18797754>

Defence Ministry signs 350th contract under iDEX for miniaturised satellite

The 350th contract under the Innovations for Defence Excellence (iDEX), the flagship initiative of the Ministry of Defence was signed with SpacePixxel Technologies Pvt Ltd for the design and development of a ‘miniaturised satellite capable of carrying electro-optical, infrared, synthetic aperture radar, and hyperspectral payloads up to 150 kgs’, the defence ministry announced on Tuesday. This challenge is being led by the Indian Air Force. The 150th iDEX contract was signed in December 2022.

“This 350th iDEX contract enables innovation in space electronics, wherein many payloads earlier deployed on dedicated large satellites are now being miniaturised,” the Ministry said. The modular small satellite will integrate multiple miniaturised payloads as per requirement, providing advantages like faster and economical deployment, ease of manufacturing, scalability, adaptability, and less environmental impact, it stated.

The contract was exchanged between Additional Secretary (Defence Production) & CEO, Defence Innovation Organisation (DIO) Anurag Bajpai and Founder and CEO of SpacePixxel Technologies Pvt. Ltd. Awais Ahmed Nadeem Alduri. SpacePixxel has been actively working to build and launch high-resolution hyperspectral imaging satellites to provide detailed earth observation data, the statement said.

Established by the DIO under the Department of Defence Production, iDEX has launched 11 editions of the Defence India Start-up Challenge and recently unveiled the Acing Development of Innovative Technologies with iDEX (ADITI) scheme to promote innovations in critical and strategic defence technologies. Till now, procurement of 35 items, worth over ₹2,000 crore, has been cleared.

The iDEX was the recipient of Prime Minister Award for Public Policy in Innovation Category in 2021 and is currently engaged with over 400 start-ups and MSMEs.

<https://www.thehindu.com/news/national/defence-ministry-signs-350th-contract-under-idex-for-miniaturised-satellite/article68331710.ece>



**Press Information Bureau
Government of India**

Ministry of Defence

Tue, 25 Jun 2024

IAF Concludes 3rd 'Warfare & Aerospace Strategy Program' (WASP) With A Capstone Seminar

First WASP With Tri-Service Participation

Indian Air Force today conducted a capstone seminar marking the culmination of the No. 3 Warfare & Aerospace Strategy Program (WASP) at the Air Force Auditorium, New Delhi. The seminar with the theme "India's Strategic Culture and Imperative for Contemporary National Security" was conducted under the aegis of the College of Air Warfare and Centre for Air Power Studies.

WASP is a strategic education programme of 15 weeks duration which was started in 2022 to provide the participants with a deep understanding of geo-politics, grand strategy and Comprehensive National Power. The broader aim is to nurture critical thinkers who can blend cross-domain knowledge to generate policy-driving ideas at the strategic level.

This edition of WASP saw tri-services participation for the first time. The participants comprised fourteen officers from Indian Air Force, two officers from the Indian Navy, one officer from the Indian Army and a research scholar. The participants underwent intensive training in the fields of Strategy, Military History, Civil-Military relations, Higher Defence Organisation, Aerospace Power, Information Warfare, Technology and Hybrid Warfare.

The program was guided by an external faculty consisting of accomplished practitioner-scholars with extensive teaching and research experience. The graduates of the program were awarded a PG diploma in Strategic Studies by Rashtriya Raksha University.

Air Chief Marshal VR Chaudhari, Chief of the Air Staff (CAS), delivered the keynote address of the seminar which was attended by Gen Anil Chauhan, Chief of the Defence Staff, Gen Manoj Pande, Chief of the Army Staff, senior officers from all three services, aerospace power scholars, academia and established defence correspondents. He highlighted that the dynamic environment of modern warfare demanded that military leaders not only be adept at combat, but also possess strategic thinking ability and grasp of the evolving geo-political landscape.

The CAS congratulated the course participants for successfully completing the rigorous program. While concluding, the CAS complimented the mentors who guided the participants through the programme and urged them to continue with the same zeal in the forthcoming editions of the WASP.

In the first session of the Seminar, the participants presented their papers on the topics of 'Examining International Relations through India's Strategic Culture' and 'Military Outlook through Strategic Partnerships'. This was followed by the second session, which saw them discussing

'Evolution of Civil-Military Relations in India' and 'Imperatives of Evolving Security Environment on Future Contours of Civil-Military Fusion (CMF).

<https://pib.gov.in/PressReleasePage.aspx?PRID=2028595>



Tue, 25 Jun 2024

To navigate through 'turbulent times', India must invest in modernisation of armed forces: IAF chief

IAF Chief Air Chief Marshal V R Chaudhari said on Tuesday the contemporary security landscape presents "multi-faceted challenges" from border disputes and terrorism to cyber threats and regional volatility, and India must invest in modernisation of its armed forces to navigate through these "turbulent times".

Delivering a keynote address at a seminar here, the IAF chief also said modern warfare is characterised by rapid technological advancements, asymmetric threats and the need for a comprehensive understanding of geopolitical, social and cultural contexts.

His remarks come amid the backdrop of evolving geopolitics with conflicts being seen in some of the regions of the world.

The seminar was hosted by the Indian Air Force , College of Air Warfare and Centre for Air Power Studies at the Air Force Auditorium at Subroto Park to mark the culmination of the third Warfare & Aerospace Strategy Programme .

"This programme has enabled us to refine the definition of scholar warriors," the IAF chef said.

This "multi-faceted landscape" requires such military personnel who are not only adept at combat but also possess a deep understanding of the broader implications of their actions, the air chief marshal said.

Therefore, in my opinion, a scholar warrior is a military professional who combines intellectual acumen with combat prowess in today's "increasingly complex and dynamic security environment", Air Chief Marshal Chaudhari asserted.

To emphasise the point, the IAF chief also invoked the words of ancient Greek historian Thucydides, who said "The society that separates its scholars from its warriors will have its thinking done by cowards and its fighting by fools".

He said India's strategic culture is shaped by historical experiences and the "ever-evolving geopolitical environment".

It emphasises on strategic autonomy, caution and a "strong focus on territorial integrity", he added.

"The contemporary security landscape presents multi-faceted challenges from border disputes and terrorism to cyber threats and regional volatility. To navigate through these turbulent times and secure our national interests, India must invest in modernisation of its armed forces, strengthen

strategic partnerships, promote indigenous defence production and adopt an integrated approach to both internal and external security," Air Chief Marshal Chaudhari said.

The event was also attended by various air warriors, retired senior officers of the IAF and scholars, among others.

The IAF chief underlined that India's strategic thinking can be traced back to the ancient texts like the Arthashastra written around the 4th century BC. It emphasised realpolitik and strategic pragmatism, "shades of which are visible today in every way we are dealing with contemporary issues".

In his address, he said the colonial experience taught India to remain "ever cautious and adopt a sovereign entity-centric approach" towards foreign policy and defence.

Atmanirbharta and Make in India are, therefore, an "offshoot of our strategic culture and a key towards preserving national security", he said.

"Whether India has a strategic culture or not is a matter of opinion, however, realpolitik, statecraft and diplomacy have always been a part of our historical tapestry and have shaped contemporary geopolitics," the IAG chief added.

External Affairs Minister S Jaishankar, in his recent book, 'Why Bharat Matters', offers a novel approach to contemporary complex international situations by presenting this perspective through the lens of the epic Ramayana, he said.

<https://www.hindustantimes.com/india-news/to-navigate-through-turbulent-times-india-must-invest-in-modernisation-of-armed-forces-iaf-chief-101719316583797.html>



Wed, 26 Jun 2024

Cost of future wars is enormous, must optimise resources: CDS General Chauhan

Saying that the cost of future wars would be "enormous", Chief of Defence Staff General Anil Chauhan on Tuesday stressed on the need to optimise resources and manpower and bring in efficiencies to afford weapons and systems of the future.

General Chauhan said before talks of fusion between civil and military resources, there should be fusion within the Army, Navy and Air Force.

General Chauhan said before talks of fusion between civil and military resources, there should be fusion within the Army, Navy and Air Force. "We have taken that up (service integration) and at last count, we had almost 170-odd initiatives where the three services can work together in an integrated manner.

In these processes, we will be able to optimise time, resources, processes, infrastructure and manpower," General Chauhan said at the Air Force capstone seminar which marked the

culmination of the third Warfare & Aerospace Strategy Program (WASP) course. WASP is a strategic education programme of 15 weeks that was started in 2022 to provide participants with a deep understanding of geopolitics, grand strategy and comprehensive national power, and is conducted by the IAF along with College of Air Warfare and Centre for Air Power Studies. General Chauhan said after integration within the three services, the logical step would be to take the approach forward to other services.

For instance, the Navy and Coast Guard can get the inventories and maintenance, repair and overhaul together. The Armed forces can also involve the Central Armed Police Forces into whatever logistics and infrastructure (that are) created, he added. General Chauhan said there are “hundreds of things where we can actually help the government to reduce costs”. “Because the cost of future wars is enormous, weapon systems and platforms are going to be very costly,” he said.

Noting that civil aviation is expanding, General Chauhan asked if it could have a military payoff. “We need to think on alternate ways of doing things. It has to be very practical and time bound,” he added. Addressing the seminar, IAF Chief Air Chief Marshal (ACM) V.R. Chaudhari said WASP has refined the definition of scholar warriors.

“A scholar warrior is a military professional who combines intellectual acumen with combat prowess in today’s increasingly complex and dynamic security environment,” he said. Talking of India’s strategic culture, the Air Chief said it is shaped by historical experiences and the ever-evolving geopolitical environment. “It emphasises strategic autonomy, caution and a strong focus on territorial integrity,” he said.

This edition of WASP saw tri-services participation for the first time with 14 officers from IAF, two officers from the Navy, one from the Army and one civilian researcher. The graduates of the programme were awarded a Postgraduate Diploma in Strategic Studies by Rashtriya Raksha University

<https://www.thehindu.com/news/national/cost-of-future-wars-is-enormous-must-optimise-resources-cds-general-chauhan/article68332881.ece>



Tue, 25 Jun 2024

India-Russia relations: New military cooperation and logistics agreement

In a significant development, Russia has announced that it is considering a new level of military cooperation with India, involving the joint deployment of troops and an agreement on logistics support. This potential move marks a new dimension in the strategic relationship between the two nations, signalling deeper defence ties and mutual reliance. Russian Prime Minister Mikhail Mishustin has tasked his country’s Defence Ministry with negotiating the details of this proposal with India.

Joint Military Deployment

Russia's new draft proposal includes the joint deployment of military formations, warships, and fighter jets. This deployment could potentially occur in each other's territories, enhancing the operational capabilities and readiness of both nations. This concept of joint deployment is unprecedented for India, which has traditionally refrained from such agreements outside of United Nations (UN) peacekeeping missions. Currently, Indian armed forces engage in exercises and defense cooperation with over two dozen countries but have not entered into agreements for joint troop deployments.

Logistics Support Agreement

The logistics support agreement under consideration is akin to the Logistics Exchange Memorandum of Agreement (LEMOA) that India signed with the United States in 2016. Such agreements facilitate the use of each other's naval and military bases for refuelling, repairs, and resupply. India has similar agreements with countries like France, Australia, Singapore, and South Korea. However, despite long standing discussions, an agreement with Russia has not yet materialized. The recent directive from the Russian Prime Minister might expedite this process, addressing the logistical needs of both nations.

Historical Context and Defence Exercises

The India-Russia defense relationship is longstanding and robust, with numerous joint military exercises underscoring their strategic partnership. Notably, in 2017, India and Russia conducted their first tri-service military exercise, Indra, in Vladivostok. This exercise involved the Army, Air Force, and Navy from both countries, utilizing Russian tanks, armoured vehicles, helicopters, and warships. This collaboration highlighted the compatibility of their military hardware, much of which India procures from Russia.

Prior to the tri-service exercise, India and Russia conducted separate exercises for each branch of their armed forces. Following the success of the Indra exercise, India held another tri-service exercise with the United States in Visakhapatnam, indicating its growing trend of comprehensive military drills.

Strategic Importance and Arctic Cooperation

The potential logistics support agreement with Russia is particularly significant in light of China's expanding influence in the Arctic region. As global warming opens new shipping routes and strategic opportunities in the Arctic, India is keen to establish a presence in this geopolitically critical area. Access to Russian military facilities in the Arctic would significantly bolster India's strategic posture and operational reach in the region.

Russia's Strategic Moves and Geopolitical Implications

The announcement of potential military deployment and logistics cooperation with India comes at a time when Russia is enhancing its strategic alliances globally. Recently, Russian President Vladimir Putin signed a special strategic agreement with North Korea, pledging mutual defense in the event of an attack on either nation. This move underscores Russia's intent to solidify its geopolitical influence through strategic partnerships.

Interestingly, Prime Minister Narendra Modi will not attend the upcoming Shanghai Cooperation Organization (SCO) summit in Kazakhstan due to the first session of the Indian Parliament. The SCO includes member states such as Russia, China, Pakistan, and Central Asian countries. However, PM Modi is heading to Moscow next month for the annual India-Russia Summit and later in the year will participate in the BRICS summit scheduled in Russia, furthering India's engagement with key global partners.

Formalization and Benefits of the Logistics Agreement

The formalization of the Reciprocal Exchange of Logistics Agreement (RELOS) with Russia has faced delays over several years. An official order published on Russia's legal information website on June 20 authorized the signing of this agreement. The RELOS, once concluded, will facilitate various military exchanges, including exercises, training, port calls, and Humanitarian Assistance and Disaster Relief (HADR) operations. The agreement, valid for five years with automatic renewals, promises to streamline logistical support and operational efficiency for both countries' armed forces.

Enhancing Defence Cooperation

The India-Russia defense cooperation extends beyond logistical support, encompassing the supply and development of military equipment and technology. The agreement on military technical cooperation for the decade 2021-2031, signed during the inaugural India-Russia 2+2 dialogue in December 2021, underscores this comprehensive partnership. A Navy-to-Navy cooperation agreement is also in the pipeline, further enhancing maritime collaboration between the two nations.

Global Military Logistics Network

India has established several logistics agreements with various countries, including all members of the Quad (the United States, Japan, Australia), as well as France, Singapore, South Korea, and Vietnam. These agreements facilitate the exchange of fuel and provisions, simplifying logistical support and increasing the operational turnaround of military operations far from home bases. The RELOS with Russia will be a critical addition, providing India access to Russian facilities in strategic regions like the Arctic.

<https://www.financialexpress.com/business/defence-india-russia-relations-new-military-cooperation-and-logistics-agreement-3534647/>



Tue, 25 Jun 2024

Ex-HOPEX: India-Egypt Defence Cooperation Strengthens; IAF And Egyptian Air Force hold drill

The Indian Air Force's (IAF) Rafale fighter jets are currently in Egypt for Ex- HOPEX. The C-17 Globemaster and IL-78 tankers are also participating in the weeklong exercise (21-26 June). The

aim of this exercise is to promote bilateral and regional cooperation, which is a symbol of the long-standing relations between the two countries.

On its way back from Alaska after joining in the 'Red Flag' exercise, the IAF contingent landed in Egypt.

On Sunday, Indian Ambassador to Cairo Ajit V Gupte reached Berighat Airbase in Egypt and met the IAF's team participating in Ex-HOPEX. Following this meeting, the Indian Embassy in Egypt gave information on its X account: "India-Egypt defense cooperation is continuously getting stronger. The fourth joint exercise of IAF (Indian Air Force) and EAF (Egyptian Air Force) will be held in Egypt from 21 to 26 June."

Relations between India and Egypt have strengthened considerably in recent years. After Prime Minister Narendra Modi took charge of the country for the third time, Egyptian President Abdel Fattah al-Sisi congratulated him on winning the election.

Diplomatic relations between India and Egypt began on 18 August 1947 at the ambassadorial level. Both countries have cooperated closely on multilateral forums as founding members of the Non-Aligned Movement. In the year 2022, India and Egypt celebrated the 75th anniversary of diplomatic relations, which reflects the depth of the relationship.

Earlier, the Rafale fighter jets and air-crew of the Indian Air Force went to Alaska to participate in the US multinational exercise 'Red Flag 24'. The exercise was conducted from 30 May to 14 June in an area of 77 thousand square miles. Eight Rafale fighter aircraft of the Indian Air Force, one C-17 Globemaster transport aircraft and one IL-78 air-refueler participated in it.

The aim of Red Flag was to integrate the airmen into the multinational environment and improve interoperability. A total of 100 aircraft and 3100 airmen from the air forces of four countries participated in it.

<https://www.financialexpress.com/business/defence-ex-hopex-india-egypt-defence-cooperation-strengthens-iaf-and-egyptian-air-force-hold-drill-3534490/>

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BusinessLine

Tue, 25 Jun 2024

US has emerged top destination for India's defence exports: Amcham

India's defence exports to the United States (US) has grown to account for over 50 per cent of the total exports, exceeding \$2.8 billion during the last 5 years, said Ranjana Khanna, Director General and CEO – American Chamber of Commerce in India (Amcham).

The Amcham in a report, "US-India Defence Partnership: Co-Production & Co-Development", laid emphasis over the fact that the US has emerged as the number one destination for India's defence exports.

In a statement to the media, the Amcham said its report “indicates that supporting the Government of India’s mission to enhance defence exports, US industry in India, and their Indian partners, have contributed to the US becoming the number 1 defence exports destination for India”.

India’s defence exports in FY22-23 stood at \$1.6 billion, showing over a ten-fold increase in 5 years.

“We thought it prudent and timey to highlight the US-India defence partnerships in the context of the US - National Security Advisor, Jake Sullivan’s recent India visit; and the Government’s target of achieving \$5 billion in defence exports by FY24-25,” Ranjana Khanna, Director General and CEO of Amcham said.

“It is important to note that Defence exports to the US accounted for over 50 per cent of total exports, strengthening the partnership and exceeded \$2.8 billion during the last 5 years”, she added.

India’s defence acquisitions include a diverse range of equipment from the US, the report also said.

According to the Stockholm International Peace Research Institute (SIPRI) report on global arms trade, 2024, France and US are emerging as key suppliers to India, collectively accounting for 46 per cent of its arms imports.

American companies have fostered strong partnerships with many in-country industrial entities, defence PSU’s, over 1,000 MSMEs, academia, start-ups and incubators, Amcham elaborated in its findings. Joint ventures and collaborations between U.S. companies and Indian entities, such as Lockheed Martin-Tata Advanced Systems, Boeing-HAL, BAE Systems-HAL, and GE-HAL, are fostering technology transfer, innovation, and skill development, it pointed out.

The US defence industry in India, as per the report, has created jobs through direct investments and by collaborating with their network of suppliers and joint venture partners. It has created over 28,000 direct jobs and a gainful employment for an additional 20,000 people, while bringing in improvement in quality of life for over 2.6 million people through initiatives in STEM education, skilling, nutrition, health, livelihood, sanitation, and sustainability through partnerships with science and technology institutes and other foundations.

<https://www.thehindubusinessline.com/economy/us-emerges-number-1-destination-for-indias-defence-exports-amcham/article68332410.ece>

R. REPUBLICWORLD.COM

Wed, 26 Jun 2024

Indian Air Force to Purchase of 10 Indigenous TAPAS Drones to Enhance Surveillance Capabilities

In a significant move to enhance indigenous unmanned surveillance capabilities, the Indian Air Force (IAF) has proposed to the central government the purchase of 10 TAPAS drones. Defence officials announced on Sunday that six of these Made-in-India drones are intended for the Indian Air Force, while the remaining four would be allocated to the Indian Navy.

The IAF is set to be the lead agency in the induction and acquisition process of the TAPAS drones for the defence forces. This proposal is expected to be reviewed soon by the Defence Ministry. Currently, only the IAF and the Indian Navy are involved in purchasing these drones.

Focus on Indigenous Development

TAPAS drones, classified as medium-altitude long-endurance (MALE) drones, have been developed indigenously by the Defence Research and Development Organisation (DRDO). Manufacturing is to be undertaken by a consortium comprising Bharat Electronics Limited and Hindustan Aeronautics Limited. The Tactical Airborne Platform for Aerial Surveillance Beyond Horizon-201 (TAPAS BH-201), formerly known as Rustom-II, is being developed to meet the surveillance needs akin to those of the General Atomics MQ-1 Predator.

Despite not fully meeting the current requirements of the defence forces, the limited induction of these drones is aimed at facilitating their upgrade and refinement to meet broader operational needs in the future. The IAF currently operates a fleet of Israeli-origin Searcher, Heron Mark-1, and Mark-2 drones and plans to induct American Predator MQ-9B drones as part of a tri-services acquisition.

Surveillance of Northern and Western Fronts

The inclusion of six indigenous TAPAS drones will bolster unmanned surveillance capabilities on both the northern and western fronts. The IAF has been a strong proponent of the Make in India initiative in defence, placing or planning orders for 180 LCA Mark 1A and 156 LCH attack helicopters, valued at approximately Rs 1.6 lakh crore.

The Indian Navy, on the other hand, intends to utilize the TAPAS drones for maritime surveillance. Delivery of these drones is expected to be expedited, with the first unit ready for deployment within 24 months of contract signing. DRDO continues to work on the TAPAS project to enhance its performance further.

Addressing Performance Challenges

The TAPAS drones have faced challenges in meeting the Joint Services Qualitative Requirements, which include sustained flight at 30,000 feet for over 24 hours. Consequently, they have been excluded from mission mode projects. However, during trials, the TAPAS drones managed to achieve an altitude of 28,000 feet and an endurance of over 18 hours.

The IAF's proposal highlights its commitment to indigenization and its role in supporting the development of domestic defence capabilities. The acquisition of TAPAS drones is a step towards self-reliance in defence technology and strengthens the surveillance capabilities of India's armed forces.

The induction of TAPAS drones marks a significant milestone in India's defence technology journey. The ongoing development and refinement efforts are expected to address existing performance gaps and meet the stringent requirements of modern warfare. The collaboration between DRDO, Bharat Electronics Limited, and Hindustan Aeronautics Limited is pivotal in achieving these objectives.

<https://www.republicworld.com/defence/indian-armed-forces/indian-air-force-to-purchase-of-10-indigenous-tapas-drones-to-enhance-surveillance-capabilities>

Indian Army announces commencement of Phase II of Agniveer recruitment process

The Indian Army on Tuesday announced the commencement of Phase II of the Agniveer recruitment process. "This phase marks a significant milestone in the Indian Army's efforts to transform its requirements procedures and ensure a seamless and efficient selection process for aspiring candidates.

The recruitment rally is free, fair and transparent so all candidates are advised not to approach any type of tout," stated PRO Defence, Guwahati. In June 2022, the government rolled out the Agnipath recruitment scheme for short-term induction of personnel with an aim to bring down the age profile of the three services.

The Agnipath scheme provides for recruiting youths between the age bracket of 17-and-half years and 21 for four years with a provision to retain 25 per cent of them for 15 more years.

The process involves two phases, with the first being an online computerbased written examination and second phase being the recruitment rally. Recently, the NDA government tasked a group of secretaries from 10 key ministries to review the Agnipath scheme and suggest ways to make the armed forces recruitment programme more attractive, underscoring the urgency with which the Centre wants to address any lacunae after it became a key election issue.

Those selected under the scheme are called Agniveers, reported ET. The review of the programme is also included in the revised 100- day agenda of the new government. The G7 summit runs from June 13 to 15. The decision to review the scheme comes after Modi government failed to win a majority independently in the 18th Lok Sabha polls.

To form government at the Centre, it had to take help from allies of NDA, with JD(U) being one of the key players. The party during the formation of government had demanded a correction in the defence scheme.

<https://economictimes.indiatimes.com/news/defence/indian-army-announces-commencement-of-phase-ii-of-agniveer-recruitment-process/articleshow/111262972.cms>

IISc researchers design novel 3D hydrogel culture to study TB infection and treatment

Researchers from the Department of Bioengineering (BE), Indian Institute of Science (IISc), have designed a novel 3D hydrogel culture system that mimics the mammalian lung environment. It provides a powerful platform to track and study how tuberculosis bacteria infect lung cells and test the efficacy of therapeutics used to treat TB. Mycobacterium tuberculosis (Mtb) is a dangerous pathogen.

In 2022, it affected 10.6 million people and caused 1.3 million deaths, according to the WHO. “It is a very old bug, and it has evolved with us quite a bit,” said Rachit Agarwal, Associate Professor at BE and corresponding author of the study published in *Advanced Healthcare Materials*. Mtb primarily infects the lungs, IISc said in a press release. Current culture models used to study Mtb infection have several limitations.

They are typically culture plates that are monolayered and do not accurately mimic the 3D microenvironment inside the lungs. The microenvironment experienced by the cells in such 2D culture is vastly different from the actual extracellular matrix (ECM) surrounding lung tissue. “In a tissue culture plate, there are no ECM molecules, and even if a very thin layer of ECM is coated on these plates, the lung cells 'see' the ECM on one side at best,” said Vishal Gupta, PhD student at BE and first author.

The 2D culture plates are also extremely hard compared to the soft lung tissues. “You are looking at a rock versus a pillow,” explains Agarwal.

He and his team have now designed a novel 3D hydrogel culture made of collagen, a key molecule present in the ECM of lung cells. Collagen is soluble in water at a slightly acidic pH. As the pH is increased, the collagen forms fibrils which cross-link to form a gel-like 3D structure. At the time of gelling, the researchers added human macrophages – immune cells involved in fighting infection – along with Mtb.

This entrapped both the macrophages and the bacteria in the collagen and allowed the researchers to track how the bacteria infect the macrophages. The team tracked how the infection progressed over 2-3 weeks. What was surprising was that the mammalian cells stayed viable for three weeks in the hydrogel – current cultures are only able to sustain them for 4-7 days. “This makes it more attractive because Mtb is a very slow-growing pathogen inside the body,” Agarwal added.

Next, the researchers carried out RNA sequencing of the lung cells that grew in the hydrogel, and found that they were more similar to actual human samples, compared to those in traditional

culture systems. The team also tested the effect of pyrazinamide – one of the four most common drugs given to TB patients. They found that even a small amount (10 µg/ml) of the drug was quite effective in clearing out Mtb in the hydrogel culture.

Previously, scientists have had to use large doses of the drug – much higher compared to concentrations achieved in patients – to show that it is effective in tissue culture. “Nobody has shown that this drug works in clinically relevant doses in any culture systems ... Our setup reinforces the fact that the 3D hydrogel mimics the infection better,” Agarwal said. Agarwal adds that they have already filed an Indian patent for their 3D culture, which can be scaled up by industries and used for drug testing and discovery.

“The idea was to keep it quite simple so that other researchers can replicate this,” he added. Moving forward, the researchers plan to mimic granulomas – clusters of infected white blood cells – in their 3D hydrogel culture to explore why some people have latent TB, while others show aggressive symptoms. Gupta says that the team is also interested in understanding the mechanism of action of pyrazinamide, which may help discover new drugs that are more or just as efficient.

<https://economictimes.indiatimes.com/news/science/iisc-researchers-design-novel-3d-hydrogel-culture-to-study-tb-infection-and-treatment/articleshow/111264008.cms>



Tue, 25 Jun 2024

China becomes 1st country to bring soil samples from far side of the moon

China became the first country on Tuesday to successfully bring rock and soil samples from the far side of the moon as its Chang'e 6 probe returned on Earth. The probe landed in northern China on Tuesday afternoon in the Inner Mongolian region.

“I now declare that the Chang’e 6 Lunar Exploration Mission achieved complete success,” Zhang Kejian, Director of the China National Space Administration said in a televised news conference after the landing.

Chinese President Xi Jinping congratulated the scientists and the team behind the success of Chang'e 6. He hailed the success and said that it was a “landmark achievement in our country's efforts at becoming a space and technological power.”

Chinese scientists hope that the samples will include 2.5 million-year-old volcanic rock and other material which will help answer questions about geographic differences on the moon's two sides.

The samples “are expected to answer one of the most fundamental scientific questions in lunar science research: what geologic activity is responsible for the differences between the two sides?” said Zongyu Yue, a geologist at the Chinese Academy of Sciences, in a statement issued in the Innovation Monday, a journal published in partnership with the Chinese Academy of Sciences.

The near side of the moon is visible from the Earth and the far side faces outer space. The far side of the moon is known to have mountains and impact craters, contrasting with the relatively flat expanses visible on the near side.

In recent years, with the launch of missions by India, Japan etc., moon exploration has taken centre stage. Earlier, countries like US and Russia (erstwhile Soviet Union) collected samples from the moon's near side.

Amid growing rivalry with the US in various sectors of the world, China is also flexing its might in space technology. China has launched its own space station in orbit and regularly sends crews there.

The Chang'e 6 probe had left Earth on May 3, and its journey lasted 53 days.

<https://www.hindustantimes.com/world-news/china-becomes-1st-country-to-bring-soil-samples-from-far-side-of-the-moon-101719310998790.html>



Tue, 25 Jun 2024

SkyFi partners with GalaxEye Space to revolutionise multi-sensor Earth imaging

GalaxEye Space, a space-tech startup, has announced a strategic partnership with SkyFi, that simplifies access to Earth observation imagery and provides powerful analytics tools.

This collaboration signifies a major advancement in the industry, coming well ahead of GalaxEye's first satellite launch and promising to enhance the accessibility and quality of high-resolution, multi-sensor data for a deeper understanding of Earth's dynamic landscapes.

The space startup's innovative technology equips satellites with both Synthetic Aperture Radar (SAR) and Electro-Optical/Multispectral Imaging (MSI) capabilities. This dual approach allows for the simultaneous collection of diverse data sets, providing valuable insights regardless of weather conditions. The maiden satellite, set to launch in Q3 2024, will feature a 2-meter resolution. Following this, four additional satellites are planned for 2025, aiming to achieve sub-1 meter resolution and daily global revisits.

Suyash Singh, Co-founder and CEO of GalaxEye Space, emphasized the transformative potential of this partnership: "At GalaxEye, we are passionate about pushing the boundaries of Earth observation. This partnership with SkyFi is a game-changer. By combining our advanced multi-sensor technology with their user-friendly platform, we transform decision-making for businesses and governments globally. This integration provides insights under any weather conditions and aligns with the 'Make in India for the World' initiative, strengthening India's prominence in space technology."

Luke Fischer, CEO of SkyFi, expressed similar enthusiasm: “We are excited to partner with GalaxEye and bring their new age multi-sensor imaging satellite capabilities into our platform. This partnership not only expands our capabilities but also aligns with our mission to make satellite imagery more accessible and useful for everyone. The simultaneous SAR and Optical imaging will provide useful information to end-users, allowing us to meet and exceed our customers’ expectations with even more detailed and frequent observations of the Earth.”

This collaboration integrates GalaxEye’s advanced multi-sensor technology with SkyFi’s platform, enhancing the range and quality of Earth observation data available to users. The partnership supports the ‘Make in India for the World’ initiative, highlighting India’s growing role in space technology.

https://www.financialexpress.com/business/defence-skyfi-partners-with-galaxeye-space-to-revolutionise-multi-sensor-earth-imaging-3534320/#google_vignette

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