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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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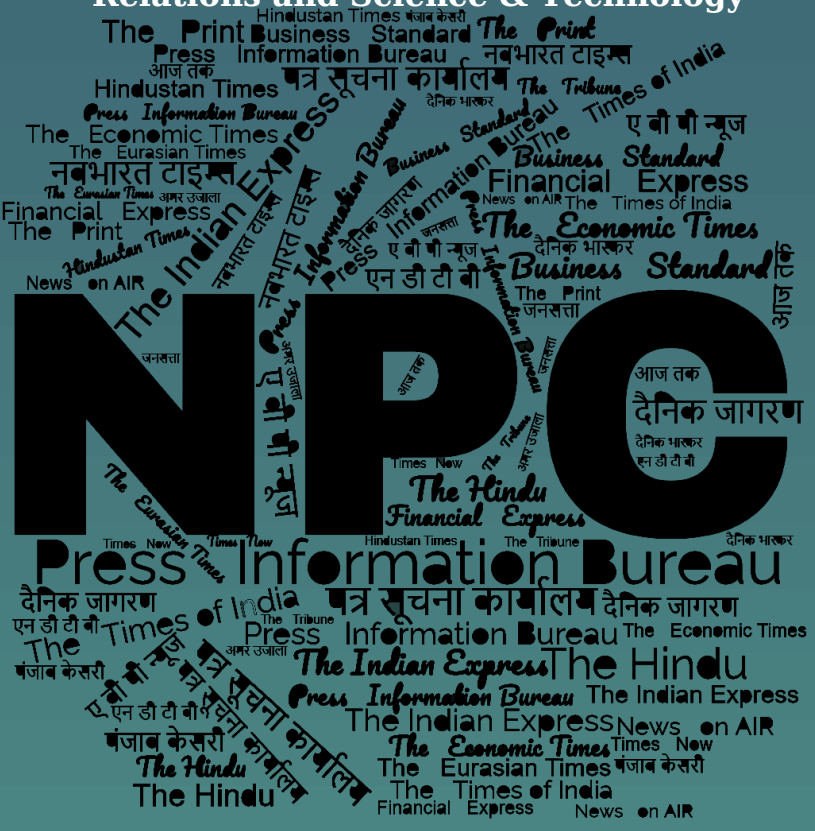

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CONTENTS

DRDO News

DRDO Technology News

Press Information Bureau
Government of India

Ministry of Defence

Thu, 07 Dec 2023

कम दूरी की बैलिस्टिक मिसाइल 'अग्नि-1' का सफल प्रशिक्षण प्रक्षेपण

कम दूरी की बैलिस्टिक मिसाइल 'अग्नि-1' का प्रशिक्षण प्रक्षेपण 07 दिसंबर, 2023 को ओडिशा के एपीजे अब्दुल कलाम द्वीप से सफलतापूर्वक संपन्न किया गया। अग्नि-1 उच्च परिशुद्धता वाली एक सिद्ध मिसाइल प्रणाली है। स्ट्रैटेजिक फोर्सेज कमांड के तत्वावधान में किए गए उपयोगकर्ता प्रशिक्षण प्रक्षेपण ने परिचालन और तकनीकी संबंधी सभी मापदंडों को सफलतापूर्वक पूरा किया।

https://pib.gov.in/PressReleasePage.aspx?PRID=1983854

Press Information Bureau
Government of India

Ministry of Defence

Thu, 07 Dec 2023

Successful Training Launch of Short-Range Ballistic Missile 'Agni-1'

Training launch of Short-Range Ballistic Missile 'Agni-1' was carried out successfully from APJ Abdul Kalam Island, Odisha on December 07, 2023. Agni-1 is a proven very high precision missile system. The user training launch, carried out under the aegis of the Strategic Forces Command, successfully validated all operational and technical parameters.

https://pib.gov.in/PressReleasePage.aspx?PRID=1983750

THE HINDU

Thu, 07 Dec 2023

India Successfully Conducts Training Launch of Short-range Ballistic Missile Agni-1

India on December 7 successfully conducted the training launch of short-range ballistic missile 'Agni-1 from APJ Abdul Kalam Island, off the Odisha coast, a defence official said.

"Agni-1 is a proven very high precision missile system. The user training launch, carried out under the aegis of the Strategic Forces Command, successfully validated all operational and technical parameters," said the official. Thursday's performance was validated using data obtained by many tracking systems, including radar, telemetry and electro-optical systems, the official said.

These systems were deployed at different locations along the flight path, including two down-range ships at the terminal point, and covered the entire trajectory.

The missile was successfully test-fired last time on June 1 from the same base.

In October last year, India successfully test-fired 'Agni Prime' - a new generation of ballistic missiles - from off the coast of Odisha.

The Agni series of missiles are the mainstay of India's nuclear delivery options.

https://www.thehindu.com/news/national/india-successfully-conducts-training-launch-of-short-range-ballistic-missile-agni-1/article67615724.ece

Defence News

Defence Strategic: National/International

Press Information Bureau
Government of India

Ministry of Defence

Thu, 07 Dec 2023

Raksha Mantri Shri Rajnath Singh Conducts Aerial Survey of Areas Ravaged by Cyclone Michuang in-and-around Chennai

Raksha Mantri Shri Rajnath Singh conducted an aerial survey of flood-affected areas in-and-around Chennai, Tamil Nadu on December 07, 2023. The areas were ravaged by Cyclone Michuang. Minister for Finance & Human Resources Management in Tamil Nadu government Shri Thangam Thenarasu and Chief Secretary Shri Shiv Das Meena accompanied the Raksha Mantri during the aerial survey. Shri Rajnath Singh also held a meeting with the Chief Minister of Tamil Nadu Shri MK Stalin and reviewed the current situation.

Talking to reporters after the aerial survey, the Raksha Mantri stated that the Central and state governments are together putting up an effective response to mitigate the crisis. He added that Indian Army, Indian Navy, Indian Air Force, Indian Coast Guard, National Disaster Response Force (NDRF) & other central agencies are assisting the state government in the relief & rescue operations and leaving no stone unturned to bring back normalcy.

The Raksha Mantri told the reporters that Prime Minister Shri Narendra Modi is deeply distressed by loss of lives due to the cyclone and he is closely reviewing the situation. "The Prime Minister spoke with the Tamil Nadu Chief Minister and has assured all possible help from the Central

Government. He has directed the Ministry of Home Affairs to release in advance the central share of the second installment of State Disaster Response Force (SDRF) of Rs 493.60 crore to Andhra Pradesh and Rs 450 crore to Tamil Nadu. The Centre had already released its first installment of the same amount to both the states," he said.

Shri Rajnath Singh further stated that the Centre has approved the first urban flood mitigation project of Rs. 561.29 crore for 'Integrated Urban Flood Management activities for Chennai Basin Project' under the National Disaster Mitigation Fund, which also includes central assistance of Rs 500 crore.

https://pib.gov.in/PressReleasePage.aspx?PRID=1983477

Press Information Bureau
Government of India

Ministry of Defence

Thu, 07 Dec 2023

Domestic Defence Industries must Bolster Technological Capabilities to Address Traditional & Future Challenges: Chief of Defence Staff at Avionics Expo 2023

"It is essential for modern militaries to be ready to fight today while preparing for the future"

Chief of Defence Staff General Anil Chauhan has called upon the domestic defence industries to bolster technological capabilities to address traditional and future challenges. Inaugurating the Avionics Exposition 2023 organised by Hindustan Aeronautics Limited (HAL) in New Delhi on December 07, 2023, General Anil Chauhan urged the industry to understand the requirement of services, and evolve solutions that fit country's terrain, climate & operational requirements. "India's challenges must be resolved with Indian solutions as a series of contemporary events have exposed the vulnerability of global supply chains," he said.

The Chief of Defence Staff pointed out that the Government has adopted the 'Aatmanirbharta' approach to mitigate uncertainties and this vision demonstrates its confidence in the domestic industry. "A number of steps are being taken to strengthen the defence industrial capabilities under the 'Aatmanirbharta' initiative. We are boosting our indigenous and innovative defence capabilities," he said.

Highlighting the economic prospects of self-reliance in defence including aerospace and avionics, General Anil Chauhan asserted that the defence industrial sector has a large potential to achieve the country's economic goals. "Global Military Avionics Market is projected to grow US$ 56.998 billion by 2030. This provides us a window of opportunity which needs to be exploited by believing in the mantra of 'Make for India, Make for World'," he said.

The Chief of Defence Staff underscored the significance of new-age technologies and termed it essential for modern militaries to be ready to fight today while preparing for an "uncertain and ambiguous" future, in the era of dynamic global security landscape and rapid technological advancements. Stating that the convergence of new technologies is making the battle space more automated and autonomous, he stressed that the advent of technological solutions in the field of networking, data analytics and robotics have heralded a new landscape in the field of avionics.

General Anil Chauhan urged the military and the scientific community to maintain pace with the technological requirements, so that the nation remains ahead of the curve. “This would need investment of thoughts, skill and capital. In the field of military avionics, it will include precision targeting, electronic warfare, aircraft health monitoring and data connectivity for positive control,” he added.

The two-day Avionics Expo-2023 is being held at Dr Ambedkar International Centre, New Delhi on December 07-08, 2023. During the expo, the HAL is showcasing its design, development and production of a diverse range of avionics systems.

https://pib.gov.in/PressReleasePage.aspx?PRID=1983513

THE TIMES OF INDIA

Fri, 08 Dec 2023

CDS Pushes for Reliance on Domestic Defence Industry

India is making concerted efforts at manned-unmanned teaming of military assets, especially in the aviation domain, which will be a key area in future warfare, chief of defence staff General Anil Chauhan said on Thursday.

The CDS, speaking at the Avionics Expo by Hindustan Aeronautics (HAL), stressed the need for domestic defence industries to develop advanced technological capabilities to address traditional and future challenges. "India's challenges must be resolved with Indian solutions as a series of contemporary events have exposed the vulnerability of global supply chains," Gen Chauhan said.

Asserting that the defence-industrial sector has a large potential to achieve the country's economic goals, he said, "Global military avionics market is projected to grow to $56 billion by 2030. This provides us a window of opportunity that needs to be exploited by believing in the mantra of 'Make for India, Make for World'."

HAL chief C B Ananthakrishnan, in turn, said Philippines, Nigeria, Argentina and Egypt have shown interest in procuring the indigenously-developed single-engine Tejas.

Argentina, in fact, has asked India to submit a formal proposal for its proposed acquisition of 16 fighters, in which the Chinese JF-17 'Thunder' and other foreign jets are also in the competition. But Argentina has also insisted there should be no British-origin parts in the Tejas jets, given its lingering dispute with the UK. At the expo, Gen Chauhan said, "We are in the midst of a change and transformation. In such an era, it is essential that modern militaries are ready to fight, while they prepare themselves for future conflicts."

https://timesofindia.indiatimes.com/india/cds-pushes-for-reliance-on-domestic-defence-industry/articleshow/105823694.cms

NDTV

Thu, 07 Dec 2023

सेना का नया 'लूनबर्ग लेंस', ड्रोन को हेलीकॉप्टर समझकर फंसेगा दुश्मन

भारतीय सेना ने एक हर मौसम, हर इलाके में इस्तेमाल किये जाने वाला एक खास 'लेंस' विकसित किया है. इसका उपयोग युद्ध के दौरान दुश्मन की वायु रक्षा प्रणालियों को चकमा देने के लिए किया जा सकता है. इससे दुश्मन के

एयर डिफेंस को कुचलने और नष्ट करने में मदद मिलेगी. इस लेंस का नाम है 'लूनबर्ग'. सेना ने लूनबर्ग लेंस का सफल परीक्षण कर लिया है, जो एक ड्रोन से जुड़ा होता है. इसका इस्तेमाल दुश्मन के हथियारों, जमीनी बलों और विमानों के हथियारों का पता लगाने के लिए किया जाएगा.

कैसे काम करता है लूनबर्ग लेंस?

ड्रोन से जब लूनबर्ग लेंस जुड़ा होता है, तब ड्रोन के रडार की क्षमता काफी बढ़ जाती है, जिससे यह एक हेलीकॉप्टर जैसा दिखाई देता है. रडार क्रॉस-सेक्शन रिसीवर पर रडार संकेतों को प्रतिबिंबित करने की लक्ष्य की क्षमता है. रडार क्रॉस-सेक्शन का क्षेत्रफल जितना अधिक होगा, लक्ष्य उतना ही बड़ा होगा. हेलीकॉप्टर की तुलना में ड्रोन में छोटा रडार क्रॉस-सेक्शन होता है. ल्यूनबर्ग लेंस रडार सिग्नेचर को बढ़ाता है और दुश्मन की वायु रक्षा प्रणाली को धोखा देता है, ड्रोन को हेलीकॉप्टर के रूप में दिखाता है. यह दुश्मन को मिसाइलों या विमानभेदी तोपों के इस्तेमाल जैसे हवाई हमले करने के लिए मजबूर करेगा. लेंस को आर्मी डिज़ाइन ब्यूरो द्वारा डिज़ाइन किया गया है. इस लेंस को अगर कॉडकॉप्टर या किसी ड्रोन में फिट किया जाए, तो ये ऐसे सिग्नल छोड़ेगा, जिससे दुश्मन को लगेगा कि ये एक हेलीकॉप्टर है. इस चकमा देने वाले लेंस को बनाया है कैप्टन धीरज उमेश ने बनाया है. कैप्टन धीरज उमेश ने बताया, "अगर लेंस से लैस ड्रोन (एकाधिक ड्रोन) का झुंड भेजा जाता है, तो यह दुश्मन के रडार को यह चेतावनी देकर भ्रमित कर सकता है कि हमलावर हेलीकॉप्टर लक्ष्य के पास आ रहे हैं और उन्हें जवाबी कार्रवाई के लिए मजबूर कर देगा."

अधिकारी ने कहा, "इकट्ठी की गई खुफिया जानकारी भविष्य के लिए मददगार होगी. यह रडार पर 360 डिग्री क्षेत्र को कवर कर सकती है और किसी भी दिशा से रडार संकेतों को प्रतिबिंबित करेगी."

यह सुरक्षाबलों को दुश्मन के हथियार की स्थिति और तैनात प्रणाली के प्रकार का पता लगाने में मदद करेगा, जो दुश मन के एयर डिफेंस (एसईएडी) को नष्ट करने में सहायक है.

ड्रोन का इस्तेमाल सेना के हेलिबोर्न ऑपरेशन के नियोजित मार्ग को छिपाने के लिए किया जा सकता है, जहां कई क्वाडकॉप्टर को दुश्मन के रडार को चकमा देने वाली दिशा में भेजा जा सकता है, जिससे यह हवाई हमले का उपयुक्त विकल्प बन जाता है.

मौजूदा दौर में लेंस किसी लड़ाकू विमान को चित्रित नहीं कर सकता है, लेकिन अधिकारी ने कहा कि भविष्य में यदि कोई यूएवी या उच्च गति वाला ड्रोन विकसित किया जाता है, तो हम लड़ाकू जेट को चित्रित करने के लिए लेंस का उपयोग कर सकते हैं.

ऑल-वेदर लेंस

ड्रोन का परीक्षण मार्च में किया गया था, जहां अक्टूबर में इलेक्ट्रॉनिक वारफेयर टेस्ट (ईडब्ल्यूटी) में ओएसए-एके मिसाइल को 6.5 किलोमीटर की दूरी से और रडार सिस्टम पर दागा गया था. ड्रोन की रेंज 15 किलोमीटर है और यह 40 मिनट तक उड़ सकता है. यह प्रणाली गर्म रेगिस्तानों और काफी ऊंचाई वाले पहाड़ी इलाकों में काम कर सकती है. ड्रोन को बनाने की लागत की काफी कम है. एक लेंस की कीमत लगभग 55,000 रुपये है और प्रति टारगेट लागत लगभग 2.5 लाख रुपये है, जबकि मौजूदा लागत 25-30 रुपये लाख प्रति टारगेट है.

https://ndtv.in/india/how-army-new-luneberg-lens-for-drones-can-deceive-enemy-air-defence-4641611

NDTV

Thu, 07 Dec 2023

Explained: How Army's New Lens for Drones can Deceive Enemy Air Defence

The Indian Army has developed an all-weather, all-terrain, special lens that can be used to deceive the enemy air defence systems during wartime, helping in the suppression and destruction of enemy air defences for air operations.

The army conducted successful trials of a Luneberg lens which is attached to a drone and is used for locating enemy weapons and the type of weaponry used against ground forces and aircraft and helicopters.

How Does The Lens Work

The Luneberg lens, when attached to a drone, increases the radar signature of the drone, making it appear like a helicopter. The radar cross-section is the ability of the target to reflect radar signals on the receiver. The more the area of the radar cross-section, the bigger the target is. Drones have a small radar cross-section compared to a helicopter.

The Luneberg lens increases the radar signature and deceives the enemy's air defence system, depicting the drone as a helicopter. It will force the enemy to initiate air defence measures like the use of missiles or anti-aircraft guns. The lens has been designed by the Army Design Bureau.

"If a swarm of drones (multiple drones) equipped with the lens is sent, it can confuse the enemy's radar by alerting that attack helicopters are approaching a target and would force them to initiate air defence measures to counter," Captain Dheeraj Umesh from the Army Air Defence (AAD) told NDTV. Captain Dheeraj Umesh from the 511 Air Defence Missile Regiment of the army is the innovator of the Luneberg lens.

"The intelligence gathered will be helpful for future operations, adding that it can cover a 360-degree area on the radar and will reflect radar signals from any direction," the officer added.

It will help the force locate the position of the enemy's weapon and the type of system deployed which is helpful in the Suppression of Enemy Air Defence (SEAD) and Destruction of Enemy Air Defence (DEAD) operations.

The drones can be used to conceal the planned route of heliborne operations of the army, where multiple quadcopters can be sent in a direction deceiving the enemy radar, making it a suitable choice of aerial deception. Currently, the lens cannot depict a fighter aircraft but the officer said in future, if a UAV or a drone with higher speed is developed, then we can use the lens to depict a fighter jet.

All-Weather, All-Terrain Lens

The drone was tested in March, where the OSA-AK missile was fired from a range of 6.5 kilometres and on the radar system in an Electronic Warfare Test (EWT) in October.

The drone has a range of 15 kilometres and can fly for 40 minutes. The system can operate in hot deserts and high-altitude mountainous terrain. The production cost of the drone is relatively cheap. A lens costs around Rs 55,000 and the cost per target is approximately Rs 2.5 lakh against the existing cost of Rs 25-30 lakh per target.

https://www.ndtv.com/india-news/explained-how-armys-new-luneberg-lens-for-drones-can-deceive-enemy-air-defence-4641343

FINANCIAL EXPRESS
Read to Lead

Fri, 08 Dec 2023

Bolstering Indian Ocean Security: Colombo Security Conclave's Collaborative Framework

The Colombo Security Conclave, an alliance comprising India, Sri Lanka, Mauritius, and the Maldives, has formulated a comprehensive roadmap aimed at ensuring the security and stability of the Indian Ocean region. The sixth meeting, held in Port Louis, Mauritius on Thursday (Dec 7, 2023), witnessed the participation of National Security Adviser Ajit Doval, representing India, alongside counterparts from Sri Lanka, the Maldives, and Mauritius. Additionally, senior officials from Bangladesh and Seychelles were present, marking a collective effort to address evolving security challenges.

During the meeting, member states took stock of the progress made since the previous conclave, specifically reviewing the decisions implemented after the fifth meeting. The outcome was the unanimous agreement on a roadmap outlining strategic activities for the year 2024. Sources familiar with the matter, speaking on condition of anonymity, highlighted the commitment to tackling traditional, non-traditional, and emerging hybrid challenges in the Indian Ocean.

Throughout the preceding year, the conclave's members and observer states engaged in a multitude of activities, showcasing a broad spectrum of collaborative efforts. These initiatives encompassed the investigation of terrorism cases, countering narcotics trafficking, addressing cyber-crime, and collaborative efforts on diverse topics such as marine pollution, maritime law, coastal security, oceanography, hydrography, and cyber-security.

Established in 2020, the Colombo Security Conclave evolved from trilateral maritime cooperation meetings between India, Sri Lanka, and the Maldives. The inclusion of Mauritius during the fifth meeting in March 2022 underscored the commitment to expanding the collaborative framework and strengthening regional ties.

The conclave's cooperation framework is organized around five pillars, each addressing critical aspects of regional security: maritime safety and security, countering terrorism and radicalization, combating trafficking and transnational organized crime, cyber-security and protection of critical infrastructure, and humanitarian assistance and disaster relief.

Observer states, notably Bangladesh and Seychelles, play an active and integral role in the conclave's discussions and decision-making processes. Their participation reflects the collective commitment to addressing security concerns in the Indian Ocean region.

The maritime security pillar witnessed a landmark event with the inaugural Oceanographers and Hydrographers Conference hosted in India in November 2022. Senior scientists from member and observer states collaborated to define a substantive list of deliverables. These included the establishment of institutional linkages, joint expeditions, scientific research initiatives, collaboration in environmental impact assessments related to maritime incidents, and the sharing of oceanographic information.

Building on the success of the conference, a significant follow-up initiative was announced during the recent meeting in Mauritius—the launch of the Ocean Information Services portal. This portal aims to facilitate the exchange of crucial oceanographic information and foster ongoing

collaboration. Anticipating the importance of such initiatives, plans are already in motion for the second oceanographers and hydrographers conference scheduled for early 2024.

In tandem with maritime security efforts, the Coastal Security Conference, inaugurated in Chennai in December 2022, emerged as a platform for the heads of Coast Guards and senior leadership from member and observer states. The conference provided a forum to discuss and address threats to coastlines, emphasizing cooperation through information sharing. Plans are underway for the next edition of the Coastal Security Conference, expected to convene in the last quarter of 2024.

The collaborative efforts extend beyond conferences and discussions. In the realm of training and capacity building, police officers, counter-terrorism experts, drug and law enforcement officers, and cyber-security experts have been engaging in regular exchanges. Joint working groups focusing on countering terrorism and radicalization, cyber-security, combating trafficking and transnational organized crime, and humanitarian assistance and disaster relief have been established to deepen cooperation in these specific priority areas.

Deputy NSAs play a pivotal role in overseeing the implementation of decisions and directions from NSAs. The next edition of the meeting of NSAs is scheduled to be held in India in 2024, providing an opportunity to reassess progress and chart the course for future collaborative endeavors.

A notable aspect of Ajit Doval's visit to Mauritius was his meeting with Prime Minister Pravind Kumar Jugnauth. This diplomatic engagement underscores the importance of high-level interactions in fortifying bilateral ties and fostering mutual understanding.

The Colombo Security Conclave stands as a beacon of regional cooperation, exemplifying the commitment of member states and observer states to address complex security challenges in the Indian Ocean region. The collaborative framework, encompassing a range of pillars and initiatives, demonstrates a comprehensive approach aimed at ensuring the safety, security, and stability of one of the world's vital maritime regions.

https://www.financialexpress.com/business/defence-bolstering-indian-ocean-security-colombo-security-conclaves-collaborative-framework-3332725/

DECCAN HERALD

Thu, 07 Dec 2023

Tejas LCA to be Exported? India Eyes Deal with Nigeria, others

Despite a set back in its first endeavour, India is in talks with at least three nations – Nigeria being the latest – for exporting the home-grown combat aircraft Tejas LCA Mk-1, top officials of the Hindustan Aeronautics Limited said here on Thursday.

While discussions with the African nation are at an early stage, the Bengaluru-based state-owned aviation major already held talks with Egypt and Argentina, with officials from the Latin American country visiting the HAL facilities earlier this year.

"We are in talks with Nigeria on Tejas-LCA, but it is early days. This is apart from our discussions with Egypt and Argentina that witnessed a change in the government recently," C B Ananthakrishnan, HAL chairman-cum-managing director told journalists here on the sidelines of a HAL conference on avionics.

The plan is to sell 15 aircraft to Argentina and 20 to Egypt to start with. Other countries that evinced interest in Tejas LCA jet are USA, Australia, Indonesia and Philippines.

Tejas LCA is a single-engine multi-role fighter aircraft capable of operating in high-threat air environments to carry out missions on air defence, reconnaissance and strike roles.

Earlier, HAL had submitted a proposal to Malaysia's Ministry of Defence to supply 18 Tejas LCA responding to a global tender floated by the Royal Malaysian Air Force. But the Indian company, despite being shortlisted as one of two final contenders, lost the deal to South Korean FA-50 made by Korean Aerospace Industries.

Ananthakrishna said HAL would also be looking at exporting avionics like mission computers, navigational systems and display systems because of its growing market as indigenous products could be customised for platforms used for foreign countries.

"Avionics are crucial to upgrade military aircraft. Globally the market is growing at a compound annual growth rate of 8% to touch 70 billion by 2030," he said.

Platforms like Dhruv advanced Lightweight helicopter and LCA Tejas were offered to foreign customers because of their superior avionics, he added.

Inaugurating the conference, Gen Anil Chauhan, Chief of the Defence Staff said India's challenges must be resolved with Indian solutions as the Russian-Ukraine war affected the operational efficiency of the armed forces around the world and exposed the vulnerability of global supply chains.

https://www.deccanherald.com/india/tejas-lca-to-be-exported-india-eyes-deal-with-nigeria-others-2801489

FINANCIAL EXPRESS
Read to Lead

Thu, 07 Dec 2023

Polish Defense Company Introduces Cutting edge Anti-Drone Systems for Global Security Challenges

As Indian security establishments grapple with enemy drones at Line of Control with Pakistan and Line of Actual Control with China, a Polish defence company Advanced Protection Systems has offered Anti-Drone Systems to end this regular problem.

Not only that, the company also claims to detect the low-flying drones which Hamas used to attack Israel recently leading to a war like situation in Gaza.

In an interview with the Financial Express Online, Dariusz Wichniarek, Vice President of Business Development, told Financial Express Online at the recently concluded Milipol in Paris, "SkyCntrl Cy View Prediction Tool PDQ is a very smart tool and is good for the Indian Armed Forces. With this, we can detect any kind of movement including para gliders."

"We have developed the software to ensure the most efficient and effective anti-drone system. It is easy to use, fully customizable and reliable in all conditions," Wichniarek explained.

According to him, "Prediction Tool: Analyses the complexity of the site before our engineers design the final system. And, we know exactly which SKYctrl system components are needed to guarantee maximum protection."

Also, CyView C2 – is used to track the direction, course and altitude of all flying objects. And can flawlessly classify every object in the air.

“When a flock of birds suddenly mixes with a swarm of drones, we will immediately distinguish them and provide a fully-clear view of the airspace,” he says.

According to him, advanced neural network algorithms will track selected objects in real-time, register all incidents, and learn on their own how to protect the selected area in the best possible way. CyView C2 has also a customizable and friendly interface, support for stationary and mobile devices and an open API for integration with external systems.

Dariusz Wichniarek, Vice President of Business Development said: “The talks are going on with Indian partners and we are on a good path. The technology that we are offering has been developed by us and it has the capability to strike Low Flying Small Objects.”

For instance: the FieldDctrl — Ultra precise #D MIMO Radars can send alerts even when a terrorist is flying in on a paraglider as happened on October 7, when Hamas flew a paraglider in Israel. “This system is being used by 22 countries across the globe including the Polish Army. This Dual use Technology can identify anything from birds to drones,” he added.

Does this have any Chinese components? Will the company Transfer Technology?

No. “We provide the software. and we are open to Transfer of Technology as there are no restrictions. Therefore, it is easy for us to integrate any sensors.”

And our technology was chosen by the Polish Armed forces because of the classification. “Currently, we are participating in a very big project in an African country,” he added.

The company has three different types of radars — 3D MIMO Radar, SkyCntrl Variants (have supplied the portable variant to Israel).

The system is available in stationary, portable and mobile versions. And Modular and fully-configurable radar sensor, 3D MIMO radar technology for improved performance, Radar tracking based on MHT (multi-hypothesis tracking) algorithm.

There are Neutralisation Jammers also which are easy to carry and can jam up to 500 m and the SkyCntrl container is good for different terrains and is a cost-effective solution.

https://www.financialexpress.com/business/defence-polish-defense-company-introduces-cutting-edge-anti-drone-systems-for-global-security-challenges-3330992/

THE TIMES OF INDIA

Fri, 08 Dec 2023

Chinese Military Surveillance Balloon Spotted in Taiwan Strait, Island's Defence Ministry Says

Taiwan's Defence Ministry says a Chinese military surveillance balloon was spotted in the Taiwan Strait, as well as a large-scale dispatch of military aircraft and ships.

The ministry said the balloon passed southwest of the northern port city of Keelung on Thursday night, then continued east before disappearing, possibly into the Pacific Ocean. Taiwan has threatened to shoot down such balloons, but the ministry did not say what, if any, action was taken. It said the balloon was monitored flying at an altitude of approximately 6,400 meters (21,000 feet).

It also said 26 Chinese military aircraft were detected, along with 10 Chinese navy ships, in the 24 hours before 6 am Friday. Of the aircraft, 15 had crossed the median line that is an unofficial divider between the sides, but which Beijing refuses to recognize. Some also entered Taiwan's air defense identification zone outside the island's airspace.

Taiwan's military monitored the situation with combat aircraft, navy vessels and land-based missile systems, the ministry said.

Such incursions occur regularly as a means of advertising China's threat to use force to annex the self-governing island republic it considers its own territory, wear down Taiwan's military capabilities, and impact morale among the armed forces and the public, who remain largely ambivalent to China's actions.

The Chinese missions have also prompted Taiwan to up its purchases of aircraft from the United States, its chief ally, and revitalize its own defense industry, including producing submarines.

Beijing strongly protests all contacts between the island and the US, but its aggressive diplomacy has helped build strong bipartisan support for Taipei on Capitol Hill.

US President Joe Biden vowed sharper rules to track, monitor and potentially shoot down unknown aerial objects after three weeks of high-stakes drama sparked by the discovery of a suspected Chinese spy balloon transiting much of the country early in the year.

https://timesofindia.indiatimes.com/world/rest-of-world/chinese-military-surveillance-balloon-spotted-in-taiwan-strait-islands-defence-ministry-says/articleshow/105830088.cms

GOV.UK

Thu, 07 Dec 2023

Artificial Intelligence Companies Showcase Defence Capabilities at Inaugural ‘DAIC Connect’ Event

The event was organised by the Defence AI Centre (DAIC) in partnership with business community Chief Disruptor and brought together representatives from industry and academia alongside defence teams including the single services. The aim was to develop a pan-defence understanding of the current AI market and to foster new connections between industry and Ministry of Defence (MOD) teams. This collaborative approach helps to accelerate innovation and strengthen the UK’s AI ecosystem, giving defence a strategic edge.

Most of the industry attendees were from small and medium sized enterprises, some of whom had not worked with the MOD before. Throughout the day, they engaged with senior staff and representatives from teams across defence, while 11 companies were given the chance to deliver a ten-minute pitch about how their AI projects could enhance defence’s current and future capabilities. The presentations were followed by Q&A sessions in which the audience explored the products’ capabilities and offered observations and advice.

In the networking area, the six companies who had sponsored the event ran exhibition stands, alongside DAIC, Defence and Security Accelerator (DASA) and Defence Equipment & Support Digital (DE&S Digital) from the MOD. This provided a further forum to discuss innovations and challenges encountered when developing and adopting AI.

Charlie Forte, MOD Chief Information Officer, who delivered the opening address, said:

It is essential that defence develops a more dynamic and integrated relationship with a wide and more diverse group of industry partners because it is through these partnerships that truly transformative solutions can be developed and placed into the hands of users. I am therefore delighted to be opening the inaugural DAIC Connect and to see such a breadth of representation from so many different companies and MOD teams.

Cdre

These include half-a-dozen PSLV missions and three GSLV flights besides a commercial launch of LVM3 and a developmental flight of SSLV, which will ultimately be handed over to the private sector for low-earth orbit satellite launches.

The next year will also be crucial for India's manned space flight programme as two unmanned missions under the Gaganyaan project will be undertaken to validate the human-rated launch vehicle and the orbital module in actual flight.

In addition, multiple sub-orbital missions using a Test Vehicle are planned to validate the Gaganyaan Crew Escape System under various abort conditions, as the space agency eyes for a 2025 time slot to send an Indian to space in an Indian capsule.

The three GSLV missions will be to launch a meteorology satellite, a navigation satellite and the joint NASA-ISRO Synthetic Aperture Radar satellite. There will also be an LVM3 commercial mission by NewSpace India Limited.

The six PSLV missions include two missions to launch a space science satellite and an Earth observation satellite, two technology demonstration flights and two commercial missions.

In addition, there will be one mission of SSLV, which is the third developmental flight and will launch a technology demonstration satellite. GSAT-20, a communication satellite will also be launched using a foreign rocket.

The next year would also witness ISRO carrying out two autonomous runway landing experiments of winged body Reusable Launch Vehicles, Singh said.

The minister informed the Rajya Sabha that the number of start-ups in the space sector crossed the 500 mark.

As on November 2023, the total number of startups and companies that have shared their capabilities in the space sector is 523, out of which 297 have submitted applications to the Indian National Space Promotion and Authorisation Centre seeking support from ISRO for R&D and testing.

https://www.deccanherald.com/india/isro-plans-to-undertake-16-major-space-missions-in-2024-2801811

THE HINDU

Thu, 07 Dec 2023

ISRO Chairman Favours more Collaborations

Citing its collaboration with the Mysuru-based DRDO-Defence Food Research Laboratory (DFRL) for its Gaganyaan Mission, Indian Space Research Organisation (ISRO) chairman S. Somanath on Thursday said the ISRO was keen to engage with various scientific and research and academic institutions and added that the space agency, being a societal-oriented organisation, was ready to extend support like it has been doing for agriculture and various other sectors.

Speaking at the inauguration of the four-day 9th International Food Convention organised by the Association of Food Scientists and Technologists (India) with the support from the CSIR-CFTRI, CSIR-IITR and the DRDO-DFRL here, Dr. Somanath said ISRO's remote sensing satellites have been supporting Indian farmers like in helping them address diseases affecting their crops with satellite and other useful data.

ISRO is open for more collaborations and to help address the problems with the aid of its satellites and other technological interventions, he said.

The ISRO chairman told the food technologists attending the conference to engage for detailed discussions with the experts from the remote sensing center at the ISRO so that we could understand the needs and work accordingly. Invite our scientists in your upcoming conferences and other events so that they could get an idea of your works and the support that ISRO can extend, Dr. Somanath told the gathering of food scientists.

Complimenting the Mysuru-based DRDO-DFRL and the CSIR-CFTRI for their pioneering works in the area of food technologies, Dr Somanath spoke about the DRDO-DFRL's support to ISRO's Gaganyaan Mission and the space foods it had developed for the astronauts who will be part of the Mission.

"The foods that will go into space travel had been kept ready," he said, while thanking the defence food lab for its efforts in supporting the space mission.

While concluding his talk, the ISRO chairman reiterated the space organisation's desire to support the area of food science, collaborating with the organisations and academic institutions.

More than 3,000 delegates from across the country are attending the four-day conference and a mega food expo will commence on the premises of CSIR-CFRI on Friday. More than 100 stalls will showcase the food technologies and the products, including those developed by the premier food labs and the ones who adopted these technologies. The highlight of the expo will be a special pavilion on millets since the year 2023 had been declared as the International Year of Millets.

https://www.thehindu.com/news/national/karnataka/isro-chairman-favors-more-collaborations/article67615045.ece