

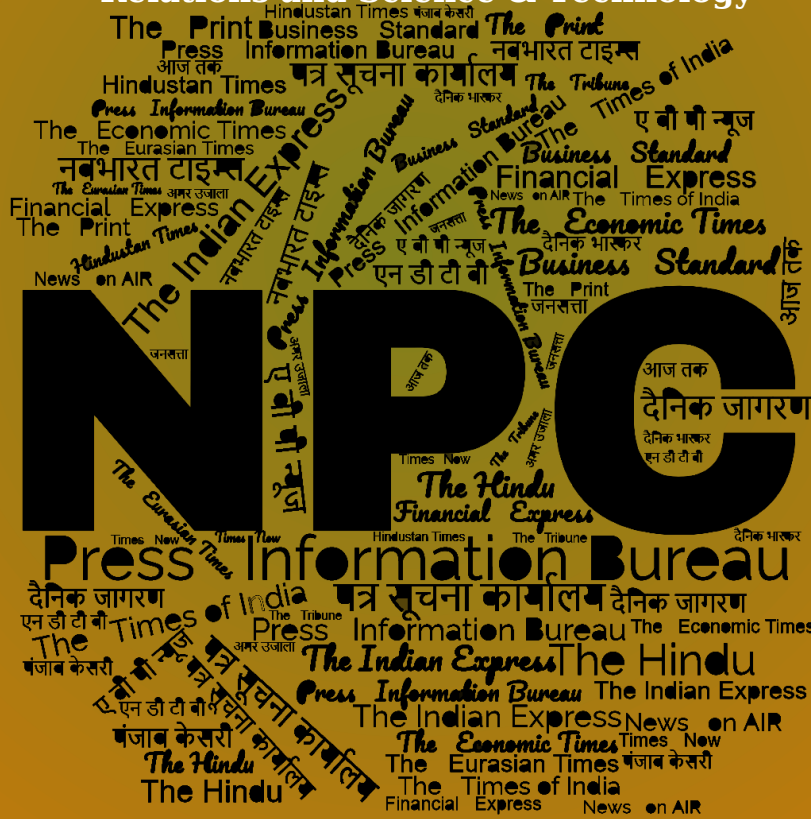
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समाचार पत्रों से चयित अंश Newspapers Clippings

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

A Daily service to keep DRDO Fraternity abreast with DRDO Technologies, Defence Technologies, Defence Policies, International Relations and Science & Technology



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Press Information Bureau
Government of India

Ministry of Defence

Sun, 25 Feb 2024

DRDO Hands over 23 Licensing Agreements for Transfer of Technology to Industries During Maharashtra MSME Defence Expo 2024

Domains include electronics, laser technology, combat vehicles, naval systems & aeronautics

To enhance cooperation and synergy with the industry, Defence Research and Development Organisation (DRDO) organised a DRDO-Industry Meet on February 25, 2024 during the Maharashtra MSME Defence Expo 2024 at Pune. The meet was intended to apprise and update industries, especially the MSMEs & start-ups about various industry-friendly initiatives and policies of DRDO as well as address the concerns of the industry.

During the meet, DRDO handed over 23 Licensing Agreements for Transfer of Technology (LATOT) to 22 industries in presence of Secretary Department of Defence (R&D) and Chairman DRDO Dr Samir V Kamat and other dignitaries. The technologies transferred cover the domains of electronics, laser technology, armaments, life sciences, materials science, combat vehicles, naval systems and aeronautics. These include Manufacturing of Carbon/Carbon Aircraft brakes for LCA Tejas, 100 m Infantry Foot Bridge Floating, 40 mm High Explosive Anti-Personnel (HEAP) Grenade for UBGL, Full Trailer of 70t Tank Transporter for MBT Arjun Mk - 1A, Expendable Mobile Shelter Solar Heated Shelter, NMR-Supercapacitor, Weaponisation of Hand-Held Thermal Imager with LRF (WHHTI) and High Pressure Water Mist Fire Suppression System (HP WMFSS). The products based on these DRDO technologies will further boost the defence manufacturing sector and self-reliance in defence.

The DRDO handed over SAMAR (System for Advance Manufacturing Assessment and Rating) assessment certificates to nine Industry Partners. SAMAR is a benchmark to measure the competency of defence manufacturing enterprises. A brief and overview on SAMAR was also provided during the function.

Addressing Industry partners, Dr Kamat iterated DRDO's commitment to provide all technology support towards the development of Indian defence industries for realisation of Aatmanirbhar Bharat as envisioned by Prime Minister Shri Narendra Modi. He elaborated that the recent success of DRDO products have not only made the country more self-reliant in defence technology but also provided immense opportunities to the industries in defence manufacturing sector. He further stressed that the industries are invaluable partners and it is an apt time for an Indian industry to take advantage of the latest initiatives and policies of the Government and make the country a hub of defence manufacturing. An Open house session during the meet was also organised which provided

an opportunity to industries to express their challenges, expectations and the kind of support needed so that framework may be refined to further ease of doing business and facilitate industry.

The Industry was also briefed about the latest policies and procedures through which DRDO is supporting industries. Some of the policies discussed include Transfer of Technologies, Test & Evaluation support, Technological and scientific support, R&D funding to industry under TDF and Free use of DRDO patents by industry and SAMAR scheme.

<https://pib.gov.in/PressReleasePage.aspx?PRID=2008923>

अमर उजाला

Mon, 26 Feb 2024

DRDO: प्रमुख रक्षा उत्पादकों के साथ डीआरडीओ ने किए 23 लाइसेंसिंग समझौते, इन क्षेत्रों में हुई बातचीत

रक्षा अनुसंधान एवं विकास संगठन (डीआरडीओ) ने रविवार को रक्षा उत्पादकों के साथ अहम समझौते किए हैं। डीआरडीओ ने प्रमुख रक्षा उत्पादकों के साथ 23 लाइसेंसिंग समझौते किए। समझौते पुणे में डीआरडीओ द्वारा आयोजित एमएसएमई डिफेंस एक्सपो में हुए। मंत्रालय ने कहा कि डीआरडीओ द्वारा रक्षा उत्पादकों को हस्तांतरित की जाने वाली प्रौद्योगिकियों में इलेक्ट्रॉनिक्स, लेजर सिस्टम, हथियार, जीवन विज्ञान, लड़ाकू वाहन और नौसेना प्रणाली शामिल है।

मंत्रालय ने एक बयान जारी कर कहा कि डीआरडीओ की इन प्रौद्योगिकियों पर आधारित उत्पाद रक्षा विनिर्माण क्षेत्र और रक्षा विनिर्माण में आत्मनिर्भरता को और बढ़ावा मिलेगा। इसमें कहा गया कि डीआरडीओ ने रक्षा उद्योग के नौ भागीदारों को एमएएएआर मूल्यांकन प्रमाणपत्र सौंपे हैं। एमएएएआर रक्षा विनिर्माण उद्यमों की योग्यता को मापने के लिए एक बेंचमार्क हैं। एक्सपो में भागीदारों को संबोधित करते हुए डीआरडीओ अध्यक्ष समीर वी कामत ने कहा कि हम भारतीय रक्षा उद्योगों के विकास के लिए सभी प्रौद्योगिकी सहायता प्रदान करने के लिए प्रतिबद्ध हैं। डीआरडीओ उत्पादों की सफलता ने न केवल देश को रक्षा प्रौद्योगिकी में आत्मनिर्भर बनाया, बल्कि रक्षा विनिर्माण क्षेत्र में उद्योगों को कई अवसर भी प्रदान किए। डीआरडीओ अध्यक्ष कामत ने कहा कि भागीदारी अमूल्य है। यह समय भारत को रक्षा विनिर्माण का केंद्र बनाने के लिए उपयुक्त है। अध्यक्ष ने अधिकारियों को नई नीतियों और प्रक्रियाओं की जानकारी दी।

डीआरडीओ कर सकता है- एसएलसीएम

जानकारी के अनुसार ,अगले महीने पूर्वी तट पर सबमरीन लॉन्च क्रूज मिसाइल (एसएलसीएम) का परीक्षण हो सकता है। इस क्रूज मिसाइल में 500 किमी दूरी तक वार करने की क्षमता होगी। इस प्रणाली को रक्षा अनुसंधान व विकास संगठन (डीआरडीओ) ने विकसित किया है। भारत में निर्मित सबमरीन के लिए एसएलसीएम एक अहम हथियार साबित हो सकता है। इन सबमरीन को प्रोजेक्ट 75 के तहत बनाया जाना है। क्रूज मिसाइलें भविष्य में बनने जा रही रक्षा बलों की रॉकेट आधारित फोर्स में शामिल होंगी। फोर्स में छोटी और मध्यम दूरी की बैलिस्टिक मिसाइलें भी शामिल की जाएंगी। इस बीच रक्षा हथियारों में भी नया इजाफा हो सकता है, रक्षा मंत्रालय 800 किमी दूरी तक मारक क्षमता वाली मिसाइलों की खरीद पर इसी हफ्ते बैठक करने जा रहा है। मिसाइल जमीन पर वार करने वाली होंगी। मंत्रालय के सूत्रों के अनुसार इसका फायदा रक्षा बलों की हथियार प्रणाली को मजबूत करने में मिलेगा।

<https://www.amarujala.com/india-news/drdo-signed-23-licensing-agreements-with-major-defence-producers-2024-02-26>

DRDO: डीआरडीओ ने व्हील्ड आर्मर्ड प्लेटफॉर्म का एडवांस्ड वर्जन किया विकसित, डिफेंस एक्सपो में हुआ पेश

रक्षा अनुसंधान एवं विकास संगठन (डीआरडीओ) और महिंद्रा डिफेंस ने मिलकर व्हील्ड आर्मर्ड प्लेटफॉर्म का एडवांस्ड वर्जन विकसित किया है। इस महाराष्ट्र के पुणे में चल रहे डिफेंस एक्सपो में प्रदर्शित किया गया।

#WATCH | Pune, Maharashtra: DRDO and Mahindra Defence have together developed the advanced version of the Wheeled Armoured Platform.

DRDO scientist Nilesh Patel says, "This vehicle is 2nd generation platform having multi-role capability... We have carried out trials and it has... pic.twitter.com/21Lxt3Wfax

— ANI (@ANI) February 24, 2024

डीआरडीओ वैज्ञानिक नीलेश पटेल का कहना है, "यह वाहन सेंकड जेनरेशन का प्लेटफॉर्म है जिसमें बहुत सी भूमिका निभाने की क्षमता है... हमने परीक्षण किए हैं और इसने भूमि और जल गतिशीलता परीक्षणों दोनों में अच्छा प्रदर्शन किया है। यह हल्का और कॉम्पैक्ट है और इसमें बैलिस्टिक सुरक्षा बढ़ी है। इसकी तुलना अन्य सभी अंतरराष्ट्रीय समान प्रणालियों से बहुत अच्छी तरह से की जा सकती है, और यह कई पहलुओं में उनसे बेहतर है, खासकर अमेरिका के Stryker (स्ट्राइकर) बख्तरबंद वाहनों की तुलना में... यह वाहन प्लेटफॉर्म महिंद्रा डिफेंस के सहयोग से निर्मित किया गया है..."

<https://www.amarujala.com/automobiles/drdo-develops-advanced-version-of-wheeled-armoured-platform-showcase-in-maharashtra-defence-expo-2024-2024-02-24>



Sun, 25 Feb 2024

DRDO, Mahindra Defence Showcase Advanced Wheeled Armoured Platform

Defence Research and Development Organisation and Mahindra Defence have together developed the advanced version of the Wheeled Armoured Platform and showcased it at the Defence Expo being held in Pune from February 24 to 26.

"This vehicle was designed and developed by DRDO. This vehicle platform is a second-generation platform. It has multi-role capabilities. That means we can use the vehicle platform for a variety of roles. Right now, it is in CBRN mode. Similarly, we can use the same vehicle for the ICv role. That is an inventory combat vehicle, then an armoured person carrier, an APC role we can utilise, and many more. So regarding this vehicle, we have completed the development tiles for it. We have carried out trials and it has performed excellently well for the land mobility trials as well as water mobility trials that we have completed. A key feature of this vehicle platform is that it is very compact compared to its earlier generation. It is lighter, and it is well protected, I mean ballistic protection. We have increased. You can see the frontal shape and side stroke we have provided," said Nilesh Patel, a DRDO scientist.

"This vehicle we can very well compare with all the vehicles worldwide available, particularly for the Striker. If we compare, this vehicle has a better power-to-weight ratio. That is, this vehicle has a 36 hp button. Ballistic and blast protection are modular in this vehicle, and the vehicle is ambitious, which may not be ambitious. So this is one of the key features. An ambitious vehicle with eight kilometres per hour of water speed," added the DRDO scientist.

DRDO showcased the different types of rockets used by the Pinaaka multi-barrel rocket launcher system at the Expo. This includes the guided, extended range, and Pinaka-Mark 1 rockets.

Earlier, Air Chief Marshal VR Chaudhary visited the 'Maharashtra MSME Defence Expo' in Pune and said that the time has come to move on to newer technologies and better quality radars and the Air Force will sign a new deal with L&T in a couple of days for the same.

"This requirement to maintain air defence coverage over the entire country has always existed. It is one of the major roles of the Air Force. We have had vintage equipment, now the high-power radar and the long-range radars have served us very well for many years. Now, the time has come to move on to newer technologies and better-quality of radars. So this new deal, which we are going to sign with L&T in a couple of days today, will open the way for a completely new technology in ground-based hyper radars," he said.

The Air Chief Marshal was briefed on AI initiatives by the 12 Base Repair Depot for training Agniveers and giving context to the speech.

"They will fill the voids that have existed in some places in our air defence network, and overall, they'll strengthen the air defence capabilities of the country," he added.

Further, speaking on the closed-in weapon system, VR Chaudhary said that this system provides a wider link in the air defence network.

"The threats that we face today are from a very wide spectrum. Starting from small drones to hypersonic weapons. Having an air defence capability against this is always a challenge. Closed-in weapon system provides a wider link in the air defence network. We are signing a contract for 61 flights of this closed-in weapon system," he said.

Meanwhile, the Indian Air Force's Made in India Samar-II and Akash surface-to-air weapon systems are being showcased at the Defence Expo being held in Pune from February 24 to 26.

The Samar-II system had been developed using the R-27 beyond-visual-range air-to-air missiles, which can now intercept targets at longer ranges than its previous version, the Samar-1 air defence missile system.

<https://www.aninews.in/news/national/general-news/drdo-mahindra-defence-showcase-advanced-wheeled-armoured-platform20240225161927/>

THE TIMES OF INDIA

Sat, 24 Feb 2024

Ready to Guard India in Deserts, Mountains, DRDO Showcases its Mighty Mounted Guns at MSME Defence Expo

Defence Research and Development Organization (DRDO) showcased its indigenously developed 155 mm/52 calibre mounted gun system (MGS) in Pune. According to the DRDO, the MGS is a truck-mounted artillery gun system, deployable in desert, mountainous, and high-altitude terrains. The MGS equips a 155 mm/52 calibre Advanced Towed Artillery Gun System (ATAGS) on an

eight-wheeled high-mobility vehicle (HMV). The state-of-the-art systems like blast resistant cabin, leg type electro-mechanical stabilizers, automatic ammunition handling system, etc. The DRDO said that the MGS is equipped with “shoot-and-scoot capability”. The system is fitted with an auto gun alignment and positioning system, fire-control system (FCS), and ammunition handling system. The system can fire up to a maximum distance of 45 km and has a maximum speed of 80 km/h.

<https://timesofindia.indiatimes.com/videos/news/ready-to-guard-india-in-deserts-mountains-drdo-showcases-its-mighty-mounted-guns-at-msme-defence-expo/videoshow/107958951.cms>



Sat, 24 Feb 2024

Govt Policy, Resolve for 'Atmanirbharta' behind Make in India Success: DRDO Chief Samir V Kamat

Defence Research and Development Organisation (DRDO) Chairman Samir V Kamat on Friday said that several factors have made the Make in India initiative successful but one of the most important factors is the government’s policy and determination to make ‘atmanirbharta’ happen.

Speaking at the ‘Firstpost Defence Summit 2024’ Kamat said, “I think several factors have made this story possible. The first among them is the government policy and determination to make aatmnirbharta happen. I think that is the most important factor which has changed the story line. We have been talking about self reliance for a long time, but there was no determination on the part of the government to enforce it. Once the present government has come in power, they have really made a strong push to enforce atmanirbharta.”

He said as part of atmanirbharta, the government has published a list for the services to buy from Indian companies which has now given a push for the industry to invest and start making systems with in the country.

“Also the speeding up of the acquisition process through the DAP, 2020 has given this fillip for this process. So I would say, the key factor which has resulted in the optimism, which is currently seen, is the government policy and determination to make it happen,” he added.

Thank you, sir and deal. If I can come to you because of course the success of governments determination initiative. Depends on how far the private sectors willing to take that. And and given that you work on a field, which is the cutting age of of the way. Conflict is being used and the way weapons are being transformed.

When asked about the ambitious targets being set now in defence production and the challenges ahead, Kamat said that the first thing to be done is to build R&D ecosystem in the country.

“So the first thing that we have to do is to build the R&D ecosystem in the country. For too long, the R&D was only focused in DRDO, but the government has now taken steps to ensure that R&D ecosystem includes the startups, the MSMEs as well as the academia. This will help us in bringing innovation much quicker to the market. We also now have private sector participating in the defence production. For too long, it was only the PSUs and the ordinance factory. Now, that the private sector is getting in, they will bring in not only the needed dynamism, they will bring in the ability to produce the systems quicker. At a more cost effective manner as well as with better quality because if you have to compete in the international market, you have to have the speed of

delivery. Your products not only have to be good but they have to be cost effective and you have to be able to innovate quickly to capture the market,” added the DRDO chairman.

He said all these factors will keep India’s position in the defence export business at a growing pace.

“I don’t think in the next 5-10 years, if we continue on our path, we will face that many challenges for exporting our systems. The kind of interest that we are getting in our systems is a reflection that the potential for exports is far more than what we have achieved so far,” added Kamat.

On India building its defence manufacturing capabilities and also having partners abroad who are looking at India as a market, how does India solve that dilemma, or have we prioritised domestic capability enhancement or the two can go together, Kamat said, “I think the two can go together. If you strengthen your domestic ecosystem, the exports will come naturally. And as India’s stature grows in the world, people also import to get that support from a strong country. So there is a lot of diplomacy, politics also in imports. A lot of time India imports from specific countries to build the diplomatic relations. So as India’s stature grows, imports from India for those countries will increase. I think there is no dichotomy in strengthening your domestic sector. As the countries domestic ecosystem improves, as the countries GDP improves, the country becomes a developed country, the exports from India will naturally increase. Not only in defence but in all sectors.”

<https://www.firstpost.com/india/govts-policy-determination-to-make-atmanirbharta-happen-behind-make-in-india-success-says-drdo-chairman-samir-v-kamat-13741567.html>

Defence News

Defence Strategic: National/International



Press Information Bureau
Government of India

Ministry of Defence

Sun, 25 Feb 2024

India-Japan Joint Exercise ‘Dharma Guardian’ Commences in Rajasthan

The 5th edition of Joint Military Exercise ‘DHARMA GUARDIAN’ between the Indian Army and the Japan Ground Self Defence Force commenced today at Mahajan Field Firing Ranges in Rajasthan. The Exercise is scheduled to be conducted from 25th February to 9th March 2024.

Exercise 'DHARMA GUARDIAN' is an annual exercise and conducted alternatively in India and Japan. The contingent of both sides comprises of 40 personnel each. The Japanese contingent is being represented by troops from the 34th Infantry Regiment and Indian Army contingent is being represented by a Battalion from the Rajputana Rifles.

Aim of the Exercise is to foster Military Cooperation and enhance combined capabilities to execute joint operations in semi-urban environment under Chapter VII of United Nations Charter. The Exercise would focus on high degree of physical fitness, joint planning, joint tactical drills and basics of special arms skills.

Tactical drills to be practiced during the Exercise will include establishing of Temporary Operating Base, creating an Intelligence, Surveillance and Reconnaissance (ISR) Grid, setting up Mobile Vehicle Check Post, executing Cordon and Search Operations in a hostile village, Heliborne operations and House Intervention Drills. A Weapon and Equipment Display will also be organised showcasing 'Atmanirbhar Bharat' initiative and the growing defence industrial capability of the country.

Lieutenant General TOGASHI Yuichi, Commanding General, Eastern Army, Japan Ground Self Defence Force is also scheduled to visit India on the sidelines of "Exercise DHARMA GUARDIAN". The General officer will visit Mahajan Field Firing Ranges on 3rd March 2024 and witness Combat Shooting demonstration, Special Heliborne Operation (SHBO) & House Intervention Drills.

Exercise 'DHARMA GUARDIAN' will enable the two sides to share their best practices in Tactics, Techniques and Procedures of conducting tactical operations. The Exercise will also facilitate developing inter-operability, bonhomie and camaraderie between troops of both the sides. This will enhance the level of defence cooperation, further fostering bilateral relations between the two friendly nations.

<https://pib.gov.in/PressReleasePage.aspx?PRID=2008775>



Press Information Bureau
Government of India

Ministry of Defence

Sat, 24 Feb 2024

Rs Three Lakh Crore Annual Defence Production & Rs 50,000 Crore Exports Expected by 2028-29: Raksha Mantri Shri Rajnath Singh

“Efforts towards jointness & integration have made our military ready to deal with every challenge together”

“Government focusing on long-term gains & not short-term outcomes to make India ‘Viksit Bharat’ by 2047”

“Aim is to manufacture high-end systems like aero-engines & gas turbines in India in the next five years”

“The Government, headed by Prime Minister Shri Narendra Modi, is focusing on long-term gains and not short-term outcomes to make India a developed nation by 2047,” said Raksha Mantri Shri Rajnath Singh at a Defence Summit organised by a private media organisation in New Delhi on February 24, 2024. Shri Rajnath Singh termed ‘giving priority to long-termism and long-term gains’ as the main difference between the present Government and the previous dispensations.

The Raksha Mantri stated that unlike in the past, the present Government has formulated and implemented policies which not only provide short-term gains for just five years. He enumerated the reforms undertaken in the defence sector for long-term gains in the last few years, including creation of the post of Chief of Defence Staff and setting up of the Department of Military Affairs which has enhanced jointness, synergy and smooth coordination among the three Services.

Shri Rajnath Singh pointed out that the Government has been focusing on the integration of the Indian Army, the Indian Navy and the Indian Air Force, which will ensure enhanced coordination among them in times of crisis. “Earlier, the three Services used to work in silos. We focused on their integration which was an out-of-the-box step and the need of the hour. It was a little difficult in the beginning; but today our military is ready with better coordination to deal with every challenge together,” he said.

On the major steps taken in the field of defence manufacturing, the Raksha Mantri said the Ministry of Defence notified five positive indigenisation lists of the Services, comprising over 500 items, and four other lists, with over 4,600 items for DPSUs, to ensure that the soldiers use made in India weapons and platforms. He also referred to the decision to earmark 75% of the capital acquisition budget for procurement from local companies. He added that some people were of the view that indigenous weapons won’t be world class; however, the government believes in the capabilities of the domestic industry and that they can consistently improve & deliver state-of-the-art products.

Shri Rajnath Singh emphasised that radical changes have been made in the defence sector for long-term gains to make it completely self-reliant, and achieve the Prime Minister’s goal of ‘Aatmanirbhar Bharat’. He stated that imposing a ban on import of arms was a short-term difficulty as today that challenge is slowly turning into opportunity, and India is rising on the defence industrial landscape of the world. “Today, our military is using weapons and platforms, which are manufactured on our own soil,” he said.

The Raksha Mantri reasserted that no military can protect its nation from equipment imported from outside and self-reliance in defence production is must for India in today’s time. He pointed out that the Government’s persistent efforts towards self-reliance have started to bear fruit as the defence production has crossed Rs one lakh crore.

Shri Rajnath Singh was of the view that through initiatives like setting up defence industrial corridors in Uttar Pradesh and Tamil Nadu, the Government is making sure that modern military hardware is not only manufactured in India, but also exported to friendly countries. “Earlier, India was known to be an arms importer. But today, under the leadership of the Prime Minister, we have come out of our comfort zone and found a place in the list of top-25 arms exporter nations. Seven-eight years ago, defence exports did not even touch Rs 1,000 crore. Today, it has touched Rs 16,000 crore. By 2028-29, annual defence production is expected to touch Rs three lakh crore and defence exports Rs 50,000 crore,” he said.

The Raksha Mantri added that while the Government is supporting huge companies, it is also inviting young ignited minds to the defence sector through start-ups, terming it another step taken for long-term gains. He said in the coming 20-25 years, these companies, on the back of their innovations, will help give a new dimension to India’s strong identity on the global stage. He referred to the recent meeting of the Defence Acquisition Council, in which effective steps were taken to promote start-ups. For procurement from start-ups, costing, payment terms, eligibility etc have been liberalised, he said.

On the emergence of technology as a great warrior in today’s constantly-evolving times, Shri Rajnath Singh underscored the significance of investing in futuristic technologies such as artificial intelligence, quantum computing, smart weapons, cyber warfare and space warfare. He

voiced the Government's long-term vision of making India a major player in the field of technology, saying that a number of steps have been taken, including the launch of Innovations of Defence Technology (iDEX), Technology Development Fund scheme under DRDO and the setting up of National Research Foundation.

The Raksha Mantri informed that in the Financial Year 2023-24, capital acquisition worth more than Rs 4,35,000 crore have been given in-principle approval till now. He added that Ministry of Defence was allocated Rs 6.21 lakh crore in the Union Budget 2024-25, which is the highest among the Ministries. He also spoke of the Agnipath scheme, which aims to make the country's military as one of the strongest in the world. These decisions reflect the Government's long-term approach towards national security, he said.

Shri Rajnath Singh described it as the Government's aim to manufacture high-end systems like aero-engines and gas turbines in India in the coming five years. "When the ability and dedication of our youth is extraordinary and the intentions of the government are clear, the question of setting simple targets does not arise. We will soon embark on an exciting journey towards achieving extraordinary goals," he said.

The Raksha Mantri also listed out some of the decisions towards long-term gains in other sectors, including the successful implementation of GST, initiatives in health & education sectors, and banking reforms. He highlighted the Government's efforts towards infrastructure development, such as Sagarmala & PM Gati Shakti schemes, as well as towards social welfare, which are ensuring holistic development of the country. He said the government has been working on big long-term infrastructure projects, wherein the outcome is visible after 5-10 years, underlining the Prime Minister's clear vision to create next generation infrastructure for future generations.

Shri Rajnath Singh added that women are being provided opportunities in every field at par with their male counterparts, which is another important aspect of the Government's long-term approach. "Through the Nari Shakti Vandan Adhiniyam, women have been given their political rights, which was pending for years. Women today stand shoulder-to-shoulder with men in every field. The role of women in the Armed Forces is increasing and becoming more important, and it will continue to grow," he said.

<https://pib.gov.in/PressReleasePage.aspx?PRID=2008632>



Press Information Bureau
Government of India

Ministry of Defence

Fri, 23 Feb 2024

Raksha Mantri & Netherlands Defence Minister Discuss Ways to Expand Bilateral Cooperation During Talks in New Delhi

Both countries to work together to enhance maritime security in Indian Ocean Region

Dutch Original Equipment Manufacturers could be encouraged to integrate Indian vendors into their supply chains: Shri Rajnath Singh

Raksha Mantri Shri Rajnath Singh held a bilateral meeting with the Netherlands Defence Minister Ms Kajsa Ollongren in New Delhi on February 23, 2024. Both Ministers discussed the possibilities for expanding their bilateral defence cooperation, particularly in maritime and industrial domains.

They noted the increased interaction between the two Navies and expressed keenness to work together to enhance maritime security in the Indian Ocean Region.

The Raksha Mantri suggested that Dutch Original Equipment Manufacturers could be encouraged to integrate Indian vendors into their supply chains. India has developed a vibrant innovation and industrial eco-system. Given the Indian and Dutch complementarities in skills, technology and scale, both sides were in agreement to encourage more interactions between the defence industries, and in high-tech sectors of semi-conductors and clean energy.

The Netherlands Defence Minister is attending the Raisina Dialogue in New Delhi.

<https://pib.gov.in/PressReleasePage.aspx?PRID=2008278>



Press Information Bureau
Government of India

Ministry of Defence

Sat, 24 Feb 2024

Indian Navy's Mission Deployed Destroyer Provides Critical EOD & Medical Assistance to MV in Distress

Palau Flagged MV Islander caught fire after an attack likely by drone/ missile on 22 Feb 24. Responding swiftly to the Distress call, Indian Navy's destroyer, mission deployed in the Gulf of Aden for maritime security operations, arrived in the vicinity of the vessel in the afternoon of 22 Feb 24. Indian Naval EOD specialists embarked the vessel and sanitised it for any residual risk. The vessel was cleared for onward transit.

On Master's request, the Medical team also embarked the ship and provided medical assistance to an injured crew member.

Relentless efforts by Indian Naval ships reaffirms Indian Navy's steadfast commitment towards safety and security of merchant shipping and seafarers.

<https://pib.gov.in/PressReleasePage.aspx?PRID=2008582>



Press Information Bureau
Government of India

Ministry of Defence

Sat, 24 Feb 2024

Raksha Mantri Approves Financial Incentive for Service Athletes who Bagged Medals in 2023 Asian Games & Asian Para Games

Gold medal winners to get Rs 25 lakh each, Silver - Rs 15 lakh; Bronze - Rs 10 lakh

Raksha Mantri Shri Rajnath Singh has approved a financial incentive for the Armed Forces personnel who bagged medals in the 19th Asian Games and 4th Asian Para Games held in Hangzhou, China in September-October 2023. For both Asian Games as well as Asian Para Games,

Gold medal winners will receive a cash reward of Rs 25 lakh each, Silver medal winners Rs 15 lakh each and Bronze medal winners Rs 10 lakh each.

Several Service athletes had made the nation proud in the Games, with the Raksha Mantri felicitating them on their return and commending them for their outstanding performance. He had also approved cash rewards to 45 medal winners, including seven Para athletes. These 45 athletes won 09 Gold, 18 Silver and 17 Bronze medals in the Asian Games and 01 Gold, 04 Silver and 02 Bronze medals in Asian Para Games.

This financial incentive, announced by the Ministry of Defence for the Armed Forces personnel for the first time, will further motivate these athletes to exhibit an even better performance at qualifying events of the Paris Olympics Games 2024 for which they are currently preparing.

<https://pib.gov.in/PressReleasePage.aspx?PRID=2008558>



Sat, 24 Feb 2024

IAF Develops SAMAR-2 Air Defence System Using Old Russian R-27 Air to Air Missiles

Indian Air force (IAF) Maintenance Command chief Air Marshal Vibhas Pande said the indigenously developed air defence missile system represents the IAF's ability to demonstrate that obsolete missiles can be put to effective use by using them as an air defence feature.

Speaking to ANI, Air Marshal Vibhas Pande said, "SAMAR 2 is the next version of the missile system and this whole effort is primarily to ensure that whatever missiles are getting life expired, we can put them to effective use by deploying them as an air defence system."

This is just a demonstration of how we can integrate the R27 missile into the Samar system. This is a capability demonstration of the Indian Air Force that within its own intellect and capability, in association with the industry, we can develop a system in-house and in future, we will be able to integrate any other missile also for ensuring that our air defence system becomes stronger and stronger."

"This is just a demonstration of how we can integrate the R27 missile into the Samar system. This is a capability demonstration of the Indian Air Force that within its own intellect and capability, in association with the industry, we can develop a system in-house and in future, we will be able to integrate any other missile also for ensuring that our air defence system becomes stronger and stronger," said the Maintenance Command chief. SAMAR-2 is an air defense system developed by the Indian Air Force (IAF). It stands for "Surface to Air Missile for Assured Retaliation".

The SAMAR-2 uses old Russian-origin R-27 air-to-air missile systems from the IAF's inventory.

The IAF's 7 Base Repair Depot Tughlakabad (BRD) developed the SAMAR system by repurposing old Russian-origin air-to-air missile systems.

The IAF has carried out successful firing trials of the SAMAR system during the Astrashakti 2023 exercise at Suryalanka Air Force Station in Andhra Pradesh.

<https://www.aninews.in/news/national/general-news/iaf-develops-samar-2-air-defence-system-using-old-russian-r-27-air-to-air-missiles20240224222335/>

THE TIMES OF INDIA

Mon, 26 Feb 2024

Can't Outsource National Security, Self-reliance must: Army Chief Manoj Pande

The nation's security can neither be outsourced, nor be dependent on the largesse of others, Army chief General Manoj Pande has said, reiterating the strategic imperative of self-reliance in defence production. Army is currently working with 340 indigenous defence industries for "fructification" of 230 contracts by 2025, which entails an outlay of Rs 2.5 lakh crore, Gen Pande said at a conclave, underlining the force's push for self-reliance as part of its "transformation" in meeting operational and functional requirements.

The impact of external dependency for critical components, supply chain disruptions and weaponisation of denial regimes came to the fore during the pandemic, which was also reinforced by the lessons learnt from the ongoing Russia-Ukraine conflict.

"The need to be self-reliant in meeting our defence needs, both in acquiring new weapon platforms or equipment and sustenance of existing ones, by meeting ammunition, spares and maintenance demands and achieving self-sufficiency in critical technologies, is hence an imperative. Atmanirbharta is an inescapable requirement," he said.

It's "extremely essential" for the nation to have a robust and effective defence-industry ecosystem, which includes indigenous research, design, development and production capacities. Strong linkages among the academia, R&D establishments, industry and the users or armed forces are critical for this ecosystem, he added.

Govt has taken a number of "enabling actions" in this regard, ranging from simplification of industrial licencing, deregulation, inclusive participation of private sector and foreign investment liberalisation to incentivisation for transfer of technology, promulgation of "positive indigenisation" lists, corporatisation of ordnance factories and setting up of two defence corridors, Gen Pande said.

Noting the ongoing geopolitical flux in the world order as well as how disruptive technologies are blunting conventional combat force ratios, Gen Pande said Army's vision for the future is to "transform into a modern, technology-enabled and self-reliant future ready force, capable to deter and win wars in a multidomain operational environment, in synergy with the other services".

<https://timesofindia.indiatimes.com/india/cant-outsource-natl-security-self-reliance-must-army-chief-manoj-pande/articleshow/107991346.cms>

THE ECONOMIC TIMES

Mon, 26 Feb 2024

Drones, Missiles, Radars, Fighter Jets: Indian Armed Forces to Get Nearly 1 Lakh Crore Infusion for Game-changer Tech

In the past week, the Cabinet Committee on Security approved several major defence deals, collectively worth over Rs 92,000 crore, to bolster the combat capabilities of the armed forces.

These investments are part of India's broader strategy to enhance its defence capabilities and promote self-reliance in defence manufacturing. The recent approvals include:

Hindustan Aeronautics Limited (HAL), supported by the Defence Research and Development Organisation (DRDO), securing approval for a major upgrade of the Su-30MKI fighter jet fleet. This Rs 60,000 crore project aims to integrate new radars, mission control systems, electronic warfare capabilities, and weapon systems.

Acquisition of over 220 extended-range BrahMos supersonic cruise missiles, with a strike range of 450 km, for deployment on frontline warships of the Indian Navy. This deal, valued at approximately Rs 19,500 crore, marks the largest-ever contract for the BrahMos missiles.

Approval for the manufacture of new advanced engines for the existing fleet of MiG-29 fighters in the Indian Air Force (IAF), to be produced by HAL in collaboration with Russia, at a cost of about Rs 5,300 crore.

Approval for the acquisition of high-powered radars and new versions of the L-70 air defence guns, each project valued at around Rs 6,000 crore, to enhance India's radar coverage in strategic areas and provide enhanced protection against potential attacks by drones and aircraft.

IAF's Sukhoi fighter jet upgrades

Hindustan Aeronautics Limited (HAL), supported by the Defence Research and Development Organisation (DRDO), has secured approval from the defence ministry for a major upgrade of the Su-30MKI fighter jet fleet. This Rs 60,000 crore project aims to bolster the aircraft's capabilities through the integration of new radars, mission control systems, electronic warfare capabilities, and weapon systems.

This project reflects India's commitment to self-reliance in defence manufacturing, as indigenous systems will replace several Russian-origin components. Key upgrades include the installation of a new indigenous radar system, enhancing target detection and engagement capabilities. Additionally, the aircraft will be equipped with a new electronic warfare system to counter incoming threats and disrupt enemy communication.

Killer Drones and Supersonic Missiles

One of the most significant contracts approved is for the acquisition of over 220 extended-range BrahMos supersonic cruise missiles. These missiles, with a strike range of 450 km, will be deployed on frontline warships of the Indian Navy. This deal, valued at approximately Rs 19,500 crore, marks the largest-ever contract for the BrahMos missiles.

According to top government sources, the contract between BrahMos Aerospace and the ministry of defence is expected to be signed in the first week of March. "The BrahMos is the main weapon for anti-ship and attack operations for the Indian navy warships which have been regularly firing the weapon system," they noted.

BrahMos Missile Contract

The contract for over 220 extended-range BrahMos missiles, with a strike range of 450 km, was approved to arm frontline warships of the Navy.

The contract, to be inked in early March, is the first consolidated order for the extended-range BrahMos missiles and will be delivered over five to six years.

Advanced Engines for Fighter Jets

In addition to the BrahMos deal, the Indian government also greenlit a project for the manufacture of new advanced engines for the existing fleet of MiG-29 fighters in the Indian Air Force (IAF).

The engines, to be produced by Hindustan Aeronautics Limited (HAL) in collaboration with Russia, will cost about Rs 5,300 crore.

High-Powered Radars and Air Defence Guns

Further enhancing India's defence capabilities, the government approved two other projects for the acquisition of high-powered radars and new versions of the L-70 air defence guns. Larsen and Toubro (L&T) will manufacture these systems with some foreign technology, with each project valued at around Rs 6,000 crore.

The Indian Air Force will procure new radars to replace and augment the existing chain of radars along both borders. This move aims to strengthen India's radar coverage in strategic areas. The Cabinet Committee has also approved the ambitious Made in India Close-in Weapon System project, valued at around Rs 7,000 crore. This system, based on a derivative of air defence guns, will provide enhanced protection to vital assets and points against potential attacks by drones and aircraft.

Other Defence Deals

Hindustan Aeronautics will manufacture new advanced engines for existing MiG-29 fighters in IAF fleet, in collaboration with Russia, for about Rs 5,300 crore.

L&T will manufacture high-powered radars and new versions of the L-70 air defence guns, each deal valued at almost Rs 5,000 crore.

Strengthening National Security and Indigenous Manufacturing

These investments highlight India's commitment to bolstering its defence capabilities and promoting indigenous manufacturing. The BrahMos missiles, jointly manufactured with Russia in India, have already become a key precision-strike weapon for the armed forces, with contracts worth over Rs 38,000 crore. The recent approvals further solidify India's position as a key player in the global defence market and underscore the country's drive towards self-reliance in defence production.

Future Outlook

India's defence sector is witnessing a paradigm shift towards indigenization and self-reliance, with significant deals and projects being approved. The strategic move to enhance the Indian Navy's firepower with BrahMos missiles and the push for 'aatmanirbharta' (self-reliance) in defence manufacturing reflect India's broader defence strategy. These developments not only aim to strengthen national security but also position India as a key player in the global defence export market.

Rs 3 lakh crore Annual Defence Production by 2028-29

India is set to achieve a milestone in its defence sector, with Defence Minister Rajnath Singh announcing that the country's annual defence production is expected to reach Rs 3 lakh crore by 2028-29. Singh emphasized the Modi government's focus on "long-term gains" in all sectors, aiming to develop India into a developed nation by 2047. He highlighted the significant progress India has made in defence exports, which have increased from under Rs 1,000 crore to Rs 16,000 crore.

Budget Allocation and Strategic Acquisitions

The defence ministry has been allocated Rs 6.2 lakh crore in the 2024-25 budget, the highest among all ministries. Singh highlighted that capital acquisitions worth over Rs 4.3 lakh crore have been approved, reflecting the government's commitment to enhancing national security. He

emphasized the importance of jointness among the Indian Army, Navy, and Air Force, noting improved coordination to address challenges jointly.

<https://economictimes.indiatimes.com/news/defence/drones-missiles-radars-fighter-jets-indian-armed-forces-to-get-nearly-1-lakh-crore-infusion-for-game-changer-tech/articleshow/107981352.cms>



Sat, 24 Feb 2024

Air Chief Marshal VR Chaudhari Visits Defence Expo in Pune

Air Chief Marshal VR Chaudhari on Saturday visited the Maharashtra MSME Defence Expo at the Pune International Exhibition and Convention Centre (PIECC) in Moshi, Pimpri-Chinchwad.

The Maharashtra government led by Chief Minister Eknath Shinde had extended an invitation to the Indian Air Force (IAF) for participation and capability demonstration at the expo which began on February 24 and will conclude on February 26.

VR Chaudhari visited the expo and interacted with participating industries, and told them about the Indian Air Force's future requirements in alignment with the central government's goal of an 'Aatmanirbhar Bharat'.

The expo witnessed active participation from numerous Micro, Small, and Medium Enterprises (MSMEs), private companies, Defence Research and Development Organisation (DRDO) laboratories, and Defence Public Sector Unit (DPSU) setups in Maharashtra.

Their participation reflected India's progress towards achieving 'Atmanirbharta' (self-reliance) in Defence and the integration of Armed Forces requirements, research and development, and Defence production by both public and private entities.

The IAF, during the expo, demonstrated its indigenous capabilities through the static display of the new-generation Advanced Light Helicopter MK-IV and Light Combat Helicopter. Additionally, the Aakash and SAMAR missile systems were also exhibited.

The IAF stall featured products developed by its internal agencies in collaboration with private industry partners.

A stall was also set up by the IAF to encourage young people to join the force. The Induction Publicity and Exhibition Vehicle (IPEV) showcased a near-real-life depiction of the range of functions and activities undertaken by the IAF.

Students from various educational institutions were briefed about the benefits of joining the Indian Air Force as an Officer and Agniveervayu.

<https://www.indiatoday.in/india/story/maharashtra-chief-of-air-staff-visits-msme-defence-expo-2024-in-pune-2506710-2024-02-24>

Full Spectrum Self-sufficiency Required in Defence, Especially Aerospace: DCAS

A nation has to become "industrially strong" and full spectrum self-sufficiency is required in defence, especially in the aerospace sector, Deputy Chief of Air Staff Air Marshal Ashutosh Dixit said on February 23.

Delivering a keynote address at an international conference in New Delhi, he also said it is being seen that 'atmanirbharta' (self-dependence) is becoming more and more important after the "two wars" happening around us in the world.

The conference, titled 'Energising Indian Aerospace Industry: Challenges for 'Aatmanirbhar Bharat' and hosted at Manekshaw Centre in Delhi Cantonment, is being attended by many other senior officers of the Indian Air Force and representatives of various leading defence industry firms.

"Every nation wants to become self-reliant, 'atmanirbhar'. And we are seeing that... after these two wars happening around us in the world, it is becoming more and more important," Air Marshal Dixit said. His remarks come in the backdrop of the Russia-Ukraine conflict and Israel-Hamas conflict.

He emphasised the need for 'atmanirbharta' in the IAF and the challenges that the force faces at present as it forges ahead. "We have to become industrially strong, full spectrum self-sufficiency is required in defence, especially in the aerospace sector," the deputy chief of the air staff said.

He also shared a historical aspect of manufacturing of IAF aircraft in India in the 1950s and the force's journey in the realm in the decades that followed.

"Today, the situation has become such that if a user doesn't come forward and drive this whole gamut of 'atmanirbharta', I don't think it is going to be successful," he added.

Society of Indian Defence Manufacturers (SIDM) and air force think-tank Centre for Air Power Studies (CAPS) are also co-organisers of the event.

<https://www.thehindu.com/news/national/full-spectrum-self-sufficiency-required-in-defence-especially-aerospace-dcas/article67877924.ece>

Business Standard

Maha to Roll out Policy to Boost Defence Manufacturing: Devendra Fadnavis

A new aerospace and defence policy will be formulated to provide a boost to defence manufacturing in Maharashtra, deputy Chief Minister Devendra Fadnavis said on Saturday.

Speaking at the inauguration of 'MSME Defence Expo', a three-day event organized at Moshi in Pimpri Chinchwad near here, he said Pune has developed an ecosystem conducive for defence manufacturing in recent years.

"Maharashtra is leading the country in defence manufacturing. We host the Air Force Maintenance Command, Army Southern Command, the Indian Navy Dockyard, Hindustan Aeronautics facility, Mazgaon Dockyard, National Defence Academy, and several DRDO laboratories," he said.

BDL's missile production facility is coming up near Amravati, the deputy CM noted. Prime Minister Narendra Modi "recognized the country's real prowess", he said, adding that earlier India was dependent on other countries for defence equipment.

"Today, countries like US, Russia, France and Germany are powerful because their defence manufacturing is their real strength. Aiming for India to possess similar strength, Modi ji initiated the 'Made in India' campaign, stating that countries exporting weapons to India must manufacture the products in India," Fadnavis said. PM Modi also insisted on technology transfers alongside manufacturing, he said.

Today, we are becoming self-reliant in the defense sector," Fadnavis added.

"In 2017 (when he was chief minister), Maharashtra was the first state to formulate an aerospace and defence policy, creating a Rs 1,000 crore fund through angel investment. Today, this fund has led to the formation of 600 MSMEs, working towards self-reliance," Fadnavis said.

"We will collaborate with the industry to introduce a renewed aerospace and defence policy to enhance the success of MSMEs," he added.

To establish a supply chain for defence manufacturing, the state's Industry Ministry has decided to create four clusters, Fadnavis informed.

https://www.business-standard.com/india-news/maha-to-roll-out-policy-to-boost-defence-manufacturing-devendra-fadnavis-124022400815_1.html

THE ECONOMIC TIMES

Fri, 23 Feb 2024

CDS General Anil Chauhan Meets with Chiefs of other Countries, Discusses Security Challenges, Defence Cooperation

On the sidelines of Raisina Dialogue in Delhi, Chief of Defence Staff General Anil Chauhan met with the Chiefs of Defence from the friendly countries, defence officials said.

In the meeting held on Thursday, General Chauhan exchanged views on the security challenges and enhancing defence cooperation with the chiefs of other countries.

General Chauhan was also accompanied by other Indian senior defence personnel.

Earlier on Thursday, the CDS held a meeting with French Navy Chief Admiral Nicolas Vaujour and discussed issues of mutual strategic interest, security challenges in the Indian Ocean Region and furthering maritime collaboration. The two sides affirmed the significant progress in bilateral defence cooperation between two nations.

In a post on X, Headquarters Integrated Defence Staff stated, "Admiral Nicolas Vaujour, French Chief of Naval Staff called on General Anil Chauhan, #CDS_India. Discussions held on issues of mutual #strategicinterest, #securitychallenges in the #IOR and furthering maritime collaboration, duly affirming the significant progress in bilateral #DefenceCooperation between both nations."

Raisina Dialogue is India's flagship conference on geopolitics and geoeconomics, committed to addressing the most challenging issues facing the global community.

The ninth edition of Raisina Dialogue is being held in Delhi from February 21-23.

Greek Prime Minister Kyriakos Mitsotakis is the Chief Guest and keynote speaker of the summit. He, along with Prime Minister Narendra Modi, inaugurated the Raisina Dialogue here on Wednesday evening.

It is being organised by the Ministry of External Affairs in collaboration with the Observer Research Foundation.

Ministers, National Security Advisors, senior officials and representatives of industry, technology, finance and other sectors from more than 100 nations are participating in the Raisina Dialogue.

According to the Ministry of External Affairs the thematic pillars of Raisina Dialogue are - "Tech Frontiers: Regulations and Realities, Peace with the Planet: Invest and Innovate, War and Peace: Armouries and Asymmetries, Decolonising Multilateralism: Institutions and Inclusion, The Post-2030 Agenda: People and Progress."

<https://economictimes.indiatimes.com/news/defence/cds-general-anil-chauhan-meets-with-chiefs-of-other-countries-discusses-security-challenges-defence-cooperation/articleshow/107935963.cms>



Fri, 23 Feb 2024

Raisina Dialogue | Grey-zone Warfare Latest Entry in Lexicon of Warfare, Says Chief of Defence Staff

In the lexicon on warfare, “grey-zone” is the latest entry, because of what has happened in the South China Sea and what has happened along our northern borders, Chief of Defence Staff Gen. Anil Chauhan said on Friday in a reference to China.

Gen. Chauhan said grey-zone warfare is a kind of a military action below a particular threshold that would invite a response. In an oblique reference to China’s actions, both along the Line of Actual Control as well as the South China Sea, Gen. Chauhan said in grey-zone warfare the dividend of the action may be available only after a long time. “To start this, possibly, you will have to have a dispute to be successful in launching this... The origin lies in a historical dispute,” he remarked.

On similar lines, the U.S. Indo-Pacific Commander Adm. John Aquilino, speaking of the exceptional growth in India-U.S. relations said the ability to share information is “like never before” and some of that is based on actions that “occurred on the Indian northern border”.

They were speaking at different sessions on the third day of the Raisina Dialogue jointly organised by the Ministry of External Affairs and the Observer Research Foundation.

Stressing on partnerships to preserve the global commons, Adm. Aquilino said U.S. cooperation with all its partners has expanded exponentially over the past three years. “Some of them is based in the environment, the aggressive action of some nations are forcing other nations to come together to ensure we stand for what we believe in. The U.S.-India relationship has certainly grown exponentially,” he said during a panel discussion ‘From the Aegean Sea to the South China Sea: Responding to Maritime Sieges’. “The capabilities that are co-produced here with India whether it be C-130s, helicopter pieces, munitions, now GE engines and carrier cooperation, those things have exploded in three years. Our ability to share information is like never before. Some of that’s based

on actions that occurred on the Indian northern border. The sharing of information to understand that my partner's forces are at risk, and we are there to help.”

Expanding linkages

This, he said, expands across the globe, whether it be through treaties or other linkages, including the Quad. “Those partnerships have expanded. We do 120 exercises a year in the region,” Adm. Aquilino said.

Earlier this week, Defence Secretary Giridhar Aramane had acknowledged the possibility that India “may encounter” a similar situation as the 2020 stand-off with China, which he said is “keeping us active all the time”, that “we are standing against a bully in a very determined fashion.” He further acknowledged the quick intelligence support from the U.S., and said the “strong resolve that we support each other in the face of a common threat is going to be of critical importance to us.”

Indian Navy Chief Adm. R. Hari Kumar said in all recent conflicts, be it Israel-Hamas or the Ukraine war, the changing character of warfare is evident and stressed on the need to adapt to the use of modern technologies, which are lately becoming more affordable and accessible.

Stressing on the importance of naval power, Adm. Kumar noted that if there is a large merchant fleet or trade, then there is need for a Navy. In this regard, he noted that today, India is the fifth largest economy and may be before 2030 we will be the third largest economy. “What does it imply? It means we will be importing more, exporting more, doing value addition. And where does this go through? It will all go through the sea. More than 90% of the trade as such will go through the sea. And where we contribute in services for the tourist economy, over 45% of that actually goes through the Internet, through the undersea cables. So a great chunk of the economy will be completely dependent on the sea,” he said.

There is risk at sea, of the need to maintain maritime security and it is going to become more and more challenging, he said adding, that more investment is needed to build assets in preparation. “People say that budget is a challenge. I would say that even if it is under 2% of the GDP, as the GDP grows it is definitely adequate to prepare to meet the challenges,” Adm. Kumar added.

French Navy Chief Adm. Nicolas Vaujour said today most things are contested, notably, the global commons and the sovereignty of states are contested. “All the pillars of the sovereignty of the states are contested — it is financial, it is economic, it is everywhere.”

Echoing similar views, the First Sea Lord and Chief of the U.K. Navy Adm. Sir Ben Key said if people wanted to impose their will on global commons like the sea, the ripples would be felt far and wide. “This is what differentiates the maritime environment from land, and why no navy can cover all of the world at the same time. The interdependencies of one effect are so intertwined that we're actually obligated to work together.”

<https://www.thehindu.com/news/national/greyzone-warfare-latest-entry-in-lexicon-of-warfare-says-cds/article67879775.ece>

THE ECONOMIC TIMES

Sat, 24 Feb 2024

India, Maldives & Sri Lanka's 'Dosti-16' Kicks off in Maldives

Highlighting the importance of "collaboration and interoperability" among the coast guards personnel of the Maldives, India and Sri Lanka, Maldivian Defence Minister Mohamed Ghassan

Maumoon said the trilateral exercise 'Dosti' will unite the troika to address "shared maritime security concerns through collaboration." Maumoon was speaking at an event to formally inaugurate the 16th iteration of 'Dosti,' the biennial exercise, which began on Thursday and would continue until Sunday.

Indian Coast Guard ship Samarth and ICGS Abhinav along with Sri Lanka Naval Ship Samudura are participating in the exercise 'DOSTI-16' while Bangladesh is participating as an observer.

Sri Lanka has described 'Dosti' as a trilateral exercise that aims to enhance cooperation, strengthen friendship, improve mutual operational capability, and develop interoperability among the Coast Guard personnel of India, the Maldives, and Sri Lanka.

"Scheduled from February 22nd to 25, the exercise provides participating forces with opportunities to engage in various maritime activities, including interdiction operations, search and rescue missions, surveillance, and communication drills," the Maldives National Defence Force (MNDF) said in a statement.

These activities aim to enhance their collective capability to respond to maritime security and safety challenges," it said.

Ministers of the Maldivian government, as well as the Chief of Defence Force, Lieutenant General Abdul Raheem Abdul Latheef, Vice Chief of Defence Force, Brigadier General Ibrahim Hilmy, Additional Director General of Indian Coast Guard, ADG S Paramesh, and some foreign ambassadors, took part in the inauguration ceremony that was held on February 22, the MNDF statement said late on Friday night.

Speaking at the event, Maumoon emphasised the importance of greater collaboration between the coast guards of Maldives, India and Sri Lanka to address "shared maritime security concerns."

Exercise 'Dosti' focuses on regional cooperation in areas such as search and rescue, medical evacuations, countering piracy, pollution response, as well as humanitarian assistance and disaster relief efforts.

According to Edition.mv, a news portal, Maumoon said, "President Dr Mohamed Muizzu's administration places the highest priority on ensuring that close relations, peace and stability is maintained between Maldives and neighbouring nations."

He said that the President has assured that he will focus on maintaining regional stability and noted that Sri Lanka's participation in the training since 2012 has brought further advancement to the programme, the portal said.

"Trilateral Joint Exercise 'EX-DOSTI-16' begins. Minister of Defence @mgmaumoon graced the inauguration ceremony, emphasising the importance of this historic event in uniting the Coast Guards of Maldives, India and Sri Lanka to address shared maritime security concerns through collaboration," the MNDF posted on its official X handle along with photos from the event late on Friday night local time.

Apart from the formal inauguration, Munu Mahawar, High Commissioner of India and S Paramesh, ADG Indian Coast Guard, also welcomed Mohamed Ghassan Maumoon, Minister of Defence, Maldives, and Moosa Zameer, Foreign Minister, Maldives onboard ICGS Samarth for trilateral exercise DOSTI XVI.

"Strengthening bonds and fostering cooperation among our maritime neighbours!" the Indian Coast Guard posted on X along with the photos of the visit.

"The trainings ... will include maritime interdiction operations, ocean search and rescue operations, maritime surveillance and communication drills," Edition.mv said, adding that the training activities are being held in the Male area and surrounding seas.

The 'Dosti' series of naval exercises had begun in 1992 with only Maldives and India. Sri Lanka joined the programme in 2012 and this year, in the 16th edition, the Bangladesh Coast Guard too has joined as an observer.

<https://economictimes.indiatimes.com/news/defence/india-maldives-sri-lankas-dosti-16-kicks-off-in-maldives/articleshow/107970545.cms>

THE ECONOMIC TIMES

Fri, 23 Feb 2024

Mind Games would be Played: Jaishankar on China's Approach towards Bilateral Ties

External Affairs Minister S Jaishankar on Friday said arriving at an equilibrium and maintaining it is going to be one of the "biggest challenges" for India-China ties even as he asserted that the immediate issue at hand was Beijing's departure from laid down norms triggering the border row in eastern Ladakh. In an interactive session at the Raisina Dialogue, he cautioned against China's "mind game" to restrict the issues under the bilateral framework and said India must not forgo its rights to harness other factors in the world to get better terms on an equilibrium.

On the economic front, the external affairs minister said there would be a period when the Chinese economy will be flattening out and India will be growing and referred to projections by Goldman Sachs that suggested that by 2075, both countries could end up as USD 50 trillion plus economies.

Jaishankar said India should be confident enough to "leverage" the international system to create the "best possible outcome".

His remarks came when asked whether there would be a settling point between China and India and would the two countries finally find an equilibrium or a balance in their frosty relations.

"Here is the immediate issue which is: From the late 1980s, we had an understanding on the border precisely because it suited both of us. Now there was a departure after almost 30 years. A departure on their side in terms of how they behaved on the border. And there was a pushback from our side," he said.

"I think arriving at an equilibrium, then maintaining those and refreshing those is going to be one of the biggest challenges for both countries. It is not going to be easy," he noted.

The external affairs minister said "mind games" will be played which would be that it is "just between the two of us".

"The other 190 odd countries do not exist in our relationship. That will be the mind game which will be played. I do not think we should play it," he said.

"Because if there are other factors out there in the world which can be harnessed by me to get better terms on an equilibrium, then why should I forgo that right," he said.

"Today, when I say think through your own solution, do not give another country, which is clearly a competitive country, a veto over our policy choices. Unfortunately, in the past that has happened from time-to-time," he said.

Talking about the two economies, Jaishankar said the Chinese started off "earlier and much more intensively and robustly" than India did.

"But it is in the nature of things that at some stage everybody flattens out. So there will be a period when they will be flattening out and we will be growing," he said.

"I am not in denial of what the numbers today suggest. But if one looks for an example in Goldman Sachs predictions which is that we will both really by around 2075 end up as USD 50 trillion plus economies and will be the two closest to each other," he said.

"The international version of that issue will be -- if both of us are moving vis-a-vis each other and vis-a-vis the world, how do we construct an equilibrium; that There will be occasions when one or the other would want to do something to press home a particular advantage and the other would resist it," he said.

<https://economictimes.indiatimes.com/news/defence/mind-games-would-be-played-jaishankar-on-chinas-approach-towards-bilateral-ties/articleshow/107941264.cms>

Science & Technology News



Press Information Bureau
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Ministry of Science & Technology

Fri, 23 Feb 2024

Artificial Intelligence Revolutionising Clinical Medicine, Need for Optimum Integration between the Existing and the Newer Tools of Patient Care, Says Union Minister Dr Jitendra Singh

At the same time, he said, integration is also required at a different level between the public and private sectors on the one hand and on the other hand among various systems of medical practice combining allopathy with AYUSH to achieve the envisaged health goals through a synergised approach

Dr Jitendra Singh says, for the first time after Independence, healthcare sector has received the top priority under Prime Minister Narendra Modi

Speaking as Chief Guest at a conference in Bengaluru, Dr Jitendra Singh said, PM Modi talked about Digital Health from the ramparts of the Red Fort and thus declared the intent of the government

Dr Jitendra Singh calls for strong Public Private extended integration of various healthcare streams for the optimum results

Union Minister of State (Independent Charge) Science & Technology; MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space, Dr Jitendra Singh today said that Artificial Intelligence is revolutionising clinical medicine at a very fast pace and there is an urgent need for optimum integration between the existing and the newer tools of patient care.

At the same time, he said, integration is also required at a different level between the public and private sectors on the one hand and on the other hand among various systems of medical practice

combining allopathy with AYUSH to achieve the envisaged health goals through a synergised approach.

Speaking as chief guest in the inaugural session of 2-day "International Patient Safety Conference 2024" in Bengaluru, Dr Jitendra Singh said, India's recent success stories which have been hailed worldwide including the vaccine story, have proved beyond evidence that working in silos or in isolation has its limitations and further growth from here on is possible only through an integration at multiple levels.

Dr Jitendra Singh said, for the first time after Independence, the healthcare sector has received top priority under Prime Minister Shri Narendra Modi. PM Modi spoke about Digital Health from the ramparts of the Red Fort on Independence Day, he recalled.

A renowned diabetologist himself, Dr Jitendra Singh called for strong Public Private extended integration for the optimum results. He gave the example of a recently introduced Ph.D course in Biosciences, which is multiple in nature and even B.Tech or M. Tech streams could join.

Elaborating further on integration of various streams of healthcare, Dr Jitendra Singh pointed out that during the COVID even the West started looking up to India in search of immunity building techniques drawn from Ayurveda, Homoeopathy, Unani, Yoga, Naturopathy and other oriental alternatives. He said, however, even after the COVID phase passes out, an optimum integration and synergism of different streams of medical management are the key to successful management of various diseases and disorders which may not be otherwise completely amenable to treatment by any single stream of medicine or the treatment given in silos.

Dr Jitendra Singh said that ever since Shri Narendra Modi took over as Prime Minister of India in 2014, he has brought to the centre stage the virtues of indigenous systems of medical management. He said, it was PM Modi who brought a unanimous resolution in the United Nations to observe International Day of Yoga, as a result of which Yoga has reached virtually every household across the world. Again it was PM Modi's initiative that we have celebrated the International Year of Millets in 2023 to spread the virtues of Millets and other coarse grains to the world.

Referring to the PPP model, Dr Jitendra Singh said, India has witnessed investment of over Rs 1,000 crore in Space Startups in the last nine months of the current financial year from April to December 2023. This has been possible because in a bold decision taken by Prime Minister Shri Narendra Modi, India's Space sector has been opened up for private players, as a result of which there is an overwhelming response from Industry as well as investors from private sector, the Minister added.

Similarly, Dr Jitendra Singh said that our Bio-economy witnessed double digit growth rate year-on-year in the last 9/10 years under the leadership of Prime Minister Modi. "In 2014, India's bioeconomy stood at just about \$10 Billion. This fiscal we are likely to touch \$150 billion and we look forward to having \$300 Billion by 2030," he said.

Dr Jitendra Singh said, India has made rapid strides in the last 8/9 years. "We had just 55 (Biotech) Startups in 2014, now we have more than 6,000," he said. Today there are over 3,000 Agritech Startups and are very successful in areas like Aroma Mission and Purple Revolution.

Stating that the "Anusandhan National Research Foundation" will pave the way for a greater PPP model in scientific research, Dr Jitendra Singh said the NRF will catapult us to the league of a handful of Developed nations pioneering new research in new frontiers. "NRF budget envisions a spending of Rs. 50,000 crore over five years, out of which over 70% will come from non-government sources, including domestic as well as outside sources," he said.

Dr Jitendra Singh thanked the organisers for taking the lead for a synergised and equitable relationship with the government for optimum outcomes. He also thanked them for taking the lead in bringing a new genre of AI and other technological tools for patient and clinical medicine.

Dr Jitendra Singh said, Apollo Hospitals has also played a pioneering role fulfilling the vision of its founder Dr Pratap Reddy in addressing the societal needs during the tough times of COVID.

<https://pib.gov.in/PressReleasePage.aspx?PRID=2008404>

THE TIMES OF INDIA

Fri, 23 Feb 2024

AIIMS Delhi Preparing Special Exoskeleton to Help Paralysed Patients Walk

AIIMS Delhi and DRDO are collaborating on a project to develop a special exoskeleton for soldiers who have been injured in service and have lost their ability to walk or became paralysed. This exoskeleton will enable the injured soldiers to walk again.

Professor Bhavuk Garg, department of Orthopaedics AIIMS, said, "We have the best gait lab in India and right now, in the first phase, we are looking and collecting data about muscle activation patterns in people while walking, Once we have this data, we will feed it into a wearable robot kind of thing called an exoskeleton, which will enable paralytic people to walk."

Professor Ravi Mittal, Head of Orthopaedic Department in AIIMS, said, "In our Gait Lab, we record the movements of knees, legs, etc. For this, we record them by placing many sensors and cameras on the body. After which, all this data is collected and fed into the computer and then it is analysed. After this, every parameter is checked. It is studied. We find out how the person walks, how his legs rotate, what the speed is, and how much the gap is. All these things are being worked on very minutely.

Dr Mittal said that they study in detail a person's walk. "What is the movement of the rest of his body? What is the effect on his shoulders and head? Every single thing is recorded in detail and from this, we find out how much difference there is between the gait of a person who is completely healthy and the gait of a person who is ill. Gait Lab is a study done on all these things, through which we can find out the data," he said.

The Gait Lab study was not in India earlier and this study has been conducted at AIIMS Delhi for about 5 years.

The doctor said that in a disease like osteoarthritis, the joints wear out. "After this, the part of the body where there is a problem requires replacement, such as knee replacement, etc. But through the gait lab study, we find out how his gait has changed and what his statistics are. A gait lab study is performed to determine the quantity. What changes took place in the entire body? What were the parameters? Its numbers are known. In this series, such an exoskeleton is being prepared through this study. So that it will help those people who are unable to stand or have problems walking, those patients will be able to walk properly, stand and do their other work by wearing the exoskeleton."

The head of the department of the Orthopaedic Department of AIIMS, Delhi, said that the exoskeleton will be a kind of structure fashioned out of plastic and metal.

Professor Bhavuk Garg, Department of Orthopaedics, AIIMS said that through the Gait Lab they are currently studying how a common man who is completely healthy walks. "What movements his body makes, and how his muscles are activated. That data is being collected through this lab, and after collecting the data, we will try to replicate it through an exoskeleton, i.e., a small robot, to see how it can work like a common man."

Dr Garg said that the patient will be able to walk wearing the exoskeleton. "That is, a person suffering from paralysis or any serious disease is not able to move his hands and legs, is not able to walk, or is not able to do his daily tasks easily. So he will be able to do all his work while wearing it. We are working closely with IIT Delhi in this regard and we are being given funding for this by DRDO."

Dr Bhavuk Garg said presently they are "on the first page" regarding this study, and data is being collected. It is expected that this technology will be completely ready in two-three years. Which will be very beneficial for patients facing problems like paralysis or movement in the body.

<https://timesofindia.indiatimes.com/home/science/aiims-delhi-collaborating-with-drdo-to-develop-exoskeleton-for-paralysed-patients/articleshow/107935959.cms>



Fri, 23 Feb 2024

PAPA Payload Aboard Aditya-L1 Detects Solar Wind Impact of Coronal Mass Ejections

The Indian Space Research Organisation (ISRO) on Friday said that the Plasma Analyser Package for Aditya (PAPA) payload onboard the Aditya-L1 has been operational and performing nominally. "Its advanced sensors have successfully detected the impact of coronal mass ejections (CMEs) including those that occurred during February 10-11, 2024," ISRO said.

PAPA is an energy and mass analyzer designed for in-situ measurements of solar wind electrons and ions in the low energy range. It has two sensors: the Solar Wind Electron Energy Probe (SWEEP, measuring electrons in the energy range of 10 eV to 3 keV) and the Solar Wind Ion Composition Analyser (SWICAR, measuring ions in the energy range of 10 eV to 25 keV and mass range of 1-60 amu). The sensors are also equipped to measure the direction of arrival of solar wind particles.

The payload has been operational since December 12, 2023.

"The SWEEP and SWICAR sensors on PAPA-Aditya-L1 are currently making continuous observations of solar wind electrons and ions in the default mode, demonstrating that they are performing as per the design in all modes of operations. The observations made by PAPA emphasize its effectiveness in monitoring space weather conditions and its capability to detect and analyze solar phenomena," ISRO added. The PAPA payload is developed by the Space Physics Laboratory and Avionics Entity of the Vikram Sarabhai Space Centre (VSSC)/ISRO.

<https://www.thehindu.com/news/national/karnataka/papa-payload-aboard-aditya-l1-detects-solar-wind-impact-of-coronal-mass-ejections/article67878502.ece>

