

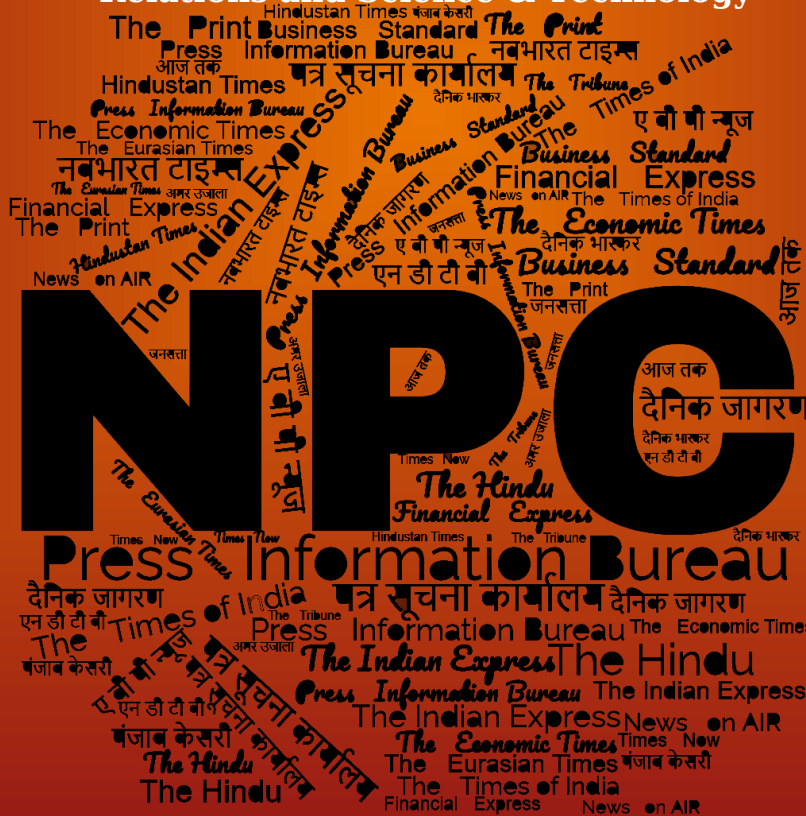
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समाचार पत्रों से चयित अंश Newspapers Clippings

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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पत्र सूचना कार्यालय
भारत सरकार

रक्षा मंत्रालय

Mon, 01 Jan 2024

डीआरडीओ ने अपना 66 वां स्थापना दिवस मनाया

डीआरडीओ आज अपना 66 वां स्थापना दिवस मना रहा है। रक्षा अनुसंधान एवं विकास विभाग के सचिव एवं डीआरडीओ के अध्यक्ष डॉ. समीर वी. कामत, डीआरडीओ ने भारत के 'मिसाइल मैन' तथा पूर्व राष्ट्रपति डॉ. एपीजे अब्दुल कलाम को पुष्पांजलि अर्पित की। डीआरडीओ के पूर्व प्रमुख डॉ. वीएस अरुणाचलम को भी पुष्पांजलि अर्पित की गई, जिनका अगस्त 2023 में निधन हो गया था।

डीआरडीओ से संबंधित लोगों को संबोधित करते हुए, डीआरडीओ के अध्यक्ष ने डीआरडीओ के सभी कर्मचारियों और उनके परिवारों को हार्दिक शुभकामनाएं दीं। उन्होंने कहा कि एक घटनापूर्ण वर्ष बीत चुका है और एक नया वर्ष शुरू होने वाला है। उन्होंने वैज्ञानिकों से राष्ट्र के लिए नवाचार और सृजन करने को कहा।

डीआरडीओ के अध्यक्ष ने डीआरडीओ की विभिन्न उपलब्धियों पर प्रकाश डाला और कहा कि वर्ष के दौरान, डीआरडीओ द्वारा विकसित कई प्रणालियों को उपयोगकर्ताओं को प्रदान, शामिल या सौंपा गया है।

उन्होंने इस बात पर प्रसन्नता व्यक्त की कि इस वर्ष 1 लाख 42 हजार करोड़ रुपये से अधिक मूल्य की डीआरडीओ की कई विकसित प्रणालियों को शामिल करने हेतु आवश्यकता की स्वीकृति (एओएन) भी प्रदान की गई है। यह किसी भी वर्ष में डीआरडीओ द्वारा विकसित प्रणालियों के लिए दी गई अब तक की सबसे अधिक राशि है। यह रक्षा उत्पादन में आत्मनिर्भरता का एक महत्वपूर्ण घटक है।

उन्होंने कहा कि कई प्रणालियां या तो पूरी हो चुकी हैं या फिर उपयोगकर्ता मूल्यांकन के अंतिम चरण में हैं और कई अन्य प्रणालियां विकासात्मक परीक्षणों से गुजर रही हैं। उन्होंने डीआरडीओ के लिए यह सुनिश्चित करने का लक्ष्य निर्धारित किया कि जो प्रणाली उपयोगकर्ता परीक्षणों के अधीन हैं और विकासात्मक परीक्षणों के अंतिम चरण में हैं, उन्हें 2024 में उपयोगकर्ता द्वारा स्वीकार किया जाए, ताकि वे शामिल किए जाने के लिए तैयार हों। उन्होंने कहा कि डीआरडीओ के प्रयोगशालाओं को जटिल व अपनी तरह की पहली प्रणालियों के विकास एवं उन्नयन और महत्वपूर्ण प्रौद्योगिकियों के विकास पर ध्यान केन्द्रित करना चाहिए, जो देश को आत्मनिर्भर और रक्षा प्रौद्योगिकी में अग्रणी बनाने में सक्षम बनाएगा।

डीआरडीओ के अध्यक्ष ने अपने भाषण में सफलता की कुछ अन्य कहानियों पर प्रकाश डाला। उन्होंने कहा कि यह हम सभी के लिए बेहद गर्व की बात थी जब माननीय प्रधानमंत्री ने 25 नवंबर, 2023 को एलसीए ट्रेनर में उड़ान भरी।

उन्होंने इस बात का उल्लेख किया कि 11 मई 2023 को राष्ट्रीय प्रौद्योगिकी दिवस के अवसर पर, माननीय प्रधानमंत्री ने आईआरईएल विजाग में रेयर अर्थ परमानेंट मैग्नेट (आरईपीएम) संयंत्र को राष्ट्र को समर्पित किया। यह संयंत्र डीआरडीओ की तकनीक का उपयोग करके स्थापित किया गया था। उन्होंने कहा कि स्वदेशी रूप से डिजाइन और

विकसित हेवी वेट टॉरपीडो (एचडब्ल्यूटी) 'वरुणास्त्र' का भारतीय नौसेना द्वारा 05 जून 2023 को समुद्र के नीचे एक लक्ष्य के खिलाफ लाइव वॉरहेड के साथ सफलतापूर्वक परीक्षण किया गया था। यह देश या शायद दुनिया में अपनी तरह का पहला प्रदर्शन था। उन्होंने पहली बार तेजस से हवा से हवा में मार करने वाली एस्ट्रो एमके1 मिसाइल दागने, स्वदेशी विमानवाहक पोत आईएनएस विक्रांत II पर एलसीए नेवी की लैंडिंग, राष्ट्रपति भवन, जी-20 शिखर सम्मेलन, गणतंत्र दिवस परेड और बीटिंग रिट्रीट समारोह में डीआरडीओ के डी4 सिस्टम की तैनाती का भी जिक्र किया। उन्होंने आगे कहा कि डीआरडीओ का समुद्र विज्ञान अनुसंधान पोत 'आईएनएस सागरध्वनि' 'महासागर अनुसंधान एवं विकास' में हिंद महासागर क्षेत्र के रिम देशों के साथ दीर्घकालिक वैज्ञानिक साझेदारी स्थापित करने के लिए ओमान के लिए सागर मैत्री मिशन -4 पर रवाना हुआ।

उन्होंने गगनयान कार्यक्रम के लिए क्रू एस्केप सिस्टम (सीईएस) के बारे में भी प्रकाश डाला, जिसका सफलतापूर्वक परीक्षण किया गया है। उन्होंने बताया कि रक्षा संबंधी संसदीय स्थायी समिति ने पिछले सप्ताह संसद में सौंपी अपनी रिपोर्ट में डीआरडीओ की सराहना की है और रक्षा अनुसंधान एवं विकास का बजट बढ़ाने की सिफारिश की है।

उन्होंने यह भी कहा कि डीआरडीओ ने इस साल 141 से अधिक पेटेंट दाखिल किए और 212 पेटेंट दिए गए और उम्मीद है कि आने वाले वर्षों में यह संख्या उल्लेखनीय रूप से बढ़ेगी। उन्होंने आगे कहा कि डीआरडीओ द्वारा 2019 में शुरू की गई पांच युवा वैज्ञानिक प्रयोगशालाओं ने अब प्रभाव दिखाना शुरू कर दिया है और ये उभरती विघटनकारी प्रौद्योगिकियों में हमारे पथप्रदर्शक बनने जा रहे हैं। उन्होंने इस बात का उल्लेख किया कि 15 डीआरडीओ उद्योग अकादमिक उत्कृष्टता केंद्र (डीआईए-सीओई) को पहले ही कई परियोजनाओं को मंजूरी दे दी गई है और यह डीआरडीओ प्रयोगशालाओं को निम्न टीआरएल से उच्च टीआरएल में कुछ भावी प्रौद्योगिकियों को निर्बाध रूप से परिवर्तित करने में सक्षम बनाएगी।

डीडीआरएंडडी के सचिव एवं डीआरडीओ के अध्यक्ष ने अपने संबोधन में कहा कि उद्योग को सक्षम बनाने की दिशा में, डीआरडीओ अपने प्रणालियों को मूर्त रूप देने के लिए उनके साथ साझेदारी कर रहा है। डीआरडीओ की परीक्षण सुविधाएं उद्योग जगत के उपयोग के लिए खोल दी गई हैं। उन्होंने बताया कि अब तक डीआरडीओ द्वारा विकसित 1650 टीओटी भारतीय उद्योगों को सौंपे जा चुके हैं। वर्ष 2023 के दौरान, डीआरडीओ उत्पादों के लिए भारतीय उद्योगों के साथ 109 प्रौद्योगिकी हस्तांतरण के लिए लाइसेंसिंग समझौतों (एलएटीओटी) पर हस्ताक्षर किए गए।

प्रौद्योगिकी विकास निधि (टीडीएफ) एवं संबद्ध योजनाओं को और अधिक प्रभावी बनाने हेतु, माननीय रक्षा मंत्री ने डीईई के पूर्व सचिव डॉ. काकोडकर और नीति आयोग के सदस्य डॉ. सारस्वत की अध्यक्षता में एक समिति का गठन किया था, जो संयुक्त राज्य अमेरिका के डीएआरपीए की तरह अत्याधुनिक अनुसंधान को वित्तपोषित करने के तरीके सुझाएगी। समिति ने अपनी रिपोर्ट सौंप दी है और एक बार माननीय रक्षा मंत्री द्वारा मंजूरी दिए जाने के बाद इस योजना को 2024 में कार्यान्वित किया जाएगा।

उन्होंने अपने संबोधन का समापन करते हुए यह अपेक्षा व्यक्त की कि सभी को उच्च उपयोगकर्ता संतुष्टि हासिल करने और हमारे सभी प्रणालियों व प्रौद्योगिकियों में कृत्रिम बुद्धिमत्ता/मशीन लर्निंग को शामिल करने पर ध्यान केन्द्रित करना होगा। उन्होंने आगे कहा कि प्रत्येक प्रयोगशाला को हमारी सभी प्रणालियों और प्रौद्योगिकियों में एआई/एमएल को सक्रिय रूप से शामिल करने के लिए एक एआई/एमएल चैंपियन नियुक्त करना चाहिए।

उन्होंने विस्फोटकों और संबंधित प्रक्रियाओं की स्थिति को स्वचालित करने हेतु एचईएमआरएल पुणे द्वारा विकसित क्वांटिटी-डिस्टेंस सॉफ्टवेयर का शुभारंभ भी किया। यह सॉफ्टवेयर सभी रक्षा मंत्रालय प्रतिष्ठानों के लिए एक आवश्यक उपकरण है जो अधिकतम समय में और अधिक सटीकता के साथ विस्फोटक संबंधी बुनियादी ढांचे का निर्माण करने में संलग्न है।

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**Press Information Bureau
Government of India**

Ministry of Defence

Mon, 01 Jan 2024

DRDO Celebrates 66th Foundation Day

DRDO is today celebrating the 66th Foundation Day of its establishment. Secretary, Department of Defence R&D and Chairman DRDO Dr Samir V Kamat DRDO paid floral tributes to the Missile Man of India and former President Dr APJ Abdul Kalam. Floral tributes were also paid to Dr VS Arunachalam, Former DRDO Chief, who passed away in August 2023.

Addressing DRDO fraternity, Chairman DRDO extended warm wishes to DRDO employees and their families. He stated that an eventful year has passed and a new one is about to begin and asked scientists to innovate and create for the Nation.

Chairman DRDO highlighted the achievements of DRDO and said that during the year, several systems developed by DRDO have been delivered, inducted or handed over to the users.

He expressed happiness that the Acceptance of Necessity (AoN) has also been accorded this year for induction of several DRDO developed systems worth more than 1 lakh 42 thousand crores.

This is the highest ever accorded to DRDO developed systems in any year. This constitutes a significant component of Aatmanirbharta in Defence Production.

He stated that several systems have also either completed or are in the final stages of User evaluation and many other systems are undergoing Developmental trials. He set the target for DRDO to ensure that the systems which are under User trials and under final stages of developmental trials, get accepted by the User in 2024, so that they are ready for induction. He said that DRDO laboratories should focus on development of complex, first of its kind systems and development of advanced and critical technologies, which will enable the country to become AtmaNirbhar and a leader in Defence Technology.

Chairman DRDO highlighted some other success stories in his speech. He stated that it was a matter of great pride for all of us when Hon'ble Prime Minister flew in LCA Trainer on Nov 25, 2023.

He mentioned that on the National Technology Day on 11 May 2023, Hon'ble Prime Minister dedicated the Rare Earth Permanent Magnet (REPM) plant at IREL Vizag to the Nation. This plant was set-up using DRDO Technology. He said that indigenously Designed and Developed Heavy Weight Torpedo (HWT) 'Varunastra' was successfully test fired with a live warhead against an undersea target on 05th Jun 2023 by the Indian Navy. This was the first of its kind demonstration in the country or may be even in the world. He also mentioned about firing of Astra Mk1 air to air missile from Tejas for the first time, Landing of LCA Navy on Indigenous Aircraft Carrier INS Vikrant II, Deployment of DRDO's D4 system at Rashtrapati Bhawan, G-20 Summit, Republic Day Parade and Beating Retreat Ceremony. He further stated that DRDO's oceanographic research vessel 'INS Sagardhwani' embarked on Sagar Maitri Mission-4 to Oman to establish long-term scientific partnerships with Indian Ocean Rim countries in 'Ocean Research & Development'.

He also highlighted about the Crew Escape System (CES) for Gaganyaan Programme, which was tested successfully. He pointed out that the Parliamentary Standing Committee on Defence has appreciated DRDO in their report submitted to Parliament last week and has recommended for increasing the budget of Defence R&D.

He also said that DRDO filed more than 141 patents this year and 212 patents were granted and hoped that this number increase significantly in the years to come. He further stated that five Young Scientists Labs, that was started by DRDO in 2019, have now started to make an impact and is going to be our torch bearers in the emerging disruptive technologies. He mentioned that 15 DRDO Industry Academia Centres of Excellence (DIA-CoEs) have already been sanctioned several projects and will enable DRDO laboratories to seamlessly transition some futuristic technologies from low TRLs to high TRLs.

Secretary DDR&D and Chairman DRDO in his address brought out that towards enabling industry, DRDO has been partnering with them for the realization of its systems. DRDO test facilities have been opened to the industries for utilisation. He pointed out that so far 1650 ToT's on DRDO developed systems have been handed over to the Indian Industries out of which 109 Licensing Agreements for Transfer of Technology (LAToTs) were signed with Indian Industries during 2023 for DRDO products.

In order to make the Technology Development Fund (TDF) and allied schemes more effective, Hon'ble Raksha Mantri had constituted a committee headed by Dr Kakodkar, former Secretary DAE and Dr Saraswat, Member NITI Aayog to suggest ways to fund cutting edge research like what DARPA does in USA. The committee has submitted its report and once Hon'ble RM gives his approval we will implement this scheme in 2024.

He concluded his address by expecting that everyone has to focus on achieving higher user satisfaction and incorporating artificial intelligence/machine learning in all our systems and technologies. He further said that each laboratory should appoint an AI/ML champion to proactively pursue the inclusion of AI/ML in all our systems and technologies.

He also launched the Quantity-Distance Software developed by HEMRL Pune to automate the siting of explosives and related buildings. The software is an essential tool for all MoD establishments engaged in creating explosive related infrastructure in optimum time and with greater precision.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1992193>

THE HINDU
BusinessLine

Mon, 01 Jan 2024

More than ₹1,42,000 Cr worth AoN Accorded for Induction of DRDO-developed Defence Products

More than ₹1,42,000 crore worth Acceptance of Necessity (AoN) was accorded this year by the Ministry of Defence for induction of several Defence Research and Development Organisation (DRDO) developed systems, its chairman Dr Samir V Kamat said on Monday.

Celebrating the 66th Foundation Day of DRDO, Dr Kamat, who is also Secretary Department of Defence, stated that so far 1,650 transfers of technology (ToT) of in-house developed systems were handed over to Indian industries, out of which 109 Licensing Agreements for Transfer of Technology (LAToTs) were signed with indigenous companies this year for manufacturing products, the Ministry of Defence said in a statement.

“The Acceptance of Necessity (AoN) has also been accorded this year for induction of several DRDO developed systems worth more than 1 lakh 42 thousand crores. This is the highest ever

accorded to DRDO-developed systems in any year. This constitutes a significant component of Aatmanirbharta in Defence Production,” Dr Kamat said.

He stated that several systems have also either completed or are in the final stages of user evaluation and many other systems are undergoing developmental trials. Kamat set the target for DRDO to ensure that the systems that are under user trials and final stages of developmental trials, get accepted by the user in 2024 so that they are ready for induction.

The state-owned research body has also filed more than 141 patents this year and the DRDO chairman hoped that this number will increase significantly in the years to come.

Kakodkar committee

To make the Technology Development Fund (TDF) and allied schemes more effective, Defence Minister Rajnath Singh constituted a committee headed by Dr Kakodkar, former Secretary DAE and Dr Saraswat, Member NITI Aayog, to suggest ways to fund cutting-edge research like what Defense Advanced Research Projects Agency (DARPA) does in the US. The committee has submitted its report and once the Minister gives his approval we will implement this scheme in 2024, stated the DRDO chief.

He also launched the Quantity-Distance Software developed by its Pune-based lab, High Energy Materials Research Laboratory (HEMRL), to automate the setting of explosives and related buildings. The software is an essential tool for all MoD establishments engaged in creating explosive related infrastructure in optimum time and with greater precision.

<https://www.thehindubusinessline.com/news/national/more-than-142000-cr-worth-aon-accorded-for-induction-of-drdo-developed-defence-products/article67695816.ece>

Defence News

Defence Strategic: National/International



Press Information Bureau
Government of India

Ministry of Defence

Mon, 01 Jan 2024

Vice Admiral B Sivakumar, AVSM, VSM Assumes Charge as the Controller Warship Production and Acquisition

Vice Admiral B Sivakumar, AVSM, VSM has assumed charge as the Controller Warship Production and Acquisition on 01 Jan 24. An alumnus of the National Defence Academy (70th Course), he was commissioned as an Electrical Officer into the Indian Navy on 01 Jul 1987. He holds Master Degrees in Engineering from IIT Chennai and Management from Osmania

University. The Flag Officer has held various important appointments in the Staff and Materiel Branch at Naval and Command Headquarters, Dockyard and Training Establishments.

The Flag Officer has served onboard frontline ships like Ranjit, Kirpan and Akshay in various capacities and also commanded INS Valsura. He is a recipient of Ati Vishisht Seva Medal and Vishisht Seva Medal for his distinguished Service. Prior to his appointment as Controller Warship and Acquisition, as Flag Officer, he has served as Programme Director, HQ ATVP at New Delhi, Assistant Chief of Materiel (IT&S) at Naval Headquarters, ASD(Mumbai) and Chief Staff Officer (Tech)/ HQ WNC.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1992061>



Press Information Bureau
Government of India

Ministry of Defence

Mon, 01 Jan 2024

Vice Admiral Kiran Deshmukh, AVSM, VSM, Assumes Charge as the Chief of Materiel

Vice Admiral Kiran Deshmukh, AVSM, VSM has assumed charge as the Chief of Materiel on 01 Jan 24. An alumnus of VJTI, University of Mumbai, VAdm Deshmukh was commissioned as an Engineer Officer into the Indian Navy on 31 March 86. He holds a Master's degree in Engineering and is a post graduate from Defence Services Staff College, Wellington. The Flag Officer has held various important appointments in the Staff, Personnel and Materiel Branch at Naval Headquarters, trial agencies, Material Organisation, Naval Dockyard and Command staff at HQENC. He has also served onboard frontline ships of Rajput Class, Delhi Class and Teg Class in various capacities.

As a Flag Officer he has served as Assistant Chief of Materiel (Dockyards & Refits) at Naval Headquarters, Chief Staff Officer (Tech)/HQENC, Admiral Superintendent of Naval Dockyard Visakhapatnam, Director General Naval Projects at Visakhapatnam and as Controller Warship Production & Acquisition (CWP&A) at Naval Headquarters. It was during his tenure as CWP&A that the first Indigenous Aircraft Carrier (IAC-I) was Commissioned and achieved the historic trap of the first LCA on board indigenous aircraft carrier. In addition, his tenure also marked the keel laying, launch and Commissioning of a number of frontline warships and submarines. In recognition of his distinguished service, the Admiral has been awarded the Vishisht Seva Medal and Ati Vishisht Seva Medal.

VAdm Kiran Deshmukh, takes over as COM from VAdm Sandeep Naithani, AVSM, VSM who hands over the baton on completion of 39 Years of glorious service. Well known as distinguished and a thorough professional Flag Officer of the Indian Navy. VAdm Naithani had displayed a fine combination of professional excellence and leadership to steer the Navy technically towards being future ready and emerge as a steadfast and professional support arm, ensuring that Indian Naval platforms are combat worthy and capable of undertaking full spectrum of operations.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1992057>

Defence Min: Govt has Given Women Rightful Place in Armed Forces

Defence minister Rajnath Singh on Monday while inaugurating the Samvid Gurukulam Girls Sainik School at Vrindavan in Mathura said that under leadership of PM Narendra Modi, government has given women their rightful place in Armed Forces, which was neglected for years.

Singh described the Sainik school as a beacon of light for girls who aspire to join the Armed Forces and serve the motherland. He added they too have the right to protect the nation, just like their male counterparts.

“It was a golden moment in the history of women’s empowerment when we approved the admission of girls to Sainik schools. Today, our women are not only flying fighter jets, they are also securing the borders,” he further said.

Meanwhile, a statement from Singh’s office mentioned: “The first all-girls Sainik school, with a strength of approximately 870 students, have been inaugurated under the initiative of establishing 100 new Sainik schools in partnership mode with NGOs/private/state government schools in all state/UTs, of which 42 have been set up.”

<https://timesofindia.indiatimes.com/city/agra/defence-minister-govts-empowerment-of-women-in-armed-forces/articleshow/106464752.cms>



Army Gears up to Induct 1st Batch of Apache Attack Helicopters in February-March

The Indian Army is expected to induct the first batch of US-made Apache attack helicopters in February-March this year, senior Army officials told India Today on Monday.

Also known as the 'tanks in the air', these advanced attack helicopters will land at the Indian Air Force's (IAF) Hindon Air Force Station and then will be deployed in Jodhpur, near the India-Pakistan border, the officials added.

The Army Aviation Corps, which currently operates utility helicopters such as the Dhruv and Chetak, earlier inducted the indigenously developed Light Combat Helicopters (LCH) Prachand at Missamari, Assam last year.

Notably, the IAF already operates a fleet of 22 Apache helicopters which have been deployed on the eastern and western fronts.

ABOUT APACHE HELICOPTERS

Developed by US aviation giant Boeing, the Apache is an advanced multi-mission helicopter with the latest technology insertions, maintaining its standing as one of the world’s best attack helicopters.

It is the only available combat helicopter with a spectrum of capabilities for virtually any mission requirement, including greater thrust and lift, joint digital operability, improved survivability and cognitive decision-aiding.

The helicopter can carry out precision attacks at standoff ranges and operate in hostile airspace with threats from the ground.

The ability of these helicopters to transmit and receive the battlefield picture, to and from the weapon systems through data networking makes it a lethal acquisition. These attack helicopters will provide a significant edge in any future joint operations in support of land forces.

<https://www.indiatoday.in/amp/india/story/indian-army-to-induct-apache-helicopters-from-us-to-be-deployed-against-pakistan-2482939-2024-01-01>



Mon, 01 Jan 2024

India, Pakistan Exchange List of Nuclear Installations

India and Pakistan on Monday exchanged a list of their nuclear installations under a bilateral pact that prohibits the two sides from attacking each other's atomic facilities, continuing an annual practice that began in 1992.

The exchange of the list took place under the provisions of an agreement on the prohibition of attack against nuclear installations and facilities, the Ministry of External Affairs (MEA) said.

It was done simultaneously through diplomatic channels in New Delhi and Islamabad. The exchange of the list came amid frosty ties between the two countries over the Kashmir issue as well as cross-border terrorism.

“India and Pakistan today exchanged, through diplomatic channels simultaneously at New Delhi and Islamabad, the list of nuclear installations and facilities, covered under the Agreement on the prohibition of attack against nuclear installations and facilities between India and Pakistan,” the MEA said.

The agreement was signed on December 31, 1988 and came into force on January 27, 1991. The pact mandates the two countries to inform each other of nuclear installations and facilities to be covered under the agreement on the first of January of every calendar year.

“This is the 33rd consecutive exchange of such lists between the two countries, the first one having taken place on January 1, 1992,” the MEA said in a statement.

The ties between India and Pakistan came under severe strain after India's warplanes pounded a Jaish-e-Mohammed terrorist training camp in Balakot in Pakistan in February 2019 in response to the Pulwama terror attack.

The relations further deteriorated after India on August 5, 2019 announced the withdrawal of special powers of Jammu and Kashmir and the bifurcation of the state into two Union territories.

India has been maintaining its diplomatic offensive against Pakistan on the issue of terrorism and remained firm on its position of not having any talks with Islamabad until it stops cross-border terrorism.

<https://www.financialexpress.com/business/defence-india-pakistan-exchange-list-of-nuclear-installations-3-3352586/>

India to Expand Defence Ties with Tanzania to Boost Presence in Indian Ocean

India is planning to deepen its defence cooperation with Tanzania to enhance its strategic presence in the western part of Indian Ocean, according to persons aware of the matter.

Besides boosting maritime cooperation, New Delhi is looking at defence equipment sales, particularly in armoured vehicles. The initiatives align with India's broader strategy to augment its presence in the western Indian Ocean, a region vital for its maritime trade routes.

India's army chief general Manoj Pande had met Tanzania's defence minister and senior members of its military during his October visit to the east African nation.

"Considering the successful hosting of the Defence Expos twice in Dar es Salaam on 31st May 2022 and 2nd October 2023 which saw participation of several Indian defence companies; both sides expressed interest in expanding cooperation in the area of defence industry. The two leaders also expressed pleasure at the progress of cooperation between the two sides towards the capacity building of the Tanzanian forces as well as industry," said a joint statement during Tanzanian president Samia Suluhu Hassan's visit to India in October.

India's concerted efforts to engage with nations in this region, such as Tanzania and Kenya, underscore shared security concerns like piracy and illegal fishing.

The maritime collaboration with Tanzania, including joint surveillance exercises and hydrographic surveys, reflects India's broader geopolitical strategy. The two sides held their joint exclusive economic zone surveillance exercise in July this year. The persons cited above stated that the number of Tanzanian defence personnel trained in India is likely to increase in the coming years as New Delhi looks to build up the country's defence capabilities.

Queries mailed to the external affairs ministry and the Tanzanian High Commission in New Delhi remained unanswered till press time.

China is also an additional factor in India's outreach to Tanzania as Beijing has traditionally been the African country's top defence partner.

India's ambitious plan to ramp up defence exports to \$5 billion by 2025 makes it a top choice for Tanzania as it looks to diversify its defence partnerships and sources of military equipment.

<https://www.livemint.com/politics/india-to-expand-defence-ties-with-tanzania-to-boost-presence-in-indian-ocean-11704096339698.html>



Reigniting the Flame of India-Korea Defence Cooperation

By Lakhvinder Singh

In the intricate tapestry of global geopolitics, defence collaboration emerges as a foundational imperative, crucial for the preservation of international peace and stability. The recent diplomatic overture during the visit of General Manoj Pande, Chief of the Army Staff of India, in November

2023, to the Republic of Korea, signifies a critical juncture in the trajectory of India-Korea defence relations. While this visit fortified diplomatic ties, it also unveiled the challenges, necessitating meticulous consideration. This prompts an exploration of the challenges faced by India and Korea in enhancing their defence cooperation, along with an examination of opportunities for mutual growth.

Despite recent high-level engagements, a challenge that persists is the absence of a shared vision for a new comprehensive defence framework, one that can provide a robust structure under which both nations can operate and align their policies to construct a novel and sustainable emerging regional order. The imperative for India and Korea is to transcend the confines of bilateral cooperation, and embrace a paradigm shift that cultivates a more profound understanding of their roles in the swiftly evolving global scenario.

Korean view of India's regional role

A hurdle lies in the resistance on the Korean government side to reassess India's role in the region. It is incumbent upon Korea to comprehend that India is not merely the largest consumer of defence products. Rather, it stands as a regional power capable of substantial contributions to peace and stability in the Indo-Pacific. A departure from Cold War mentalities, where the Korean government perceived India as standing in the opposite Soviet bloc, is imperative for Korea to forge a deeper, more meaningful partnership with India. This paradigm shift in Korean government strategic thinking is indispensable for any meaningful engagement between the two nations.

Further, the prevailing overemphasis by the Indian government side on weapons acquisition and technology transfer from Korea, while undeniably pivotal, has tended to overshadow broader strategic considerations. Similarly, the unwavering focus of the Korean defence establishment on profit-driven weapons sales to India, devoid of strategic considerations, may prove shortsighted in the face of fast-changing geopolitical dynamics. Powerful arms lobbies in India and Korea pose a potential roadblock, emphasising the necessity to prioritise long-term strategic goals over short-term gains.

The emerging coalition of North Korea, China, and Russia poses a new serious challenge to collaborative efforts between the two nations. Divergent stances may arise, necessitating a nuanced appraisal of each party's strategic imperatives.

The high-level interactions of Gen. Pande with the top Korean military leadership and his engagements with the leadership of top Korean defence institutions, such as the Defense Acquisition Program Administration (DAPA) and the Agency of Defence Development (ADD), are anticipated to further unite the defence communities of both countries.

Explore technological collaborations

Leveraging their technological capabilities, India and South Korea are aiming to collaborate in developing advanced defence systems and equipment. Given their shared understanding of the pivotal role technology will play in future conflicts, the scope for cooperation in this sector is limitless. Such synergy can lead to a mutually beneficial defence technology and industry partnership, propelling both countries to the forefront of innovation and self-reliance.

In an era where defence against space warfare, information warfare, and cybersecurity is paramount, both nations can further explore opportunities for cooperation. Given Korea's status as an advanced high-tech digital superpower, vast opportunities exist in the development of robust security measures in these areas to effectively counter emerging threats in the digital domain, ensuring the security of critical infrastructure and information.

Strengthening coordinated efforts to counter terrorism aligns seamlessly with the shared concerns of India and South Korea. There is potential for collaboration in maritime security, including joint

patrolling and information sharing, given the significant maritime interests both countries have in the Indian Ocean.

Peacekeeping and exercises

India and South Korea can leverage their United Nations peacekeeping expertise for collaborative efforts. Sharing insights and resources in peacekeeping operations can enhance regional and global stability, underscoring their joint commitment to peace and security. Additionally, joint exercises and the exchange of best practices in Humanitarian Assistance and Disaster Relief (HADR) demonstrate the shared responsibility of both nations in addressing vulnerabilities to natural disasters.

Lastly, mutual growth is found in enhancing joint army exercises, fostering interoperability, and strengthening the capabilities of both armies for effective collaboration in diverse scenarios. Gen. Pande's visit to Seoul has spurred the extension of cooperation beyond naval focus to other branches of India's armed forces.

While the recent visit of Gen. Pande has reignited the flame of India-Korea defence cooperation, the path forward necessitates meticulous navigation through the challenges and the wholehearted embrace of opportunities. A strategic, balanced approach, coupled with adaptability to the evolving geopolitical landscape is key to unlocking a robust and enduring defence collaboration, in turn creating a partnership that fosters peace, stability, and prosperity in the Indo-Pacific region. United, both nations stand ready to navigate the complexities and uncertainties of the future, forging a path toward a stronger and more resilient partnership.

<https://www.thehindu.com/opinion/op-ed/reigniting-the-flame-of-india-korea-defence-cooperation/article67696201.ece>



Mon, 01 Jan 2024

North Korea's Kim Orders Military to 'Thoroughly Annihilate' U.S., South Korea if Provoked

North Korean leader Kim Jong Un ordered his military to “thoroughly annihilate” the United States and South Korea if provoked, State media reported on January 1, after he vowed to boost national defence to cope with what he called an unprecedented U.S.-led confrontation.

Mr. Kim is expected to ramp up weapons tests in 2024 ahead of the U.S. presidential election in November. Many experts say he likely believes his expanded nuclear arsenal would allow him to wrest U.S. concessions if former President Donald Trump is reelected.

In a five-day major ruling party meeting last week, Mr. Kim said he will launch three more military spy satellites, produce more nuclear materials and develop attack drones this year in what observers say is an attempt to increase his leverage in future diplomacy with the U.S.

In a meeting on December 31 with commanding army officers, Mr. Kim said it is urgent to sharpen “the treasured sword” to safeguard national security, an apparent reference to his country's nuclear weapons program. He cited “the U.S. and other hostile forces' military confrontation moves,” according to the official Korean Central News Agency.

Mr. Kim stressed that “our army should deal a deadly blow to thoroughly annihilate them by mobilising all the toughest means and potentialities without moment's hesitation” if they opt for

military confrontation and provocations against North Korea, KCNA (Korean Central News Agency) said.

In his New Year's Day address on January 1, South Korean President Yoon Suk Yeol said he will strengthen his military's preemptive strike, missile defence and retaliatory capabilities in response to the North Korean nuclear threat.

“The Republic of Korea is building genuine, lasting peace through strength, not a submissive peace that is dependent on the goodwill of the adversary,” Mr. Yoon said, using South Korea's official name.

At the party meeting, Mr. Kim called South Korea “a hemiplegic malformation and colonial subordinate state” whose society is “tainted by Yankee culture.” He said his military must use all available means including nuclear weapons to “suppress the whole territory of South Korea” in the event of a conflict.

South Korea's Defence Ministry warned in response that if North Korea attempts to use nuclear weapons, South Korean and U.S. forces will punish it overwhelmingly, resulting in the end of the Kim Government.

Experts say small-scale military clashes between North and South Korea could happen this year along their heavily armed border. They say North Korea is also expected to test-launch intercontinental ballistic missiles capable of reaching the mainland U.S. and other major new weapons.

In 2018-19, Mr. Kim met Mr. Trump in three rounds of talks on North Korea's expanding nuclear arsenal. The diplomacy fell apart after the U.S. rejected Mr. Kim's offer to dismantle his main nuclear complex, a limited step, in exchange for extensive reductions in U.S.-led sanctions.

Since 2022, North Korea has conducted more than 100 missile tests, prompting the U.S. and South Korea to expand their joint military drills. North Korea has also tried to strengthen its relationships with China and Russia, which blocked efforts by the U.S. and its partners in the U.N. Security Council to toughen U.N. sanctions on North Korea over its weapons tests.

KCNA said Mr. Kim and Chinese President Xi Jinping exchanged New Year's Day messages on January 1 on bolstering bilateral ties. North Korea faces suspicions that it has supplied conventional arms for Russia's war in Ukraine in return for sophisticated Russian technologies to enhance the North's military programs.

Estimates of the size of North Korea's nuclear arsenal vary, ranging from about 20-30 bombs to more than 100. Many foreign experts say North Korea still has some technological hurdles to overcome to produce functioning nuclear-armed ICBMs, though its shorter-range nuclear-capable missiles can reach South Korea and Japan.

<https://www.thehindu.com/news/international/north-koreas-kim-orders-military-to-thoroughly-annihilate-us-south-korea-if-provoked/article67694606.ece>

ISRO's New Year Plans Take off with Polarimetry Satellite Launch

The Indian Space Research Organisation (Isro) on Monday placed an X-ray Polarimeter Satellite (XPoSat) in an orbit 650 km from Earth, in a successful start to a mission to study astronomical x-ray sources and blackholes. "A great start to 2024 thanks to our scientists! This launch is wonderful news for the space sector and will enhance India's prowess in this field. Best wishes to our scientists at Isro and the entire space fraternity in taking India to unprecedented heights," Prime Minister Narendra Modi said in a post on microblogging platform X. Satellite director Brindaban Mahto said this is the first mission worldwide launched to study polarised x-ray sources and the second after a 2021 US mission for polarisation. "The new year has begun" - a beaming Isro chairman Somanath S said after the successful launch of the satellite on the PSLV, Isro's workhorse launch vehicle.

"PSLV C-58 has placed the primary satellite XPoSat in the desired circular orbit of 650 km and 6-degree inclination," Somanath said. PSLV's fourth stage will be brought down to a lower orbit 350 kms away from Earth where the POEM (PSLV Orbital Experimental Module) will carry out experiments with nine onboard payloads, he said.

Space debris responsibility

"As a responsible space agency, we decided to bring the fourth stage to a lower orbit because life of the stage in the orbit is much less so that we don't create debris in the process. That is why it has been brought down to 350 km," Somanath said. Explaining the experiments to be undertaken by the POEM module, he said the Isro will conduct experiments with a fuel cell, which could be used in future in an Indian Space Station and other areas where power generation on board will be required. Another payload is WESAT, or Women Engineered Satellite developed by Thiruvananthapuram-based LBS Institute of Technology for Women, which aims to measure solar irradiance and UV Index. "This is an excellent contribution from all the girl students who have built this spacecraft," said Somanath.

<https://economictimes.indiatimes.com/news/science/isro-kickstarts-new-year-with-launch-of-xposat/articleshow/106431520.cms>



ISRO Launches Fuel Cell to Test Power Source for Future Bhartiya Space Station

The Indian Space Research Organisation (Isro) has successfully launched a Fuel Cell Power System (FCPS) designed to test the power source for the upcoming Indian Space Station. The

experiment was launched aboard the PSLV-C58 mission that carried the XPoSat observatory to space.

Isro chief S Somnath revealed the development following the successful launch of the XPoSat mission.

Developed by the Vikram Sarabhai Space Center (VSSC), a part of Isro, this fuel cell is a new technology to pioneer a sustainable and efficient power source in space exploration.

The FCPS was launched aboard the PSLV Orbital Experimental Module (POEM), which is essentially the fourth stage of the Polar Satellite Launch Vehicle.

Initially placed into a 650 km orbit with the X-ray Polarimeter Satellite (XPoSAT) mission, the POEM fourth stage was subsequently lowered to a 350 km orbit through a series of controlled maneuvers.

This strategic lowering of the orbit was crucial for maintaining the stability required for the onboard experiments, including the FCPS.

This innovative fuel cell technology is expected to be a game-changer for long-duration space missions. Unlike traditional power systems, fuel cells offer the advantage of converting chemical energy from fuels directly into electricity through electrochemical reactions, providing a much longer supply of electrical energy.

Isro's move to test the FCPS in the lower orbit is part of a broader strategy to validate technologies that will be critical for the success of the proposed Indian Space Station.

Slated to be established in Low Earth Orbit at an altitude ranging from 120 to 140 km, the space station is expected to serve as a platform for various microgravity experiments, contributing significantly to space science and technology.

The successful deployment and testing of the FCPS are indicative of Isro's forward-thinking approach to space exploration. By harnessing the potential of fuel cell technology, Isro is not only paving the way for its ambitious space station project but also setting a precedent for sustainable practices in space missions.

<https://www.indiatoday.in/science/story/isro-launches-fuel-cell-to-test-power-source-for-future-india-space-station-2482710-2024-01-01>



Mon, 01 Jan 2024

2024 to be a Year of Gaganyaan Readiness: ISRO Chairman

ISRO has lined up a series of tests for Gaganyaan, its ambitious manned mission, this year and 2024 will be a year of "Gaganyaan readiness," said the agency's Chairman S. Somanath on Monday.

The Bengaluru headquartered space agency earlier in the day had successfully placed its first X-Ray Polarimeter satellite in PSLV C58 mission.

Briefing reporters on ISRO's agenda for 2024, he said, "We are going to get ready for at least 12-14 missions this year. 2024 is going to be a year for Gaganyaan readiness, though it is targeted for 2025.

"The Gaganyaan mission began with the TV-D1 or the abort mission (successfully conducted in October 2023). We have four such missions in the series. Our target is to do at least two more in 2024. By then, we will have three abort mission demonstrations," said Mr. Somanath, who is also a Secretary in the Department of Space.

Mr. Somanath said that the unmanned missions would help the agency understand its preparedness of various hardware, adding that ISRO would also conduct helicopter-based drop test to prove the parachute systems for the unmanned mission.

"There will be multiple drop tests. Also, we will have the launch pad abort and hundreds of such valuation tests including environmental control support system tests, the crew module related tests and simulation tests," he said.

On the other missions lined up for ISRO in 2024, he said, "We are going to have launches of GSLV for NISAR this year itself. We are going to have the first flight of GSLV with INSAT-3DS soon. The (launch) vehicle is almost ready.

"The second flight of GSLV will carry the NASA-ISRO synthetic aperture radar satellite. This means that a minimum of two GSLV satellites are required to be launched. There are a few more in pipeline, including the NAVIC series." he said.

ISRO has lined up a series of tests for Gaganyaan, its ambitious manned mission, this year and 2024 will be a year of "Gaganyaan readiness," said the agency's Chairman S. Somanath.

Briefing reporters on ISRO's agenda for 2024, he said, "We are going to get ready for at least 12-14 missions this year. 2024 is going to be a year for Gaganyaan readiness, though it is targeted for 2025.

Mr. Somanath said that the unmanned missions would help the agency understand its preparedness of various hardware, adding that ISRO would also conduct helicopter-based drop test to prove the parachute systems for the unmanned mission.

<https://www.thehindu.com/sci-tech/science/2024-to-be-a-year-of-gaganyaan-readiness-isro-chairman/article67695154.ece>

