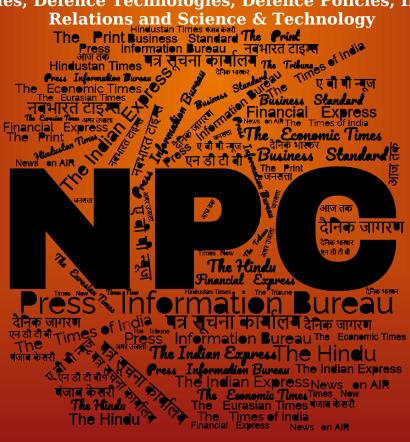
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समाचार पत्रों से चयित अंश Newspapers Clippings

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

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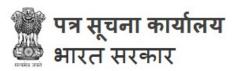
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DRDO News

DRDO Technology News



रक्षा मंत्रालय

Wed, 24 Jan 2024

गणतंत्र दिवस परेड 2024 के दौरान रक्षा अनुसंधान एवं विकास संगठन नारी शक्ति और स्वदेशी महत्वपूर्ण प्रणालियों तथा प्रौद्योगिकियों का प्रदर्शन करेगा

रक्षा अनुसंधान एवं विकास संगठन (डीआरडीओ) द्वारा विकसित कई महत्वपूर्ण प्रणालियों/प्रौद्योगिकियों को 26 जनवरी, 2024 को कर्तव्य पथ पर 75 वें गणतंत्र दिवस परेड के दौरान प्रदर्शित किया जाएगा। 'आत्मिनर्भरता' के प्रवर्तक के रूप में, डीआरडीओ की महिला वैज्ञानिकों का रक्षा अनुसंधान के प्रमुख क्षेत्रों में बहुमूल्य योगदान रहा है। डीआरडीओ की इस वर्ष की झांकी 'पृथ्वी, वायु, समुद्र, साइबर और अंतिरक्ष जैसे पांचों आयामों में रक्षा कवच प्रदान करके राष्ट्र की सुरक्षा करने में महिला शक्ति' विषय पर आधारित है।

इस झांकी में रक्षा अनुसंधान एवं विकास में महिलाओं की भागीदारी को प्रमुखता से प्रदर्शित किया जाएगा। प्रसिद्ध वैज्ञानिक श्रीमती सुनीता देवी जेना दस्ते की कमांडर होंगी। झांकी में मैन पोर्टेबल एंटी-टैंक गाइडेड मिसाइल(एमपीएटीजीएम), एंटी-सैटेलाइट (एएसएटी) मिसाइल, और अग्नि-5, सतह से सतह पर मार करने वाली बैलिस्टिक मिसाइल, बहुत कम दूरी की वायु रक्षा प्रणाली (वीएसएचओआरएडीएस), नौसेना एंटी-शिपमिसाइल शॉर्ट रेंज (एनएएसएम-एसआर), एंटी-टैंक गाइडेड मिसाइल 'हेलिना', क्विक रिएक्शन सरफेस-टू-एयर मिसाइल (क्यूआरएसएएम), एस्ट्रा, लाइट कॉम्बैट एयरक्राफ्ट 'तेजस', 'उत्तम' एक्टिव इलेक्ट्रॉनिकली स्कैन्ड ऐरे रडार (एईएसएआर), एडवांस्ड इलेक्ट्रॉनिक वारफेयर सिस्टम 'शिक्त', साइबर सुरक्षा प्रणालियां, कमांड कंट्रोल सिस्टम और सेमी कंडक्टर फैब्रिकेशन सुविधा का प्रदर्शन किया जाएगा।

मिशन शक्ति में प्रयोग की गई एंटी-सैटेलाइट (एएसएटी) मिसाइल देश की एंटी-सैटेलाइट तकनीक और सटीक स्ट्राइक क्षमता का प्रदर्शन करने वाली एक बड़ी सफलता रही। भारत ऐसी विशिष्ट एवं आधुनिक क्षमता हासिल करने वाला चौथा देश है। अग्नि-5 सतह से सतह पर मार करने वाली बैलिस्टिक मिसाइल है जो उच्च स्तर की सटीकता के साथ लक्ष्य को भेदने में सक्षम है।

स्वदेशी रूप से विकसित एमपीएटीजीएम 'फायर एंड फॉरगेट' 'टॉप अटैक' और रात्रि परिचालन क्षमता के साथ तीसरी पीढ़ी की एटीजीएम है। इसे थर्मल साइट सेएकीकृत एक मैन पोर्टेबल लॉन्चर से लॉन्च किया जाता है। एनएएसएम-एसआरपहली स्वदेशी एयर लांच की जाने वाली एंटी-शिप मिसाइल प्रणाली है। वीएसएचओआरएडीएस एक मैन पोर्टेबल एयर डिफेंस सिस्टम है जो कम दूरी से कम ऊंचाई वाले हवाई खतरों को विफल करने में सक्षम है। हेलीकॉप्टर से लांच की जाने वाली नाग तीसरी पीढ़ी की, दागो और भूल जाओ एंटी-टैंक गाइडेड मिसाइल है, जो सीधे हिट मोड के साथ-साथ टॉप अटैक मोड में भी लक्ष्य पर हमला कर सकती है। इस प्रणाली में किसी भी मौसम में तथा दिन और रात मार करने की क्षमता है और यह पारंपरिक के साथ-साथ विस्फोटक प्रतिक्रियाशील कवच वाले युद्ध टैंकों पर भी हमला करने में सक्षम है।

क्यूआरएसएएम सभी मौसम में काम करने वाली वायु-रक्षा प्रणाली है, जो सामरिक युद्ध क्षेत्र में भारतीय सेना की मशीनीकृत संपत्तियों को गतिशील वायु रक्षा कवर प्रदान करती है। एस्ट्रा, दृश्य सीमा से परे हवा से हवा में मार करने वाली एक अत्याधुनिक मिसाइल है, जो अत्यधिक पैंतरेबाज़ी वाले सुपरसोनिक हवाई लक्ष्यों को भेदने और उन्हें नष्ट करने में सक्षम है।

एलसीए तेजस स्वदेशी रूप से विकसित हल्के वजनवाला और मल्टीरोल चौथी पीढ़ी का लड़ाकू विमान है, जो स् टीक लक्ष्य को भेदने के लिए लेजर निर्देशित बम और आधुनिक मिसाइल ले जा सकता है। उत्तम एक्टिव इलेक्ट्रॉनिकली स्कैन्ड ऐरे रडार (एईएसएआर) एक मल्टीमोड, स्केलेबल आर्किटेक्चर वाला सॉलिड-स्टेट सक्रिय चरणबद्ध ऐरे फायर कंट्रोल रडार है जिसे विभिन्न प्रकार के लड़ाकू विमानों की श्रेणी के लिए अनुकूलित किया जा सकता है। उन्नत इलेक्ट्रॉनिक वारफेयर (ईडब्ल्यू) सिस्टम 'शिक्त' को पारंपरिक और आधुनिक राडार के अवरोधन, पता लगाने, वर्गीकरण, पहचान और जैमिंग के लिए भारतीय नौसेना के लिए डिजाइन और विकसित किया गया है।

कर्तव्य पथ पर डीआरडीओ द्वारा विकसित कई अन्य प्रणालियों/प्रौद्योगिकियों का भी सशस्त्र बलों के विभिन्न दस्तों में प्रदर्शन किया जाएगा। इनमें पिनाका, नाग मिसाइल सिस्टम, मोबाइल ब्रिजिंग सिस्टम 'सर्वत्र', मध्यम दूरी की सतह से हवा में मार करने वाली मिसाइल (एमआरएसएएम), हथियार का पता लगाने वाला रडार 'स्वाति' आदि शामिल हैं। भारतीय वायू सेना के फ्लाई पास्ट में डीआरडीओ द्वारा विकसित एलसीए तेजस और एईडब्ल्यूएंडसी शामिल होंगे।

डीआरडीओ सशस्त्र बलों के लिए एक डिजाइन और विकास एजेंसी है,जो'आत्मिनर्भर भारत' की भावना को मजबूत बनाने के लिए अत्याधुनिक रक्षा प्रणालियां विकसित करने में शिक्षा जगत, उद्योग, एमएसएमई, स्टार्ट-अप और सेवाओं सिहत रक्षा इकोसिस्टम के सभी हितधारकों के साथ साझेदारी कर रहा है।

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Ministry of Defence

Wed, 24 Jan 2024

DRDO to Showcase Nari Shakti & Indigenous Critical Systems & Technologies During Republic Day Parade 2024

Many critical systems/technologies developed by Defence Research & Development Organisation (DRDO) will be showcased during the 75th Republic Day Parade at Kartavya Path on January 26, 2024. As an enabler of 'Aatmanirbharta', the valuable contribution of women scientists of DRDO in core areas of Defence Research has been significant. The DRDO tableau is based on the theme 'Women power in protecting the nation by providing the defence shield in all 5 dimensions namely Land, Air, Sea, Cyber, and Space'.

Women's involvement in Defence R&D will be prominently highlighted in the tableau. Outstanding Scientist Smt Sunita Devi Jena will be the Contingent Commander. The tableau displays Man Portable Anti-tank Guided Missile (MPATGM), Anti-Satellite (ASAT) Missile, and Agni-5, Surface-to-Surface Ballistic Missile, Very Short Range Air Defence System (VSHORADS), Naval Anti-Ship Missile—Short Range (NASM-SR), Anti-Tank Guided Missile 'HELINA', Quick Reaction Surface-to-Air Missile (QRSAM), Astra, Light Combat Aircraft 'Tejas', 'Uttam' Active Electronically Scanned Array Radar (AESAR), Advanced Electronic Warfare System 'Shakti', Cyber Security systems, Command Control Systems and the Semi Conductor Fabrication Facility.

Anti-Satellite (ASAT) Missile used in Mission Shakti was a major breakthrough in demonstrating the nation's anti-satellite technology and precision strike capability. India is the fourth country to acquire such a specialised and modern capability. Agni-5 is the surface-to-surface ballistic missile capable of striking targets with high degree of accuracy.

Indigenously developed MPATGM is a third generation ATGM with 'Fire & Forget' 'Top Attack' and night operational capability. It is launched from a man portable launcher, integrated with thermal sight. NASM-SR is the first indigenous air launched anti-ship missile system. VSHORADS is a Man Portable Air Defence System meant for neutralising low altitude aerial threats at short ranges. Helicopter-launched Nag is the third generation, fire and forget Anti-Tank Guided Missile that can engage targets in direct hit mode as well as top attack mode. The system has all-weather day and night capability and can defeat battle tanks having conventional as well as explosive reactive armour. The QRSAM is all-weather, Air-Defence system that provides mobile air defence cover to mechanised assets of the Indian Army in the Tactical Battle Area. ASTRA, is a state-of-the-art beyond visual range air-to-air missile to engage and destroy highly maneuvering supersonic aerial targets.

LCA Tejas is indigenously developed light-weight and multirole 4+ generation tactical fighter aircraft which can carry laser guided bombs and modern missiles to cause extreme damage to the target. Uttam Active Electronically Scanned Array Radar (AESAR) is a multimode, solid-state active phased array fire control radar with scalable architecture that can be adapted for various types of fighter class of aircraft. Advanced Electronic Warfare (EW) System 'Shakti' has been designed and developed for Indian Navy for the interception, detection, classification, identification and jamming of conventional and modern Radars.

Many other systems/technologies developed by DRDO will also be displayed at Kartavya Path in various contingents of the Armed Forces. This includes Pinaka, Nag Missile System, mobile bridging system 'Sarvatra', Medium Range Surface to Air Missile (MRSAM), Weapon Locating Radar 'Swathi' etc. The fly past of the Indian Air Force will include LCA Tejas and AEW&C developed by DRDO.

The DRDO is a design and development agency for the Armed Forces and to reinforce the spirit of 'Aatmanirbhar Bharat', it is partnering with all stakeholders of defence ecosystem including academia, industry, MSMEs, start-ups and Services in developing state-of-the-art defence systems.

https://pib.gov.in/PressReleasePage.aspx?PRID=1999044



Wed, 24 Jan 2024

Agni-5 जैसी खतरनाक मिसाइलों की झांकी लेकर कर्तव्य पथ पर आएंगी DRDO की महिला वैज्ञानिक

देश की सेनाओं को ताकत देने वाली संस्था का नाम है रक्षा अनुसंधान एवं विकास संगठन (DRDO). इस बार गणतंत्र दिवस परेड (Republic Day Parade) में डीआरडीओ की तरफ से खतरनाक मिसाइलें, फाइटर जेट, कमांड कंट्रोल सिस्टम जैसी महत्वपूर्ण चीजों का प्रदर्शन किया जाएगा. इस वर्ष की झांकी 'पृथ्वी, वायु, समुद्र, साइबर और अंतिरक्ष जैसे पांचों आयामों में रक्षा कवच प्रदान करके राष्ट्र की सुरक्षा करने में महिला शिक्त' विषय पर आधारित है. DRDO की महिला वैज्ञानिकों का रक्षा अनुसंधान के प्रमुख क्षेत्रों में बहुमूल्य योगदान रहा है. इस झांकी में रक्षा

अनुसंधान एवं विकास में महिलाओं की भागीदारी को प्रमुखता से प्रदर्शित किया जाएगा. प्रसिद्ध वैज्ञानिक सुनीता देवी जेना दस्ते की कमांडर होंगी.

झांकी में मैन पोर्टेबल एंटी-टैंक गाइडेड मिसाइल (MPATGM), एंटी-सैटेलाइट (ASAT) मिसाइल, और Agni-5, सतह से सतह पर मार करने वाली बैलिस्टिक मिसाइल, बहुत कम दूरी की वायु रक्षा प्रणाली (VSHORDS), नौसेना एंटी-शिप मिसाइल शॉर्ट रेंज (NASM-SR), एंटी-टैंक गाइडेड मिसाइल 'HELINA', क्विक रिएक्शन सरफेस-टू-एयर मिसाइल (QRSAM), ASTRA मिसाइल, लाइट कॉम्बैट एयरक्राफ्ट 'TEJAS', 'उत्तम' एक्टिव इलेक्ट्रॉनिकली स्कैन्ड ऐरे रडार (AESAR), एडवांस्ड इलेक्ट्रॉनिक वारफेयर सिस्टम 'Shakti', साइबर सुरक्षा प्रणालियां, कमांड कंट्रोल सिस्टम और सेमी कंडक्टर फैब्रिकेशन सुविधा का प्रदर्शन होगा.

एंटी-सैटेलाइट मिसाइल का होगा प्रदर्शन

मिशन शक्ति में प्रयोग की गई एंटी-सैटेलाइट (ASAT) मिसाइल देश की एंटी-सैटेलाइट तकनीक और सटीक स्ट्राइक क्षमता का प्रदर्शन करने वाली एक बड़ी सफलता रही. भारत ऐसी आधुनिक क्षमता हासिल करने वाला चौथा देश है. Agni-5 सतह से सतह पर मार करने वाली बैलिस्टिक मिसाइल है जो उच्च स्तर की सटीकता के साथ लक्ष्य को भेदने में सक्षम है. MPATGM 'फायर एंड फॉरगेट' 'टॉप अटैक' और रात में चलाने लायक तीसरी पीढ़ी की एटीजीएम है.

कम दूरी से लेकर टैंक उड़ाने वाली मिसाइलें दिखेंगी

NASM-SR पहली स्वदेशी एयर लांच की जाने वाली एंटी-शिप मिसाइल प्रणाली है. VSHORDS एक मैन पोर्टेबल एयर डिफेंस सिस्टम है जो कम दूरी से कम ऊंचाई वाले हवाई खतरों को विफल करने में सक्षम है. हेलीकॉप्टर से लांच की जाने वाली तीसरी पीढ़ी की नाग एंटी-टैंक गाइडेड मिसाइल है, जो सीधे हिट मोड के साथ-साथ टॉप अटैक मोड में भी लक्ष्य पर हमला कर सकती है. इस प्रणाली में किसी भी मौसम में तथा दिन और रात मार करने की क्षमता है.

पैंतरेबाज मिसाइल ASTRA की ताकत पता चलेगी

QRSAM सभी मौसम में काम करने वाली वायु-रक्षा प्रणाली है, जो युद्ध क्षेत्र में भारतीय सेना की मशीनीकृत संपत्तियों को गतिशील वायु रक्षा कवर प्रदान करती है. ASTRA दृश्य सीमा से परे हवा से हवा में मार करने वाली अत्याधुनिक मिसाइल है, जो अत्यधिक पैंतरेबाज़ी वाले सुपरसोनिक हवाई लक्ष्यों को भेदने और उन्हें नष्ट करने में सक्षम है.

Tejas फाइटर जेट और राडारों की क्षमता दिखेगी

LCA Tejas स्वदेशी रूप से विकसित हल्के वजन वाला और मल्टीरोल चौथी पीढ़ी का लड़ाकू विमान है. यह सटीक लक्ष्य भेदने के लिए लेजर निर्देशित बम और आधुनिक मिसाइल ले जा सकता है. उत्तम एक्टिव इलेक्ट्रॉनिकली स्कैन्ड ऐरे रडार (AESAR) एक मल्टीमोड, स्केलेबल आर्किटेक्चर वाला सॉलिड-स्टेट सक्रिय चरणबद्ध ऐरे फायर कंट्रोल राडार है जिसे विभिन्न प्रकार के लड़ाकू विमानों की श्रेणी के लिए अनुकूलित किया जा सकता है.

उन्नत इलेक्ट्रॉनिक वारफेयर (EW) सिस्टम 'शिक्त' को पारंपरिक और आधुनिक राडार के अवरोधन, पता लगाने, वर्गीकरण, पहचान और जैमिंग के लिए भारतीय नौसेना के लिए डिजाइन और विकसित किया गया है. कर्तव्य पथ पर डीआरडीओ द्वारा विकसित कई अन्य प्रणालियों/प्रौद्योगिकियों का भी सशस्त्र बलों के विभिन्न दस्तों में प्रदर्शन किया जाएगा. इनमें पिनाका, नाग मिसाइल सिस्टम, मोबाइल ब्रिजिंग सिस्टम 'सर्वत्र', मध्यम दूरी की सतह से हवा में मार करने वाली मिसाइल (MRSAM), हथियार का पता लगाने वाला रडार 'स्वाति' आदि शामिल हैं. भारतीय वायु सेना के फ्लाई पास्ट में डीआरडीओ द्वारा विकसित एलसीए तेजस और एईडब्ल्यूएंडसी शामिल होंगे.

 $\underline{https://www.aajtak.in/defence-news/story/drdo-to-showcase-nari-shakti-and-indigenous-weapons-missiles-fighter-jets-and-technologies-1866092-2024-01-24$



Wed, 24 Jan 2024

DRDO to Showcase 'Narishakti' at RD Parade

Like the Armed Forces, the Defence Research & Development Organisation (DRDO) will showcase 'narishakti' (women power) in it tableau at the 75th Republic Day parade.

The DRDO tableau will be lead by scientist Sunita Devi Jena, who has been designated as the Contingent Commander for the parade, as per the Ministry of Defence official statement. The tableau displays Man Portable Anti-tank Guided Missile (MPATGM), Anti-Satellite (ASAT) Missile and Agni-5, Surface-to-Surface Ballistic Missile, Very Short Range Air Defence System (VSHORADS), Naval Anti-Ship Missile—Short Range (NASM-SR), Anti-Tank Guided Missile 'HELINA', Quick Reaction Surface-to-Air Missile (QRSAM), Astra, Light Combat Aircraft 'Tejas', 'Uttam' Active Electronically Scanned Array Radar (AESAR), Advanced Electronic Warfare System 'Shakti', Cyber Security systems, Command Control Systems and the Semi Conductor Fabrication Facility, it said in an official statement.

Anti-satellite (ASAT) missile used in Mission Shakti was a major breakthrough in demonstrating the nation's precision strike capability, said the MoD while insisting that India is the fourth country to acquire such a specialised and modern capability. Agni-5 is the surface-to-surface ballistic missile capable of striking targets with high degree of accuracy.

Indigenously developed

Briefing about its other displays on the Kartavya Path on January 26, the Ministry said that indigenously developed MPATGM is a third generation ATGM with 'Fire & Forget' 'Top Attack' and night operational capability. It is launched from a man portable launcher, and integrated with thermal sight. NASM-SR is the first indigenous air launched anti-ship missile system, it said. VSHORADS is a Man Portable Air Defence System meant for neutralising low altitude aerial threats at short ranges.

About other systems, the DRDO said that helicopter-launched Nag is the third generation, fire and forget Anti-Tank Guided Missile that can engage targets in direct hit mode as well as top attack mode. The system has all-weather day and night capability and can defeat battle tanks having conventional as well as explosive reactive armour, the DRDO stated.

Many other systems and technologies developed by the DRDO will also be displayed at RD parade in various contingents of the Armed Forces, it said. This includes Pinaka, Nag Missile System, mobile bridging system 'Sarvatra', Medium Range Surface to Air Missile (MRSAM), Weapon Locating Radar 'Swathi' etc. The fly past of the Indian Air Force will include LCA Tejas and AEW&C developed by the DRDO, the Ministry said.

https://www.thehindubusinessline.com/news/national/drdo-to-showcase-narishakti-at-rd-parade/article67772468.ece



Wed, 24 Jan 2024

Navy Carries out Engagement of Land Target at Enhanced Range with Advanced Supersonic Cruise Missile

In a boost to the 'Aatmanirbhar Bharat' initiative, the Indian Navy on Wednesday successfully carried out engagement of a land target at enhanced range with an advanced supersonic cruise missile. It revalidated indigenous capability for extended-range precision strike capability.

The test-firing was conducted by the Indian Navy and the BrahMos Aerospace Private Limited (BAPL). The Indian Navy, in a tweet said, '#IndianNavy & M/s BAPL carried out successful engagement of land target at enhanced range with advanced supersonic cruise missile. This endeavour revalidates #AatmaNirbharta for extended range precision strike capability from combat & misson ready ships."

The Navy also shared a video and images of the test-firing.

Indian Navy's tweet:

The test-firing was conducted form combat and mission ready ships.

Last year in October, the Indian Air Force (IAF) tested the BrahMos supersonic cruise missile. The missile was fired from Sukhoi fighter jet.

https://www.timesnownews.com/india/navy-carries-out-engagement-of-land-target-at-enhanced-range-with-advanced-supersonic-cruise-missile-video-article-107120469

Defence News

Defence Strategic: National/International



Ministry of Defence

Wed, 24 Jan 2024

Launch of Ammunition cum Torpedo cum Missile Barge, LSAM 19 (YARD 129) 5th Barge of 11X Ammunition cum Torpedo cum Missile (ACTCM) Barge Project on 24 Jan 24 at M/s Suryadipta Project Pvt Ltd, Thane

The launch of 'Ammunition Cum Torpedo Cum Missile Barge, LSAM 19 (Yard 129)', 5th Barge of 11 x ACTCM Barge Project, built by MSME Shipyard, M/s Suryadipta Projects Pvt Ltd, Thane for

Indian Navy, was undertaken on 24 Jan 24 at M/s Suryadipta Project Pvt Ltd (Launch site of M/s SPPL). The launching Ceremony was presided over by Cmde V Pravin, AWPS(Mbi).

The contract for building 11 X ACTCM Barge was signed between MoD and M/s Suryadipta Projects Pvt Ltd, Thane on 05 Mar 21. The availability of these Barges would provide impetus to operational commitments of IN by facilitating Transportation, Embarkation and Disembarkation of articles/ ammunition to IN Ships both alongside jetties and at outer harbours.

These Barges are indigenously designed and built under relevant Naval Rules and Regulation of Indian Register of Shipping. The model testing of the Barge during design stage was undertaken at Naval Science and Technological Laboratory, Visakhapatnam. These Barges are proud flag bearers of Make in India initiative of Government of India (GoI).

https://pib.gov.in/PressReleasePage.aspx?PRID=1999112



Ministry of Defence

Wed, 24 Jan 2024

MoD Inks Contract, worth over Rs 1070 Cr, with Mazagon Dock Shipbuilders Ltd for 14 Fast Patrol Vessels for Indian Coast Guard

The Ministry of Defence has signed Contract with Mazagon Dock Shipbuilders Ltd (MDL), Mumbai on 24 January, 2024, for acquisition of 14 Fast Patrol Vessels (FPVs) for the Indian Coast Guard (ICG). The value of the contract is Rs 1070.47 cr. These multi role FPVs will be indigenously designed, developed and manufactured by MDL under Buy (Indian-IDDM) Category and will be delivered in total 63 months.

Along with several high tech advanced features and equipment, these FPVs will be equipped with multipurpose drones, wirelessly controlled remote water rescue craft lifebuoy and AI capability etc. enabling greater flexibility and operational edge to the ICG to face new age multidimensional challenges. These modern FPVs will play a critical role in enhancing fisheries protection and monitoring, control and surveillance, anti-smuggling operations, search and rescue operations including in shallow waters, assistance to ship/crafts in distress, towing capabilities, assistance and monitoring during marine pollution response operations, anti-piracy operations. The acquisition of these FPVs is aimed to boost ICG's capability and reinforces the increased focus of the government towards maritime security.

In line with the 'Atmanirbhar Bharat', the contract will boost nation's indigenous shipbuilding capability bolstering maritime economic activities and foster growth of ancillary industries especially the MSME Sector. The project will effectively generate employment opportunities and expertise development in the Country.

https://pib.gov.in/PressReleasePage.aspx?PRID=1999143

THE TIMES OF INDIA

Thu, 25 Jan 2024

Navy to Set up its 2nd VLF Communication Station in Vikarabad

The Telangana government has transferred 1,174 hectares of forest land at Dammaigudem forest area in Vikarabad district for the Indian Navy's Very Low Frequency (VLF) communication transmission station. According to the chief minister's office (CMO), the station will be completed by 2027. The navy uses VLF communication transmission stations to communicate with ships and submarines. Commodore Karthik Shankar, Circle DEO Rohit Bhupathi and Captain Sandeep Das met chief minister A Revanth Reddy on Wednesday. The officials of Vikarabad DFO and Naval Command Agency signed the agreement for transfer of forest lands. This will be the second such station in the country. INS Kattabomman Radar Station at Tirunelveli in Tamil Nadu was the first of its kind and has been serving the navy since 1990.

The Eastern Naval Command in Visakhapatnam has already identified Telangana as a suitable area for setting up a second radar station. Since 2010, the navy has been in touch with the state government. Despite all the environmental permits and clearances, the allotment of land did not proceed due to the negligence of the previous government, said the CMO adding that with the special initiative of CM Revanth, all the obstacles to this project were removed.

The Union Forest and Environment Department approved the Navy's proposals in 2014. Compensatory Afforestation Fund Management and Planning Authority (CAMPA) funds of Rs 133.54 crore for handing over forest land have been paid.

The Navy has also paid Rs 18.56 crore for the works undertaken for land conservation measures.

The Damagudem Forest Protection Joint Action Committee had filed a petition in court seeking to cancel this project. The court has issued orders to take all precautions in accordance with the conditions decided by the government. Along with the navy station, the township would have schools, hospitals, banks and markets. This naval unit will consist of around 600 naval personnel and other civilians. About 2,500 to 3,000 people will live in this township.

Adequate measures would be taken to preserve biodiversity and ecological balance in the region through extensive planting. As a part of this project, about 27 km of road will be constructed around Damagundam Reserve Forest, the CMO added.

https://timesofindia.indiatimes.com/city/hyderabad/navy-to-set-up-2nd-vlf-communication-station-in-vikarabad-hyderabad/articleshow/107128773.cms



Wed, 24 Jan 2024

IAF Plays War Games amid Record India Navy Presence in Arabian Sea

With the raging conflict in Israel seriously threatening to spill over to the entire region, the Indian military is trying to make its presence felt if only to indicate its state of preparedness to deal with any eventuality.

There are an unprecedented number of about 12 Indian Navy warships sailing in the Arabian Sea, ostensibly engaged in anti-piracy operations but ready for escort operations for the commercial liners. All these ships have marine commandos, helicopters and surveillance drones.

Meanwhile, the long range MQ-9B drones and P-8 maritime long range reconnaissance aircraft operate as the veritable 'eyes in the sky' for the Indian military.

Amid this naval power projection, the Indian Air Force (IAF) conducted an exercise 'Desert Knight' on Tuesday along with assets of the French Air and Space Force (FASF) and United Arab Emirates (UAE) Air Force over the Arabian Sea.

The IAF contingent of Sukhoi 30 MKI, MiG-29, Jaguar, AWACS, C-130-J and an Air-to-Air refueler aircraft took off from an Indian airbase to meet a French Rafale fighter and a multi role tanker transport, and the UAE Air Force's F-16 fighter midair over the Arabian Sea.

An IAF release said the main focus of the exercise was on "enhancing synergy and interoperability between the three air forces."

The interesting facet of the exercise lay in the fact that all platforms flew in from their respective land bases underlining perfect interoperability and mutual understanding that has come from years of having war-gamed together.

Without doubt, Tuesday's exercise is indicative of high levels of established communication channels and the immense diplomatic and military potential it has.

https://www.theweek.in/news/india/2024/01/24/latest-news-iaf-play-war-games-amid-record-india-navy-presence-in-arabian-sea.html

Business Standard

Thu, 25 Jan 2024

Northern Army Commander Visits J&K's Poonch, Briefed on Security Strategy

Northern Army Commander Lieutenant General Upendra Dwivedi on Wednesday visited troops in Jammu and Kashmir's Poonch and was briefed about a new methodology being adopted to strengthen the area's security.

The Army Commander emphasised executing operations with utmost professionalism.

"Lt Gen Upendra Dwivedi, Army Commander Northern Command visited a battalion deployed in the hinterland in Poonch sector for operational review," the Northern Command said in a post on X.

It said a comprehensive briefing was carried out by ground commanders on the prevailing security situation, including a new methodology being adopted to strengthen the security of the area.

The commander also reviewed the need-based projects initiated by the Army for the development of the local community.

https://www.business-standard.com/india-news/northern-army-commander-visits-j-k-s-poonch-briefed-about-new-security-strategy-124012500011 1.html

THE ECONOMIC TIMES

Wed, 24 Jan 2024

Modi-Macron Talks to Cover Space and Defence, Digital Ties

Expanding space sector collaboration, including its defence aspects, and growing digital sector partnership will be among the key agenda for the Summit between PM Narendra Modi and French President Emmanuel Macron in Jaipur on Thursday. India and France have created a Strategic Space Dialogue mechanism that provides guidance and direction across civilian and defence aspects of space cooperation. This will be scheduled soon after Macron's visit, according to persons familiar with the subject. A Joint Vision for Space Cooperation was adopted during Macron's visit here in 2018. ISRO and its French counterpart CNES have a rich legacy of collaboration for over six decades. France remains a major supplier of components and equipment for the Indian space programme.

ISRO and CNES concluded a joint declaration for cooperation in future launch vehicle technologies and agreement for cooperation in joint Earth Observation mission TRISHNA, Maritime Domain Awareness (short-term plan) and Space Situational Awareness. While ISRO's Polar Satellite Launch Vehicle (PSLV) has launched French satellites on a commercial basis, Arianespace, France, has been the major provider of launch services to Indian geo-stationary satellites, according to one of the persons quoted above. Digital sector is a new and emerging area of cooperation and it will get a big boost with Macron's visit, ET has learnt. President of Greater Paris Region Mme Valerie Pecresse visited India this month and is looking to collaborate with India further on the digital side. India and France collaborate in the cybersecurity domain as well and have a continuing engagement through MEA and the National Security Council Secretariat.

The Embassy of India in Paris, along with the French Ministry of Europe and Foreign Affairs, organised a workshop called 'INFRAStructures' last May in Paris to showcase India's achievements in Public Digital Infrastructures and discuss building secure and innovative digital commons.

An 'India pavilion' was set up at 'VivaTech 2023', which is Europe's largest start-up and technology annual event, last June. Around 70 Indian start-ups from the fields of fintech, aerospace, healthcare, robotics and renewable energy, participated in the event. India was the 'Country of the Year' at VivaTech in 2022 and the PM had delivered a keynote address at VivaTech Digital Fair in 2021.

DAC and M/S Atos, a European multinational IT service and consulting company based in France, has developed 14 supercomputers for India to date, including the fastest supercomputer Param Siddhi.

https://economictimes.indiatimes.com/news/india/modi-macron-talks-to-cover-space-and-defence-digital-ties/printarticle/107123756.cms

THE ECONOMIC TIMES

Wed, 24 Jan 2024

Indian Air Force (IAF) Conducts 'Exercise Desert Knight' with France and UAE Counterparts

Indian Air Force (IAF) recently conducted 'Exercise Desert Knight ' with French Air and Space Force (FASF) and United Arab Emirates (UAE) Air Force over the Arabian Sea, according to the official statement of IAF.

"The main focus of Exercise Desert Knight was on enhancing synergy and interoperability between the three Air Forces. The interactions during the exercise facilitated the exchange of operational knowledge, experiences and best practices amongst the participants. Such exercises are indicative of the growing diplomatic and military interactions in the region, apart from showcasing the prowess of the IAF," said the official statement of IAF.

— IAF_MCC (@IAF_MCC)

Aircrafts fielded by India, UAE and France:

India Air Force- Su-30 MKI, MiG-29, Jaguar, AWACS, C-130-J and Air to Air Refueller aircraft.

French Air and Space Force (FASF)- Rafale fighter aircraft and a Multi Role Tanker Transport UAE Air Force- F-16.

"The exercise in Indian FIR ((Flight Information Regions) was conducted over the Arabian Sea, with IAF aircraft operating from bases within India," the official statement read.

All airspace worldwide is divided into FIRs and each of them is managed by a controlling authority responsible for ensuring that air traffic services are provided to aircraft flying within it.

The exercise came amid increasing attacks on commercial vessels by Houthi militants in the Red Sea.

The trilateral exercise came days before India's Republic Day celebrations where two Rafale fighter jets and an Airbus A330 multi-role tanker transport aircraft of the French air force will also feature.

A 95-member marching contingent and 33-member band contingent from France will also take part in the parade.

French President Emmanuel Macron will be the Chief Guest at the Republic Day celebrations on January 26 that would make him the sixth leader from France to grace the prestigious annual event.

https://economictimes.indiatimes.com/news/defence/indian-air-force-iaf-conducts-exercise-desert-knight-with-france-and-uae-counterparts-check-visuals-here/articleshow/107102825.cms



Thu, 25 Jan 2024

As Army Launches Op Sarvashakti, Recalling Sarpvinash of 2003, that Crushed Terror Base in Pir Panjal

The Army has launched Operation Sarvashakti in the Rajouri-Poonch sector of Jammu and Kashmir, deploying forces on both sides of the Pir Panjal range to target terrorists who have carried out a series of attacks on troops in the area.

There were three major attacks on the security forces in 2023, and over the past few years, 20 soldiers have been killed in terrorist ambushes in this area. Most terrorists here are believed to be foreigners.

Operation Sarvashakti, as part of which at least three brigades of additional troops are being deployed in the sector from various reserve and strike corps formations in order to increase the density of troops and, therefore, the likelihood of contact with terrorists, recalls an earlier operation by the Army in the same forests more than two decades ago.

Back in 2003, Indian forces launched Operation Sarpvinash to flush out terrorists who had infiltrated from across the border and set up camps in the thick forests south of the Pir Panjal range, especially in the Hilkaka area in Poonch.

What was Operation Sarpvinash?

Following several encounters in the area, the Army carried out, from April 2003 onward, what was until then its biggest counter-insurgency operation in Jammu and Kashmir.

The roughly three-month-long operation took place in high forested mountains, in an approximately 150 sq km area bound by three major ridges. Some 10,000 troops under the 15 Corps and 16 Corps were involved in the operation that lasted about two weeks.

Mi-17 helicopters were used to airlift soldiers to Hilkaka, a Bakerwal village that had been taken over by terrorists, and Lancer attack helicopters were used to bust concrete bunkers built by the infiltrators, The Indian Express reported earlier.

About 100 terrorists were killed in the operation. A large number of weapons of various kinds, dumps of explosives, and stores including some 7,000 kg of ration, medicines, and communication equipment were recovered. Some 40-50 terrorist hideouts were demolished in the operation.

Under what circumstances was Sarpvinash launched?

The Kargil war of 1999 was still fresh in memory and, in the aftermath of the December 13, 2001 terrorist attack on Parliament, the Indian armed forces had carried out Operation Parakram, a massive mobilisation exercise on the border with Pakistan that lasted well into the summer of 2002.

Preparations for the assault began in early 2003 after inputs suggested that more than 300 foreign terrorists who had infiltrated across the Line of Control (LoC) had established secure camps in the areas of Surankote and Hilkaka. The terrorists, who belonged to several Pakistan-based outfits, had created a demilitarised zone in the region, and were dominating the area.

They had created multiple hideouts inside caves, built bunkers in the dhokes (shelters for humans and cattle) of the migrant Bakerwals, and established a communication network.

Why is this area important strategically?

The areas south of Mendhar leading to the Pir Panjal range through Hilkaka constitute among the shortest routes of access for infiltrators from across the LoC into the Kashmir valley.

The terrorists chose this region to set up camps because dominating this area can potentially provide a conduit to personnel in the event of a military operation by the Pakistanis, and easier infiltration of terrorists.

The dense forests and steep mountain slopes offer both adequate cover and visual domination of the area. Terrorists were able to merge with the foliage whenever Indian troops carried out searches in the area, and to inflict casualties in case of contact. All of these locational advantages for terrorists remain intact to some degree even now.

What was the outcome of Operation Sarpvinash?

The operation flushed out terrorists and brought peace to the area that lasted until 2017-18, even as terrorist incidents continued to take place in the valley. But since 2021, this region has seen several high intensity attacks on security forces.

https://indianexpress.com/article/explained/as-army-launches-op-sarvashakti-recalling-sarpvinash-of-2003-that-crushed-terror-base-in-pir-panjal-9126363/



Thu, 25 Jan 2024

US Navy Intercepts Missiles in Red Sea while Escorting Maersk Ships

Two vessels sailing close to the Gulf of Aden were compelled to seek assistance from the US navy following the detection of nearby explosions as the Houthi group persisted in their assault on commercial shipping along the Yemeni coast.

The Houthis have asserted that their actions are in solidarity with the Palestinians amid Israel's bombardment of Gaza.

According to The Guardian report, the ships, affiliated with the US arm of the Danish shipping company Maersk, were transporting military supplies for the US when they faced an attack involving three anti-ship missiles near the Bab el-Mandeb strait.

The report, citing the US Central Command (Centcom), said two missiles were successfully intercepted, and the third landed in the sea. There was no damage to either the Maersk Detroit or the Maersk Chesapeake, and there were no reported injuries, added the report.

"En route, both ships reported seeing explosions close by and the US navy accompaniment also intercepted multiple projectiles. The crew, ship and cargo are safe and unharmed. The US navy has turned both ships around and is escorting them back to the Gulf of Aden," The Guardian quoted Maersk as saying in a statement.

Maersk said its US subsidiary was now suspending Red Sea transits.

"The safety of our crews is of utmost importance. Following the escalation of risk, MLL [Maersk Line Limited] is suspending transits in the region until further notice" the spokesperson said.

Both commercial vessels carry cargo for the US government and are enrolled in programs run by the defence department to transport forces, supplies and equipment during times of war or national emergency, which is why they were escorted through the strait.

Centcom also reported that on Tuesday night it had launched two pre-emptive strikes designed to stop imminent Houthi attacks. Previous attacks last Friday underlined the current inability of the US and UK to neutralise the Houthis despite multiple attacks on their missile sites.

https://www.firstpost.com/world/us-navy-intercepts-missiles-in-red-sea-while-escorting-maersk-ships-13653622.html

Science & Technology News



Ministry of Science & Technology

Wed, 24 Jan 2024

9th India International Science Festival (IISF) Strengthens Country's Global Connect in the Field of Science, Technology and Innovation

The 9th edition of India International Science Festival, (IISF-2023) reached out with India's scientific achievements to 21 different countries which participated in the science outreach festival through their 35 international delegates.

While most of the delegates participated in the various events as speakers, panelists, many of them formed long-term association with India.

The 21 countries represented were - Argentine Republic, Republic of Armenia, Commonwealth of Australia, Kingdom of Cambodia, French Republic, Republic of Indonesia, Italian Republic, Japan, Republic of Kenya, Lao People's Democratic Republic, Malaysia, Republic of the Union of Myanmar, Republic of Namibia, Republic of the Philippines, Republic of Rwanda, Republic of Singapore, Republic of South Africa, Kingdom of Thailand, United States of America (USA), Socialist Republic of Vietnam, Republic of Zimbabwe.

The Institutions represented included University of Tsukuba, Ministry of Industry, Science, Technology & Innovation (MISTI) – Cambodia; University of South Australia; SEAMEO Regional Centre for Community Education Development – Lao PDR; Bordeaux University; Ministry of Science, Technology, and Innovation (MOSTI) – Malaysia; Enterprise Singapore; Office of National Higher Education Science Research and Innovation Policy Council – Thailand; Asian Institute of Technology – Thailand; University of Zimbabwe; Australian High Commission, India; Embassy of Italy in India amongst others.

The National Innovation Foundation (NIF) – India, an autonomous Institution of the Department of Science and Technology (DST), Government of India, set up several collaborations on different aspects related to Science, Technology and Innovation (STI). NIF's key international collaborations included those with National Centre of Innovation and Entrepreneurship, The Ministry of Economy, Republic of Armenia; Australian National Fabrication Facility (ANFF), Commonwealth of Australia; Yayasan Inovasi Malaysia (YIM), Malaysia; University of Nairobi & Moi University - Republic of Kenya; University of Namibia, Republic of Namibia; Department of Research and Innovation (DRI), Ministry of Science and Technology (MOST), Republic of The Union of Myanmar; Foreign Trade University, Socialist Republic of Vietnam; The National Research and Innovation Agency (BRIN), Republic of Indonesia; UNIVERSITY OF RWANDA, Republic of Rwanda and The Global Institute for Empowerment, Accomplishment & Impact by Young People, USA (Books / Publications).

The collaborations will facilitate opportunities in the areas like access to expertise and state of the art infrastructure in other parts of the world, for example leveraging the latest fabrication infra for grassroots innovations development; Capacity buildings and raising the exposure of innovators; Tech Exchange leading to greater dissemination opportunities worldwide for home grown technologies; Joint Research and publications; Industry engagement and research commercialisation activities and an overall contribution to strengthening Science Technology and Innovation based relationship of India with other countries of the world.

https://pib.gov.in/PressReleasePage.aspx?PRID=1999235



Wed, 24 Jan 2024

ISRO's Moon Moment to Shine at Republic Day Parade with Tableau, 8 Women Scientists of Chandrayaan-3

Eight women scientists from the Indian Space Research Organisation (ISRO) who were part of India's biggest space dream of landing on the moon will march down Kartavya Path as part of the 75th Republic Day parade to be held on Friday.

The all-women contingent from various ISRO centres in Bengaluru, Ahmedabad, Thiruvananthapuram, and Sriharikota will lead the special tableau to be showcased by ISRO. The space agency will depict the historic moment when its spacecraft Chandrayaan-3 successfully touched down on the moon on August 23 last year. The milestone led India to become the first and the only country in the world to land near the unexplored lunar south pole.

"The attempt is to provide a snapshot of that entire journey of Chandrayaan-3 – right from the launch pad at Sriharikota to its touchdown on the moon – a site which is now known as the Shiv Shakti point. The tableau will depict all the key moments of this historic mission," said a senior ISRO scientist.

As many as 212 other scientists from various ISRO centres will also witness the parade from a special enclosure. The tableau will have a miniature model of India's heaviest launcher, the LVM MK3, which lifted off with Chandrayaan-3 into space on July 14, 2023. The rocket is also set to fly the crew module of ISRO's first-ever human spaceflight, Gaganyaan, scheduled to take off in late 2025.

Apart from the launch pad at Sriharikota and the rocket, the tableau will also showcase the control room of ISRO in Bengaluru from where scientists tracked the final moments of the Chandrayaan-3 landing. It will also depict the soft landing on the moon with the lander Vikram and rover Pragyan.

Besides Chandrayaan-3, the space agency will also provide a glimpse of other key missions, including Aditya – the first-ever solar observatory, which reached its designated L1 point on January 6 – as well as the upcoming Gaganyaan mission.

This year, the Republic Day parade will be mostly led by women contingents from various sectors. Apart from ISRO scientists, there will be 100 women artistes playing Indian musical instruments, and an all-women tri-service contingent marching down Kartavya Path for the first time. The Central Armed Police Force (CAPF) contingents will also consist of women personnel.

A total of 25 tableaux from as many as 16 states and union territories as well as nine ministries will roll down the Kartavya Path during the parade. The parade will start at 10.30 am and run for around

90 minutes. The seating capacity at Kartavya Path is 77,000, of which 42,000 places are reserved for the general public. French President Emmanuel Macron will be the chief guest at this year's Republic Day parade.
https://www.news18.com/india/isros-moon-moment-to-shine-at-republic-day-parade-with-tableau-8-women-scientists-behind-chandrayaan-3-8753462.html
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