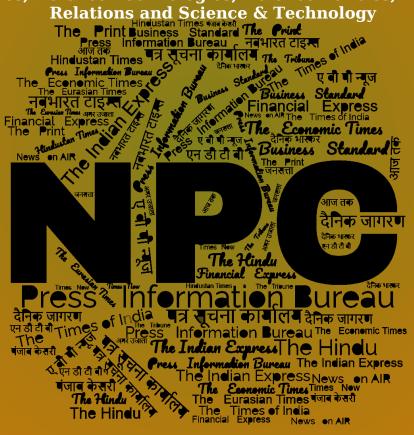
फरवरी Feb 2024 खंड/Vol.: 49 अंक/Issue: 37

21/02/2024

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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DRDO Technology News



Ministry of Defence

Tue, 20 Feb 2024

Digital Flight Control Computer for Tejas Mk1A Flown Successfully

In a significant development towards Tejas Mk1A programme, the Digital Fly by Wire Flight Control Computer (DFCC) was integrated in prototype LSP7 and successfully flown on 19th Feb 2024. DFCC has been indigenously developed by the Aeronautical Development Establishment (ADE), Bengaluru for the Tejas - Mk1A. Digital Fly by Wire Flight Control Computer features Quadraplex Power PC based Processor, high speed autonomous state machine based I/O controller, enhanced computational throughput and complex on-board software complied to DO178C level- A safety requirements. All critical parameters and performance of the flight controls were found satisfactory. The maiden flight was piloted by Wg Cdr Siddarth Singh KMJ (Retd) of National Flight Test Centre.

Aeronautical Development Agency, under the aegis of Department of Defence R&D and Ministry of Defence has successfully type certified Tejas-Light Combat aircraft (LCA). Indian Air Force has already operationalised Tejas LCA Mk1. The improved version of the aircraft, Tejas MK1A features advanced mission computer, high performance Digital Flight Control Computer (DFCC Mk1A), Smart Multi-Function Displays (SMFD), Advanced Electronically Scanned Array (AESA) Radar, Advanced Self-protection Jammer, Electronic Warfare Suit etc.

Raksha Mantri Shri Rajnath Singh complimented joint teams from DRDO, IAF, ADA and industries involved in the development and successful flight test of this critical system for Tejas Mk1A and termed it as a major step towards Atmanirbharata with reduced count of special imports.

Secretary DDR&D and Chairman DRDO congratulated the teams involved in the successful flight test which has boosted the confidence towards delivery of Tejas MK1A to IAF in a stipulated time frame.

https://pib.gov.in/PressReleasePage.aspx?PRID=2007465



Wed, 21 Feb 2024

स्वदेशी डिजिटल फ्लाइट कंट्रोल कंप्यूटर के साथ तेजस ने भरी उड़ान, रक्षा मंत्री ने बताया आत्मनिर्भरता की दिशा में बड़ा कदम

स्वदेशी रूप से विकसित डिजिटल फ़्राइट कंट्रोल कंप्यूटर (डीएफसीसी) के साथ तेजस लड़ाकू विमान ने सफल उड़ान भरी है। रक्षा मंत्रालय ने मंगलवार को कहा कि डिजिटल फ़्राइट कंट्रोल कंप्यूटर को हल्के लड़ाकू विमान तेजस में एकीकृत किया गया है जो एक महत्वपूर्ण घटनाक्रम है।

स्वदेश निर्मित तेजस एकल इंजन वाला बहुउद्देश्यीय लड़ाकू विमान है, जो उच्च खतरे वाले हवाई क्षेत्र में काम करने में सक्षम है। इसे हवाई रक्षा, समुद्री टोही और हमले की भूमिका निभाने के उद्देश्य से डिजाइन किया गया है।

रक्षा मंत्रालय ने कहा कि तेजस एमके1 ए कार्यक्रम की दिशा में एक महत्वपूर्ण घटनाक्रम में डीएफसीसी को प्रोटोटाइप एलएसपी7 में एकीकृत किया गया और 19 फरवरी को सफलतापूर्वक उड़ान उड़ान भरी। तेजस-एमके1 ए संस्करण के लिए डीएफसीसी को एयरोनाटिकल विकास प्रतिष्ठान (एडीई) बेंगलुरु द्वारा स्वदेशी रूप से विकसित किया गया है।

मंत्रालय ने एक बयान में कहा कि उड़ान नियंत्रण के सभी महत्वपूर्ण मानक और प्रदर्शन संतोषजनक पाए गए। इसने कहा कि पहली उड़ान का संचालन राष्ट्रीय उड़ान परीक्षण केंद्र से संबद्ध विंग कमांडर सिद्धार्थ सिंह केएमजे (सेवानिवृत्त) ने किया। भारतीय वायुसेना पहले ही तेजस एलसीए एमके 1 का संचालन शुरू उकर चुकी है।

रक्षा मंत्री राजनाथ सिंह ने तेजस एमके1 ए के लिए इस महत्वपूर्ण प्रणाली के विकास एवं सफल उड़ान परीक्षण में शामिल रक्षा अनुसंधान और विकास संगठन (डीआरडीओ), वायुसेना, एडीए और उद्यमों की की सराहना की।

सिंह ने इसे आत्मनिर्भरता की दिशा में एक बड़ा कदम बताया। तेजस विमान भारतीय वायुसेना का मुख्य आधार बनने के लिए तैयार है जिसमें शुरुआती संस्करण के लगभग 40 तेजस पहले ही शामिल किए जा चूके हैं।

https://www.jagran.com/news/national-tejas-flies-with-indigenous-digital-flight-control-computer-23657709.html



Tue, 20 Feb 2024

Digital Flight Control Computer for Tejas Mk1A Flown Successfully

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DFCC has been indigenously developed by the Aeronautical Development Establishment (ADE), Bengaluru for the Tejas – Mk1A.

"Digital Fly by Wire Flight Control Computer features a Quadraplex Power PC-based Processor, high-speed autonomous state machine-based I/O controller, enhanced computational throughput and complex on-board software complied with DO178C level- A safety requirements," Defence Ministry said.

All critical parameters and performance of the flight controls were found satisfactory. The maiden flight was piloted by Wg Cdr Siddarth Singh KMJ (Retd) of the National Flight Test Centre.

Aeronautical Development Agency, under the aegis of the Department of Defence R&D and Ministry of Defence, has successfully type-certified Tejas-Light Combat aircraft (LCA).

The Defence Ministry mentioned that the Indian Air Force has already operationalised Tejas LCA Mk1. The improved version of the aircraft, Tejas MK1A features an advanced mission computer, high-performance Digital Flight Control Computer (DFCC Mk1A), Smart Multi-Function Displays (SMFD), Advanced Electronically Scanned Array (AESA) Radar, Advanced Self-protection Jammer, Electronic Warfare Suit etc.

Defence Minister Rajnath Singh complimented joint teams from DRDO, IAF, ADA and industries involved in the development and successful flight test of this critical system for Tejas Mk1A and termed it as a major step towards Atmanirbharata with the reduced count of special imports.

Secretary DDR&D and Chairman DRDO congratulated the teams involved in the successful flight test which has boosted the confidence towards delivery of Tejas MK1A to IAF in a stipulated time frame.

 $\frac{https://www.aninews.in/news/national/general-news/digital-flight-control-computer-for-tejas-mk1a-flown-successfully20240220193219/$

Defence News

Defence Strategic: National/International



Ministry of Defence

Tue, 20 Feb 2024

RADM David Proctor, Chief of Navy Royal New Zealand Navy Visit to India

RAdm David Proctor, Chief of Navy, Royal New Zealand Navy is on an official visit to India from 19 – 27 Feb 24. RAdm David Proctor interacted with Adm R Hari Kumar, the Chief of the Naval Staff, Indian Navy at New Delhi on 20 Feb 24. He was welcomed with the customary Guard of Honour on the South Block Lawns.

During the interaction, the Principals discussed avenues to strengthen bilateral maritime cooperation, including increased operational engagements, training exchanges and information sharing. RAdm David Proctor is scheduled to participate in Indian Navy's Flagship Exercise MILAN 24 at Visakhapatnam and also undertake high level engagements at Western Naval Command.

Maritime cooperation between IN and RNZN has witnessed significant growth since CNS visit to New Zealand in Oct 22. The visit marked conclusion of Technical Arrangement on White Shipping Information Exchange. Further, warships from both the Navies have been making regular port calls at each other's ports, last being port calls by INS Kolkata and INS Sahyadri at Auckland and Wellington in Sep 23. IN ships also conducted PASSEX with RNZN and RNZAF in the Tasman Sea post Departure.

https://pib.gov.in/PressReleasePage.aspx?PRID=2007435

THE TIMES OF INDIA

Wed, 21 Feb 2024

Anti-tank Missile Tested at Pokhran Firing Range

The Battle Axe Division of the Indian Army successfully tested indigenously manufactured antitank guided missiles for both day and night operations at Pokhran field firing range in Jaisalmer district. The missile, which can be launched from a tripod, weighs 15kg and has a range of 2.5km. The control flight test was done successfully and a plan has been made for a guided flight test.

The soldiers of the Battle Axe Division on foot fired this missile from a portable system. This missile is a guided missile which has been designed to destroy tanks and it uses a high explosive anti-tank heat warhead.

According to official sources, the capacity and accuracy of the missile was successfully tested. The missile, which can travel 2.5 km is fired from surface to surface and hits many targets. This indigenously manufactured anti-tank guided missile is a third generation missile hit from surface to surface.

Defence sources said, "ATGM employs a tandem high explosive anti-tank (HEAT) warhead to defeat explosive reactive armour (ERA) protected vehicles. ATGM has been developed with multiplatform launch capability. It can be transported by a single soldier, tripod-mounted weapons, trucks, tanks, and aircraft."

https://timesofindia.indiatimes.com/city/jaipur/indian-army-successfully-tests-anti-tank-missiles-at-pokhran-firing-range/articleshow/107868000.cms

THE ECONOMIC TIMES

Tue, 20 Feb 2024

Milan 2024: War Exercise Including 50 Navies Kicks off in Vizag

The Indian Navy's largest-ever multilateral naval exercise, Milan 2024, has commenced in Vizag with an impressive lineup of warships from Indian and foreign navies participating in the Harbour Phase.

Harbour Phase Highlights

From February 19 to 23, the Harbour Phase includes an international city parade on RK Beach, a maritime seminar, a tech expo, Milan village, subject matter expert exchange, Milan of young officers, and various sporting events.

Sea Phase and Activities

During the Sea Phase from February 24 to 27, participating navies will conduct advanced air defence, anti-submarine, and anti-surface warfare drills. The exercises will include gunnery shoots on aerial and surface targets, manoeuvres, and underway replenishment.

— ANI (@ANI)

Notable Participants and Events

For the first time, Vizagites will have the opportunity to see the indigenously built aircraft carrier INS Vikrant, anchored off the coast of Vizag. This event marks the first time both the aircraft carriers - INS Vikrant and INS Vikramaditya - will be present in the city.

— ANI (@ANI)

Dignitaries and Inauguration

Defence Minister Rajnath Singh will inaugurate the Milan Village on February 21, while Vice-President Jagdeep Dhankar will attend the International City Parade programme on February 22.

— ANI (@ANI)

Security Measures and Traffic Regulations

Meanwhile, city police have imposed traffic restrictions and diversions from February 20 to 22. Around 3,500 police personnel have been drafted for security and traffic regulations.

Joint Commissioner of Police, Fakkeerappa Kaginelli, stated that heavy vehicle movement will be restricted from Convent Junction to Sheela Nagar, Sheela Nagar to Convent Junction, and Convent Junction to Scindia from 7 am to 9 pm on February 21 and 22.

On Beach Road, vehicles without passes will not be allowed between the Collectorate Junction and NCB, CR Reddy Circle and NTR Statue, Beach Road via AIR Junction, and Pandimetta Junction and Novotel Junction on February 20 and 22.

https://economictimes.indiatimes.com/news/defence/milan-2024-war-exercise-including-50-naval-forces-begins-in-vizag/articleshow/107849006.cms



Wed, 21 Feb 2024

At Milan-24, Navy Offers its Submarine Rescue Capability

Indian Navy is offering its submarine rescue capabilities to friendly countries, a key highlight of the ongoing multilateral naval exercise Milan-24 in Visakhapatnam that will further India's defence diplomacy.

On Tuesday, the Navy showcased its Deep Submergence Rescue Vehicle (DSRV) to the delegates of 50 countries at the mega naval exercise that began on Monday. A submarine rescue operation is undertaken when the vessel is reported missing or has sunk. The DSRV can help in locating the disabled submarine, rescue the trapped personnel or provide them emergency supplies.

The Navy had acquired two advanced DSRVs—one each for India's west coast and east coast in Mumbai and Visakhapatnam, respectively—in 2018 and 2019 from James Fisher Defence, UK.

As on date, India is among the 12 countries, including the US, China, Russia and Singapore, to possess this niche technology. Only 40 countries operate submarines.

Additionally, the Navy is also awaiting induction of two diving support vessels (DSVs)—also for submarine rescue operations—being indigenously made by Hindustan Shipyard Ltd, Visakhapatnam.

Talking to the media on the sidelines of the event, Rear Admiral K Venkatraman, Flag Officer Submarines, said several nations have shown a keen interest in making use of India's capability.

He said while the Navy already has an Implementing Agreement with Singapore, a similar pact is expected with South Africa during MILAN-24, adding that Japan and some other countries have also shown interest in it.

Addressing the foreign delegates Tuesday, Captain Vikas Gautam, officer in-charge, Submarine Rescue Unit (East), said the DSRV system is capable of reaching anywhere across the globe in times of distress.

In 2021, the Navy mobilised one of its DSRV to assist Tentara Nasional Indonesia-Angkatan Laut (TNI AL – Indonesian Navy) in search and rescue efforts for the Indonesian Submarine KRI Nanggala which was reported missing.

Indian Navy's DSRV system can locate a submarine up to 1,000-metre depth utilising its state-of-the-art Side Scan Sonar (SSS) and Remotely Operated Vehicle (ROV).

Live undersea matings with different types of submarines along with transfer of personnel from submarine to DSRV has also been achieved. As per officials, the rescue operation can take place within 96 hours even as it, at times, depends on other factors like the logistics and infrastructure available.

The indigenously-built Diving Support Vessels (DSVs) are 118.4 metres long, 22.8 metres at the broadest point and will have a displacement of 9,350 tonnes and they would be deployed for deep sea diving operations. Aside from submarine rescue operations, they will be capable of sustained patrolling, conducting search and rescue operations and carrying out helicopter operations at high seas.

Visakhapatnam is hosting the 12th edition of MILAN from February 19 to 27. The exercise would comprise two phases, 'Harbour Phase' and 'Sea Phase'. The first phase would comprise international maritime seminar, international city parade at R K Beach, maritime tech exhibition, subject matter expert exchange, Milan of young officers and various sporting events.

In the Sea phase, ships along with aircraft of friendly foreign countries would participate along with Indian Navy's aircraft carriers and other units.

https://indianexpress.com/article/india/at-milan-24-navy-offers-its-submarine-rescue-capability-9172115/

THE TIMES OF INDIA

Wed, 21 Feb 2024

Eye on China, Army to 'Combatise' more Formations under Central Command

Continuing with its re-balancing of forces and firepower to the northern borders with China, the 12-lakh strong Army now plans to "combatise" additional formations under its Lucknow-based Central Command.

Uttar Bharat Area based in Bareilly, which is largely a static formation geared for administrative, training and other peace-time purposes, for instance, will be converted into a full-fledged corps, with additional infantry, artillery, aviation, air defence and engineer brigades under it. "The final approval is yet to come but Army wants UB Area to transform into an operational corps tasked with guarding the middle sector of the 3,488-km long line of actual control," a source said.

This new corps, likely to be called the 18 Corps, will cover the stretch between Leh-based 14 Corps in Ladakh and the Sukna-based 33 Corps in Bengal. The Army has been deploying additional formations for the LAC in all three sectors — western (Ladakh), middle (Uttarakhand, Himachal) and eastern (Sikkim, Arunachal).

The Mathura-based 1 Strike Corps, which has around 70,000 soldiers and heavy weaponry, for instance, was earlier "rebalanced" to LAC from its previous role on the western front with Pakistan, as was reported by TOI.

Consequently, apart from "pivot" corps, there are now two "strike" corps for the LAC: the 1 Corps for the northern sector, including Ladakh, and Panagarh-based 17 Corps for eastern one, including Chumbi Valley opposite Sikkim.

As part of the re-balancing, UB Area got one division and three independent brigades under it over the last couple of years to get "combatised" in order to tackle the threat from China. "The UB Area will be further upgraded," the source said.

China has so far rebuffed India's push for troop disengagement from the two remaining major faceoffs at Depsang Plains and the Charding Ninglung Nallah (CNN) track junction at Demchok in Ladakh, let alone accept any return to status quo ante.

https://timesofindia.indiatimes.com/city/delhi/indian-army-to-combatise-more-formations-under-central-command/articleshow/107866499.cms



Tue, 20 Feb 2024

Indian Navy Chief Proposes Strategic Development Bank for MSMEs in Defence Sector

Indian Navy Chief, Admiral Hari Kumar, has put forth a proposal to address the funding challenges encountered by Micro, Small, and Medium Enterprises (MSMEs) in the defence sector.

He advocates for the establishment of a dedicated "strategic development bank" tailored to meet the specific needs of MSMEs, aiming to bolster the nation's 'Aatmanirbharta' or self-reliance in defence production.

Admiral Hari Kumar underscores the active support of the Indian Navy towards MSMEs, citing the collaboration with Nibe Ltd as an example.

Nibe Ltd, an MSME, is engaged in the production of Brahmos launchers for ships, showcasing the fruitful partnerships between the navy and small-scale enterprises.

The Naval Innovation and Indigenisation Organisation (NIIO) has played a pivotal role in facilitating opportunities for MSMEs to present innovative solutions for naval technology.

This effort has resulted in an impressive response, with over 300 proposals and 518 contracts being signed.

Inaugurating the Nibe Defence and Aerospace manufacturing plant in Chakan, Admiral Hari Kumar emphasises the paramount importance of industry collaboration in fulfilling the navy's commitment to supporting MSMEs.

He stresses that such collaborations enhance the nation's capability to manufacture weapon systems, aligning with the broader goal of self-reliance in defence production.

https://knnindia.co.in/news/newsdetails/sectors/indian-navy-chief-proposes-strategic-development-bank-for-msmes-in-defence-sector

THE ECONOMIC TIMES

Tue, 20 Feb 2024

IAF's Sukhoi Fighter Jets to Get a Rs 60,000 Crore Booster: Here are all the Upgrades for the New Su-30MKI

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.

Private Sector Participation and Indigenous Upgrades

HAL Chairman and Managing Director CB Ananthakrishnan confirmed that the project would see significant involvement from the private sector, with HAL acting as the lead integrator for the upgrade. The project is divided into two phases, focusing initially on installing new avionics and radars, followed by enhancements to the flight control systems.

"The upgrade will see significant private sector participation, with HAL as the lead integrator," CMD of HAL CB Ananthakrishnan said.

What are Sukhoi-30MKI's Key Upgrades

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.

Enhanced Targeting Capabilities

Integration of indigenous infrared search and track systems will significantly improve air-to-air and air-to-ground targeting capabilities. The Air Force is set to commence work on integrating the new systems within the year, with approximately 90 fighters slated for upgrade in the initial phase, all to be conducted in India.

Global Market Potential

With over 600 Su-27/30 type aircraft manufactured globally, countries like Vietnam, Malaysia, Indonesia, and Algeria present a significant export market for these upgrades. India's initial order of

272 Su-30MKI jets from Russia forms the backbone of the Air Force's fighter fleet, with an additional order for 12 jets cleared last year.

Defence Acquisition Council Approval

The Defence Acquisition Council (DAC), led by Defence Minister Rajnath Singh, granted Acceptance of Necessity (AoN) for the indigenous upgrade of Su-30 MKI Aircraft by state-owned Hindustan Aeronautics Limited (HAL).

Future Upgrades and Russia's Involvement

The Su-30MKI fleet has been undergoing continuous upgrades for over a decade, integrating new weapons and sensors. Indigenous additions to Su-30MKI weaponry include BrahMos and Astra airto-air missiles, with further integration anticipated involving new generation anti-radiation missiles (NGARMs).

Installation of a new indigenous radar system to enhance target detection and engagement capabilities. Addition of a new electronic warfare system to counter incoming threats and disrupt enemy communication. Integration of indigenous infrared search and track systems to improve air-to-air and air-to-ground targeting capabilities

What is the new engine for Su-30MKI?

Russia has persistently urged India to consider the AL-41F-1S engine for the Sukhoi-30MKI fleet. The AL-41F-1S engine boasts a thrust of 142.2 kN, a notable improvement compared to the current AL-31FP engines with 122.6 kN of thrust.

The upgrade of the Su-30MKI fighter jet fleet represents a significant step towards enhancing India's defence capabilities and achieving self-reliance in defence manufacturing. The project's successful execution is expected to strengthen India's position in the global defence market while ensuring the operational readiness of the Air Force's fighter fleet.

https://economictimes.indiatimes.com/news/defence/iafs-sukhoi-fighter-jets-to-get-a-rs-60000-crore-booster-here-are-all-the-upgrades-for-the-new-su-30mki/articleshow/107842591.cms

Business Standard

Tue, 20 Feb 2024

INDUS-X: Two-day Indo-US Bilateral Defence Summit Kicks off in Delhi

A two-day bilateral defence cooperation meeting, called the India-US Defence Accelerator Ecosystem (INDUS-X), kicked off in Delhi on Tuesday marking a significant milestone in collaboration between the two countries in defence innovation.

Launched in June 2023 during Prime Minister Narendra Modi's state visit to the US, INDUS-X has driven the expansion of bilateral ties in defence innovation.

While being initially greeted with little fanfare, this US-India defence technology initiative could prove crucial for developing ways of deterring China. For the two-day INDUS-X Summit, stakeholders from both nations have converged in New Delhi to explore emerging opportunities and chart the future trajectory of defence relations.

Organised by Innovations for Defence Excellence (iDEX) under the Ministry of Defence (MoD), and the US Department of Defence (DoD), in conjunction with the US-India Business Council

(USIBC) and Society of Indian Defence Manufacturers (SIDM), the summit aims to drive strategic technology partnerships and defence industrial cooperation between India and the US.

There is much in common between the INDUS-X and a similar US-India cooperation initiative called the Defence Trade and Technology Initiative (DTTI) that was put in place during the presidencies of George W Bush and Barack Obama.

Like the DTTI, the INDUS-X is breaking information silos, building networks of cooperation and reducing bureaucratic and regulatory friction between the two defence ministries.

Two Washington-based scholars of US-India relations, Sameer Lalwani and Vikram J Singh, wrote last week that INDUS-X could become one of the most consequential US-India cooperation frameworks in the days ahead.

https://www.business-standard.com/india-news/delhi-s-indus-x-summit-boosts-india-us-defence-innovation-alliance-124022000976 1.html



Wed, 21 Feb 2024

Military Equipment Co-developed by India, U.S. can be Used to Dissuade Countries from Going to 'Mutual Adversaries'

Calling on India and the United States to quickly look at co-development of military hardware and not just co-production, U.S. Ambassador Eric Garcetti on Tuesday outlined how India can be a "great market place and producer" for countries that might not always be able to afford top-shelf equipment. This can be done to dissuade countries from going to "mutual adversaries" to get their weaponry, he added. "We can deter, we can defend, we can also de-escalate together, because the goal... is not to wage war but is to protect peace," Mr. Garcetti said, speaking at the second India-U.S. Defence Acceleration Ecosystem (INDUS-X) summit. "Co-production is not the same thing as co-development. We need to make sure we are looking at co-development not just for the sake of that but something that India needs in its military and that America needs it... and quickly we can look at co-development..."

The INDUS-X was launched in June 2023 during Prime Minister Narendra Modi's State visit to the U.S., and is meant to expand strategic technology partnerships and defence industrial cooperation between the Indian and U.S. governments, businesses, and academic institutions. INDUS X will be a defence innovation bridge which would include joint challenges, a joint innovation fund, academia engagement, industry-startup connections, investment by private entities in defence projects, mentoring by experts, and niche technology projects, the Defence Ministry had stated.

On similar lines, stating that the Indo-U.S. nuclear deal set a "new echelon of trust" between the two governments and helped get over a lot of past historical apprehensions between the two countries, USIBC president Atul Keshap emphasised on the power of private sectors of the two countries to collaborate and innovate together, to design, develop and produce together. "I think both governments need to really expand that flame of the private sector to private sector partnership. And if they do that, it's going to greatly add to our shared deterrence," he said.

'War is not the goal', Garcetti quotes Rig Veda, Mahabharata

Mr. Garcetti referred to Indian epics to stress that the goal was "not to wage war". He noted that the Rig Veda refers to Indra as the most powerful God, the God of thunder, and in many ways the God

of war too. However, there are two traditions in India, he said, one that is in the Mahabharata, where war is treated as something kind of exciting, grim, but a sport, and even a religious duty.

"We know that well. And when we were not as hopefully civilized as we are today, every culture embraced the necessity of war as places were conquered, as people suffered, histories that were never written," he said. "But there is a second of thought, [in the Arthashastra, which, long before [Prussian general Carl von] Clausewitz, literally said that war was a continuation of politics by other means, over 2,000 years before we studied it in our war colleges. Like so much we discover in India, it was actually written here first."

Driving strategic partnerships

Organised by Innovations for Defence Excellence (iDEX) under the Department of Defence Production, the Ministry of Defence, and the U.S. Department of Defence, in conjunction with the U.S.-India Business Council and the Society of Indian Defence Manufacturers, the summit aims to be a "pivotal event driving strategic technology partnerships and defence industrial cooperation" between India and the U.S., the Defence Ministry said in a statement.

Two defence innovation challenges related to the maritime domain — underwater communications for the Indian Navy, and oil spill detection for the Coast Guard — have since been launched under INDUS-X, for which the selection of companies from both sides is underway.

https://www.thehindu.com/news/national/military-equipment-co-developed-by-india-us-can-be-used-to-dissuade-countries-from-going-to-mutual-adversaries/article67868477.ece

THE TIMES OF INDIA

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Putin Says Russia has no Intention of Putting Nuclear Weapons in Space, Denying US Claims

Russian President Vladimir Putin declared on Tuesday that Moscow has no plans to deploy nuclear weapons in space, asserting that the country's space capabilities are comparable to those of the United States.

Putin's statement comes after the White House confirmed last week that Russia possesses a "troubling" anti-satellite weapon capability, though it is not operational yet. White House national security spokesman John Kirby mentioned that such a weapon would violate the international Outer Space Treaty but did not comment on its nuclear capabilities.

The Outer Space Treaty, signed by over 130 countries, including Russia, prohibits the deployment of "nuclear weapons or any other kinds of weapons of mass destruction" in orbit or the stationing of "weapons in outer space in any other manner." The White House expressed its intention to engage directly with Russia on these concerns.

Putin emphasized, "Our position is quite clear and transparent: we have always been and remain categorically opposed to the deployment of nuclear weapons in space." He urged all parties to adhere to existing agreements in this realm.

During a meeting with defense minister Sergei Shoigu, Putin stated that Russia has developed space capabilities similar to those of other nations, including the US, and emphasized that Russia has not deployed nuclear weapons in space.

Shoigu suggested that the White House's allegations about Russia's new space capability could be a tactic to secure Congressional support for aid to Ukraine and to encourage Moscow to re-enter nuclear arms control talks, which Russia had suspended amid tensions with the US over Ukraine.

While Putin did not rule out future contacts with the US, he maintained that Washington's push for Russia's defeat in Ukraine currently makes such discussions impossible. He criticized the US and the West for seeking Russia's strategic defeat while simultaneously expressing a desire for a dialogue on strategic stability, deeming these two goals incompatible.

https://timesofindia.indiatimes.com/world/europe/putin-says-russia-has-no-intention-of-putting-nuclear-weapons-in-space-denying-us-claims/articleshow/107866882.cms



Tue, 20 Feb 2024

Australia Announces Navy Overhaul to Build Biggest Fleet since World War II

Australia, on Tuesday (Feb 20) outlined its decade-long plan and announced a major overhaul of the Navy's surface combatant fleet saying that it would more than double the number of warships as well as add six large and "optionally crewed" naval vessels heavily armed with missiles as a part of the new \$11 billion reshaping of the country's naval forces.

Australia's plan for its Navy

Australian Prime Minister Anthony Albanese's government announced a major overhaul of the country's Navy which includes the acquisition of six new large optionally crewed surface vessels (LOSVs) which can be operated remotely by a support vessel and would be heavily armed with missiles.

Under the sweeping overhaul, Australia will have 26 combat-ready warships up from the current fleet of 11 ships. "It is the largest fleet that we will have since the end of the Second World War," said Defence Minister Richard Marles.

He also cited concerns over rising geopolitical tensions amid competition between the United States, its allies and China in the Asia-Pacific region.

Canberra has also reduced its order of Hunter-class frigates from nine to six, according to the new plan "Enhanced Lethality Surface Combatant Fleet."

The new fleet would include three upgraded Hobart-class destroyers, 11 new general-purpose frigates to replace six remaining Anzac-class frigates, six new LOSVs and 25 minor war vessels, including six Offshore Patrol Vessels (OPVs).

The Hunter class frigates will be built at the Osborne shipyard in South Australia, said Australia's Department of Defence in a statement.

The announcement also comes after the government received an independent analysis, led by the retired US Navy Vice-Admiral William Hilarides, which found that the current and planned surface combatant fleet was "not appropriate for the strategic environment we face, noting it is the oldest fleet Navy has operated in its history".

The independent analysis also urged the Albanese government for "immediate implementation" of the overhaul citing the threat to Australia's national security.

Australia's oldest currently serving warship, HMAS Anzac, as per the plan, will be immediately decommissioned ahead of the gradual replacement of the ageing Anzac-class fleet with new frigates.

Australia increases defence spending

To implement the shake-up to the current Australian navy fleet, the government has announced an additional \$1.7 billion over the forward estimates and \$11.1 billion over the next decade in defence for "accelerated delivery" for the navy's future surface combatant fleet and to expand the country's shipbuilding industry.

The total cost of the plan over the next decade would amount to \$54 billion. The plan would also see Australia increase its defence spending to 2.4 per cent of its gross domestic product (GDP), above the two per cent target set by its NATO allies.

"This will be the largest surface combatant force we've operated in generations. It will also be, in time, the most lethal," said Chief of Navy, Vice Admiral Mark Hammond.

https://www.wionews.com/world/australia-announces-navy-overhaul-to-build-biggest-fleet-since-world-war-ii-691881

Science & Technology News



Ministry of Science & Technology

Tue, 20 Feb 2024

Brainstorming Session on Pre-proposal Call for NQM Brings together Researchers to Create Synergy in Quantum Research

The brainstorming session on the call for pre-proposals for setting up the Thematic Hubs (T-Hubs) under the National Quantum Mission (NQM) brought together quantum science researchers and quantum technologists from all over India who were keen to participate in India's historic National Quantum Mission.

"We have launched this mission with a goal that as we proceed, we will be making very definitive contributions to quantum technologies along with quantum science. Quantum science and quantum technologies cannot be separated. They must go hand in hand and will need a lot of synergy. This is the reason why the concept of hubs has been created. Under each hub, we will have technical groups which will be constituted with participation from more than one institute," said Professor Ajay Sood, Principal Scientific Adviser to the Government of India.

Expressing his delight at the huge enthusiasm of researchers and technologists to participate in the brainstorming session, Secretary Department of Science and Technology (DST) Professor Abhay Karandikar said, "This is an ambitious project of the Government of India. We are making significant investments in this mission. A high -powered mission governing board will provide a broad direction to the entire mission and a mission technology research council will look into the

execution aspects of this mission. We have invited call for proposals for setting up the T-hubs under this mission in the area of computing, communication, sensing, and devices in consortia mode".

"This brainstorming meeting will help bring awareness among researchers and foster synergy among the various technical groups. I hope this in person meeting will also be a networking event for all of you where you can interact with other researchers from other institutions and form a collaborative partnership which will be useful for submitting the proposals that we are looking forward to," he added.

"I hope that we will be able to launch the research activities in this area which will not only make national impact but also a global impact. The NQM was started so that Indian researchers can take a leadership role globally, in quantum science and technology," Professor Karandikar pointed out.

Dr Akhilesh Gupta, Senior Adviser, Department of Science and Technology (DST) said that the concept of working in consortia mode along with the industry is a unique experiment to ensure rapid outcomes of the Mission.

The dignitaries interacted with 400 in-person and more than 150 online participants from institutions across the country to address their queries regarding the call for pre-proposals for setting up the T-Hubs.

The Department of Science and Technology (DST) will provide necessary resources for success of submission of pre-proposals and to facilitate researchers.

The NQM which is being implemented by DST will also work in collaboration with industry and startups to translate research to deployable technologies, so that India evolves to a competitive position at the international level in quantum science and technologies.

https://pib.gov.in/PressReleasePage.aspx?PRID=2007481

