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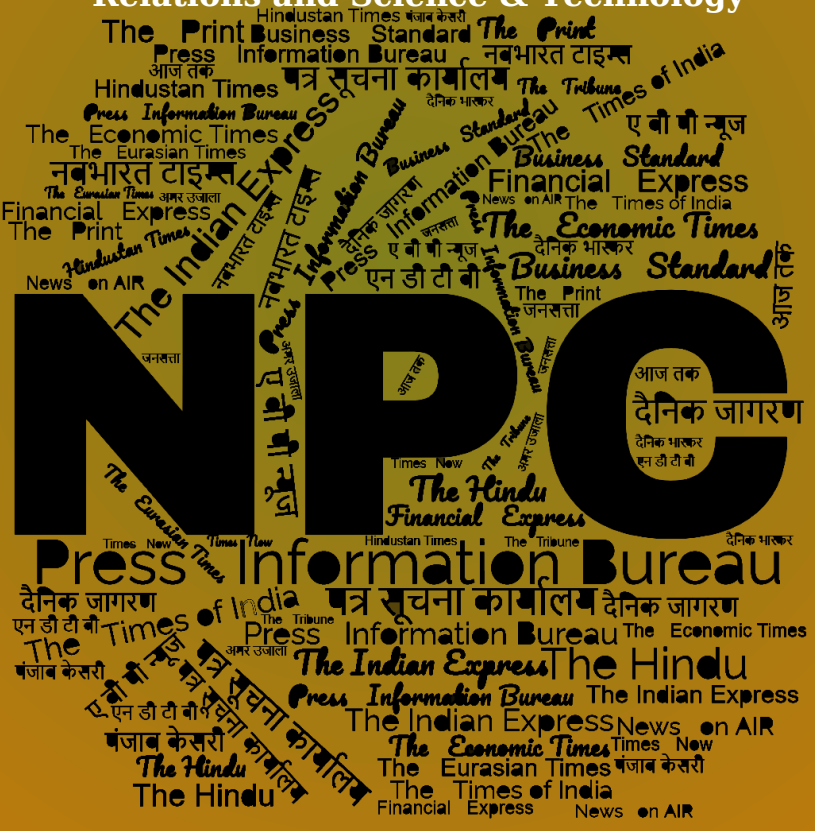

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Hindustan Times

Fri, 22 Mar 2024

Murthy Assumes Charge as DIAT Vice-chancellor

The Appointments Committee of the Cabinet (ACC) has appointed BHVS Narayana Murthy, retired scientist, and former director general, Missiles and Strategic Systems (DG, MSS), Defence Research and Development Organisation (DRDO) as the new vice-chancellor of Defence Institute of Advanced Technology, Pune (DIAT), according to an official statement released on Thursday. He assumed the new charge on March 20.

Murthy is renowned for his research and development (R&D) in the indigenous design and development of advanced avionics technologies for defence and aerospace applications in India.

He graduated in electronics and communication engineering from Regional Engineering College (REC), Warangal, now known as the National Institute of Technology, Warangal (deemed university); completed his MTech from the Jawaharlal Nehru Technological University (JNTU), Hyderabad and received doctorate in computer science from the International Institute of Information Technology (IIIT), Hyderabad. He joined DRDO in 1986.

https://www.hindustantimes.com/cities/pune-news/murthy-assumes-charge-as-diat-vicechancellor-101711046592843.html

Defence News

Defence Strategic: National/International

Press Information Bureau
Government of India

Ministry of Defence

Thu, 21 Mar 2024

India - Mozambique - Tanzania Trilateral Exercise IMT TRILAT- 2024

INS Tir and INS Sujata will participate in the forthcoming second edition of India Mozambique Tanzania (IMT) Tri Lateral (TRILAT) Exercise, a joint maritime exercise scheduled from 21-29

Mar 24. The first edition of IMT TRILAT exercise conducted in Oct 22, saw participation of INS Tarkash with the Tanzanian and Mozambique Navies.

The current edition of the exercise is planned in two phases. As part of the harbour phase scheduled from 21-24 Mar 24, Naval ships Tir and Sujata will engage with the respective Navies at the ports of Zanzibar (Tanzania) and Maputo (Mozambique). This phase would begin with a Planning Conference followed by conduct of joint harbour training activities like Damage Control, Fire Fighting, Visit Board Search and Seizure procedures, Medical Lectures, Casualty Evacuation and Diving operations. The sea phase of the exercise is scheduled from 24-27 Mar 24 covering practical aspects of countering asymmetric threats, Visit Board Search and Seizure procedures, boat handling, manoeuvres and firing exercise. A joint EEZ surveillance is also planned during the sea phase. The exercise will conclude with a joint debrief scheduled at Nacala (Mozambique).

During the harbour stay, Indian Naval ships would be open for visitors and partake in sports & cultural exchanges with host Navies. Training visits for sea trainees of 106 Integrated Officers Training Course are also planned at the respective ports.

https://pib.gov.in/PressReleasePage.aspx?PRID=2015968

THE TIMES OF INDIA

Thu, 21 Mar 2024

India-US Relationship at Historic High, Says Pentagon Officials

The United States and India have been witnessing a strengthening relationship, characterised as stronger than ever before by top Defence Department officials in America. This affirmation was made during a session with lawmakers, where it was highlighted that India holds a pivotal position due to its ties with Russia.

"I would describe the US-India relationship as growing and stronger than it has ever been and absolutely essential to our vision for a free and open Indo-Pacific," said Assistant Secretary of Defence for Indo-Pacific security affairs Ely S Ratner told members of the house subcommittee on Indo-Pacific on Wednesday noting that New Delhi is a swing vote because of its ties with Russia.

Ratner mentioned that efforts are underway to enhance collaboration in various areas, including co-production of defense equipment. He noted significant progress in projects related to jet engines and armoured vehicles, aimed at bolstering the defense industrial base of both nations. Ratner also highlighted the strategic significance of India, acknowledging its relationships with various countries, including Russia, and the importance of aligning with the US.

The commander of US Indo-Pacific command, Navy Adm John Aquilino, echoed Ratner's sentiments, emphasising the deepening military cooperation between the US and India. Aquilino highlighted the increasing interoperability between the two countries, with joint operations and exercises contributing to enhanced coordination and mutual capabilities.

During the session, the topic of India's involvement in Brics, a group comprising Brazil, Russia, India, China, and South Africa, was raised. Ratner explained that India's strategic identity aligns with a multipolar international system, reflecting its foreign policy objectives. Despite its associations within Brics, India has been moving towards strategic convergence with the US, particularly in the Indo-Pacific region. "Our defence trade now is valued at over $20 billion and India recently announced their decision to acquire over 30 MQ9Bs and BS. That's part of a growing

defence relationship between our countries that couldn't be more important," the defence department official said.

Aquilino emphasised the importance of the US-India comprehensive global strategic partnership in maintaining a free and open Indo-Pacific. The launch of initiatives like INDUS-X and the roadmap for US-India defence industrial cooperation signifies the commitment to enhance bilateral defense cooperation and innovation. Notably, the proposed deal between G E Aerospace and Hindustan Aeronautics for domestic production of F-414 jet engines exemplifies this collaborative approach.

In the realm of defense collaboration, both countries are striving for unprecedented levels of interoperability across different domains. Aquilino mentioned the participation of US B-1B Bombers in India's AERO INDIA air show and the bilateral air exercise 'Cope India' as examples of expanding cooperation in the air domain. Furthermore, joint exercises like 'Tiger Triumph' in the land domain have strengthened maritime domain awareness and service-to-service ties between the US and India.

Looking ahead, the focus remains on deepening cooperation under the Logistics Exchange Memorandum of Agreement (LEMOA) to facilitate more regular engagements in the Indian Ocean Region. Recent agreements for ship repair further underscore the commitment to enhancing maritime collaboration between the two nations.

The testimony from officials underscores the shared vision for a free and open Indo-Pacific region and the ongoing efforts to nurture and advance the strategic partnership between the US and India. As both countries continue to collaborate in defense and security realms, the bond between them is poised to grow stronger, contributing to regional stability and security.

The evolving partnership between India and the United States holds significance not only for the two countries but also for the broader Indo-Pacific region.

https://timesofindia.indiatimes.com/india/india-us-relationship-at-historic-high-says-pentagon-officials/articleshow/108664617.cms

THE TIMES OF INDIA

Fri, 22 Mar 2024

IAF’s Gagan Shakti War Drill from April 1

To test war preparations and firing capabilities, the Indian Air Force (IAF) will organise a war drill ‘Gagan Shakti’ from April 1 to 10 at the Pokhran field firing range in Jaisalmer.

Gagan Shakti is the IAF’s biggest war exercise after Vayu Shakti. It will be organised at Bhuj in Gujarat, Ladakh, western front and northeast front in Arunachal Pradesh and other areas in which Tejas, Rafale, Jaguar, Mirage, MiG-29 fighter planes, cargo flights, ALH, LCH, fighter helicopters, drones and other equipment made under Make in India will be tested.

These fighter planes and helicopters taking off from different places will hit the pseudo targets of the enemies in the Thar Desert. This exercise is based on air support, network centric warfare, attack, counter attack, and joint operation with other wings.

In this wargame, the air force chief and other army, and IAF senior officers will be present. This exercise is organised once every five years in active participation with the Army and Navy.

https://timesofindia.indiatimes.com/city/jaipur/iafs-gagan-shakti-war-drill-from-april-1/articleshow/108690306.cms

ThePrint

Thu, 21 Mar 2024

UAE-based Firm & Indian Start-up Join Hands to Deliver High Altitude Pseudo Satellite

UAE-based Mira Aerospace and Indian start-up VEDA Aeronautics have come together to offer High Altitude Pseudo Satellite (HAPS) solutions designed for the Indian market, both in the military and the civilian space.

Sources in the defence and security establishment told ThePrint that the project is being handheld by the Indian military and the HAPS has successfully carried out flights over the Pokhran Test Range at 12 km above the ground. Conducted in March last year, the test marked the only flight of an HAPS in the Indian stratosphere, said sources.

The Indian Air Force (IAF) is looking at acquiring a HAPS solution capable of carrying a minimum 35 kg payload and sustaining operations at an altitude of 18,000 m above sea level for a minimum of 30-45 days.

Running purely on solar power and flying above the clouds at 16-20 km autonomously for months at a stretch, an HAPS platform will fill a capability gap between satellites and HALE (High Altitude Long Endurance) UAVs.

Developed under the Ministry of Defence's Rs 1,000 crore 'Make-I project', which entails 90 percent of government funding, the HAPS would be used for strategic persistent monitoring of India's borders.

The HAPS UAV is part of a new genre of solar-powered platforms being designed across the world for persistent surveillance, communications, and scientific missions.

Both the IAF and the Navy are on board with the project and are looking to acquire this capability for the short- and long-term.

Sources said the security establishment along with the IAF is closely monitoring the project and handholding the players.

As part of this project, Mira Aerospace — a joint venture of Bayanat and UAVOS — and VEDA Aeronautics announced a collaboration to deliver the world's most advanced HAPS solutions designed for the Indian market.

"Under this agreement, the companies have committed to deliver a HAPS platform specific to the Indian market within the first half of 2024. Mira Aerospace and VEDA Aeronautics previously performed test flights in the Indian airspace, where the technology demonstrator HAPS unit flew in the Indian stratosphere. This test continues to be the only such flight in India to date," said a press statement by Mira Aerospace Thursday.

VEDA Aeronautics, a winner of the IAF's 'Mehar Baba' swarm drone competition, had last year secured a Rs 300-crore project from the force to deliver a jet-powered swarm drone system for punitive strikes.

Incidentally, the National Aerospace Laboratories (NAL), established by the government's Council of Scientific and Industrial Research (CSIR) is also working on a similar project but that could take time given the involvement of multiple facets of technology in this project.

As reported by ThePrint earlier, Bengaluru-based NewSpace Research and Technologies Pvt Ltd (NRT) is also working on HAPS, and in December last year carried out its first flight lasting over 21 hours.

The project is being spearheaded under the Innovation for Defence Excellence (iDEX) initiative of the defence ministry. Under this, NRT has signed a contract for an initial proof of concept demonstration, which targets a solar-powered flight lasting longer than 48 hours.

Sources explained that there are multiple dynamics that come into play when it comes to flying at an altitude of above 10,000 m.

“Stratosphere brings in multiple dynamics. The battery is under too much of a pressure along with the frame itself. There are multiple complications which arise and hence the Veda HAPS managing to fly in the stratosphere is important. Now the plan is for them to bring forward the phase-2 product which will fly for a longer duration,” said one source.

https://theprint.in/defence/uae-based-firm-indian-start-up-join-hands-to-deliver-high-altitude-pseudo-satellite/2010030/

Business Standard

Thu, 21 Mar 2024

China under Cyberattack, 100s of Govt Units and Firms Compromised: Report

Citing a recent case where an unnamed Chinese technology company was targeted by a foreign hacking group for cyber extortion, China's Ministry of State Security (MSS) on Thursday warned that the networks of "hundreds" of other Chinese businesses and government units have also been infiltrated by these overseas hackers, in preparation for "larger scale criminal activities".

The warning was issued by the MSS on Thursday through a message on its official WeChat account. The intention of the message was to raise public awareness about hacking and cyber-ransom risks from overseas, which the state security authority said could cause "huge economic losses and leakage of sensitive information", especially given the "rampant" cyberattacks by foreign agencies in recent years.

The news was first reported by the Global Times, which comes under the Chinese Communist Party's flagship newspaper, the People's Daily. Hong Kong-based South China Morning Post also confirmed the development.

The MSS also warned that China's national security could be "severely" endangered if sensitive or secret information fell into the hands of foreign spy agencies or "someone with an ill intention".

The warning by the MSS comes at a time when China and the US have accused each other of state-backed cyberattacks, with both countries expanding their cybersecurity efforts.

MSS' WeChat post gave an example of a "hi-tech enterprise" that was recently blackmailed after its data and information systems were encrypted and locked by the aforementioned overseas hacking group. The company's daily production and business operations were also interrupted.

The MSS warned that its investigations have found that in addition to the ransomware attack against the aforementioned firm, "the foreign hacking group has also infiltrated hundreds of networks of domestic business and government units, in preparation for larger scale criminal activities".

However, the state security authority did not reveal this hacking group's location or identity.

The MSS went on to urge people and organisations to report any cyberattacks or ransom demands to China's national security authorities.

Earlier this week, the MSS had also said that Chinese authorities have the power to freeze assets or impose other sanctions if foreign organisations or individuals "attack, invade, interfere (with), or damage" China's information infrastructure.

https://www.business-standard.com/external-affairs-defence-security/news/china-under-cyberattack-100s-of-govt-units-and-firms-compromised-report-124032100909_1.html

THE ECONOMIC TIMES

Thu, 21 Mar 2024

China Expanding Military, Nuke Arsenal, Prepared for Taiwan Invasion by 2027, US Admiral Warns

A top US admiral has issued a stark warning about China's military and nuclear ambitions, indicating that Beijing is ramping up its military and nuclear capabilities to levels unseen since World War II. Admiral John Aquilino, leader of the Indo-Pacific Command, testified before the US House Armed Services Committee, highlighting China's readiness to invade Taiwan by 2027.

China's Military Buildup and Ambitions

Despite economic challenges, China has significantly increased its defense budget, which now exceeds $223 billion, marking a 16% increase in recent years. Aquilino reported that since he assumed command three years ago, the People’s Liberation Army (PLA) has bolstered its forces with over 400 fighter aircraft, more than 20 major warships, and has doubled its inventory of ballistic and cruise missiles since 2020.

"All indications point to the PLA meeting President Xi Jinping’s directive to be ready to invade Taiwan by 2027," Aquilino stated. He highlighted the PLA's rehearsal of various operations against Taiwan, including simulating encirclement tactics with maritime and air blockades.

Global Concerns and US Response

US lawmakers and officials have expressed growing concerns about Xi Jinping's intentions regarding Taiwan, particularly in light of his goal for China's military to become a "world-class force" by 2027. The US intelligence community believes that while China is determined to reunify Taiwan with the mainland, it prefers to avoid military conflict.

Representative Mike Rogers, chair of the House Armed Services Committee, emphasized China's significant military advancements, including the deployment of modern systems like hypersonic weapons and fifth-generation fighters. He also highlighted China's partnership with Russia, which has provided economic and security assistance for the invasion of Ukraine.

Taiwan's Response and Global Preparedness

Taiwan has detected increased Chinese military activity, with 32 Chinese military aircraft and five naval ships operating around the island in a 24-hour period. Taiwan's armed forces remain vigilant, employing patrol aircraft, Navy vessels, and coastal missile systems in response to these activities.

The US and its allies have been preparing for potential military conflicts between Taiwan and China in recent years. Taiwan, a self-governing island with direct presidential elections, has been a point of contention, as China considers it a "sacred and inseparable part" of its territory.

https://economictimes.indiatimes.com/news/defence/china-expanding-military-nuke-arsenal-prepared-for-taiwan-invasion-by-2027-us-admiral-warns/articleshow/108679311.cms

ARMY TECHNOLOGY

Thu, 21 Mar 2024

Germany Enhances Air Defence with $1.2 Bn Patriot Contract from RTX

Germany has inked a contract with RTX subsidiary Raytheon to fortify its air defence capabilities and acquire Patriot air and missile defence systems. Valued at $1.2bn, the deal reveals Germany's commitment to modernise its defence infrastructure, aligning closely with Nato's collective security objectives.

On 4 January, Nato secured a $5.6bn deal with COMLOG, a joint venture between Raytheon and MBDA, to bolster Europe's air defence capabilities with 1,000 Patriot Guidance Enhanced Missiles (GEM-Ts) as part of the Sky Shield Initiative. Beneficiaries include Germany, the Netherlands, Romania, and Spain, with Spain also investing in the latest PAC-3 variant.

The contract entails the delivery of Patriot Configuration 3+ radars, launchers, command and control stations, and associated spares and support services. This infusion of technology is poised to enhance Germany's existing air defence network, providing a shield against various airborne threats. Tom Laliberty, president of land and air defence systems at Raytheon, emphasised the broader implications of the agreement, stating: "This contract reflects the global emphasis on advanced air and missile defence capabilities and the steadfast confidence in Patriot. With this expansion, Germany will modernise its own significant air defence, enhance its interoperability with allies, and further strengthen a core Nato mission."

The Patriot defence system has been the cornerstone of air defence for numerous nations worldwide, including the United States and Ukraine. Its ability to effectively counter threats ranging from long-range cruise missiles to tactical ballistic missiles shows its capability to safeguard airspace against security challenges.

According to GlobalData's intelligence on the global missiles and missile defence systems market, RTX Corp (RTX), the third highest revenue earner over 2023–33, is anticipated to account for earnings worth $30.82bn owing to Poland, Switzerland, Romania, and Spain's procurement of the MIM-104 Patriot missile defence system.

The system ensures readiness to confront threats through continuous investment and technological advancements by Patriot partner nations.

As geopolitical tensions persist and threats to international security evolve, investments in air and missile defence capabilities have assumed greater significance. The contract between Germany and Raytheon represents a proactive step towards enhancing regional security and fostering closer collaboration within the NATO alliance.

https://www.army-technology.com/news/germany-enhances-air-defence-with-1-2bn-patriot-contract-from-rtx/?cf-view

THE TIMES OF INDIA

Fri, 22 Mar 2024

ISRO Completes 2nd Key Landing Experiment of Reusable Launch Vehicle

The Indian Space Research Organisation (Isro) early Friday achieved a significant milestone in the development of reusable launch vehicle (RLV) technology with the successful completion of the second landing experiment, the RLV-LEX-02.

TOI first reported that this test would happen in its Mar 16 edition.

Conducted at 7.10am at the Aeronautical Test Range (ATR) in Chitradurga's Challakere, some 200km from Bengaluru, the second experiment in the series demonstrated the autonomous landing capability of the RLV from "off-nominal initial conditions"."Building upon the success of the RLV-LEX-01 mission last year, the RLV-LEX-02 experiment involved more challenging maneuvers and dispersions, requiring the vehicle to correct both cross-range and downrange deviations before landing autonomously on the runway," Isro said.

The winged vehicle, now being called Pushpak, was lifted by an Indian Air Force Chinook helicopter and released from an altitude of 4.5 km, 4 km away from the runway.

After release, Pushpak autonomously approached the runway, making necessary cross-range corrections. It then landed precisely on the runway, coming to a halt with the aid of its brake parachute, landing gear brakes, and nose wheel steering system.

"This mission successfully simulated the approach and high-speed landing conditions of an RLV returning from space. With the RLV-LEX-02, Isro has re-validated its indigenously developed technologies in areas such as navigation, control systems, landing gear, and deceleration systems, which are essential for performing a high-speed autonomous landing of a space-returning vehicle," Isro said.

Significantly, the winged body and all flight systems used in the RLV-LEX-01 mission were reused in the RLV-LEX-02 mission after necessary certifications and clearances, demonstrating the reuse capability of flight hardware and systems.

The mission was accomplished by the Vikram Sarabhai Space Centre (VSSC), the Liquid Propulsion System Centre (LPSC), and the ISRO Inertial Systems Unit (IISU), with collaboration from various agencies, including the Indian Air Force, ADE, ADRDE, and CEMILAC.

Isro chairman S Somanath congratulated the team for the flawless execution while VSSC director S Unnikrishnan Nair, highlighted that through this repeated success, Isro could master the terminal phase maneuvering, landing, and energy management in a fully autonomous mode, which is a critical step towards the future development of an RLV.

https://timesofindia.indiatimes.com/india/isro-completes-2nd-key-landing-experiment-of-reusable-launch-vehicle/articleshow/108692653.cms

THE ECONOMIC TIMES

Thu, 21 Mar 2024

Today Astronauts are from IAF, Tomorrow Research Scientists too would Don the Role: ISRO Chief

The country's astronauts at present are from the Indian Air Force but very soon research scientists would also don this role when the human space programme will begin running in a continuous manner, Indian Space Research Organisation chairperson S Somanath said on Thursday.

Prime Minister Narendra Modi had, on February 27, revealed the names of the four astronauts who are currently training for India's first-ever human space flight mission 'Gaganyaan'. The four, Group Captains Prasanth Nair, Angad Pratap, Ajit Krishnan and Wing Commander Shubhanshu Shukla are from the IAF.

Answering a query on qualifications to become an astronaut, Somanath said, "Today, astronauts are coming from the Indian Air Force and they are pilots. Tomorrow, when we will start out human space programme in a continuous manner, we will require research scientists etc." "You can become scientific specialist to go on board (a spacecraft) and become an astronaut. We are starting a space station. You can become an astronaut to do specific things. You can become biology scientist and become space astronaut.

Become a physicist, do experiments and become space scientist," he added. Somanath was addressing the valedictory function of 'Space on Wheels' organised by Vigyan Bharti Vidarbha Pradesh Mandal in association with ISRO. Hailing the success of the Chandrayaan-3 project, Somanath said India was embracing technology as an important element in its ascend to world leadership. Space technology is India's torchbearer, Somanath, said, adding the country was working towards sending a man to moon by 2040.

https://economictimes.indiatimes.com/news/science/today-astronauts-are-from-iaf-tomorrow-research-scientists-too-would-done-the-role-isro-chief/articleshow/108685353.cms

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