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Defence Strategic: National/International



Press Information Bureau
Government of India

Ministry of Defence

Sun, 24 Sep 2023

Chief of Defence Staff Visits Karwar Naval Base & Aircraft Carrier INS Vikramaditya

Reviews progress of critical infrastructure & other strategic initiatives

Chief of Defence Staff (CDS) General Anil Chauhan visited the Naval Base at Karwar and aircraft carrier INS Vikramaditya on September 23, 2023. He assessed the progress of critical infrastructure, accommodation and other strategic initiatives at the Naval Base.

The CDS interacted with the senior officers of Karwar Naval Area and Project Seabird. He underscored the importance of establishing the base as a forward-thinking and adaptable one, ensuring its readiness for future challenges with the ability to remain relevant and responsive to the evolving security concerns.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1960146>



Press Information Bureau
Government of India

Ministry of Defence

Fri, 22 Sep 2023

Indian Naval Ship Sahyadri Participates in the Maiden India-Indonesia-Australia Trilateral Maritime Exercise

Indian Navy's indigenously built warship INS Sahyadri, mission deployed in Indo-Pacific, participated in the maiden trilateral Maritime Partnership Exercise with the ships and aircraft from the Royal Australian Navy (RAN) and Indonesian Navy from 20 - 21 Sep 2023.

The trilateral exercise provided an opportunity for the three maritime nations to strengthen their partnership and improve their collective capability to support a stable, peaceful and secure Indo-Pacific region. The exercise also provided the opportunity for the participating navies to benefit from each other's experience and expertise. Complex tactical and manoeuvring exercises, cross-deck visits and cross-deck landings of integral helicopters were conducted for training of crew and enhancement of interoperability.

INS Sahyadri, the third ship of the indigenously designed and built Project-17 class multirole stealth frigates was built at Mazagon Dock Ltd, Mumbai and is commanded by Capt Rajan Kapoor.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1959717>



Press Information Bureau
Government of India

Ministry of Defence

Sun, 24 Sep 2023

“Exercise Yudh Abhyas-23” Set to Commence in Fort Wainwright, Alaska, USA – Indian Contingent Departs

The 19th edition of “EXERCISE YUDH ABHYAS” will be conducted from 25th September to 8th October 2023 in Fort Wainwright, Alaska, USA. It is an annual exercise conducted jointly by the Indian Army and the United States Army. The previous edition of the Exercise was conducted in Auli, Uttarakhand, India in November 2022.

Indian Army contingent comprising of 350 personnel will participate in this edition of the Exercise. The lead battalion from Indian side is affiliated to MARATHA Light Infantry Regiment. 1-24 Infantry Battalion of 1st Brigade Combat Team will participate from the US side. Both sides will practice a series of tactical drills to enhance interoperability in conducting UN peacekeeping operations. Personnel from both sides will also hold detailed discussions to share their experiences and best practices. The theme of the Exercise is ‘Employment of an Integrated Battle Group in Mountain/ Extreme Climatic Conditions’ under Chapter VII of United Nations mandate.

A Command Post Exercise and Expert Academic Discussions on selected topics will also form part of the schedule. The scope of the Field Training Exercise includes validation of Integrated Battle Groups against hostile forces at the Brigade level, Integrated Surveillance Grid at the Brigade/ Battalion level, employment of Heliborne/ Airborne elements and Force Multipliers, validation of logistics and casualty management during operations, evacuation and combat medical aid and other aspects as applicable to High Altitude Areas and Extreme Climatic Conditions.

The Exercise will also involve exchange of views and best practices in drills on a wide spectrum of combat skills including combat engineering, obstruction clearance, mine and Improvised Explosive Devices warfare. “EX YUDH ABHYAS-23” will facilitate both Armies to mutually learn from each other and further strengthen the bonds between the two armies.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1960137>



Mon, 25 Sep 2023

Defence Minister Rajnath Singh to Inaugurate 'Bharat Drone Shakti' Today, Induct C-295 Aircraft into IAF

Defence Minister Rajnath Singh will inaugurate the ‘Bharat Drone Shakti-2023’ exhibition at Hindon in Ghaziabad district of Uttar Pradesh today. During the event, the minister will formally

induct the C-295 transport aircraft into the Indian Air Force in the presence of top military officials, including IAF chief Air Chief Marshal VR Chaudhari, according to IAF officials.

The Indian Air Force and Drone Federation of India will co-host the two-day event, during which the Indian drone industry will present aerial demonstrations.

“‘Bharat Drone Shakti 2023’ will present the prowess of the Indian drone industry at full capacity hosting over 50+ live aerial demonstrations showcasing survey drones, agriculture drones, fire suppression drones, tactical surveillance drones, heavy-lift logistics drones, loitering munition systems, drone swarms, and counter-drone solutions and witness participation from more than 75 drone start-ups and corporates,” the Defence Ministry said.

The Bharat Drone Shakti is likely to be attended by around 5,000 people, including representatives from the central government, state departments, public and private industries, the armed forces, paramilitary forces, representatives from friendly nations, academicians, apart from students and drone enthusiasts.

According to reports, the C-295 transport aircraft is likely to replace the Indian Air Force AVRO fleet.

The ‘Bharat Drone Shakti 2023’ event will be in lines with India’s commitment to becoming a global drone hub by 2030.

According to the Defence Ministry, the usage of drones in India has witnessed an increase, both in the military as well as in the civil domain. The IAF currently uses Remotely Piloted Aircraft extensively for Intelligence Surveillance and Reconnaissance operations and its faith in emerging drone design and development capabilities in India are borne by its initiatives such as the Meher Baba Swarm Drone competition that sought to tap this indigenous potential.

<https://news.abplive.com/news/india/defence-minister-rajnath-singh-to-inaugurate-bharat-drone-shakti-induct-c-295-aircraft-into-iaf-1631703>



Sun, 24 Sep 2023

Defence Procurement Board Discusses Navy’s Proposal for a Second Vikrant-like Aircraft Carrier

The Defence Procurement Board (DPB) last week discussed the Indian Navy’s proposal for acquiring a second Vikrant-like aircraft carrier displacing 45,000 tonnes, and estimated to cost of around ₹40,000 crore, according to defence sources. However, the DPB is yet to clear it after which it will be put for final approval by the Defence Acquisition Council (DAC) headed by the Defence Minister, a source said. The DPB which met last Friday discussed the issue and they are expected to continue in the next meeting as well, the source said.

The project estimated to cost around ₹40,000 crore and will see some modifications and upgrades to the design of the country’s first Indigenous Aircraft Carrier (IAC) INS Vikrant, commissioned in September 2022, and will also be manufactured by Cochin Shipyard Limited (CSL), another source stated.

The 262m long and 62m wide INS Vikrant displacing 44,800 tonnes is powered by four General Electric LM2500 engines which give it a maximum speed of 28 knots and an endurance of 7,500 Nautical Miles. The ship uses an aircraft-operation mode known as Short Take Off But Arrested

Recovery (STOBAR) for which it is equipped with a ski-jump for launching aircraft, and a set of three 'arrestor wires' for their recovery onboard.

In addition, the Navy also operates the 44,500-tonne carrier INS Vikramaditya, which also employs the STOBAR mechanism, procured from Russia under a \$2.3-billion deal and inducted in November 2013.

Speaking on the sidelines of the Aero India air show in Bengaluru in February, Navy Chief Adm. R. Hari Kumar had said that the Navy is finalising plans to repeat-order a Vikrant-sized carrier, Indigenous Aircraft Carrier-2 (IAC-2), with some modifications. Given the long timelines, it may be inducted "close to the time INS Vikramaditya leaves service effectively becoming its replacement", he said while adding that the Navy would continue to study the need for a larger and more capable carrier.

The Navy which has for long based its force structure centered around three carriers, had envisaged an IAC-2 with a displacement of 65,000 tonnes and a Catapult Assisted Take Off But Arrested Recovery (CATOBAR) system for launching aircraft as well as full-electric propulsion.

However, a much bigger carrier with newer technologies would mean much higher cost and build time due to which the Navy has settled for a repeat of a Vikrant-sized carrier. The keel of Vikrant was laid in 2009, launched into water in 2013 and commissioned in 2022. With the experience gained from that, CSL officials had stated that a repeat order can be executed in seven to eight years.

In the past, the Parliamentary Standing committee on Defence had noted that three aircraft carriers is an "unavoidable requirement" to meet any eventualities and stated that taking into account the long coastline and hostile adversities on both sides of Indian peninsula, an aircraft carrier on both sides of coast is "quintessential" to uphold operational requirements.

<https://www.thehindu.com/news/national/defence-procurement-board-discusses-navys-proposal-for-a-second-vikrant-like-aircraft-carrier/article67341505.ece>

THE ECONOMIC TIMES

Mon, 25 Sep 2023

Army Looking for Lighter, Versatile Made in India Artillery Guns

The Army is looking for lighter, more versatile guns that will be developed and manufactured in India for its requirement of mainstay towed artillery. Interactions are on with the industry to draw up qualitative parameters for the requirements that is likely to be for close to 1,200 guns in future.

Sources in the defence establishment said the new Towed Gun System (TGS) being looked at will be more advanced than the DRDO-developed Advanced Towed Artillery Guns (ATAGS) which are currently in the process of being acquired.

"For the towed mainstay, we are looking at a gun that is lighter than the ATAGs. It will also be technically more advanced and versatile. We expect the industry to offer an even more advanced artillery gun in the future," sources said.

Industry sources added the Army has been in talks with manufacturers and several companies have come up with suggestions for the features in the futuristic artillery weapon. It is likely to have higher automation and accuracy than current systems in service.

The Army has a requirement of over 1,200-towed artillery guns but the acquisition could take place in smaller batches, as has been the case in other procurement cases as well. "A case for acquisition is expected to be moved after the industry interactions and drafting of technical requirements," sources said.

At present, the bulk of artillery guns in the Army are 130 mm field guns that are slowly being upgraded to 155mm under the Sharang project. Sources said that an order for 300 upgrades is still pending with the erstwhile Ordnance Factory Board and 25% of the guns have been delivered, with the rest promised to be handed over in two years.

The Army is also in process of awarding a contract for 155mm/52 Caliber Advanced Towed Artillery Gun System. The order for 307 of the indigenous guns is to be split between Tata and Bharat Forge who jointly developed it with DRDO. The Army is awaiting commercial offers from the two companies to take the process forward. The lowest bidder will be awarded 60% of the contract and the other company will get 40%, provided they match the price offered by the lower bidder.

<https://economictimes.indiatimes.com/news/defence/army-looking-for-lighter-versatile-made-in-india-artillery-guns/articleshow/103913813.cms>



Fri, 22 Sep 2023

India's SSS Defence Sets Sights on Exporting India's First Indigenous Sniper Rifles

In a significant stride towards enhancing self-reliance in defence manufacturing, Bangalore-based SSS Defence has unveiled India's first indigenous sniper rifle prototypes, aiming to equip the Indian armed forces. These pioneering sniper rifles represent a critical development in the 'Make in India' initiative, positioning India as a defence manufacturing and exporting hub. SSS Defence's Managing Director Satish R Machani expressed the vision of not only catering to India's defence needs but also becoming a global arms exporter, emphasising the company's robust Research and Development capabilities.

These groundbreaking sniper rifles have garnered considerable attention for their potential to redefine precision shooting capabilities, a crucial aspect of modern warfare. Sniper rifles play an indispensable role in the Indian Army's arsenal, enabling long-range engagements and providing a tactical edge in diverse combat scenarios. Some of the sniper rifles currently in use by the Indian Army include the Dragunov, IMI Galil, Heckler & Koch PSG1, Sig Sauer SSG 3000, and Beretta Scorpio TGT, each offering distinct features tailored to meet the evolving requirements of contemporary warfare.

Dragunov, IMI Galil, Heckler & Koch PSG1: India's Sniper Arsenal

The Dragunov, a semi-automatic sniper rifle renowned for its reliability and performance, stands as a cornerstone of the Indian Army's sniping capabilities. Originating in the Soviet Union, it offers precise firepower and an effective firing range of approximately 800 meters, enabling snipers to engage distant targets with accuracy. Its semi-automatic action ensures rapid follow-up shots, making it a valuable asset in dynamic combat situations.

The IMI Galil sniper rifle, hailing from Israel, distinguishes itself with versatility and reliability. Its gas-operated action allows for accurate and swift follow-up shots, enhancing snipers' effectiveness

in various operational environments. The rifle's ergonomic design, adjustable stock, and integrated bipod contribute to stability and manoeuvrability, making it an excellent choice for the Indian Army.

The Heckler & Koch PSG1 represents the pinnacle of sniper rifle technology, offering advanced features and technological innovations. Equipped with a gas-delayed blowback action, match-grade trigger, and customizable components, this rifle provides unparalleled precision and adaptability. While mastering its intricate features demands specialized training, it empowers Indian Army snipers with exceptional capabilities.

The Sig Sauer SSG 3000, highly versatile and customizable, stands as a testament to innovation. Its adjustable stock, customizable trigger, and modular design cater to snipers' individual preferences. Compatibility with various sighting systems and accessories ensures seamless integration into diverse operational scenarios, making it a valuable asset for the Indian Army.

Finally, the Beretta Scorpio TGT, an embodiment of Italian craftsmanship, exemplifies accuracy, reliability, and longevity. Its meticulous design and construction instil confidence in Indian Army snipers, enabling precise engagements across a spectrum of combat environments.

These developments not only contribute to India's defence preparedness but also reflect the nation's commitment to fostering a self-reliant defence manufacturing ecosystem, setting the stage for potential arms exports in the future. As indigenous capabilities continue to evolve, they reinforce India's position as a rising player in the global defence industry.

<https://www.republicworld.com/india-news/general-news/indias-sss-defence-sets-sights-on-exporting-indias-first-indigenous-sniper-rifles-articleshow.html>



Sun, 24 Sep 2023

India Navy to Muscle up as Pak Gets Chinese Submarines

With Pakistan soon to acquire eight Chinese Yuan class submarines between 2023-2028, pressure has mounted on Mazagon Dock Shipbuilders (MDL) to conclude a deal for building three additional diesel-electric Kalvari class submarines with French Naval Group this year so that its submarine building capacity (currently 11) does not turn idle by the end of the year.

MDL is giving finishing touches to last of the six Kalvari (Scorpene) class submarine, INS Vagsheer, before commencement of sea trials, and has begun negotiations with Naval Group for the additional three submarines which will have features that are operation specific and with indigenous torpedos and air independent propulsion (AIP) for longer endurance. It is understood that the heavyweight indigenous torpedo and AIP are currently being tested in France for operational validation.

As of now Pakistan has one old French Agosta 70 (called PNS Hurmat) and another old and upgraded Agosta 90 B (called PMS Hamza) with French single use MESMA AIP operational . It also has four Yuan class diesel-electric submarines to join this year. The Yuan class submarines will induce a paradigm shift in Pakistan's sub-surface fleet as the 039 B submarine is equipped with AIP and, possibly, submarine-launched cruise missiles.

It is understood that the three additional submarines MDL is in talks for will have much more advanced features than those of the Kalvari class, which were ordered by India in 2005 on the basis

of A B Vajpayee government's 30-year submarine plan in 1999. The three subs, the acceptance of necessity for which were accorded by the Modi government in July, will possibly be seven meters longer than Kalvari class subs if the Navy wants a pure diesel-electric submarine, with additional batteries for staying submerged for longer periods or will be 10 meters long to house the AIP unit designed by DRDO. The new three submarines will have advanced optronics, electronic warfare suites and heavy weight torpedos with a range of 40 kilometers and higher explosive content. The new boats will also have advanced/upgraded SM-39 Exocet missiles with future boats equipped with SCALP 1000 km range submarine-launched cruise missiles. But there is more to this.

With Naval Group signing an MoU this July with MDL to build submarines in Mumbai dockyards to export to other countries, there is much excitement within the yard as through this joint venture India will export Scorpene class submarines to Indonesia, Malaysia and others. Naval Group has also signed an MoU with Kolkata based GRSE to build surface combatants such as destroyers and frigates under a joint venture and export these to third countries. This will ensure that the machine tooling capacity of the two dockyards does not erode for want of work orders.

With India's submarine force strength going down with ageing Shishumar (HDW) class and Sindughosh (Kilo) class submarines facing spare parts issues on account of Russia's Ukraine war, the Indian Navy needs more sub-surface combatants to protect its 7500 km coastline as well as pose deterrence threat to Pakistan and China. The Indian Kalvari class ships frequently patrol Pakistan's Makran coast, some six hours from Mumbai, and were operationally deployed outside Karachi and Gwadar harbor during Operation Balakot in 2019.

While the US Seventh Fleet Commander Vice Admiral Karl Thomas told the Malabar partners during 2023 exercise off the coast of Sydney that the US expects a military emergency in Taiwan in 2027, the Indian Navy is quite clear that Chinese patrols or carrier-based strike force with nuclear powered conventionally armed submarines will start patrolling the Indian Ocean by 2025-2026. It is for this very reason that India's indigenous submarine building capacity needs to be promoted, say experts, adding that as it is the lynchpin of PM Narendra Modi's "Atmanirbhar Bharat" plan in defence and security.

<https://www.livemint.com/news/india/india-navy-to-muscle-up-as-pak-gets-chinese-submarines-11695520912684.html>



Sat, 23 Sep 2023

Artillery Guns, Drones and Rifles Part of India's Latest Export Push

India will next week highlight the advances made in the indigenous defence manufacturing sector and showcase a range of locally produced weapons and systems before 35 countries with vital stakes in the Indo-Pacific region as part of an overarching drive to get a toehold in new markets and raise the country's defence exports to meet goals, senior officials aware of the matter said on Friday.

The military hardware to be displayed by the Indian Army at the Indo-Pacific Armies Chiefs Conference (IPACC) to be held on September 26-27 in Delhi to tap export opportunities includes artillery guns, a variety of drones, counter unmanned aerial systems, anti-drone guns and jammers,

assault weapons, sniper rifles and ballistic protection gear, said one of the officials cited above, requesting anonymity.

This gathering, being jointly hosted by the Indian and US armies, will be the largest conference for land forces in the region, with 20 countries represented by their army chiefs and the rest by vice chiefs or deputy commanders. It will bring together the top military leaders to enhance collaboration and understanding in the Indo-Pacific with the goal of promoting peace, security and prosperity across the region.

India's defence sector is characterised by a firm export push and an unprecedented cut back on imports under a multi-pronged self-reliance drive, said a second official, who also asked not to be named.

"IPACC will be a great platform to tell the world how India's defence manufacturing sector is coming of age, and the country is ready to meet the military needs of other nations," the second official added. The countries taking part in the conference include the US, the UK, France, Canada, Japan, Thailand, Malaysia, Indonesia, Australia, New Zealand, Bangladesh, the Maldives, and Papua New Guinea.

The hardware on display will include blast containment boxes, portable firing ranges, machine pistols, robotic equipment, automatic weapon cleaning systems and indoor shooting ranges, the first official said. Around 30 Indian vendors will be a part of the equipment display.

The defence ministry is tapping the government-to-government channel to drive defence exports and unlock new opportunities for domestic players, said Vivek Krishnan, CEO, SSS Defence, a Bengaluru-based firm.

"Earlier, the government-to-government channel was used only to boost exports of defence public sector undertakings. Now the private sector is also prominently in the picture. Indian defence attaches have been given directions to push indigenous military hardware in new markets," added Krishnan. SSS Defence manufactures small arms, ammunition and weapon accessories, and has made inroads into some foreign markets.

India has set a defence export target of ₹35,000 crore by 2024-25, which experts believe is within the country's reach.

The locally made advanced towed artillery gun system (ATAGS) will be one of the highlights of IPACC's equipment display. The Defence Research and Development Organisation began the ATAGS project in 2013 to replace older army guns with a modern 155mm artillery gun. It partnered with two private firms --- Bharat Forge and Tata Advanced Systems --- to manufacture the gun, which has a range of 48 km.

The Indian Army is looking at inducting 307 of these 155mm/52-calibre howitzers for which a tender was floated in August and responses from vendors are expected by November.

India's military exports have risen sharply, and imports have recorded a drop on the back of policy initiatives and reforms. Exports grew 23 times between 2013-14 and 2022-23 (from ₹686 crore to ₹16,000 crore), while the spending on imported weapons and systems dropped from 46% of the total expenditure in 2018-19 to 36.7% in December 2022.

India is currently exporting military hardware to more than 85 countries, with around 100 domestic firms involved in the exports. Its exports include missiles, artillery guns, rockets, armoured vehicles, offshore patrol vessels, personal protective gear, a variety of radars, surveillance systems and ammunition. Equipment that holds export potential includes light combat aircraft, helicopters, even tanks.

India is exporting bullet-proof jackets to 34 countries including Australia, Japan, Israel and Brazil, ammunition (ranging from 5.56mm to 155mm) to around 10 countries including the United Arab Emirates, Egypt, Indonesia and Thailand, fast interceptor boats to Mauritius, Seychelles and the Maldives, and defence electronics to countries such as the US, the UK and France, according to defence ministry data.

India has taken several measures over the last four to five years to boost self-reliance in defence. These include imposing phased bans on import of weapons, creating a separate budget for buying locally made military hardware, increasing foreign direct investment from 49% to 74% and improving ease of doing business. India is eyeing a turnover of ₹1,75,000 lakh crore in defence manufacturing by 2024-25.

<https://www.hindustantimes.com/india-news/artillery-guns-drones-and-rifles-part-of-india-s-latest-export-push-101695410069601.html>

THE TIMES OF INDIA

Sun, 24 Sep 2023

Navies of India, US Explore Ways to Expand Cooperation

Ways to expand bilateral maritime security cooperation in sync with fast-expanding India-US strategic partnership figured prominently during Navy Chief Admiral R Hari Kumar's four-day visit to the US, officials said on Sunday. The Chief of Naval Staff visited the US from September 19 to 22 primarily to attend the 25th International Seapower Symposium (ISS).

"The visit of the Navy Chief to the US provided a significant opportunity for apex level navy-to-navy engagements for deepening bilateral cooperation as well as engaging with diverse partners across the Indo-Pacific," Indian Navy spokesperson Commander Vivek Madhwal said.

The ISS is hosted by the US Navy at US Naval War College, Newport, Rhode Island, to enhance its cooperation among like-minded navies to work towards the shared vision of an open and rules-based Indo-Pacific. On the sidelines of the ISS, Admiral Kumar also held bilateral meetings with his counterparts from various countries, including the US, Australia, Egypt, Fiji, Israel, Italy Japan, Kenya, Peru, Saudi Arabia, Singapore and the UK.

"The extensive engagements during the visit are a demonstration of the Indian Navy's steadfastness towards realising the vision for a free, open and inclusive Indo-Pacific," Madhwal said.

During the visit, extensive deliberations were also held towards exploring greater operational engagements between the Indian and the US navies at bilateral and multilateral exercises such as the Malabar, Sea Dragon, RIMPAC and Tiger Triumph.

The Rim of the Pacific Exercise (RIMPAC) is considered one of the largest international maritime warfare exercises. It is hosted by the US Navy's Indo-Pacific Command.

At the ISS, Admiral Kumar spoke extensively about the challenges of human resource management, with specific reference to recruitment and retention of trained personnel and India's initiatives towards addressing these through the Agnipath scheme, empowering women and driving the Indian Navy into a gender-neutral force, according to Madhwal.

The Indo-US defence ties have been on an upswing in the last few years.

In June 2016, the US designated India a "Major Defence Partner" paving the way for sharing of critical military equipment and technology.

The two countries have also inked key defence and security pacts over the past few years, including the Logistics Exchange Memorandum of Agreement (LEMOA) in 2016 that allows their militaries to use each other's bases for repair and replenishment of supplies.

The two sides also signed Comcasa (Communications Compatibility and Security Agreement) in 2018 which provides for interoperability between the two militaries and provides for the sale of high-end technology from the US to India.

<https://timesofindia.indiatimes.com/india/navies-of-india-us-explore-ways-to-expand-cooperation/articleshow/103911370.cms>

ThePrint

Sat, 23 Sep 2023

Delhi to Host over 30 Countries at Indo-Pacific Armies Chiefs Conference

The national capital will host over 30 countries for the Indo-Pacific Armies Chiefs Conference from September 25 to 27.

The event is aimed at exchanging views and developing mutual understanding among the Indo-Pacific partners, officers in the Indian Army said.

Representatives from over 30 participating countries will discuss issues of mutual interest at the meeting, the Army informed further. The conference will be a platform to exchange ideas and views on security, promote peace and stability in the Indo-Pacific region and develop mutual understanding and dialogue amongst the Indo-Pacific partners, officials added.

More than 20 chiefs of friendly armies are expected to take part in the main event, the officials said, adding that the participating countries include US, France and the UK

“The Indo-Pacific Armies Chiefs Conference is being held in New Delhi from September 25 to 27 where over 30 countries will be represented in discussing issues of mutual interest. This will be a platform to exchange ideas and views on security, promote peace and stability in the Indo-Pacific region and develop mutual understanding and dialogue amongst the Indo-Pacific partners. More than 20 Chiefs of friendly Armies are expected to take part in the main event including countries like the US, France and the UK,” the Army said in a statement.

<https://theprint.in/world/delhi-to-host-over-30-countries-at-indo-pacific-armies-chiefs-conference/1774534/>



Sat, 23 Sep 2023

Army Contingent Departs for Russia to Participate in Counter-Terrorism Meet

An Indian Army contingent, comprising 32 soldiers representing the 14 Rajputana Rifles, departed for Russia to participate in the ASEAN Defence Ministers Meeting Plus Expert Working Group on Counter Terrorism, the Ministry of Defence said in a statement.

The Counter Terrorism Field Training Exercise (FTX) 2023 will be conducted from September 25-30.

“Indian Army Contingent consisting of 32 personnel from a Battalion affiliated to the RAJPUTANA RIFLES departed for ASEAN Defence Ministers Meeting (ADMM) Plus Expert Working Group (EWG) on Counter Terrorism Field Training Exercise (FTX) 2023 scheduled to be conducted from 25th to 30th September 2023 in Russia,” the Ministry of Defence stated in a press release.

A multinational joint military exercise being hosted by Russia as a co-chair of the EWG along with Myanmar, the meeting was preceded by the Table Top Exercise of the ADMM Plus EWG on Counter-Terrorism at Nay Pyi Taw, Myanmar from August 2-4.

Since 2017, the ADMM Plus meets annually to allow dialogue and cooperation among the Association of Southeast Asian Nations (ASEAN) and Plus countries. The inaugural ADMM Plus was convened in Ha Noi, Vietnam on October 12, 2010.

This year ASEAN member states, along with the Plus Group, will be participating in the exercise, the Ministry stated.

The exercise will comprise a number of counter-terrorism drills, including the destruction of terrorist groups in a fortified area. The main objective of the exercise is strengthening and promoting regional cooperation in the field of counter-terrorism.

ADMM Plus EWG on Counter-terrorism 2023 will provide the Indian Army with a platform to share their expertise and best practices in counter-terrorism operations besides increasing cooperation between the other 12 participating countries.

The Indian Army is looking forward to an enriching professional experience from the exercise, the Ministry added in the release.

<https://www.aninews.in/news/world/asia/army-contingent-departs-for-russia-to-participate-in-counter-terrorism-meet20230923174650/>

THE HINDU
BusinessLine

Fri, 22 Sep 2023

Border Tension Aside, India & China to Participate in Multilateral Defence Exercise in Russia

Despite prevailing tensions with China, Indian and Chinese armies will participate in a 6-day-long multilateral exercise on counter-terrorism to be held in Vladivostok in Russia beginning Monday.

Over 30 Indian Army personnel, drawn from Rajputana Rifles, equipped with Made in India weapon systems along with those acquired from foreign sources, will depart on Saturday to take part in the multilateral exercise. The exercise would also include participation of army personnel from 13 countries, sources in the Indian Army said. Of them, besides India, China, and Russia, ten armies are from the Association of Southeast Asian Nations (ASEAN) -- Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam.

“Indian Army contingent will participate for the first time in the Joint Exercise from Sep to 30 Sep 23 at #Vladivostok, #Russia under the umbrella of #ASEAN Defence Ministers’ Meeting Plus Experts Working Group (ADMM plus EWG). The exercise is aimed to share expertise between

participating Armies & promote regional cooperation between #ASEAN countries.” the Indian Army wrote on X (formerly Twitter).

The visiting Indian Army contingent will be sharing practical aspects of counter-terrorism operations gained through decades-long deployment in Jammu & Kashmir and in the northeastern states. Sources in the Indian Army also revealed that during brainstorming sessions and tactical drills with the armies of other participating countries, its contingent will be open to new ideas. . The use of new technology in the counter-terrorism theatre would also form part of the drills that would be carried between September 25-26, said Indian Army sources. Like in any other joint exercises, the Rajputana Rifles would be carrying with them Made in India weapons which gives India an opportunity to showcase them before foreign armies, army sources explained.

Military diplomacy

The participation of Indian Army in the exercise is seen as an attempt by India to engage in military diplomacy to counter-balance influence of China in the ASEAN. This move comes despite New Delhi’s friendly bilateral defence ties individually with each of ASEAN’s member countries said Indian Army officials. The officials added that message to be conveyed is India’s huge regard for relations with other countries, especially with Russia despite the latter’s global isolation since the beginning of 18-month-long war with Ukraine, they observed.

This is, however, not the first time Indian Army would be participating in an exercise that involved China. Last September, armies of the two neighbouring adversaries also sweated out in “Vostok-2022” at Sergeyeysky, East Military District of Russia. At that point of time, troops from 7/8 Gorkha Rifles had joined the multilateral exercise that too saw participation Chinese People’s Liberation Army.

India also attended “Zapad exercise” in 2021, again in Russia that saw 17 countries such as China and Pakistan joining in for the drills.

The relations between India and China have slipped for worse since Galwan face off between the two armies in eastern Ladakh in May, 2020. The PLA troops clashed with Indian Army again on December 9, 2022, in the Tawang sector of Line of Actual Control (LAC), Arunachal Pradesh.

<https://www.thehindubusinessline.com/incoming/border-tension-aside-india-china-to-participate-in-multilateral-defence-exercise-in-russia/article67335184.ece>

THE TIMES OF INDIA

Sat, 23 Sep 2023

Eye on China, Quad Seeks ‘Free’ Indo-Pacific

In what was their second meeting this year, the Quad foreign ministers reiterated their commitment to a free, open, inclusive and resilient Indo-Pacific that is free from intimidation and coercion, and where disputes are settled in accordance with international law.

In the face of growing Chinese assertiveness, they pledged support for the principles of freedom, the rule of law, sovereignty and territorial integrity, and peaceful settlement of disputes, while opposing unilateral attempts to change the status quo.

“We seek to maintain and strengthen stability in the Indo-Pacific, where competition is managed responsibly,” they said in a joint statement after their meeting on the sidelines of the ongoing

UNGA session in New York. Quad foreign ministers had last met on the margins of the G20 foreign ministers' meeting in March this year in India.

The Quad foreign ministers—external affairs minister S Jaishankar, US secretary of state Antony Blinken, Australian foreign minister Penny Wong and Japanese foreign minister Kamikawa Yoko—also expressed deep concern over the “war raging” in Ukraine and mourned its terrible and tragic humanitarian consequences, while emphasising that the rules-based international order must respect the sovereignty and territorial integrity of all states.

While calling the threat of use of nuclear weapons unacceptable, they said they were deeply concerned also about the global food security situation and supported the efforts of the UN in the resumption of the Black Sea Grain Initiative (BSGI).

“We underscore the need for a comprehensive, just, and lasting peace in Ukraine in accordance with international law, consistent with the principles of the UN Charter. In the context of this war, we concur that the use, or threat of use, of nuclear weapons would be unacceptable,” they said.

<https://timesofindia.indiatimes.com/india/eye-on-china-quad-seeks-free-indo-pacific/articleshow/103881344.cms>



Fri, 22 Sep 2023

Russia Plans Huge Defence Spending Hike in 2024, Bloomberg Reports

Russia plans a huge hike in defence spending next year, swelling to 6% of gross domestic product (GDP), up from 3.9% in 2023 and 2.7% in 2021, Bloomberg News reported on Friday.

Reuters could not immediately verify the report.

Moscow doubled its target for defence spending in 2023 to more than \$100 billion, Reuters reported exclusively in August, as the costs of the war in Ukraine spiral and place growing strain on Moscow's finances. Rising war costs are supporting Russia's modest economic recovery this year with higher industrial production, but have already pushed budget finances to a deficit of around \$24 billion - a figure compounded by falling export revenues.

The government was due to discuss draft budget proposals on Friday.

<https://www.reuters.com/business/aerospace-defense/russia-plans-huge-defence-spending-hike-2024-bloomberg-2023-09-22/>



Fri, 22 Sep 2023

NATO and the European Union Meet to Discuss Deepening Cooperation on Cyber Defence

“Cyberspace is marked by constant competition,” said David van Weel, Assistant Secretary General for Emerging Security Challenges. “Effective defence in cyberspace requires a more proactive

approach, including a mind-set shift towards more engagement with partners. Cyberspace can be only defended in a collaborative spirit. Greater synergies between NATO and the EU cyber initiatives enhance the wellbeing and security for our citizens, our economies, including protection of critical infrastructure, as well as our cyber defences.”

NATO and EU officials discussed recent policy developments, and agreed to continue working closely together on enhancing shared situational awareness, cyber capacity building, and preventing, deterring and responding to cyber threats. The talks were chaired by Mr van Weel and Benedikta von Seherr-Thoss, Managing Director for Peace, Security and Defence, at the European External Action Service.

At the Vilnius Summit, Allies took important decisions to strengthen cyber defence as part of NATO’s overall deterrence and defence posture, including committing to strengthening national cyber defences through the Enhanced NATO Cyber Defence Pledge. Allies have also launched NATO’s new Virtual Cyber Incident Support Capability to support national mitigation efforts in response to significant malicious cyber activities. This provides Allies with an additional tool for assistance.

https://www.nato.int/cps/en/natohq/news_218654.htm

Science & Technology News



Fri, 22 Sep 2023

ISRO’s Aditya L1 Mission: Spacecraft may Need Trajectory Correction Manoeuvre as Anomalies Kick in

After the resounding success of India’s Chandrayaan-3 mission, all eyes are on ISRO’s Aditya L1 mission. This is India’s first space based mission to study the Sun.

The Indian space agency on Monday informed that Aditya L1 mission spacecraft has started collecting data which will assist the scientists in analysing the behaviour of particles that surround Earth. ISRO said that the sensors of an Aditya L1 instrument has started measuring supra-thermal and energetic ions and electrons at distances greater than 50,000 km from Earth.

Aditya L1 spacecraft needs Trajectory Correction Manoeuvre

The Aditya L1 spacecraft was put into a trajectory to reach the Sun-Earth Lagrangian (L1) point Tuesday. However, scientists have said that the spacecraft could require a Trajectory Correction Manoeuvre (TCM) soon due to the anomalies that may have crept into the early trajectory, The Indian Express reported.

Almost two days Trans-Lagrangian Point 1 Insertion (TL1I) manoeuvre was carried out on September 19 the scientists at ISRO were waiting for data at ground stations on Thursday to see the trajectory they had managed to achieve and estimate the timing and amount of trajectory correction that will be required.

U R Rao Satellite Centre Director M Sankaran has said that the correction manoeuvre will be done. “We have to decide when it will be done after the assessment of information after 48 hours,” he added.

What are trajectory correction manoeuvres?

Trajectory correction maneuvers, often referred to as trim manoeuvres, are often employed in deep space missions. These critical manoeuvres are vital in adjusting the flight path of spacecraft following their initial trajectory insertion. The adjustment is required to ensure the spacecraft follows a precise course towards its intended destination, such as the L1 point, located 1.5 million kilometers on the journey to the Sun.

The Aditya L1 will be injected into an orbit around L1 after about 110 days. In order to get this right, the spacecraft needs to travel to stay on the planned trajectory.

Anomalies in Aditya L1 mission

The Indian Express in its report said that there were some anomalies in the data for orbit determination and the alignment of ground station antennas. This led to a trajectory correction manoeuvre anticipated in the upcoming days for the Aditya L1 mission.

Earlier, ISRO said that the spacecraft’s Trans-Lagrangian Point 1 Insertion (TL1I) manoeuvre was carried out successfully and it was on a trajectory that would take it to the Sun-Earth L1 point. It was the fifth consecutive time ISRO has successfully transferred an object on a trajectory toward another celestial body or location in space.

However, scientists found that there could be some trajectory errors which will require correction. Sources have said that the anomalies seen in the orientation of antennas at ground stations in India and the absence of support from Nasa’s Jet Propulsion Laboratory’s ground stations could have caused errors in orbit-raising manoeuvres by Aditya L1 spacecraft.

<https://www.financialexpress.com/life/science-isros-aditya-l1-mission-spacecraft-may-need-trajectory-correction-manoevre-as-anomalies-kick-in-3251719/>

THE TIMES OF INDIA

Sun, 24 Sep 2023

Resistance to Last-Resort Antibiotics Growing in India, Says ICMR Report

The majority of the country’s sickest patients may no longer benefit from carbapenem, an antibiotic that effectively treated pneumonia and septicemia until a decade back, according to the latest Indian Council of Medical Research (ICMR) study on antimicrobial resistance.

The study, released on Friday, found that abuse of antimicrobials — be they antibiotics, antivirals or antifungals — had led to widespread resistance to these drugs in the community. ICMR gathered data from 21 tertiary-level hospitals across the country, including BMC-run LTMG Hospital in Sion and Hinduja Hospital in Mahim, between January 1 and December 31, 2022.

Around 1 lakh culture isolates from ICU patients were studied to analyse hospital-acquired infections, finding 1,747 pathogens, bacterium Ecoli being the most common culprit followed by another bacterium Klebsiella pneumoniae.

The report said that if eight out of 10 patients with a drug-resistant E-coli infection responded to carbapenem in 2017, only six responded in 2022. It's worse with infections caused by drug-resistant avatars of bacterium *Klebsiella pneumoniae*: as against six out of 10 finding the medicine helpful, only four could be helped by it in 2022.

“Even if the new antibiotics for E-coli developed in the West come to India right now, they may not work against a few drug-resistant Indian E-coli strains,” said senior ICM scientist Dr Kamini Walia, one of the main authors of the study.

She, though, said the 2022 report had some heartening findings amidst widespread antimicrobial resistance in India. “We are happy to say that resistance patterns of major super bugs haven't changed over the last five to six years, but the unfortunate part is that we are not seeing any declining trends.”

Secondly, the scientists found a molecular mechanism of resistance in all superbugs. “We found that NDM (New Delhi metallo-beta-lactamase) is frequently seen in isolates of multi-drug-resistant *Pseudomonas*. This is a unique phenomenon seen only in India and it can help antibiotic developers tailor new drugs for Indian needs,” added Dr Walia.

Doctors also believe that indiscriminate use and prescription of broad-spectrum antibiotics is the worst culprit. “Even the commonly used drugs for diarrhoea such as norflox or oflox are not as widely effective,” said Dr Walia. “In fact, if we were to introduce a new drug, and use it the same way that used carbapenem, it will soon lose its potency.”

In the West, a resistance level between 10% and 20% is considered to be alarming, but in India doctors would prescribe the medicine even if there are reports of 60% resistance levels. “Antibiotic prescription should be taken more seriously by doctors and should only be given to patients only if needed,” she said.

<https://timesofindia.indiatimes.com/home/science/resistance-to-last-resort-antibiotics-growing-in-india-says-icmr-report/articleshow/103897885.cms>



Sun, 24 Sep 2023

NASA Capsule Carrying First Asteroid Samples Lands on Earth

NASA's first asteroid samples fetched from deep space parachuted into the Utah desert on September 24 to cap a seven-year journey.

In a flyby of Earth, the Osiris-Rex spacecraft released the sample capsule from 100,000 km (63,000 miles) out. The small capsule landed four hours later on a remote expanse of military land, as the mothership set off after another asteroid.

Live Now: #OSIRISREx delivers the US's first pristine asteroid sample after a 3.86 billion-mile journey. Watch landing live from @DeptOfDefense's Utah Test & Training Range. Use #AskNASA to send us your questions. <https://t.co/biS33u6RtP>

— NASA (@NASA) September 24, 2023

“We have touchdown!” Flight Control announced, immediately repeating the news since the landing occurred three minutes before anticipated. Officials later said the orange striped parachute

opened four times higher than anticipated — around 20,000 feet (6,100m) — which led to the early touchdown.

Scientists estimate the capsule holds at least a cup of rubble from the carbon-rich asteroid known as Bennu, but won't know for sure until the container is opened. Some spilled and floated away when the spacecraft scooped up too much and rocks jammed the container's lid during collection three years ago.

Japan, the only other country to bring back asteroid samples, gathered about a teaspoon in a pair of asteroid missions.

The pebbles and dust delivered on September 24 represent the biggest haul from beyond the moon. Preserved building blocks from the dawn of our solar system 4.5 billion years ago, the samples will help scientists better understand how Earth and life formed.

Osiris-Rex, the mothership, rocketed away on the \$1 billion mission in 2016. It reached Bennu two years later and, using a long stick vacuum, grabbed rubble from the small roundish space rock in 2020. By the time it returned, the spacecraft had logged 6.2 billion km (4 billion miles).

NASA's recovery effort in Utah included helicopters as well as a temporary clean room set up at the Defense Department's Utah Test and Training Range. The samples will be flown on September 25 morning to a new lab at NASA's Johnson Space Center in Houston. The building already houses the hundreds of kilogrammes of moon rocks gathered by the Apollo astronauts more than a half-century ago. The mission's lead scientist, Dante Lauretta of the University of Arizona, will accompany the samples to Texas. The opening of the container in Houston in the next day or two will be "the real moment of truth," given the uncertainty over the amount inside, he said ahead of the landing.

Engineers estimate the canister holds 250g of material from Bennu, plus or minus 100g. Even at the low end, it will easily surpass the minimum requirement of the mission, Mr. Lauretta said.

It will take a few weeks to get a precise measurement, said NASA's lead curator Nicole Lunning.

NASA plans a public show-and-tell in October.

Currently orbiting the sun 81 million km (50 million miles) from Earth, Bennu is about one-half of a km (one-third of a mile) across, roughly the size of the Empire State Building but shaped like a spinning top. It's believed to be the broken fragment of a much larger asteroid.

During a two-year survey, Osiris-Rex found Bennu to be a chunky rubble pile full of boulders and craters. The surface was so loose that the spacecraft's vacuum arm sank a foot or two (0.5 meters) into the asteroid, sucking up more material than anticipated and jamming the lid.

These close-up observations may come in handy late in the next century. Bennu is expected to come dangerously close to Earth in 2182 — possibly close enough to hit. The data gleaned by Osiris-Rex will help with any asteroid-deflection effort, according to Mr. Lauretta.

Osiris-Rex is already chasing the asteroid Apophis, and will reach it in 2029.

This was NASA's third sample return from a deep-space robotic mission. The Genesis spacecraft dropped off bits of solar wind in 2004, but the samples were compromised when the parachute failed and the capsule slammed into the ground. The Stardust spacecraft successfully delivered comet dust in 2006. NASA's plans to return samples from Mars are on hold after an independent review board criticized the cost and complexity. The Martian rover Perseverance has spent the past two years collecting core samples for eventual transport to Earth.

<https://www.thehindu.com/sci-tech/science/nasa-capsule-bearing-asteroid-sample-in-imminent-return-to-earth/article67341459.ece>

