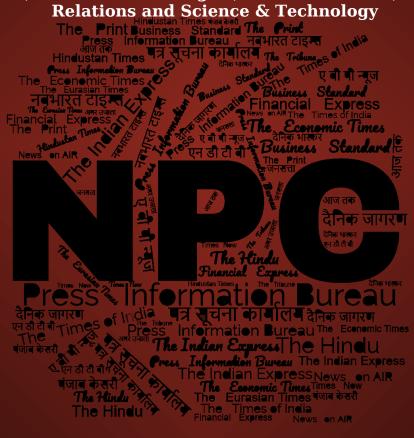
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Defence News

Defence Strategic: National/International

THE TIMES OF INDIA

Mon, 07 Aug 2023

Defence Minister to Dedicate to Nation 74 Projects of BRO Including Air Strips, Tunnels: DG BRO

Defence minister Rajnath Singh will soon dedicate to the nation 74 projects of the Border Roads Organisation (BRO) including airstrips, tunnels and bridges along the northern and western borders, BRO Director General Rajeev Chaudhry said on Monday.

Lieutenant General Chaudhry was speaking after an inspection of the nearly half-a-kilometre-long fully constructed bridge on River Devak that connects areas along the International Border (IB) with the mainland.

"Date (for the inauguration of Devak bridge) will be finalised soon. It will be inaugurated and dedicated to the nation. The defence minister will be visiting the Jammu region. He will also be inaugurating 74 more projects including two airstrips, tunnels, bridges and roads," the DG told reporters here.

He said that the construction of the Devak Bridge in Samba district has been accomplished within two years under Project Sampark.

"This bridge, positioned on the Devika River, holds immense importance from both strategic and socio-economic perspective.

"It enables rapid movement of forces along the border, benefiting the villages of Folpur and Gulpur situated along the IB", he said.

The officer said that previously, villagers faced challenges crossing the river, especially during periods of high water levels.

"The bridge, located approximately 3.5 km from the International Border, spans 422 metres," he added.

The DG said that a pivotal road under construction along the border is the Akhnoor-Poonch road.

"We have widened this road, which features four tunnels of Kandi, Sungal, Nowshera, and Bhimbergali. The project is progressing at a commendable pace and is anticipated to conclude within the next two years," he added.

He also spoke about the strategic hinterland road of Bani-Basholi-Baderwah.

"Out of the total 165 km, 125 km of the road has been surfaced. Work is ongoing on the remaining 40 km and is projected to be finished by March 2025. Notably, 89 km of road between Basholi and Bani, as well as 35 km from Baderwah to Chatergalla, has already been completed", he added.

Replying to another question about infrastructure development along the Sino-India border, he said that over the past three years, the BRO has successfully established substantial bridges, including modular designs, along the frontier with China.

"Unlike the earlier single and fragile bridges incapable of supporting heavy vehicles like tanks and multi-axle artillery, these newly constructed double-lane bridges ensure efficient movement of all vehicle types, even in challenging circumstances", he said.

He said that in the aftermath of the flash floods on July 19 that damaged the Tarnah Bridge on the highway, the entire traffic flow was redirected through BRO-managed roads in the area.

Given the high traffic volume on the highway, the BRO played a crucial role in swiftly addressing the situation, he said.

On the question of BRO's efforts to connect remote areas through roads, he said that this achievement has been highlighted by the President of India during her address to the joint parliamentary session.

The prime minister has also been emphasising BRO's vital role, he said. Villages have gained access to various developmental amenities, such as schools, health centres, police stations and administrative offices due to the infrastructure push, he said.

https://timesofindia.indiatimes.com/india/defence-minister-to-dedicate-to-nation-74-projects-of-bro-including-air-strips-tunnels-dg-bro/articleshow/102507221.cms

THE ECONOMIC TIMES

Tue, 08 Aug 2023

India Bars Makers of Military Drones from Using Chinese Parts

India in recent months has barred domestic manufacturers of military drones from using components made in China over concerns about security vulnerabilities, according to four defence and industry officials and documents reviewed by Reuters.

The measure comes amid tensions between the nuclear-armed neighbours and as New Delhi pursues a military modernisation that envisages greater use of unmanned quadcopters, long-endurance systems and other autonomous platforms.

But as the nascent Indian industry looks to meet the military's needs, the defence and industry figures said India's security leaders were worried that intelligence-gathering could be compromised by Chinese-made parts in drones' communication functions, cameras, radio transmission and operating software.

Three of these people and some of the six other government and industry figures interviewed by Reuters spoke on the condition of anonymity as they were not authorised to talk to the media or because of the topic's sensitivity. India's defence ministry did not respond to Reuters questions.

India's approach, reported by Reuters for the first time, complements phased import restrictions on surveillance drones since 2020 and is being implemented through military tenders, documents show.

At two meetings in February and March to discuss drone tenders, Indian military officials told potential bidders that equipment or subcomponents from "countries sharing land borders with India

will not be acceptable for security reasons", according to minutes reviewed by Reuters. The minutes did not identify the military officials.

One tender document said such subsystems had "security loopholes" that compromised critical military data, and called for vendors to disclose components' origin.

A senior defence official told Reuters the reference to neighbouring countries was a euphemism for China, adding that Indian industry had become dependent on the world's second-largest economy despite concern about cyberattacks.

Beijing has denied involvement in cyberattacks. China's commerce ministry, which last week announced export controls on some drones and drone-related equipment, did not respond to questions about India's measures.

The U.S. Congress in 2019 banned the Pentagon from buying or using drones and components made in China.

MANUFACTURING HURDLE

Prime Minister Narendra Modi has sought to build India's drone capability to thwart perceived threats, including from China, whose forces have clashed with Indian soldiers along their disputed border in recent years.

India has set aside 1.6 trillion rupees (\$19.77 billion) for military modernisation in 2023-24, of which 75% is reserved for domestic industry.

But the ban on Chinese parts has raised the cost of making military drones locally by forcing manufacturers to source components elsewhere, government and industry experts said.

Sameer Joshi, founder of Bengaluru-based NewSpace Research and Technologies, a supplier of small drones for India's military, said 70% of goods in the supply chain were made in China.

"So if I talk to, let's say, a Polish guy, he still has his components which are coming via China," he said. Switching to a non-Chinese pipeline pushed up costs dramatically, Joshi said, adding that some manufacturers were still importing material from China but would "white-label it, and kind of keep the costs within that frame".

TECHNOLOGY GAPS

India relies on foreign manufacturers for both parts and entire systems as it lacks the know-how to make certain types of drones.

A government-funded program to produce an indigenous Medium Altitude Long Endurance unmanned system is delayed by at least half a decade, said Y. Dilip, director of the state-run Aeronautical Development Establishment (ADE).

The platform, called Tapas, has met most requirements but needs further work to fulfil the military's goal of a drone that can reach an operational altitude of 30,000 feet and remain airborne for 24 hours, Dilip said.

"Primarily we were constrained by the engines," he said, with neither those built domestically nor international models available to India up to the job.

Apart from Tapas, which is expected to begin military trials this month, ADE is working on a stealth unmanned platform and a High Altitude Long Endurance platform, but both are years away.

To fill these gaps, India announced in June that it would buy 31 MQ-9 drones from the U.S. for over \$3 billion.

R.K. Narang, a drone expert at the government's Manohar Parrikar Institute for Defence Studies and Analyses, said "there has to be coherent national strategy to fill the technology gaps" to deliver commercially viable products.

Finance Minister Nirmala Sitharaman pledged in February that one-quarter of this year's the 232.6 billion rupees (\$2.83 billion) budget for defence research and development would be for private industry.

Still, Narang said there was little investment in research and development by India's big privatesector companies. Joshi said venture capitalists eschewed military projects because of long lead times and the risk that orders may not eventuate.

The senior defence official said India would need to accept higher costs to boost domestic manufacturing.

"If today I buy equipment from China but I say I want to make it in India, the cost will go up 50%," he said. "We as a nation need to be ready to help the ecosystem build here."

https://economictimes.indiatimes.com/news/defence/india-bars-makers-of-military-drones-from-using-chinese-parts/articleshow/102519138.cms



Mon, 07 Aug 2023

India Bolsters Security of Vital Siliguri Corridor amidst Growing Border Tensions with China

China's actions in Bhutan have prompted India to take proactive measures to safeguard the Siliguri Corridor, a vital link connecting the northeastern states with the rest of the country. This move comes as a response to growing border tensions, China's territorial ambitions, and India's strategic defense considerations.

To secure the Siliguri Corridor, which is commonly referred to as the 'Chicken Neck', troops from the Central Armed Police Forces (CAPFs) will be deployed. This corridor holds immense importance due to its role in connecting the northeastern states with the rest of India. In a bid to bolster security, three key border guarding forces, namely the Border Security Force (BSF), Indo-Tibetan Border Police (ITBP), and Sashastra Seema Bal (SSB), will be deployed at strategically identified points along the corridor.

The border standoff, ongoing along the Line of Actual Control, coupled with China's construction of dual-use border villages in Bhutan and boundary talks with Bhutan, have pushed India to take preemptive measures to secure its interests. The Siliguri Corridor, being geo-strategically vital, stretches through West Bengal and is just 20-22 km wide at its narrowest. It shares borders with Nepal, Bangladesh, and Bhutan, underscoring its sensitivity.

China's approach of 'salami slicing,' gradually encroaching on territory along the Bhutanese border, has raised concerns. China's negotiations with Bhutan over the boundary issue, particularly its ambition to gain control over areas like the Jhampheri Ridge and the Doklam region, pose challenges for India's strategic interests. By expanding its influence in these regions, China aims to strengthen its Chumbi Valley's strategic position, which could potentially impact India's security.

According to sources, "This move to deploy CAPFs is not isolated; it falls in line with India's holistic approach to security. The then Eastern Army Commander, now Indian Army Chief, Gen Manoj Pande, emphasized a comprehensive approach involving various agencies and administrations. This approach seeks to address threats during both peacetime and conflict situations, promoting coordination and collaboration among all stakeholders."

Background

The historical context is relevant, especially the 2017 Doklam standoff, during which India firmly resisted China's attempts to change the tri-junction to Gamochen. The 73-day standoff eventually concluded after a telephone conversation between Prime Minister Narendra Modi and Chinese President Xi Jinping. This highlights the persistence required to protect territorial integrity.

In recent times, the Indian security forces have conducted numerous exercises near the corridor to enhance operational preparedness and synergy. Exercises like 'Trishakti Prahar' and 'Vayu Prahar,' involving the Indian Army, Indian Air Force, and CAPFs, demonstrate the commitment to maintaining a networked environment to respond effectively to potential threats.

"India's decision to deploy CAPFs to guard the Siliguri Corridor is a strategic response to the evolving security landscape. It reflects the nation's commitment to securing its borders, especially in the face of China's territorial ambitions and border tensions," sources quoted above explained.

This comprehensive approach, involving multiple agencies, showcases India's determination to ensure its territorial integrity and maintain regional stability.

https://www.financialexpress.com/business/defence-india-bolsters-security-of-vital-siliguri-corridor-amidst-growing-border-tensions-with-china-3202466/



Mon, 07 Aug 2023

Indian Army Thwarts Infiltration Attempt, Eliminates Hardcore Terrorist along LoC in Poonch: A Blow to Extremist Plans

The Indian Army has once again demonstrated its unwavering commitment to safeguarding the nation's security by thwarting an infiltration attempt and neutralizing a hardcore terrorist along the Line of Control (LoC) in Poonch. The successful operation is a testament to the military's dedication to maintaining peace and stability in the region.

According to sources in the Indian Army, "The terrorist responsible for the infiltration has been identified as Muneer Hussain, a resident of Bagyladra Poonch. Holding the position of Self-Styled Division Commander within the Hizbul Mujahideen, Hussain was no stranger to terrorist activities. His involvement in orchestrating attacks against security forces had earned him a notorious reputation."

Adding, "Hussain's journey into militancy dates back to 1993 when he first ventured into Pakistan-occupied Kashmir (PoK). After returning in 1996, he once again crossed the border to PoK in 1998, deepening his ties with extremist groups. His close association with Maulana Dawood Kashmir (TuJ), a known confidant of Syed Salauddin, the leader of Hizbul Mujahideen, further underlines his significant role within the militant hierarchy."

Recent intelligence inputs revealed a high-level meeting of the Hizbul Mujahideen Group taking place in Islamabad, with Hussain in attendance. The agenda of the meeting focused on reviving terrorism in the Rajouri and Poonch areas. This insight sheds light on the extent to which terrorist organizations are willing to go to disrupt peace and stability in the region.

Hussain, accompanied by his bodyguard, was assigned the task of revitalizing Hizbul Mujahideen's presence in the Rajouri, Poonch, and southern Pir Panjal regions. "This move by Pakistan emphasizes the intention to employ experienced terror operatives to motivate and recruit impressionable youth, highlighting a desperate attempt to revive terrorism," said the source in the Indian Army.

The Indian Army's successful operation not only eliminates a key player in the Hizbul Mujahideen's plans but also sends a strong message to those who aim to disrupt the peace in the region. By thwarting this infiltration attempt and neutralizing Muneer Hussain, the army demonstrates its commitment to protecting its citizens and preserving the tranquility of the region.

In conclusion, the Indian Army's swift and effective action on the LoC in Poonch is a clear reminder of its dedication to countering terrorism and maintaining peace. The neutralizing of Muneer Hussain, coupled with his history of orchestrating attacks and his integral role in extremist groups, reaffirms the army's resolve to ensure the safety and security of the nation and its people.

https://www.financialexpress.com/business/defence-indian-army-thwarts-infiltration-attempt-eliminates-hardcore-terrorist-along-loc-in-poonch-a-blow-to-extremist-plans-3202674/

THE ECONOMIC TIMES

Mon, 07 Aug 2023

GE Jet Engine Deal a Game Changer; will Engage Private Sector: HAL

The fighter jet engine technology deal with the US is a game changer that will take India ahead in the coming decades and will become the basis of future indigenous engines that will power military aircraft, Hindustan Aeronautics Limited (HAL) Chief CB Ananthakrishnan told ET.

Explaining in detail the landmark pact to manufacture GE Aviation's F 414 INS6 engines in India that was announced during Prime Minister Narendra Modi's visit to the US, the senior executive said HAL will engage with the private sector as well to expedite production of the engines in India.

"This is a big game changer as far as engine technology is concerned. So far we had design and development capability for aircraft but did not have the capability to produce engines. The program with GE under transfer of technology will lead to a big tech absorption by the country and will become the basis of our future indigenously designed and developed engines," Ananthakrishnan said.

Valued at close to \$ 1 billion, the deal will lead to an 80% technology transfer for the engines, which will include coating for the hot end of the engine as well as crystal blades and laser drilling technology.

The HAL CMD said technology absorption of such magnitude will take India ahead for the next few decades and the private sector will be a partner in the future as well. "We want to engage the private sector in a bigger way. If we have to do everything, it is going to take a longer period. If we engage the private ecosystem, things can happen much faster," he said.

The top executive shared that the first LCA Mk 2 fighter aircraft, which will be fitted with the GE 414 engine is scheduled for its inaugural flight in December next year, with intense work underway to meet the deadline. "The production of the LCA Mk2 should start by 2027-28. By that time we will be manufacturing the engines here. We may even be able to further shorten this timeline," he said.

On the next steps to take the deal further, the CMD said a memorandum of agreement has been signed with GE and after legislative clearances from the US, GE will be asked to submit its quotes and negotiations will commence. When the contract was last being negotiated in 2012, the American side had agreed to 58% technology transfer, which has now been enhanced to 80%.

As part of the deal, 99 engines will be manufactured in India and will power the Mk2 variant of the Light Combat Aircraft. The Air Force has projected a demand for 120-130 of the Tejas Mk 2 fighters, which if accepted is likely to increase the size of the order beyond 99 engines. Besides, India is also developing twin engine deck-based fighters for the Navy that could also be powered by the F 414. The first two squadrons of the futuristic Advanced Multirole Combat Aircraft (AMCA) could also be powered by the same engine.

https://economictimes.indiatimes.com/news/defence/ge-jet-engine-deal-a-game-changer-will-engage-private-sector-hal/articleshow/102511379.cms

THE ECONOMIC TIMES

Mon, 07 Aug 2023

India-China Border Talks not Halted: EAM Jaishankar Says, "Made Progress on Key Tension Points"

Border talks between India and China have not been "halted" and both the countries "have made progress on key tension points in the last three years," External Affairs Minister S Jaishankar said on Monday.

In an interaction with media persons in Delhi today, the foreign minister said that there has been progress on key tension points between the two countries in the last three years.

He further informed that another meeting on the border talks will be held soon.

"India-China border talks not halted, meeting will be held soon," Jaishankar said.

India and China have time and again faced border disputes and they date back to 1962. The most recent clash was in June 2020, when Indian and Chinese troops engaged in a brawl in the Galwan Valley.

Both countries have been holding several rounds of military-level talks to solve issues in the border regions.

On April 23 this year, the 18th round of India- China Corps Commander Level Meeting was held at the Chushul-Moldo border meeting point on the Chinese side. Jaishankar today said that over the last nine years the Prime Minister Narendra Modi-led government has been "significantly enhancing border infrastructure, including in the areas along Northern frontier".

"Post 2014, when there is a big push on border infrastructure, contestation and patroling has increased from the Chinese side," said Jaishankar.

The foreign minister said that India is in talks with Bhutan for railway connectivity with Assam.

"We are in talks on the Rail link between Bhutan and Assam, Bhutan is very keen to open more points for tourists and it is very good for Assam," Jaishankar said.

Meanwhile, on talks between Bhutan and China, Jaishankar said, "...they are having negotiations, and 24 rounds have been completed. They will be holding more rounds. We track carefully what affects us. It is for them to determine the pace."

Speaking on Kailash Mansarovar Yatra, Jaishankar said, "Kailash Mansarovar - Infrastructure is building up, there is a need for a tunnel there, Border Road Organisation (BRO) is working and planning it. But, there is no signal from China on coming back to the old process".

Terming the Myanmar Trilateral highway a "big challenge" due to the prevailing law and order situation there Jaishankar said India has to engage with authorities in Myanmar to complete the project and to get access of the Sittwe port.

"The border situation with Myanmar is challenging. Sittwe Port is operational, and we are hopeful to conclude the coastal shipping agreement this year. Myanmar Trilateral highway is a big challenge due to the law and order situation. We are engaging with Myanmar authorities to meet challenges," Jaishankar said.

https://economictimes.indiatimes.com/news/defence/india-china-border-talks-not-halted-eam-jaishankar-says-made-progress-on-key-tension-points/articleshow/102492944.cms

The Tribune

Tue, 08 Aug 2023

Indigenous Progress in Satellite Imagery will Benefit IAF

By GP Capt Murli Menon (Retd)

Renowned airpower expert Giulio Douhet said, "The choice of enemy targets is the most delicate operation of aerial warfare." Targeting involves a detailed process of selection of targets, vulnerability analysis, weapon matching and intelligence. Ultimately, of course, air targeting is all about intelligence and that means the ability to 'see' the enemy. This includes wherewithal in space and the use of sensors on other aerial platforms.

To that end, it was heartening to read about a Bengaluru-based space startup, Pixxel, winning a grant to manufacture miniaturised multi-payload satellites for the Indian Air Force (IAF) under the Ministry of Defence's iDEX (Innovation for Defence Excellence) initiative. The 2019 Balakot airstrikes brought out the need for having all-weather remote-sensing capabilities, without having to rely on largesse from friendly allies for timely imagery.

Western nations such as the USA have had such capabilities since the early 1990s, like the Keyhole (KH) series satellites employed and used effectively during the Gulf War. With technology having evolved, entities are able to have state-of-the-art multispectral cameras on board much smaller, low earth orbit (LEO) satellites.

The Keyhole series and other older strategic sensor satellites were mainly geostationary, with electro-optical onboard sensors and cameras. Modern technology such as that available with the Pixxel startup, Israel Aircraft Industries and others enable low earth orbits with multispectral capabilities and high revisit times. The Shakuntala/TD-2 LEO is one such satellite, launched in April 2022 as a 'ride share' mission on the Falcon 9 rocket operated by Elon Musk's Space X. Pixxel designed the TD-2 as a demonstration satellite, which is a part of a constellation of weather

satellites. But once the mechanics of launch and orbital dynamics has been proven, these LEOs could well be engineered for day-and-night tactical military reconnaissance all over the world.

Pixxel claims that its micro-satellites have a resolution 50 times higher than the existing multispectral counterparts, designed for detecting, monitoring and predicting global weather phenomena. Weighing less than 150 kg, these micro-satellites have resolutions of the order of 10m per pixel, which compares favourably with the hyper-spectral cameras launched by NASA, the European Space Agency and ISRO. It has a lifespan of 10 years.

The fact that such a startup has emerged in the private sector is all the more laudable as aspects such as budgetary constraints can be addressed while collaborating with foreign vendors having deep pockets, such as Space X. Further, employing ISRO's PSLV satellites for their launch would have attractive commercial payoffs for the nation's space agency. The US Air Force Space Command has, of late, been exploring the use of commercial LEO and very low earth orbit (VLEO) satellites (250-300 km altitude) as options for communications and imagery. The IAF appears to be on a similar track in tactically exploiting the LEO space. The ability to have our own indigenous LEOs could dovetail with the nation's military satellite programme seamlessly to also provide Battle Damage Assessment (BDA), again warranted during the Balakot operation.

Multispectral sensors would be invaluable for infrared and synthetic aperture radar cameras on these satellites to enable all-weather target analysis and BDA. The Pixxel satellites are expected to field sensors in the electro-optical, infrared, synthetic aperture radar and hyper-spectral applications.

An associated requirement would be to ensure the safety of LEO satellites from electronic jamming by adversaries and physical damage by space interceptors. Hence, the LEO and VLEO satellites being designed to "see and not be seen" provide better options for high-resolution imagery on low payload satellites, with obvious cost benefits for the operator.

'The more the merrier' is the current thinking on the exploitation of the commercial LEO space by leading air and space forces. Multispectral sensor capability on satellites would also provide the capability to detect enemy missile launches on the ground. The Ukraine war has exposed the Russian military as being virtually 'blind in orbit', with too few high-resolution satellites.

The sanctions on Russia by the West after the Crimean invasion have adversely impacted Moscow's ability to get high-tech satellite technology. Typically, the best available Russian satellites' imagery is of the order of 50 cm per pixel as compared to 5 cm for the Keyhole series and around 15 cm for private satellites, such as those of Maxar and Planet. Recently, satellite imagery available in the public domain has shown damage to Russian helicopters, ships in the Black Sea and civilian areas of Mariupol.

It is expected that the IAF would look for on-demand generation of high-resolution imagery and communication services in all-weather conditions from its Pixxel contract. Private companies in the business of selling satellite imagery would expect to raise revenue from their commercial applications. The government would have its own defence requirements for satellites. The main requirement would be to have satellites available on call to accomplish operational tasks.

Commercial satellite imagery has been available from companies such as Maxar and Planet since the Syrian war, but the Ukraine conflict has changed the game dramatically. With imagery costing as less as \$10 per square km, even a hobbyist using his device can monitor wartime imagery, such as that from Ukraine and make sense of the progress of the battle.

This open-source intelligence could give resolutions as high as 3 metres as compared to the classified imagery sold at a premium by professional agencies.

The advent of private satellite imagery companies into the IAF's targeting ambit augurs well for the future of sophisticated open and classified intelligence wherewithal for aspiring nations and private players.

https://www.tribuneindia.com/news/comment/indigenous-progress-in-satellite-imagery-will-benefit-iaf-533072



Mon, 07 Aug 2023

Exercise Malabar to be Held off Sydney from August 11-21

The 31st edition of the Malabar multilateral exercise comprising India, Australia, Japan and the U.S. will be held off Sydney from August 11-21, as Australia hosts the war games for the first time this year. Australia has also invited India for the Sea Power conference that it is hosting from November 7-9 and defence sources said India is likely to attend it.

The exercise will take place in a large designated area, the East Australian exercise area, spread over a couple of hundred miles off Sydney and will have a harbour and sea phase. Exercise Malabar will be followed by AUSINDEX, the India-Australia bilateral naval exercise. In the past, officials have termed Malabar as the most complicated naval exercise that India does.

Australia has also just hosted multilateral Exercise Talisman Sabre, which involved more than 33,000 troops from 13 countries, for which India had sent four observers.

Australian Navy is deploying two ships, destroyer HMAS Brisbane and landing ship HMAS Choules while Indian Navy has deployed destroyer INS Kolkata and frigate INS Sahyadri for the exercise. The U.S. will be represented by a destroyer and the Japanese Maritime Self Defence Force (JMSDF) by a surface vessel. In addition, P-8 maritime patrol aircraft of India, Australia and the U.S. will take part in the exercise with focus on anti-submarine warfare (ASW).

En route to Australia, the two Indian warships made a port call at Port Moresby in Papua New Guinea (PNG) last week as part of India's Pacific outreach.

During a visit to India in March this year, Australian Prime Minister Anthony Albanese had announced that they would be hosting the multilateral exercise for the first time this year, when he took a tour of India's indigenous aircraft carrier INS Vikrant in Mumbai. He had also stated that for Australia, India is a top-tier security partner. He is the first foreign leader to go onboard the indigenous aircraft carrier that was commissioned in September 2022. "My visit [to India] reflects my government's commitment to place India at the heart of Australia's approach to the Indo-Pacific and beyond," he had said addressing the Navy personnel onboard.

Australia was included as a permanent member of Ex. Malabar in 2020 amid the stand-off with China in Eastern Ladakh. Japan hosted the last edition of Malabar which was held in November 2022. It also marked 30 years of the exercise that began as a bilateral exercise between India and the U.S. in 1992.

Malabar has grown in size, scope and complexity with ASW training emerging as a major focus area in the last few years, especially in the backdrop of rapid expansion of Chinese Navy and its increased forays into the Indian Ocean. India's growing line-up of military platforms from the U.S. has increased commonality of platforms, in addition to New Delhi concluding all foundational agreements with the U.S.

Officials have repeatedly asserted that Malabar and the Quad are different and the latter was not a military grouping. However, Maritime Domain Awareness (MDA) has emerged as a key focus area for the Quad with the four countries announcing an Indo-Pacific MDA to assist countries in the region.

During the last edition, Navy chiefs of the four countries, also part of the Quadrilateral grouping, were present for the inaugural ceremony as the JMSDF also hosted an International Fleet Review and the 18th Western Naval Symposium before the naval war games. The four chiefs met and exchanged views on "further enhancing inter-operability" in future editions of the Malabar multilateral naval exercise.

https://www.thehindu.com/news/national/exercise-malabar-to-be-held-off-sydney-from-august-11-21/article67168571.ece



Mon, 07 Aug 2023

Thousands of US Sailors, Marines Reach Red Sea after Iran Tensions

More than 3,000 United States military personnel have arrived in the Red Sea aboard two warships, part of a beefed up response from Washington after tanker seizures by Iran, the US Navy said Monday.

The deployment adds to a growing US military buildup in tense Gulf waterways vital to the global oil trade and led Tehran on Monday to accuse the US of inflaming regional instability.

The US military says Iran has either seized or attempted to take control of nearly 20 internationally flagged ships in the region over the past two years.

The US sailors and Marines entered the Red Sea on Sunday after transiting through the Suez Canal in a pre-announced deployment, the US Navy's Fifth Fleet said in a statement.

They arrived on board the USS Bataan and USS Carter Hall warships, providing "greater flexibility and maritime capability" to the Fifth Fleet, the statement from the Bahrain-based command added.

The deployment adds to efforts "to deter destabilising activity and de-escalate regional tensions caused by Iran's harassment and seizures of merchant vessels," Fifth Fleet spokesman Commander Tim Hawkins told AFP.

USS Bataan is an amphibious assault ship which can carry fixed-wing and rotary aircraft as well as landing craft. The USS Carter Hall, a dock landing ship, transports Marines, their gear, and lands them ashore.

In a Monday news conference, Iran's foreign ministry spokesman Nasser Kanani said US deployments are only serving Washington's interests.

"The US government's military presence in the region has never created security. Their interests in this region have always compelled them to fuel instability and insecurity," he told reporters.

"We are deeply convinced that the countries of the Persian Gulf are capable of ensuring their own security."

The spokesman for Iran's Revolutionary Guards, Ramazan Sharif, meanwhile said the Islamic republic "has reached a level of strength and power that can reciprocate any vicious act by the US, such as seizing ships", according to state news agency IRNA.

'New approach'

The latest deployment comes after Washington said its forces blocked two attempts by Iran to seize commercial tankers in international waters off Oman on July 5.

The maritime services in Iran said one of the two tankers, the Bahamian-flagged Richmond Voyager, had collided with an Iranian vessel, seriously injuring five crew members, according to IRNA.

In April and early May, Iran seized two oil tankers within a week in regional waters.

Those incidents came after Israel and the United States blamed Iran in November for what they said was a drone strike against a tanker operated by an Israeli-owned firm off the coast of Oman.

The US announced last month that it would deploy a destroyer, F-35 and F-16 warplanes, along with the Amphibious Readiness Group/Marine Expeditionary Unit, to the Middle East to deter Iran from seizing ships in the Gulf.

Last week, a US official told AFP that Washington is also preparing to put Marines and Navy personnel aboard commercial tankers transiting the Gulf as an added layer of defence.

Washington's stepped-up military response comes at a time of deepening engagement between the region and China, which brokered a shock detente between Gulf rivals Saudi Arabia and Iran in March.

Tehran's relations with other Gulf Arab states are also growing. The president of the United Arab Emirates and Kuwait's foreign minister were both offered invitations to visit the Islamic republic last week.

"Security will remain a friction point in US-Gulf relations even if the threat posed by Iranian attacks against shipping eases in the short term," said Torbjorn Soltvedt of the risk intelligence firm Verisk Maplecroft.

"The perception that the US isn't doing enough to deter Iranian attacks against international shipping will persist," he told AFP.

"The need for a new approach is evident".

https://www.hindustantimes.com/world-news/thousands-of-us-sailors-marines-reach-red-sea-after-iran-tensions-101691428964750.html



Mon, 07 Aug 2023

Ukraine Praises 'Highly Effective' US, German Air Defence Systems

Despite waves of Russian air attacks that Kyiv claims targeted civilians and residential buildings, President Volodymyr Zelenskiy claimed on Sunday that Ukraine is witnessing "significant results" from American and German air defence systems.

In the third such strike in a week, Russia claimed to have shot down a drone headed for Moscow, while officials on both sides said Ukraine had hit two bridges connecting Crimea to the mainland.

As Ukraine attempts to drive out Russian soldiers who have become entrenched throughout southern and eastern Ukraine since their invasion last year, both nations have increased strikes against each other's military personnel, equipment, and support systems for the conflict.

The Chonhar bridge, which connects the peninsula that Moscow annexed from Ukraine in 2014, was reportedly damaged by a missile strike, according to the leader of Crimea designated by Moscow.

According to a Moscow-appointed official, one of the three road connections between the Crimea and the Russian-occupied regions of mainland Ukraine was shelled close to the town of Henichesk. A civilian driver was injured.

Zelenskiy stated in his nightly video address on Sunday that modern air defence systems, including as the German IRIS-T and the American Patriot, were "highly effective" and had "already yielded significant results".

Zelenskiy claimed that Ukraine has successfully shot down a substantial portion of Russia's recent raids, which included 178 assault drones, including 87 Shaheds, and 65 missiles of various types.

Ukraine's military said later that Russia had launched 30 missiles and 48 air strikes.

"Unfortunately, there are casualties and wounded among the civilian population. Residential buildings and other civilian infrastructure suffered destruction," the military said in a statement.

The bombings came after what Zelenskiy claimed was a late-night Saturday bombing of a blood transfusion facility in Kupiansk, around 16 kilometres (10 miles) from the front in the eastern Kharkiv region. He called the attack a war crime. Reuters was unable to quickly confirm the claim.

In its full-scale invasion of Ukraine, which has resulted in hundreds of deaths, millions of evictions, and the destruction of cities, Russia denies intentionally targeting civilians or military hospitals.

Moscow's Vnukovo airport in Russia cancelled all flights on Sunday, blaming unidentified outside factors. Sergei Sobyanin, the mayor of Moscow, reported that a drone had been shot down south of the city.

The western Rivne and Khmelnytskyi areas, as well as the southern Zaporizhzhia region, were the targets of effective attacks on Ukrainian air bases, according to the Russian defence ministry earlier. It claimed that all of the targets in a group strike carried out by its military utilising long-range and sea-based precision weaponry had been neutralised.

One of the objectives, according to Serhiy Tiurin, the Khmelnytskyi region's deputy governor, was a military airstrip near Starokostiantyniv. He claimed that while the majority of the missiles were shot down, some houses, a cultural centre, and the bus station were damaged by explosions, and a grain silo caught fire.

Ukraine has been engaged in a rigorous counteroffensive for two months in an effort to drive out Russian forces that have taken over nearly 5% of its territory.

The weekend Russian missile assaults, according to Zelenskiy adviser Mykhailo Podoliak, were in retaliation for Ukraine's outreach to countries in the Global South who had been unwilling to join sides in a conflict that had harmed the world economy.

On Saturday and Sunday, senior officials from over 40 nations, including the United States, China, and India, held discussions regarding the conflict in Saudi Arabia. However, the summit didn't result in any specific actions beyond a pledge to further discussions.

The meeting was a component of Ukraine's diplomatic effort to seek support outside of its primary Western backers. Andriy Yermak, the head of staff for Zelenskiy, claimed that the discussions had been really fruitful but he didn't elaborate.

Russia did not attend. Its deputy foreign minister, Sergei Ryabkov, said the meeting reflected the West's "doomed efforts" to mobilise developing nations behind Zelenskiy.

https://www.firstpost.com/world/ukraine-praises-highly-effective-us-german-air-defence-systems-12969292.html

THE ECONOMIC TIMES

Mon, 07 Aug 2023

North Korean Hackers Breached Top Russian Missile Maker

An elite group of North Korean hackers secretly breached computer networks at a major Russian missile developer for at least five months last year, according to technical evidence reviewed by Reuters and analysis by security researchers.

Reuters found cyber-espionage teams linked to the North Korean government, which security researchers call ScarCruft and Lazarus, secretly installed stealthy digital backdoors into systems at NPO Mashinostroyeniya, a rocket design bureau based in Reutov, a small town on the outskirts of Moscow.

Reuters could not determine whether any data was taken during the intrusion or what information may have been viewed. In the months following the digital break-in Pyongyang announced several developments in its banned ballistic missile programme but it is not clear if this was related to the breach.

Experts say the incident shows how the isolated country will even target its allies, such as Russia, in a bid to acquire critical technologies.

NPO Mashinostroyeniya did not respond to requests from Reuters for comment. Russia's embassy in Washington did not respond to an emailed request for comment. North Korea's mission to the United Nations in New York did not respond to a request for comment.

News of the hack comes shortly after a trip to Pyongyang last month by Russian defence minister Sergei Shoigu for the 70th anniversary of the Korean War; the first visit by a Russian defence minister to North Korea since the 1991 breakup of the Soviet Union.

The targeted company, commonly known as NPO Mash, has acted as a pioneer developer of hypersonic missiles, satellite technologies and newer generation ballistic armaments, according to missile experts - three areas of keen interest to North Korea since it embarked on its mission to create an Intercontinental Ballistic Missile (ICBM) capable of striking the mainland United States.

According to technical data, the intrusion roughly began in late 2021 and continued until May 2022 when, according to internal communications at the company reviewed by Reuters, IT engineers detected the hackers' activity. NPO Mash grew to prominence during the Cold War as a premier satellite maker for Russia's space programme and as a provider of cruise missiles.

EMAIL HACK

The hackers dug into the company's IT environment, giving them the ability to read email traffic, jump between networks, and extract data, according to Tom Hegel, a security researcher with U.S. cybersecurity firm SentinelOne, who initially discovered the compromise.

"These findings provide rare insight into the clandestine cyber operations that traditionally remain concealed from public scrutiny or are simply never caught by such victims," Hegel said.

Hegel's team of security analysts at SentinelOne learned of the hack after discovering that an NPO Mash IT staffer accidentally leaked his company's internal communications while attempting to investigate the North Korean attack by uploading evidence to a private portal used by cybersecurity researchers worldwide.

When contacted by Reuters, that IT staffer declined to comment.

The lapse provided Reuters and SentinelOne with a unique snapshot into a company of critical importance to the Russian state which was sanctioned by the Obama administration following the invasion of Crimea.

Two independent computer security experts, Nicholas Weaver and Matt Tait, reviewed the exposed email content and confirmed its authenticity. The analysts verified the connection by checking the email's cryptographic signatures against a set of keys controlled by NPO Mash.

"I'm highly confident the data's authentic," Weaver told Reuters. "How the information was exposed was an absolutely hilarious screwup".

SentinelOne said they were confident North Korea was behind the hack because the cyber spies reused previously known malware and malicious infrastructure set up to carry out other intrusions.

'MOVIE STUFF'

In 2019, Russian President Vladimir Putin touted NPO Mash's "Zircon" hypersonic missile as a "promising new product", capable of travelling at around nine times the speed of sound.

The fact North Korean hackers may have obtained information about the Zircon does not mean they would immediately have that same capability, said Markus Schiller, a Europe-based missile expert who has researched foreign aid to North Korea's missile programme.

"That's movie stuff," he said. "Getting plans won't help you much in building these things, there is a lot more to it than some drawings".

However, given NPO Mash's position as a top Russian missile designer and producer, the company would be a valuable target, Schiller added.

"There is much to learn from them," he said.

Another area of interest could be in the manufacturing process used by NPO Mash surrounding fuel, experts said. Last month, North Korea test-launched the Hwasong-18, the first of its ICBMs to use solid propellants.

That fuelling method can allow for faster deployment of missiles during war, because it does not require fuelling on a launchpad, making the missiles harder to track and destroy before blast-off.

NPO Mash produces an ICBM dubbed the SS-19 which is fuelled in the factory and sealed shut, a process known as "ampulisation" that yields a similar strategic result.

"It's hard to do because rocket propellant, especially the oxidiser, is very corrosive," said Jeffrey Lewis, a missile researcher at the James Martin Center for Nonproliferation Studies.

"North Korea announced that it was doing the same thing in late 2021. If NPO Mash had one useful thing for them, that would be top of my list," he added.

 $\underline{https://economic times.indiatimes.com/news/defence/north-korean-hackers-breached-top-russian-missile-maker/articleshow/102500846.cms$

Science & Technology News



Mon, 07 Aug 2023

'Up to 100 Km No Difficulty, but...': ISRO Chief Explains Chandrayaan-3's Critical Phase

India's third lunar mission – Chandrayaan-3 – is in good health and its most critical phase will be the orbit determination process when the spacecraft starts moving closer to the moon from the 100 km circular orbit, Indian Space Research Organisation Chairman S Somanath said on Monday.

Launched on July 14 by the Launch Vehicle Mark-3 rocket, Chandrayaan-3 spacecraft is now placed in a 170 km by 4,313 km elliptical orbit around the moon and a series of manoeuvres are planned for August 9 and 17 to place it in a 100 km circular orbit.

The Vikram lander is expected to descend on the moon on August 23.

"Up to 100 km we do not see any difficulty. The issues are only in estimation of the position of the lander accurately from earth. This measurement is a very critical measurement, we call it the orbit determination process. If it is correct, the rest of the process can be done," Somanath told PTI here.

"We are able to bring it down very correctly this time. The orbit changes are happening as planned. There is no deviation. So, it shows excellent results and we are hoping that all will be fine," the ISRO chairman said.

He said the experience from Chandrayaan-2, the 2019 mission that was a partial success, was proving to be very useful as the space agency attempted to land a spacecraft on moon.

"The Chandrayaan-2 experience will be of great help. We went through in great detail what possibly went wrong. We re-constructed the scenario and made a lot of modifications to Chandrayaan-3," Somanath said.

He said images of the moon from the Chandrayaan-2 mission were used in Chandrayaan-3 for its better positioning and increasing the landing area measurements.

"We have gathered more intelligence to handle contingencies and failure. We went through an extensive testing programme to validate all of this," Somanath said.

https://www.hindustantimes.com/technology/up-to-100-km-no-difficulty-but-isro-chief-s-somanath-on-chandrayaan-3-critical-phase-101691410976574.html



Mon, 07 Aug 2023

New Covid Variant Eris Spreading Rapidly in UK; know Symptoms and Prevention Measures

The pandemic has eased but newer variants of Covid keep emerging. EG.5.1 or Eris that was first identified in May has been raising the number of Covid cases in UK and currently 1 out of 10

Covid cases in UK are due to this latest strain which is not currently listed as variant of concern. Eris has been contributing to hospitalisation cases in UK albeit mostly among elderly. (Also read: Omicron variant Eris sparks concerns, puts UK on Covid alert)

Experts opine that there is a need to keep a close eye on this new strain which is of Omicron lineage and spreads faster than the original Covid-19 virus. However, there is no reason to believe that EG.5.1 is deadlier than previous strain. The rise in cases could be due to waning immunity from previous infections or vaccinations and it's important to take booster shots to build up a defence against the virus.

Eris raising hospitalisation cases among elderly

"As seasons are changing and Covid virus continues to spread, newer variants continue to emerge worldwide. One of the recent variants that has been identified is Eris variant which has recognised to be come out of UK where it has been known to cause 1 in 10 of the Covid cases. This is showing an increase in number of cases in UK, with a somewhat higher levels of hospitalisation for people who are seniors even if they are vaccinated. So, it is something which we need to keep an eye on. This is strain of the Omicron variant which itself was significantly mutated compared to the original Covid 19 virus that came in 2019," says Dr Pavithra Venkatagopalan, corona-virologist and Covid awareness specialist at Rotary Club of Madras NextGen.

Symptoms of new Covid variant Eris

This variant has very similar symptoms compared to previous variants as per Dr Pavithra.

- Running nose
- Sneezing
- Cough
- Fever
- Fatigue (mild or severe depending on the person's composition).

Preventive measures

Dr Pavithra says people need to take booster shots if they haven't done already and get tested in case of any symptoms to contain the spread.

"We have to keep an eye on spread of this variant. However treatment and preventive measures continue to be the same. Unvaccinated people should get vaccinated as soon as they are eligible. Booster shots have to be taken if not done so far. If people are known to be showing symptoms, they need to be isolated, get tested if needed. More importantly, now that the schools have started in full swing, the wave will see increase in number of cases. But whether this will result in hospitalisation of the younger population we do not know," says the expert.

 $\frac{https://www.hindustantimes.com/lifestyle/health/new-covid-variant-eris-spreading-rapidly-in-uk-know-symptoms-and-prevention-measures-101691407657712.html$

