खंड/Vol. : 49 अंक/Issue : 56 **21/03/2024**

मार्च Mar 2024

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CONTENTS

S. No.	TITLE		Page No.
	Defence News		1-12
	Defence Strategic: National/International		1-12
1.	Station Commanders' Workshop Concludes at Naval Headquarters, New Delhi	Press Information Bureau	1
2.	Maiden Test-firing of India's First Indigenously-made 1500 HP Engine for Main Battle Tanks Held at BEML in Mysuru	Press Information Bureau	2
3.	Transformative Moment: BEML Successfully Test Fires Indigenous 1500 HP Engine for Military Tanks	The Economic Times	2
4.	'Indian Navy's Daring Rescue Ops Showcase World-class Defence Capabilities'	Business Standard	4
5.	Indian Army Engineer Innovates Self-Reliant Defence Technologies; WEDC Gets Patented	Financial Express	5
6.	IAF Augments Operational Capability, Chetak Helicopter Unit Moved to TN	The New Indian Express	6
7.	Army Inducts First Lot of Desi Anti-drone Systems for China Border Deployment	The Times of India	7
8.	Caribbean Defence Boost: Guyana Secures Indian Aircraft through Landmark Agreement	Financial Express	8
9.	Russia to Deliver Last Two Squadrons of S-400 Air Defence Missiles by 2026	ANI	9
10.	North Korea Successfully Conducts Ground-jet Test for New Hypersonic Missile	The Economic Times	10
11.	Multiple Explosions, Gunfire in Pakistan's Gwadar Port; 8 Killed	The Times of India	11
	Science & Technology News		12-13
12.	Agnikul Cosmos, a Private Aerospace Company, is All Set to Conduct the Maiden Test of its Under- development Launch Vehicle to Demonstrate the Reliability of a Homegrown System	India Today	12

Defence News

Defence Strategic: National/International

Press Information Bureau
Government of India

Ministry of Defence

Wed, 20 Mar 2024

Station Commanders' Workshop Concludes at Naval Headquarters, New Delhi

Admiral R Hari Kumar, Chief of the Naval Staff (CNS), along with Mrs Kala Hari Kumar, President Naval Welfare and Wellness Association (NWWA) addressed the Station Commanders, at the Workshop being held for the first time at New Delhi.

The 3rd edition of the Station Commanders' Workshop (SCW 24/1), an assembly of the Station Commanders across the Navy who provide administrative and functional support to Operational units, was held at Naval Headquarters, New Delhi from 18 - 20 Mar 24. The three-day Workshop was attended by more than 100 delegates representing all naval stations, as well as officers from Naval Headquarters (NHQ) and Command Headquarters. The workshop was also attended by the Commanding Officers of various Naval Hospital, officers from Naval Armament Inspection (NAI) Units and the Material Organisations (MOs). The Key Focus Areas steered by the NHQ for SCW 24/1 were Works, Logistics and Intelligence. In addition, DGMS(N) presented a report on the operations of Early Intervention Centres in all the Commands and NHQ. EIC book manuscript was also released on the occasion by Admiral R Hari Kumar, CNS, Mrs Kala Hari Kumar, President NWWA and Surg Vice Admiral Arti Sarin, DGMS(N).

Mrs Kala Hari Kumar, President NWWA, conducted an information session on NWWA which was attended by the Station Commanders, Unit heads of MOs, NLCs, NAIs and NWWA members. She familiarized them with recent initiatives undertaken by NWWA, for the benefit of the naval community including Early Intervention Centres, and emphasized the role of leadership in ensuring community welfare. She also shared with the Station Commanders the forthcoming initiatives of NWWA. NWWA Coffee table book was also released by President NWWA and NWWA committee members during the event.

https://pib.gov.in/PressReleasePage.aspx?PRID=2015764



Press Information Bureau Government of India

Ministry of Defence

Wed, 20 Mar 2024

Maiden Test-firing of India's First Indigenously-made 1500 HP Engine for Main Battle Tanks Held at BEML in Mysuru

Defence Secretary terms it as a transformative moment which will enhance India's military capabilities

Defence Secretary Shri Giridhar Aramane presided over the maiden test-firing of India's first indigenously-made 1500 Horsepower (HP) engine for Main Battle Tanks at BEML's Engine division in Mysuru complex on March 20, 2024. The achievement heralds a new era in the country's defence capabilities, showcasing the technological prowess and commitment to self-reliance in defence technologies. The 1500 HP engine represents a paradigm shift in military propulsion systems, possessing cutting-edge features such as high power-to-weight ratio, operability in extreme conditions including high altitudes, sub-zero temperatures, and desert environments. Equipped with advanced technologies, the engine stands on par with the most advanced engines globally.

Inaugurating the Test Cell, the Defence Secretary described the achievement as a transformative moment which will enhance the capabilities of the Armed Forces. CMD of BEML Shri Shantanu Roy stated that the accomplishment solidifies BEML's position as a key contributor to defence production in the country, underscoring its commitment to serving the nation's needs in this critical sector. The first test-firing of the 1500 HP engine signifies the completion of Generation One, focusing on technology stabilisation. Generation Two will see BEML producing engines for various trials at Combat Vehicles Research and Development Establishment, a DRDO laboratory, and their integration into actual vehicles for user testing. The project is slated for completion by mid-2025. The project, initiated in August 2020, has been meticulously structured into five major milestones, ensuring timely completion and adherence to quality standards. The Defence Secretary also inaugurated the 'Wall of Fame' to recognise the extraordinary efforts of the BEML team. It symbolises their contribution towards advancing the defence capabilities of the country and achieving milestones in indigenous technological innovation. Senior civil and military officers of the Ministry of Defence; industry partners and officials of BEML Ltd were present on the occasion.

https://pib.gov.in/PressReleasePage.aspx?PRID=2015720

THE ECONOMIC TIMES

Wed, 20 Mar 2024

Transformative Moment: BEML Successfully Test Fires Indigenous 1500 HP Engine for Military Tanks

In a significant development, public sector BEML successfully test-fired its indigenous 1500 HP engine for military vehicles at its Mysuru plant. The test-firing, inaugurated by Defence Secretary

Giridhar Aramane, marks a milestone in India's journey towards self-reliance in defense technologies.

Advancing India's Defense Capabilities

The 1500 HP engine project is a key step towards realizing Prime Minister Narendra Modi's vision of an Atmanirbhar Bharat. Giridhar Aramane highlighted the project's importance, stating that it represents a significant stride towards enhancing India's military capacity on the global stage. He emphasized that the engine's development heralds a transformative movement, showcasing India's prowess in defense technologies.

Cutting-Edge Technology and Features

The indigenous 1500 HP engine boasts advanced features, including electronic control with CRDi fuel injection system, self-air filter cleaning electronic warning control, and high power-to-weight ratio. It is designed to operate in extreme conditions, including high altitudes of 5,000 meters and above, sub-zero temperatures of minus 40 degrees Celsius, and desert environments up to 55 degrees Celsius.

Timely Completion and Quality Standards

The project was structured into five major milestones to ensure timely completion and adherence to quality standards. Despite challenges, including the impact of COVID-19, the first firing of the 1500 HP prototype engine signifies the completion of Generation One, focusing on technology stabilization.

Future Plans and Milestones

The production of the first generation of engines has already begun, with 20 such engines set to undergo further trials in the next year. If successful, the engines will be fitted in Indian Army's armored vehicles. The project's Generation Two will involve producing engines for various trials at Combat Vehicles Research and Development Establishment (CVRDE) and integrating them into actual vehicles for user testing. The project is slated for completion by mid-2025.

BEML's Contribution to Defense Production

CMD of BEML Shantanu Roy highlighted that this achievement solidifies BEML's position as a key contributor to defense production in India. The company's commitment to serving the nation's defense needs is underscored by this accomplishment.

BEML Team Honored for Advancing Defense Capabilities

During the event, Defence Secretary Giridhar Aramane inaugurated the 'Wall of Fame' to honor the extraordinary efforts of the BEML team. This wall symbolizes their significant contribution towards advancing the defense capabilities of the country and achieving milestones in indigenous technological innovation. The ceremony was attended by senior civil and military officers of the Ministry of Defence, industry partners, and officials of BEML Ltd, highlighting the collaborative effort and dedication of all involved in this groundbreaking project.

https://economictimes.indiatimes.com/news/defence/india-successfully-test-fires-indigenous-1500hp-engine-for-military-tanks/articleshow/108650928.cms

Business Standard

'Indian Navy's Daring Rescue Ops Showcase World-class Defence Capabilities'

The massive operation carried out by the Indian Navy to rescue a commercial ship from pirates off Somalia's coast last weekend shows how New Delhi's military has developed special forces capabilities on par with some of the world's best, CNN reported, citing several analysts.

The navy rescued 17 crew members of the vessel MV Ruen during an anti-piracy operation lasting nearly two days, with no casualties reported. Around 35 pirates surrendered and were taken into custody, the Indian Navy said.

The operation involved a navy destroyer, a patrol ship, an Indian Air Force C-17 transporter flying more than 1,500 miles to airdrop marine commandos, a naval drone, a reconnaissance drone and a P-8 surveillance jet, the Indian Navy release said.

"The success of the operation marks the Indian Navy as a top-class force in terms of training, command and control, and other capabilities," said John Bradford, a Council on Foreign Relations International Affairs fellow.

"What marks this operation as impressive is how risk was minimised by using a coordinated force that includes the use of a warship, drones, fixed- and rotary-wing aircraft, and marine commandos," he added.

Experts are concerned that the volatile security situation in the Red Sea due to attacks by Yemenbased Houthi rebels on commercial shipping may tie up international forces and provide a window for Somali pirates in the nearby Horn of Africa - presenting a multi-billion-dollar threat to the global economy, CNN reported.

Yemen and Somalia are among the region's poorest nations, both ravaged by years of civil war.

Somali pirates' capture of the MV Ruen in December last year marked the first successful hijacking of a vessel off the country's coast since 2017.

Spanish, Japanese and Indian warships tracked the Malta-flagged, Bulgarian-managed bulk carrier as it was taken into Somali territorial waters, according to a December report from the European Union Naval Force.

But when the Ruen, now operated by a pirate crew, last week left Somali waters with the intent of committing acts of piracy on the high seas, the Indian Navy made moves to intercept it.

The destroyer INS Kolkata, operating in the area to help ensure international maritime security, used a ship-launched drone to confirm the Ruen was being operated by armed pirates, the Indian statement said.

After the pirates fired on the drone, destroying it, and then on the Indian warship itself, the INS Kolkata responded by firing on the Ruen, disabling its steering and navigation, the statement said.

As INS Kolkata sought the surrender of the pirates, the commandos parachuted in after a 10-hour flight from India, the air force said on X. Rafts were also dropped into the ocean from the large transport for marines to reach the Ruen. In a remarkable display of #Jointness & #Integration, an IAF C-17 aircraft executed a precision Airborne Drop of two Combat Rubberised Raiding Craft (CRRC) boats, along with Indian Navy MARCOS in Arabian Sea in support of ongoing anti piracy Op Sankalp.

Flying for almost 10 hrs... pic.twitter.com/DEMgvZQI1N — Indian Air Force (@IAF_MCC) March 17, 2024 The Indian show of force proved too much for the pirates, the CNN report added.

"Due to sustained pressure and calibrated actions by the Indian Navy over the last 40 hours, all 35 Somali pirates surrendered," the navy statement said.

Bulgarian leaders, including President Rumen Radev, thanked India and Prime Minister Narendra Modi for the operation.

"My sincere gratitude to (PM Modi) for the brave action of (the) Navy rescuing the hijacked Bulgarian ship 'Ruen' and its crew, including 7 Bulgarian citizens," Radev posted on X.

Analyst Carl Schuster, a former US Navy captain, said the incident highlighted the professionalism of the Indian Navy and said Delhi's marine commando force, known as MARCOS, had learned from its US and British counterparts.

"The Indian Navy itself is a highly trained and disciplined professional force," Schuster said.

"MARCOS' nearly eight months of training is modelled after Britain's SAS. Despite a very intense selection process, only about 10-15 per cent of those who enter the training graduate," he said.

The analysts further emphasised that the Indian Navy holds over 20 years of experience in antipiracy operations - and the restive security situation in one of the world's major shipping lanes meant they were likely to be called on again, as reported by CNN.

The Ministry of External Affairs spokesperson, in January that maritime security in the region is a priority for India.

"The ongoing activities there are indeed a matter of concern, and it affects our economic interests," MEA spokesperson Randhir Jaiswal said.

"We are consistently monitoring the situation. Our naval forces, and naval vessels are engaged in ensuring the safety of our commercial vessels," he added.

https://www.business-standard.com/external-affairs-defence-security/news/navy-s-daring-rescueops-showcase-world-class-defence-capabilities-124032000061_1.html



Wed, 20 Mar 2024

Indian Army Engineer Innovates Self-Reliant Defence Technologies; WEDC Gets Patented

The Indian Army is making significant strides towards self-reliance in the defence sector, with tech-savvy warriors leading the charge. Among them, Major Rajprasad RS of the Army Corps of Engineers has emerged as an example of innovation, recently patenting two groundbreaking devices.

Following his success with an electrical protection device, Major Rajprasad has now patented a Portable Multi Target Detonation Device (WEDC), capable of delivering multiple blasts remotely. The WEDC is aimed to enhance safety and reliability of detonation of multiple targets and overcome limitations of previously used Exploder Dynamo Capacitors. The previously utilized system is a mechanically operated wired system with limited range of 400mtrs.

Now, soldiers can use this device to demolish any building while remaining safe from a distance. Usually, such detonations are used by the Indian Army to blow up the hideouts of terrorists in Jammu and Kashmir. Because it is capable of delivering multiple detonations simultaneously from a distance. This detonation device can be used to destroy land mines or even demolish a building.

According to the sources in the defence and security establishment, his contributions were showcased during the Bharat Shakti exercise, drawing attention from Prime Minister Narendra Modi and Army Chief General Manoj Pandey.

His dedication to advancing military technology underscores the ethos of the Army Design Bureau, fostering self-reliance among its officers. Major Rajprasad's achievements exemplify India's commitment to indigenous defence innovation, crucial for maintaining strategic autonomy in an increasingly complex geopolitical landscape.

About the Device

The electrical protection device made by Major Rajprasad can operate all the generators installed on the country's borders from a remote command and control center. Taking lessons from the Russia-Ukraine war, he made this special system through 'Industrial Automation'. Now a company is producing the electric protector in large numbers so that the army can make it a part of its armament as soon as possible.

The WEDC is a microprocessor based electronic system that offers a long range of 2.5 kms with both wired and wireless modes of firing. Multiple targets can be selectively fired- both independently and simultaneously. It provides great advantage in reserve Demolition of enemy targets, Destruction of IEDs from longer ranges. The WEDC also has many other inherent features. Parallel firing of multiple targets wirelessly is one of the advanced features incorporated in the WEDC.

The major advantages accrued because of WEDC include Increased Range of operation; No Mechanical efforts required like Exploder dynamo capacitor; Increased Safety distance; Dual mode of operation- Both Wired and Wireless; Ease of handling the equipment by personnel with minimal training.

Major Rajprasad has been a part of the Army Design Bureau of the Indian Army for the last few years which encourages in-house military officers to become self-reliant in the defence sector. Another officer of the bureau had prepared the Uzi gun a few months ago.

https://www.financialexpress.com/business/defence-indian-army-engineer-innovates-self-reliantdefence-technologies-wedc-gets-patented-3431571/



Thu, 21 Mar 2024

IAF Augments Operational Capability, Chetak Helicopter Unit Moved to TN

In a bid to enhance its operational capabilities in the southern region, the Indian Air Force on Tuesday deployed its Chetak helicopter unit at Air Force Station at Thanjavur in Tamil Nadu.

Confirming the "recent redeployment of IAF assets," the air force said on Wednesday, "Induction of the helicopter unit at Thanjavur would ensure availability of sufficient resources with Southern Air Command (SAC) headquarters to enhance operational capabilities as well as meet the

peacetime tasks of search and rescue, humanitarian assistance and disaster relief and casualty evacuation."

Sources confirmed that it is the Chetak helicopters that have been relocated from the Western Air Command of IAF.

The induction was done in the presence of Air Marshal B Manikantan, the Air Officer Commanding-in-Chief, SAC.

The SAC was established in July 1984 in response to certain geopolitical developments to ensure effective command and control of IAF assets and facilitate quick deployment of combat forces in the event of threats developing in the Indian Ocean Region. It was created to effectively defend the island territories and protect the country's exclusive economic zones.

The IAF's SAC covers the geopolitical area of peninsular India, extending to Andaman and Nicobar Islands in the Bay of Bengal and Lakshadweep Islands in the Arabian Sea.

The move comes soon after Indian Navy's recent commissioning of its new base, INS Jatayu, at Minicoy Island in Lakshadweep.

Minicoy is the southernmost island of Lakshadweep, which straddles the vital Sea Lines of Communications (SLOC). As per the Navy, basing of an independent Naval unit with requisite infrastructure and resources will enhance its overall operational capability in the islands.

"The base will enhance operational reach and facilitate Indian Navy's operational effort towards anti-piracy and anti-narcotics operations in the Western Arabian Sea. It will also augment the Navy's capability as the first responder in the region and augment connectivity with the mainland."

It would strengthen the Navy's presence in the strategically important Lakshadweep.

Southern Air Command

The Chetak helicopter unit has been transferred to IAF's Southern Air Command (SAC). The SAC was established in July 1984 in response to certain geopolitical developments to ensure effective command of IAF assets and facilitate quick deployment of combat forces in the event of threats in the Indian Ocean Region.

https://www.newindianexpress.com/nation/2024/Mar/21/iaf-augments-operational-capabilitychetak-helicopter-unit-moved-to-tn

THE TIMES OF INDIA

Thu, 21 Mar 2024

Army Inducts First Lot of Desi Anti-drone Systems for China Border Deployment

The Army has now inducted an initial lot of seven new indigenous integrated drone detection and interdiction systems (IDD&IS) for deployment along the northern borders with China, even as DRDO is working on more powerful directed energy weapon (DEW) systems in the shape of high-energy lasers and high-powered microwaves.

The vehicle-based IDD&IS, which provide for both "soft kills" of hostile drones through jamming and "hard kills" through lasers, has a detection range of 5 to 8 km. While the "soft kill" can jam the drones at ranges from 2 to 5 km, the effective "hard kill" range is over 800 meters.

"Produced by DRDO and Bharat Electronics, these IDD&ISs are Mark-1 variants inducted by the Army Air Defence (AAD). They will add to the existing counter-drone systems. There will, of course, be advanced IDD&IS versions with longer interception ranges," an officer said.

"The systems provide an integrated capability to detect low radar cross-section drones or unmanned aerial vehicles (UAVs) and enable their destruction through integrated application of soft and hard kills," he added.

With the cost-effective operational utility of drones and swarm drones being reinforced by the Armenia-Azerbaijan, Russia-Ukraine and other conflicts, the armed forces are going in for induction of a wide array of UAVs from both domestic as well as foreign sources.

There is an equal emphasis on inducting different kinds of effective counter-drone systems. They range from jamming, spoofing and blinding systems to disrupt the satellite or video command-and-control links of drones to laser-based DEWs.

The armed forces have already inked several contracts for them, and more are in the pipeline. IAF, for instance, recently floated initial tenders for 10 kamikaze drones-based anti-swarm drone systems, 10 mobile micro munitions-based anti-swarm drone systems and 100-200 vehicle-mounted C-UAS (counter unmanned aircraft systems). "All these systems are meant to protect IAF assets and air bases from attacks by drones and swarm drones from multiple directions," another officer said.

India, of course, has lagged far behind other countries in developing drones as well as counterdrone systems. After DRDO developed anti-drone systems with 2-kilowatt to 10-kilowatt lasers, the armed forces have ordered 23 such systems for around Rs 400 crore.

DRDO is now working on DEWs with power levels of nearly 30-50 kilowatt as per a roadmap laid down with short, medium and long-term goals. "The aim is to develop DEWs with higher power levels in the next three to five years with envisaged operational ranges of tens of kms," a source said.

"The development of more powerful and efficient lasers will allow for greater range and precision. Moreover, advancements in beam-steering technology and adaptive optics may enhance the weapon's ability to maintain focus and accuracy at longer ranges," he added. India certainly needs a mission-mode national programme on DEWs, given the continuing four-year-old military confrontation with China in eastern Ladakh.

https://timesofindia.indiatimes.com/india/army-inducts-first-lot-of-desi-anti-drone-systems-forchina-border-deployment/articleshow/108658556.cms

Wed, 20 Mar 2024

Caribbean Defence Boost: Guyana Secures Indian Aircraft through Landmark Agreement

Guyana is set to acquire Hindustan 228-201 aircraft from state-owned Hindustan Aeronautics Limited. The Indian Navy and the Indian Coast Guard are already operating these aircraft.

In the first ever defence Line of Credit (LOC) signed with the Caribbean region, the Export-Import Bank of India [Exim Bank], has extended USD 23.37 million and this was signed on March 15,

2024 for the procurement of two aircraft from India for the country's defence forces. HAL will now enter into a contract for supply of two aircraft with the designated authority in Guyana. These aircraft are for the Guyana Defence Force (GDF).

The process of the LOC was extended to Guyana following the visit of External Affairs Minister S Jaishankar last year, when Dr KJ Srinivasa was the High Commissioner.

This agreement shows the Government's latest effort to improve the GDF's abilities. It started when President Ali visited India's Hindustan Aeronautics Limited in January 2023.

After signing the agreement, Dr Ashni K Singh from Guyana's Government thanked India for its support and encouraged more Indian companies to do business in Guyana. He stressed the importance of advanced technology and expressed his government's dedication to enhancing the country's security, particularly in the Air Corps and Coast Guard. He mentioned the purchase of two aircraft as a significant investment in strengthening the GDF.

High Commissioner of India to Guyana, Dr Amit Telang, highlighted the importance India attaches to the relationship it shares with Guyana, and the signing of the LOC is just another means of cementing its partnership with Guyana.

Chief of Staff of the GDF, Brigadier Omar Khan, while speaking on behalf of the defence sector, recognised the role that the Government of India has played in defence training over decades in Guyana. With the signing of LOC Agreement, the Government of Guyana to date, has received eleven (11) LOCs from the Indian EXIM Bank over the years.

Who signed the LOC agreement?

It was between Senior Minister in the Office of the President with Responsibility for Finance and the Public Service, Dr Ashni K Singh, Government of Cooperative Republic of Guyana; Chief of Staff of the GDF, Brigadier Omar Khan and team; and Sanjay Lamba, Deputy General Manager, Exim Bank; in the presence of High Commissioner of India to Guyana, Dr Amit Telang. With the signing of this LOC Agreement, Exim Bank has now in place 292 Lines of Credit, covering 62 countries in Africa, Asia, Latin America, CIS and the Oceania, with credit commitments of around USD 2.72 billion, available for financing exports from India.

https://www.financialexpress.com/business/defence-caribbean-defence-boost-guyana-securesindian-aircraft-through-landmark-agreement-3432024/



Wed, 20 Mar 2024

Russia to Deliver Last Two Squadrons of S-400 Air Defence Missiles by 2026

Amid delays due to its ongoing military conflict with Ukraine, Russia has informed India that it would be able to supply the remaining two squadrons of the S-400 long-range air defence missile system by August 2026.

Russia and India had signed a deal to buy five squadrons of the S-400 air defence system, of which three have already been supplied, while the remaining two could not be supplied on time due to developing situations in view of the Russia-Ukraine war, which is still ongoing.

"The Russian side has informed that they would now supply the two remaining squadrons of the highly capable air defence systems by August 2026, defence sources told ANI.

The air defence system is capable of hitting targets at 400 Kms and can be very effective against fighter jets, and cruise missiles.

The Russian side was expected to deliver all the systems by 2024 but had to change plans due to its own requirements in the ongoing conflict there.

India and Russia signed an over Rs 35,000 crore deal for five squadrons of S-400 air defence missiles, and all deliveries are anticipated to be completed by the end of 2023-24 but there may be a delay in this timeframe.

The Indian Air Force, which recently received the indigenous MR-SAM and Akash missile systems as well as the Israeli Spyder quick reactions surface-to-air missile systems, believes the S-400 will be the game changer for it.

The Indian Air Force has significantly improved its air defence capabilities in recent years.

The Indian Air Force has now started working on its own Project 'Kusha', which would allow it to have an indigenous system developed by DRDO to take down enemy platforms at long ranges.

Air defence systems have been deployed in a big way by the Chinese military across the Line of Actual Control while India has also deployed own systems in a big way there.

https://www.aninews.in/news/world/asia/russia-to-deliver-last-two-squadrons-of-s-400-air-defence-missiles-by-202620240320192200/

THE ECONOMIC TIMES

Wed, 20 Mar 2024

North Korea Successfully Conducts Ground-jet Test for New Hypersonic Missile

North Korea has successfully conducted a ground-jet test of a solid-fuel engine for a new type of intermediate hypersonic missile amid heightened tensions on the Korean peninsula, according to Yonhap News Agency.

Reportedly, hypersonic missiles are on the list of sophisticated weapons North Korean leader Kim Jong-un vowed to develop during a key party congress in 2021, along with nuclear-powered submarines, spy satellites and solid-fuel intercontinental ballistic missiles.

The missiles travel at a speed of at least Mach 5, five times the speed of sound, and are designed to be maneuverable on unpredictable flight paths and fly at low altitudes.

At Mach 5 or higher, such a missile would be able to traverse the 195 kilometres between Pyongyang and Seoul in just one to two minutes, as reported by Yonhap News Agency.

"The military strategic value of this weapon system is appreciated as important as ICBM from the security environment of our state and the operational demand of the People's Army and enemies know better about it," Kim said at the Sohae Satellite Launching Ground on the country's west coast on Tuesday.

The Korean Central News Agency stated that the North was able to set a timetable for completing the development of a new hypersonic missile weapons system with the success of the latest ground engine test.

In November last year, North Korea also carried out ground tests of what it called newly developed solid-fuel engines for a new type of intermediate-range ballistic missile (IRBM).

On January 14, the North test-fired a solid-fuel IRBM tipped with a hypersonic warhead in its first ballistic missile launch this year, according to Yonhap News Agency.

The latest test came just a day after the North conducted firing drills involving super-large multiple rocket launchers, its second ballistic missile launch of the year.

The South Korean military said on Monday that it had detected the firing of multiple short-range ballistic missiles near Pyongyang.

The North's Monday missile launch, which followed the annual Freedom Shield military exercise by Seoul and Washington, was also timed with US Secretary of State Antony Blinken's visit to Seoul.

The US reassurance came hours after Pyongyang fired multiple short-range ballistic missiles toward its eastern waters, a statement released from South Korea's presidential office said.

Blinken arrived in South Korea on Sunday to attend the third Summit of Democracy hosted by South Korea, a US-led multinational gathering formed to boost solidarity and shared values among democratic countries.

Blinken called for continuing close coordination and communication between the allies, while further strengthening their "extended deterrence" and the US's commitment to using the full range of its military capabilities, including nuclear, to defend its allies.

In January, Kim called for revising the country's constitution to define South Korea as its "primary foe" and codify a commitment to subjugate the South Korean territory in the event of war, as reported by Yonhap News Agency.

https://economictimes.indiatimes.com/news/defence/north-korea-successfully-conducts-ground-jettest-for-new-hypersonic-missile/articleshow/108644715.cms

THE TIMES OF INDIA

Thu, 21 Mar 2024

Multiple Explosions, Gunfire in Pakistan's Gwadar Port; 8 Killed

Armed Baloch separatists launched an assault on Pakistan's vital Gwadar port, wielding guns and explosives.

The port holds significant importance as it is a linchpin in the multi-billion dollar China-Pakistan Economic Corridor. Security forces responded by neutralizing all 8 militants in the confrontation.

The militants stormed the complex which houses offices of different government departments, intelligence agencies and paramilitary forces, said Saeed Ahmed Umrani, a government commissioner.

Meanwhile, the Majeed Brigade of the proscribed Balochistan Liberation Army (BLA) has claimed responsibility for the attack.

Gwadar, situated close to the Strait of Hormuz, plays a pivotal role in the Arabian Sea's oil shipping route.

This deep-water port is central to the multi-billion-dollar China Pakistan Economic Corridor (CPEC), which includes infrastructure projects such as roads and energy initiatives. It forms an integral part of Chinese President Xi Jinping's ambitious Belt and Road Initiative.

Despite facing a longstanding separatist insurgency in the region, China has made significant investments in mineral-rich Balochistan as part of its Belt and Road Initiative, particularly in the development of Gwadar.

Balochistan province has seen low-intensity insurgency for decades, with Baloch nationalists demanding greater political autonomy and a bigger share of the province's resources. A local militant group, Baloch Liberation Army, claimed responsibility for the attack in a statement.

China has raised concerns about security in Pakistan after Chinese citizens have been killed in previous attacks. Pakistan is a flagship destination for President Xi Jinping's signature Belt and Road Initiative.

Pakistan has witnessed an uptick in terror activities in the past year, especially in KP and Balochistan after the banned militant Tehreek-i-Taliban Pakistan ended its ceasefire with the government in November 2022, Dawn reported.

In November, 14 Pakistan Army soldiers were killed after militants attacked two vehicles of security forces in Gwadar. The military vehicles came under attack while moving from Pasni to Ormara in the coastal district.

https://timesofindia.indiatimes.com/world/pakistan/unidentified-gunmen-open-fire-at-pakistansgwadar-port-2-killed/articleshow/108651366.cms

Science & Technology News



Thu, 21 Mar 2024

Agnikul Cosmos, a Private Aerospace Company, is All Set to Conduct the Maiden Test of its Under-development Launch Vehicle to Demonstrate the Reliability of a Homegrown System

The Sub-Obital Technology Demonstrator (SOrTeD) mission will last just over two minutes, from launch to splashdown, and yet it could pave the way for the next generation of satellite launchers from the country.

The SOrTeD mission is a single-stage launch vehicle demonstration that will be powered by a semi-cryogenic engine, the Agnilet, a sub-cooled liquid oxygen-based propulsion system developed indigenously.

AGNIBAAN SORTED COMPONENTS

The mission will feature the company's 6.2 meter-tall single-stage launch vehicle with an elliptical nose cone at the top to protect the package from harsh conditions during the flight. The company has readied the vehicle with the first-ever ethernet-based avionics architecture and fully in-house developed autopilot software from India.

Powered by sub-cooled Liquid Oxygen (LOX) and Aviation Turbine Fuel (ATF), the vehicle is equipped with four carbon composite fins to provide passive control. Agnikul has said that the active pitch and yaw control will be achieved through two-plane gimbling, and together, these systems will enable controlled vertical ascent.

The company has integrated Agnibaan SOrTeD with the flight termination system developed by the Indian Space and Research Organisation (Isro), and the engine is placed in the base shroud of the rocket. The Agnilet engine is the world's first single-piece 3D-printed semi-cryogenic rocket engine.

TWO-MINUTE-LONG FLIGHT

The mission will last just over two minutes from launch to splashdown. The mission will lift off from India's first private launchpad, ALP-01, located at Satish Dhawan Space Centre in Sriharikota.

Following lift-off, the vehicle will perform a pitch-over manoeuvre nearly four seconds into flight. This manoeuvre involves the controlled rotation of the vehicle to change its orientation from vertical to a predetermined angle with respect to the ground or its flight path.

The vehicle will then go into the wind biasing manoeuvre at just over 39 seconds, which is introduced in rockets to compensate for the effects of wind on the trajectory of the rocket during ascent.

At 1 minute 29 seconds, Agnikul expects the launch vehicle to reach apogee, the point it will be farthest from the launch site before it splashes down at just over two minutes into flight, marking the completion of the mission.

WHY JUST TWO MINUTES?

While the flight is brief, the data that it will provide will help engineers fine-tune and shape the development of the Agnibaan launch vehicle, which is expected to be flexible when it comes to launching missions.

"The inaugural flight of Agnibaan SOrTeD, Mission-01, serves as a test flight, gathering crucial flight data and ensuring optimal functioning of systems for Agnikul's orbital launch vehicle, the 'Agnibaan," Agnikul Cosmos said.

The company is targeting the multi-billion dollar small satellite launch market, which is looking for a launch vehicle with quick turnaround times and the ability to launch at a faster pace.

The maiden test flight on Friday will determine the future course of development of the launch vehicle, which is aimed at making India a hub of small satellite launches.

https://www.indiatoday.in/science/story/agnikul-cosmos-test-flight-agnibaan-sorted-missionlaunch-isro-2517371-2024-03-21

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