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पंजाब केसरी

Wed, 29 Jun 2022

DRDO, भारतीय सेना ने स्वदेश निर्मित टैंक विध्वंसक मिसाइल का किया सफल परीक्षण

रक्षा अनुसंधान एवं विकास संगठन (डीआरडीओ) और भारतीय सेना ने मंगलवार को महाराष्ट्र के अहमदनगर में केके रेंज में स्वदेश निर्मित टैंक विध्वंसक मिसाइल का सफल परीक्षण किया।

यह जानकारी रक्षा मंत्रालय ने दी। मंत्रालय के बयान में कहा गया है कि अर्जुन युद्धक टैंक से टैंक विध्वंसक निर्देशित मिसाइल (एटीजीएम) का सफल परीक्षण किया गया। इसमें कहा गया, “परीक्षण में, एटीजीएम ने बेहद सटीकता के साथ लक्ष्य पर प्रहार किया और उसे ध्वस्त कर दिया। टेलीमेट्री सिस्टम ने मिसाइल के संतोषजनक उड़ान प्रदर्शन को रिकॉर्ड किया।” बयान में कहा गया कि रक्षा मंत्री राजनाथ सिंह ने एटीजीएम के सफल परीक्षण के लिए डीआरडीओ और भारतीय सेना को बधाई दी है।



रक्षा अनुसंधान एवं विकास संगठन (डीआरडीओ) और भारतीय सेना ने मंगलवार को महाराष्ट्र के अहमदनगर में केके रेंज में स्वदेश निर्मित टैंक विध्वंसक मिसाइल का सफल परीक्षण.

<https://www.punjabkesari.in/national/news/indian-army-successfully-test-fired-indigenously-built-tank-destroyer-missile-1627194>

Wed, 29 Jun 2022

DRDO, Army Successfully Test Indigenous ATGM Missile from Karakoram Range

The indigenously developed laser-guided Anti-Tank Guided Missile (ATGM) was successfully test-fired from the Main Battle Tank (MBT) Arjun at the Karakoram ranges with the support of Armoured Corps Centre and School (ACCS) on Tuesday. The missile was test-fired by the Research and Development Organisation (DRDO) and the Indian Army. "In this test, the ATGM has hit the bull's eye with textbook precision and successfully defeated the target at minimum ranges. Telemetry systems recorded the satisfactory flight performance of the missile," a Defence Ministry statement said.



Engaging the targets at lower ranges is a challenge due to the dimensional constraints of tank launched ATGMs, which has been successfully accomplished by the ATGM for MBT Arjun.

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<https://www.indiatvnews.com/news/india/drdo-army-successfully-test-fire-indigenous-atgm-missile-from-karakoram-range-accs-watch-video-2022-06-29-788123>

DRDO On Twitter



Defence News

Defence Strategic: National/International



Tue, 28 Jun 2022

Coast Guard Commissions ALH-MkIII Squadron in Porbandar

The Coast Guard on Tuesday commissioned an indigenous Advanced Light Helicopter (ALH)-MkIII squadron, 835 Squadron (CG), at the air enclave at Pornandar in Gujarat. In a separate development, the keel of the last of Project-17A stealth frigates for the Navy was laid at Mazagon Dock Shipbuilders Ltd. (MDL), Mumbai. “So far, 13 ALH MK-III helicopters have been inducted in a phased manner and four of these are positioned at Porbandar. Since the induction, the squadron has flown over 1,200 hours and conducted numerous operational

missions, including the maiden night SAR mission off Diu coast,” the Coast Guard said in a statement.

The ALH helicopters have been indigenously manufactured by Hindustan Aeronautics Ltd. (HAL). They feature state-of-the-art equipment, including advanced radar as well as electro optical sensors, Shakti engines, full glass cockpit, high-intensity searchlight, advanced communication systems, automatic identification system as well as search and rescue (SAR) homer, the Coast Guard said. “The features enable them to undertake maritime reconnaissance as well as carry out SAR at extended ranges even while operating from ships during both day and night,” the Coast Guard said. The aircraft has the ability to switch roles from an offensive platform with heavy machine gun to that of a benign one carrying a medical intensive care unit to facilitate transfer of critically ill patients, it stated.

Stealth frigate

The keel for the seventh stealth frigate was ceremoniously laid by Rear Admiral G.K. Harish, Director-General, Naval Design (Surface Ship Group) at MDL. The ceremony was performed in the presence of senior officials of the Indian Navy and MDL. Keel Laying is a major milestone activity in the construction of ships, symbolising formal commencement of the erection process of warships on the building berth. Seven Frigates under P17A class are being constructed of which four are being constructed at MDL and three in Garden Reach Shipbuilders and Engineers Ltd. (GRSE) with MDL as lead yard. The P17A class frigates are being built using indigenously developed steel and fitted with weapons and sensors along with Integrated Platform Management System, the Navy said in a statement.

The first two ships of P17A Project were launched in 2019 and 2020 at MDL and GRSE, respectively. The project cost of seven ships under Project-17A was ₹45,000 crore as sanctioned by the Cabinet Committee on Security (CCS) in 2015.

<https://www.thehindu.com/news/national/coast-guard-commissions-alh-mkiii-squadron-in-porbandar/article65576876.ece>



Wed, 29 Jun 2022

Stop Messing With Our Military

By Ashok K Mehta

Thank the Almighty for minor mercies on Agniveer. After five days of avoidable all-India arson and damage (railways alone suffered losses of Rs 1,000 crore), the Government has backpedalled. Some concessions have been made to Agnipath Yojana: One-time age waiver (21 to 23 years); unwritten reservation in Government jobs; promises of public and private sector employment for demobilised Agniveers, and skilling and higher education schemes — in short, they’ve been promised the moon when it is a distant crescent. The anger among youth is understandable as many have passed physical and medical tests. For IAF, aspirants had cleared

even written examinations but were not called up. The charade of COVID was used to suspend regular recruitment and replaced with Agnipath. The youth were cheated.

Now that Agnipath has become irreversible, the merit of the scheme as youthful infusion into an aging Army was marked by colossal criticism including masking the real reason for its imposition, ie reduction of salary and pension bills. Hundreds of veterans including Param Vir Chakra winner, Capt Bana Singh, denigrated the project. He tweeted: 'save the country from Agnipath scheme as it would badly damage the youth'. Later, it seems he was forced to delete the tweet. Most former service Chiefs adopted maun vrat. Only former Naval Chief, Adm Arun Prakash, had the temerity to expose its infirmities. These days, it is dangerous to speak out or speak up lest you're targeted by one or the other public/private agencies. Not many veterans detected or objected to forcing down All India All Class (AIAC) recruitment on single class/caste regiments. But those who did made passionate appeals to spare the high-value regimental system in the fighting arms.

In final briefings to media by Additional Secretary (Department of Military Affairs) Lt Gen Anil Puri and Vice Chief of Army Staff, Lt Gen BS Raju, and NSA Ajit Doval allayed concerns about dismantling the regimental system. This seems to be one more concession by the Government after the uproar. Lt Gen Raju told newspapers that Agnipath is in fact a pilot project and in response to pleas that it should be test-bedded, he said in four years Agniveer would be tweaked. This means the four year-engagement could be increased and the number of re-enlisted could also be increased. The pay package offered to Agniveers is in fact less than what regular soldiers receive after enlistment. There are other anomalies, including severance package, which need to be scrutinised. Listening to youth on social media and TV, it is clear they cannot be duped as they are questioning all aspects of the project, including why not Agniveers for officers also?

In his briefing, Lt Gen Puri let the cat out of the bag. He said: "In the last two years, we got an opportunity and we stopped the recruitment process." So COVID was used as a pretext to stop recruitment when in fact Agnipath was being prepared. He also said: "The AIAC recruitment model will remain unchanged. 75 per cent of the Army is already AIAC except single-class regiments like Sikh, Dogra, Garhwal, Gorkha, Jat and the like. The regimentation (presumably meaning regimental system) will remain unchanged."

Doval said: "The policy on the recruitment will not affect the current regimental system. The concept of regiments, nobody is tinkering with. The regimental system has not ended." Doval insisted there will be no rollback of Agniveer. The good news is that a few single-class regiments which in 2032 will have 50 per cent Agniveer and 50 per cent regulars will continue and be exempt from AIAC. Doval is the highest-ranking Government official to confirm this and put worries of regimental diehards at rest.

In the future, when Agniveers are enlisted to full capacity of 125,000 annually and 100,000 will be demobilised, second careers will have to be found for the latter. Current assurances by all and sundry are unreliable. The problem is: Agniveers will not only be competing among themselves for re-enlistment, they will also be competing with fulltime regulars. Sporting their Agniveer badges (some are calling it a new rank?), singling out this group will create bad blood creating different types of soldiers. This is a bad idea and should be dropped.

As in the British military from whose sinews the Indian system is derived, a military covenant is necessary between soldiers and the nation. The country should commit to taking care of them and their families through thick and thin as they put their lives on the block. Will the Agniveers

qualify for this as the regulars do? The biggest challenge for Agniveers is their effective integration into the military system and assimilation into combat units imbued with regimental ethos, tradition and motivation which underline the ultimate test on the battlefield.

Varun Gandhi is the only parliamentarian who is deriding the new scheme. One has not seen such an enormous upheaval against what is ostensibly a transformative defence reform. Agnipath Yojana requires a transformation to ensure defence of the realm is not compromised. Given the backlash to Agnipath, Government is unlikely to pick a CDS anytime soon. It has turned it into a modern swayamvar with 150 people in the contest.

(The writer, a retired Lt Gen, was Commander, IPKF South, Sri Lanka, and founder member of the Defence Planning Staff, currently the Integrated Defence Staff. The views expressed are personal.)

<http://www.dailypioneer.com/2022/columnists/stop-messing-with-our-military.html>



Wed, 29 Jun 2022

Mazagon Docks Lays Keel of 7th Ship of Prestigious Project-17A (NILGIRI-CLASS) Advanced Stealth Frigate

The keel for the seventh ship (Y-12654) of the prestigious P17A of Indian Navy was ceremoniously laid on 28 Jun 22 by Rear Admiral GK Harish, Director General Naval Design (Surface Ship Group) at Mazagon Dock Shipbuilders Ltd., Mumbai. The ceremony was performed in the presence of senior officials of the Indian Navy and MDL. Keel Laying is a major milestone activity in the construction of ships, symbolising formal commencement of the erection process of warships on the building berth.

Seven Frigates under P17A class are being constructed of which four are being constructed at MDL and three in GRSE with MDL as lead yard. The P17A class frigates are being built using indigenously developed steel and fitted with weapons and sensors along with Integrated Platform Management System. The construction of these vessels is a major boost for Aatmanirbhar Bharat and India's Make in India commitment with orders for equipment and systems on indigenous firms including MSMEs amounting to indigenous content to the order of 75%.

Construction of P17A ships differ in the very concept of warship building by way of adoption of the modern technology 'Integrated Construction (IC)' where the blocks are pre-outfitted before joining to reduce the build period of warships. When commissioned the platforms will enhance the combat capability of the Indian Naval fleet.

<http://www.indiandefensenews.in/2022/06/mazagon-docks-lays-keel-of-7th-ship-of.html?m=1>

Wed, 29 Jun 2022

Navy Issues Request for Information (RFI) for Naval Shipborne Unmanned Aerial System (NSUAS)

The Ministry of Defence, intends to procure approximately 40 (Forty) Naval Shipborne Unmanned Aerial System (NSUAS) for Surveillance and Reconnaissance, Sea lines of Communication (SLOC) monitoring and Coastal/Exclusive Economic Zone (EEZ) surveillance, anti-piracy and anti-terrorism, assistance in Search and Rescue and assistance in Maritime Domain Awareness. The NSUAS will be launched from a ship and will be used for Surveillance including SIGINT, Target Acquisition, and Reconnaissance and building MDA (Maritime Domain Awareness) around a Task Group. The secondary roles of NSUAS would include anti-piracy, antiterrorist activities and assist in Search and Rescue (SAR).

Each system is to comprise of two air vehicles, which are modular in design, made of composite material and that can be dismantled/folded for portability and stowage onboard ship (in a container provided along with Remotely Piloted Aircraft (RPA) being supplied. The RPA must be easily assembled onboard the ship.

<http://www.indiandefensenews.in/2022/06/navy-issues-request-for-information-rfi.html?m=1>

Wed, 29 Jun 2022

India-Vietnam Defence Ties Get a Major Push: Decoding Why Rajnath Singh's Hanoi Visit Was So Important

Defence Minister Rajnath Singh embarked on a three-day visit to Hanoi, Vietnam, from 8-10 June 2022 with an aim to further strengthen the defence and maritime security cooperation between India and Vietnam. Vietnam is an important player in India's Act East policy and also its Indo-Pacific vision. The defence minister handed over 12 high-speed guard boats to Vietnam. Five of those were built in India, and the rest in a Vietnamese shipyard under India's \$100 million Defence Line of Credit.

The Defence Minister held extensive talks with his Vietnamese counterpart, General Phan Van Giang, with a focus on exploring new initiatives to further strengthen the defence engagements, besides exchanging views on regional and global issues of shared interest. During his Vietnam tour, he also visited training institutions of the country at Nha Trang, including the Telecommunication University where an Army Software Park is being established with a \$5 million grant from India. India and Vietnam signed an MoU on mutual logistics support, the first such major agreement Hanoi has inked with any country for simplifying procedures for

mutually-beneficial logistic support to allow militaries of the two sides to use each other's bases for repair and replenishment of supplies.

The two countries also signed the 'Joint Vision Statement on India-Vietnam Defence Partnership towards 2030' which will “significantly enhance” the scope and scale of bilateral defence cooperation. The two sides also agreed to the early finalisation of the \$500 million defence Line of Credit (LoC) extended to Vietnam by India. In a statement issued by the Indian defence ministry, it said, “The implementation of the projects under the LoC will add substantially to Vietnam's defence capabilities and further Prime Minister Narendra Modi's vision of 'Make in India, Make for the World’”. From the Indian end, gifting of two simulators and monetary grants towards setting up a language and IT laboratory at the Air Force Officers Training School for capacity building of the Vietnamese armed forces was also announced.

These developments during the recent visit are indeed reflective of the fact that the India-Vietnam defence partnership is getting a push. The deepening of the defence ties has been a gradual process nonetheless. Vietnam was the first country in the Southeast Asian region with whom India had signed a Strategic Partnership Agreement in 2007, which from 2016 onwards after the visit of Prime Minister Narendra Modi to Vietnam has been elevated to a ‘Comprehensive Strategic Partnership’.

In the early 2000s, both sides also signed a defence protocol through which Vietnam could procure military helicopters and equipment for the repair of Vietnamese aircraft. A provision was also made for facilitating the training of Vietnam’s military personnel by India. During the signing of the Comprehensive Strategic Partnership, India had reiterated “its commitment to provide necessary assistance in developing Vietnam’s defence capabilities as well as providing a new line of credit facility for the country.” Moreover, on the logistics front, the implementation of the \$100 million Line of Credit for building high-speed patrol vessels to be used by the Vietnamese Border Guards is a classic example of India’s strategic support.

The Vietnamese side has also appreciated India’s offer of \$500 million Line of Credit to the local defence industry and agreed to accelerate procedures for its timely approval. Other defence engagements include joint military exercises, the latest of which was held in August 2021 when Indian and Vietnamese navies took part in a bilateral exercise in the South China Sea. India had deployed four frontline ships for the exercise, including INS Ranvijay and INS Kora, which were already on overseas deployment in Southeast Asia, the South China Sea and Western Pacific. Vietnam sent Vietnam People’s Navy (VPN) frigate VPNS Ly Thai To (HQ-012) for the exercise.

Vietnam has always been a critical partner for India in its Southeast Asian diplomacy, both under its Look East policy and now in the era of the Act East policy. India was the only country to have supported Vietnam’s invasion of Cambodia in 1978. This had also stalled the process of India becoming a dialogue member in the ASEAN. Vietnam’s approach or foreign policy orientation has evolved over the years and this can be seen at how the US-Vietnam relations have advanced over the years. The relationship is currently seen as mutually beneficial. This evolution of approach is also reflective in the way Vietnam handles China as well, where on the one hand it is one of the leading ASEAN countries to openly call out China for its aggressive stance in the disputed South China Sea, and on the other hand China is also the leading trading partner of Vietnam. With India on the contrary, Vietnam hardly has had any differences or conflict of opinions and the relation has been smooth.

But as mentioned above this reform in attitude has provided the much-needed push for this bilateral relationship to make some substantial progress and not just remain a talking shop marked by some agreements and high-level visits. The wariness of other Southeast Asian countries when it comes to the growing influence in Southeast Asia of external powers like the US, Australia, India among others to balance a rising China is clearly visible, it is Vietnam which openly supports the idea of countries like the US, India taking more interest in the challenges that the region is facing.

Vietnam has insisted on several forums that other stakeholders, even if not direct claimants in the South China Sea dispute like the US and India, should persuade China to work faster on a Code of Conduct in the South China Sea. Vietnam though also is keeping its relations with China intact, given the economic benefits, but also does not shy away from calling out Beijing when needed. India has ongoing oil exploration projects with PetroVietnam, although China continues to object to India's oil exploration operations in areas offered by Vietnam and has on a number of occasions asked India to withdraw these projects. But Vietnam has lent its full support to India in this regard. This indeed makes Vietnam a valuable partner and player in the Indo-Pacific. India and Vietnam have agreed to strengthen bilateral cooperation in line with India's Indo-Pacific Oceans Initiative and ASEAN's Outlook on the Indo-Pacific in order to ensure shared security, growth and prosperity for the Indo-Pacific region.

Another push to further boost the defence ties and defence industry collaboration has been for India's drive of establishing its place as a potential exporter in the defence sector globally. This can be seen in Defence Minister Rajnath Singh's statement at Hanoi: "The project is a glowing example of Prime Minister Narendra Modi's vision of Make in India, Make for the World. The successful completion of the project, despite the challenges due to the Covid-19 pandemic, is a testimonial to the commitment and professional excellence of the Indian defence manufacturing sector as also of Hong Ha Shipyard and expressed confidence that it will be a precursor to many more cooperative defence projects between India and Vietnam in future." Vietnam has mostly faced the brunt of Chinese aggression in the South China Sea since the 1970s — from China's occupation of Paracels in 1974, to the occupation of Spratlys in the 1980s. This threat has only intensified in recent times. This looming threat and Vietnam's reformed attitude and foreign policy orientation will only provide the much needed impetus to Vietnam to look at potential like-minded players in the Indo-Pacific like India.

<http://www.indiandefensenews.in/2022/06/india-vietnam-defence-ties-get-major.html?m=1>

Armed Forces to Procure 4,800 New Sniper Rifles

Armed forces to procure 4,800 new sniper rifles

New Delhi: A well-trained sniper is a deadly force-multiplier on the battlefield to strike fear in hearts of enemies. With this in mind, the Army is now finally going in for the acquisition of a large number of long-range sniper rifles as well as upgrading training in this lethal skill, reports **Rajat Pandit**.

The Army on Tuesday issued the request for information (RFI) to procure 4,800 new sniper rifles with telescopic sights and 78 lakh rounds of ammunition from Indian companies for soldiers deployed on the borders with Pakistan and China.

Concurrently, the basic and advanced sniper courses are also being upgraded at the Infantry School in Mhow. "The right training and deployment of sniper teams boosts their use as force multipliers and human intelligence assets, yielding great dividends," a senior officer said.

"While long-range precision shooting is the most fundamental skill, good snipers also need to be adept at survival, concealment, stalking and navigation for conventional conflicts as well counter-terrorism operations," he added.

The RFI specifies the new .338-calibre sniper rifles should have an effective range of over 1,200-metres, along with the .338 Lapua Magnum high-powered cartridges. The deal will be worth around Rs 460 crore.

"The tender or RFP (request for proposal) to Indian vendors will be issued around September," officer said.

How Major Foreign Militaries Induct and Release Personnel

How major foreign militaries induct and release personnel

All militaries aim to be better than their adversaries, but no two are built the same way. Amid the launch of the controversial Agnipath scheme, which prescribes a four-year service period and no lifelong pension, here's a look at the recruitment policies of some other major militaries.

UNITED STATES



4-Year Minimum Service, Full Pension After 20 Years

The US has not enforced conscription since the Vietnam War but retains its power to order a draft. At present, enlistment in its military is voluntary for citizens aged 17 and above. The maximum cutoff age varies from 28 years in the Marines to 39 years in the air force.

Normal service involves four years of active duty and four years of inactive or reservist status. Upon completion of active duty, personnel can extend their contract to continue serving.

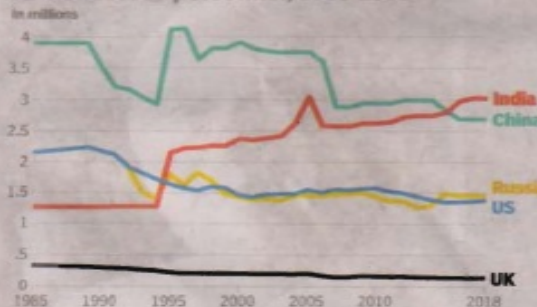
PENSION

Soldiers who opt for full service become eligible for pension and benefits after serving for 20 years. Starting 2018, the US military has two retirement systems: Blended Retirement System (BRS), and the older 'defined benefit system' known as High-3. A Quartz article says the pension benefits after 20 years of service are "very generous" but only 17% of active duty members serve that long. BRS was therefore introduced to make the military an attractive career choice for those on shorter contracts. In BRS, personnel contribute to their pension plan and the government makes a matching contribution. So, all US military personnel now leave service with some retirement savings.

The article says US military pension reforms "were well received, with more than half of service members in favour of them".

Text: Kenneth Mohanty; Design: Anil Parwar
Source: usa.gov, parliament.uk, globalpolicyinsights.org, World Bank media reports

Armed forces personnel, 1985-2018



RUSSIA



Mix Of Conscripts, Contract Soldiers

Russia still enforces conscription, requiring 12 months of service for all male citizens aged 18-27 years, normally in non-combat positions. However, exemptions are available on health grounds and for higher studies. Russia also has a contract system for hiring professional soldiers who are deployed in critical battle positions after advanced training, although it is reported to have also deployed conscripts in Ukraine.

In the ongoing Ukraine war, Russia reportedly suspended the service age limits of 18-40 years for Russians and 18-30 years for foreigners. Now, people aged 40 and above can join its military.

PENSION

The webpage of the Pension Fund of the Russian Federation says a "long-service state pension" is given to servicemen, cosmonauts and test pilots, among others, while a "loss of breadwinner state pension" is paid to "unemployable family members of killed servicemen". Further, a "disability state pension" is given to servicemen, WWII veterans, and others.

UNITED KINGDOM



Pension Benefits After 2 Years Of Service

The UK is the only European country that enlists people under the age of 18. The minimum age for enlisting is 16, and a British parliamentary note says, "those who sign on when 16 or 17 must serve until they are 22". The minimum length of service ranges from four years in the army to 3-3.5 years after completion of training in the navy and the air force. After active service, personnel move to the reserves for six years.

PENSION

The UK government says, "pension entitlement starts accumulating from the first day of paid service" and personnel are eligible to receive pension benefits after serving for at least 2 years.

CHINA



Working On A Leaner, More Tech-Savvy Force

China has the world's largest military, but it has been reducing the size of its army and expanding its navy and air force. A 2018 article in The Diplomat said the People's Liberation Army (PLA) had cut around 3 lakh troops - mostly from the ground forces - since July 2017.

Instead of a large headcount, China now wants tech-savvy personnel. A 2022 report in the state-run Global Times said the PLA would recruit non-commissioned officers (NCOs) from the national college entrance exam candidates to "boost the quality of its troops and improve the employment of graduates at the same time". Applicants need to be under 20 years old, and single, and must meet the prescribed physical and "political" conditions. China has never ordered a draft, but if it does, conscripts will have to serve for a minimum 3 years in the army and 4 years in the navy and air force. Volunteers, however, are in active service for at least 8 years and a maximum of 12 years up to the age of 35.

PENSION

The Global Times report also said the NCOs "will enjoy the same benefits as first-year conscripts like subsidies, fares, medical support and insurance" from the day they join, and would "get the salary and benefits for such positions" after getting their ranks.



Wed, 29 Jun 2022

Officials: US Sending Advanced Missile Systems to Ukraine

The US is planning to buy and send more medium- to long-range missile systems to Ukraine, a move officials hope will help Ukrainian forces hold onto the last remaining segments of land in the eastern Donbas that Russia has not yet been able to capture. A senior defense official said Monday that Ukrainian forces are already effectively using advanced rocket systems, and that more of those will go into Ukraine with trained troops soon. A new plan for the U.S. To buy and send NASAMS, an advanced surface-to-air missile system, to Ukraine, is also in the works and would add to its longer-range rocket and missile strike capabilities.

President Joe Biden is expected to announce soon that the U.S. Is purchasing NASAMS, a Norwegian-developed anti-aircraft system, to provide medium- to long-range defense for Ukraine, according to an administration official familiar with the matter. NASAMS is the same system used by the U.S. To protect the airspace around the White House and Capitol in Washington. Both the defense official and the administration official spoke on condition of anonymity to discuss U.S. Military assessments and plans that have yet to be announced.

Russia has been mounting an all-out assault on the last Ukrainian stronghold in the eastern Luhansk region - the city of Lysychansk - from the ground and air, the local governor said Monday. Luhansk Gov. Serhiy Haidai said Russian forces were pummeling Lysychansk after capturing the neighboring city of Sievierodonetsk in recent days. It's part of a stepped-up Russian offensive to wrest the broader Donbas region from Ukrainian government control in what Western experts say has become the new main goal of President Vladimir Putin's war in Ukraine, now in its fifth month. The defense official said the U.S. Continues to see morale and other command and control problems among the Russian forces, and that some local Russian officials in Ukraine have been assassinated in recent days.

The U.S. Has sent four High Mobility Artillery Rocket Systems, or HIMARS, into Ukraine, which already are being used. Four more will go in soon.

<https://www.dailypioneer.com/2022/world/officials--us-sending-advanced-missile-systems-to-ukraine.html>

DefenseNews

Wed, 29 Jun 2022

US Army Unveils Contract to Build New Light Tank for Infantry Forces

The U.S. Army on Tuesday selected General Dynamics Land Systems to build a light tank meant to improve mobility, protection and direct-fire capabilities for Infantry Brigade Combat Teams. The production deal is a key step forward for Army Futures Command, which has promised faster and more successful modernization programs through a competitive prototyping approach.

GDLS will deliver 26 vehicles initially, but the contract allows the Army to buy 70 more over the course of low-rate initial production for a total of \$1.14 billion, according to the Army. At least eight of the 12 prototypes used during competitive evaluation will be retrofitted to be fielded to the force, service officials in charge of the competition said.

The first production vehicles are expected to be delivered in just under 19 months. The first unit will receive a battalion's worth of MPF systems — 42 vehicles — by the fourth quarter of fiscal 2025. The Army plans to enter full-rate production in calendar year 2025, according to GDLS. "MPF shows the Army is committed to doing acquisition rapidly and using all the new approaches and new authorities we have to do modernization in a new way," Army acquisition chief Doug Bush said in a June 28 media roundtable. He noted it's the first major platform going from prototyping to production under Army Futures Command, which relies on new rapid prototyping authorities.

"This program is leading the way in that effort, and prototyping into production is not easy. There's a lot more work to do as we go into low-rate production and then we have operational testing," he said. "But I'm very encouraged by the work so far." The Army expects to spend roughly \$6 billion on the MPF program through the procurement phase, including what's already been spent in research and development and prototyping, according to Brig. Gen. Glenn Dean, the service's program executive officer for ground combat systems. The total life cycle cost of the program including sustainment, military construction and personnel is estimated at around \$17 billion. The Army plans to buy 504 vehicles, and they are projected to be in the inventory for at least 30 years. The bulk of procurement should be complete by 2035, Dean said, adding that the MPF program has remained on schedule and budget. Once fielded, the MPF capability will be organized by battalion, but will be employed as companies "generally" at the brigade level, Maj. Gen. Ross Coffman, who oversees combat vehicle modernization, said during the same roundtable.

GDLS and BAE Systems — selected in 2018 to build prototypes — were competing to produce MPF. Reports earlier this year indicated the service had already made its choice, taking BAE out of the competition several months ahead of announcing the winner. At the time, Bush said the Army had conducted a fair and thorough evaluation of both vehicles, but did not address the reports the Army had already decided on a winner. Dean, during Tuesday's roundtable, declined to discuss the selection process, citing the sensitivity of the competition. The two prototypes differed significantly. GDLS offered a new, lightweight chassis with a high-performance power pack and an advanced suspension, combined with a turret featuring the latest version of the fire control system found in the Abrams main battle tank.

BAE Systems' design is an updated M8 Buford armored gun system with new capabilities and components. Army officials said the service opted to move forward with GDLS because it offered the best value. The cost of the system, the maturity and the readiness for production were all factors, Dean said. In 2021, the companies were tasked with delivering prototypes to a soldier vehicle assessment with the 82nd Airborne Division at Fort Bragg, North Carolina. There, soldiers worked to validate the MPF concept and provide feedback on how the service should develop tactics, techniques and procedures for fighting with this capability.

GDLS delivered vehicles to the soldier evaluation in January, months ahead of BAE Systems, which struggled with production delays due to the coronavirus pandemic. Soldiers wrapped up evaluations in early August. In fall 2021, the competing light tank prototypes moved into the

Army's limited-user test, including live-firing of the systems, which marked the final step before the service selected a winner. "The soldiers the Army selected for [the soldier evaluation] were tankers, so they were familiar with the Abrams tank when they started last year's evaluation and they immediately saw how common the look and feel and operations inside the turret were [compared] to the Abrams tank today," Tim Reese, GDLS' director of U.S. business development, told Defense News on June 28. "It didn't take a lot of training to get them up to speed."

The company also included a commander's independent thermal viewer, which was not originally an Army requirement, Reese said. Reese said the commonality to Abrams will mean the vehicles can be upgraded together where appropriate. He said the company designed its vehicle with growth capacity "for what we would imagine over the lifetime of the program will be the desire to upgrade things or add capabilities" and said GDLS made some tweaks to the vehicle after soldier feedback. "One of the things that the soldiers really wanted was the skirts on the track to be more easily removable and turn-able, so they could get in and clean and adjust the track," Reese said. "We made some changes to the seals around hatches based on their feedback. We learned a few things about the cooling system," he said. "There's a number of things that are better today or will be better when we get into low-rate production than those first 12 that we built for the competition." BAE Systems told Defense News in a statement that while the company was "not chosen to move forward in the MPF competition, we will take the innovation and lessons learned from our solution with us and apply it to future modernization efforts."

<https://www.defensenews.com/land/2022/06/28/us-army-unveils-contract-to-build-new-light-tank-for-infantry-forces/>

DefenseNews

Tue, 28 Jun 2022

US Army Awards \$72 Million for New Phase in Next-Gen Ground System Effort

The U.S. Army announced Tuesday its effort for a next-generation, software-centric ground system is transitioning to another phase. The service awarded \$36 million each to software company Palantir Technologies and defense firm Raytheon Technologies for work on the Tactical Intelligence Targeting Access Node, which is currently under development. TITAN is expected to help connect sensors with users in the field to support beyond-line-of-sight targeting.

The Army selected both companies in January 2021 to mature their respective designs during the program's first phase. The new awards for the second phase will be used to transform their plans into



Targeting solutions created by TITAN will be fed to shooters like the Extended Range Cannon Artillery in future Project Convergence demonstrations.

prototypes. Phase II is expected to last 14 months and will culminate with a capstone demonstration and a contract to a single provider. The third and fourth legs of the development effort will focus on refining the prototype and preparing the system to integrate sensors and future technology improvements.

During Phase I of the effort, the Army worked with Palantir and Raytheon to ensure their designs met the usability and workflow requirements for soldiers operating in a multidomain environment. In a statement Tuesday, the Army said soldier feedback from Phase I will inform Phase II prototypes. As the two companies mature their TITAN prototypes, the Army and the Pentagon's Defense Innovation Unit have partnered with defense contractor Northrop Grumman to develop two pre-prototype ground stations, which the program can use to demonstrate TITAN capabilities before the system is ready. The Army expects to begin using the Northrop systems as TITAN surrogates in demonstrations later this year. A senior engineer with Palantir told reporters that the pre-prototype capabilities will eventually be part of the software specialist's prototype and will be integrated toward the end of Phase II. Connecting data systems across warfighting domains through programs like TITAN is a key piece of the Department of Defense's Joint All-Domain Command and Control concept and is a major focus for the Army. The service has been testing this concept with TITAN surrogates, including during its 2020 Project Convergence demonstration. During that event, the Army linked tactical satellite imagery to a TITAN stand-in system that used an artificial intelligence program to develop targeting options with the data. Those options were transmitted to the demonstration site at Yuma Proving Ground in Arizona and a separate AI system sent a targeting solution to a designated shooter.

<https://www.defensenews.com/industry/2022/06/28/us-army-awards-72-million-for-new-phase-in-next-gen-ground-system-effort/>

DefenseNews

Wed, 29 Jun 2022

Turkey Lifting Objections to Sweden, Finland Joining NATO

Turkey agreed Tuesday to lift its opposition to Sweden and Finland joining NATO, a breakthrough in an impasse clouding a leaders' summit in Madrid amid Europe's worst security crisis in decades triggered by the war in Ukraine. "We now have an agreement that paves the way for Finland and Sweden to join NATO," alliance Secretary General Jens Stoltenberg said following top-level talks. Russia's invasion of Ukraine prompted Sweden and Finland to abandon their long-held nonaligned status and apply to join NATO. But Turkish President Recep Tayyip Erdoğan had blocked the move, insisting the Nordic pair change their stance on Kurdish rebel groups that Turkey considers terrorists.

Finnish President Sauli Niinistö said the three countries' leaders signed a joint agreement after talks on Tuesday. Turkey said it had "got what it wanted" including "full cooperation ... in the fight against" the rebel groups. The agreement comes at the opening of a crucial summit dominated by Russia's invasion of Ukraine. U.S. President Joe Biden and other NATO leaders arrived in Madrid for a summit that will set the course of the alliance for the coming years. The summit was kicking off with a leaders' dinner hosted by Spain's King Felipe VI at the 18th-century Royal Palace of Madrid.

Stoltenberg said the meeting would chart a blueprint for the alliance “in a more dangerous and unpredictable world.” “To be able to defend in a more dangerous world we have to invest more in our defense,” Stoltenberg said. Just nine of NATO’s 30 members meet the organization’s target of spending 2% of gross domestic product on defense. Spain, which is hosting the summit, spends just half that. Top of the agenda for leaders in meetings Wednesday and Thursday is strengthening defenses against Russia and supporting Ukraine. Biden, who arrived with the aim of stiffening the resolve of any wavering allies, said NATO was “as united and galvanized as I think we have ever been.” Moscow’s invasion on Feb. 24 shattered European security and brought shelling of cities and bloody ground battles back to the continent. NATO, which had begun to turn its focus to terrorism and other nonstate threats, has had to confront an adversarial Russia once again. “Ukraine now faces a brutality which we haven’t seen in Europe since the Second World War,” Stoltenberg said.

Diplomats and leaders from Turkey, Sweden and Finland earlier held a flurry of talks in an attempt to break the impasse over Turkey’s opposition to expansion. The three countries’ leaders met for more than two hours alongside Stoltenberg on Tuesday before the agreement was announced. Erdoğan is critical of what he considers the lax approach of Sweden and Finland toward groups that Ankara deems national security threats, including the Kurdistan Workers’ Party, or PKK, and its Syrian extension. American support for Syrian Kurdish fighters in combatting the Islamic State group has also enraged Turkey for years. Turkey has demanded that Finland and Sweden extradite wanted individuals and lift arms restrictions imposed after Turkey’s 2019 military incursion into northeast Syria. Ending the deadlock will allow NATO leaders to focus on their key issue: an increasingly unpredictable and aggressive Russia.

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Stoltenberg said Monday that NATO allies will agree at the summit to increase the strength of the alliance’s rapid reaction force nearly eightfold, from 40,000 to 300,000 troops. The troops will be based in their home nations, but dedicated to specific countries on NATO’s eastern front, where the alliance plans to build up stocks of equipment and ammunition. Beneath the surface, there are tensions within NATO over how the war will end and what, if any, concessions Ukraine should make to end the fighting.

There are also differences on how hard a line to take on China in NATO’s new Strategic Concept — its once-a-decade set of priorities and goals. The last document, published in 2010, didn’t mention China at all. The new concept is expected to set out NATO’s approach on issues from cybersecurity to climate change — and the growing economic and military reach of China,

as well as the rising importance and power of the Indo-Pacific region. For the first time, the leaders of Japan, Australia, South Korea and New Zealand are attending the summit as guests. Some European members are wary of the tough U.S. line on Beijing and don't want China cast as an opponent. In the Strategic Concept, NATO is set to declare Russia its No. 1 threat.

Russian state space agency Roscosmos marked the summit's opening by releasing satellite images and coordinates of the Madrid conference hall where it is being held, along with those of the White House, the Pentagon and the government headquarters in London, Paris and Berlin. The agency said NATO was set to declare Russia an enemy at the summit, adding that it was publishing precise coordinates "just in case."

<https://www.defensenews.com/global/europe/2022/06/28/turkey-lifting-objections-to-sweden-finland-joining-nato/>



Wed, 29 Jun 2022

NATO Summit Madrid 2022 to Open as Leader Warns of 'Dangerous' World

Russia's invasion of Ukraine has sparked a "fundamental shift" in NATO's approach to defense, and member states will have to boost their military spending in an increasingly unstable world, the leader of the alliance said Tuesday. Secretary-General Jens Stoltenberg spoke as U.S. President Joe Biden and other NATO leaders arrived in Madrid for a summit that will set the course of the alliance for the coming years. The summit was kicking off with a leaders' dinner hosted by Spain's King Felipe VI at the 18th-century Royal Palace of Madrid. Stoltenberg said the meeting would chart a blueprint for the alliance "in a more dangerous and unpredictable world." "To be able to defend in a more dangerous world we have to invest more in our defense," Stoltenberg said. Just nine of NATO's 30 members meet the organization's target of spending 2% of gross domestic product on defense. Spain, which is hosting the summit, spends just half that.

Top of the agenda for leaders in meetings Wednesday and Thursday is strengthening defenses against Russia and supporting Ukraine. U.S. President Joe Biden, who arrived with the aim of stiffening the resolve of any wavering allies, said NATO was "as united and galvanized as I think we have ever been." Moscow's invasion on Feb.

24 shattered European security and brought shelling of cities and bloody ground battles back to the continent. NATO, which had begun to turn its focus to terrorism and other non-state threats, has had to confront an adversarial Russia once again. "Ukraine now faces a brutality which we haven't seen in Europe since the Second World War," Stoltenberg said. Russia's invasion has prompted Sweden and Finland to abandon their long-held nonaligned status and apply to join NATO. But they are being blocked by Turkish President Recep Tayyip Erdogan, who has insisted that he will only allow the Nordic pair to enter if they change their stance on Kurdish rebel groups that Turkey considers terrorists.

Stoltenberg said “we hope to make progress” on the issue in Madrid — but that was far from certain. Diplomats and leaders from the three countries have held a flurry of talks in an attempt to break the impasse. The three countries’ leaders met for more than two hours alongside Stoltenberg on Tuesday. The Turkish leader showed no sign of backing down as he left Ankara for Madrid. “We don’t want empty words. We want results,” Erdogan said. Erdogan is critical of what he considers the lax approach of Sweden and Finland toward groups that Ankara deems national security threats, including the Kurdistan Workers’ Party, or PKK, and its Syrian extension. American support for Syrian Kurdish fighters in combatting the Islamic State group has also enraged Turkey for years.

Turkey has demanded that Finland and Sweden extradite wanted individuals and lift arms restrictions imposed after Turkey’s 2019 military incursion into northeast Syria. Sinan Ulgen, director of the Center for Economics and Foreign Policy Studies in Istanbul, was pessimistic about a breakthrough in Madrid. He said the issue of the Kurdish groups was the main block, “but there are other demands, and the involvement of other actors like the U.S. could facilitate a deal.” Biden is due to meet Erdogan Wednesday on the sidelines of the NATO summit. U.S.

national security adviser Jake Sullivan said the Nordic nations dispute would not be the “central focus” of the meeting and the U.S. was not going to “take on a brokering role.” Ankara has been upset with the U.S. since the Americans kicked Turkey out of its F-35 stealth jet program after Turkey bought Russian-made S-400 missiles. Turkey is waiting to hear back on a request for upgraded F-16s from the U.S. Jamie Shea, a former senior NATO official who is an associate at the Chatham House think tank, said the Madrid meeting, with national leaders present in the media glare, “is the moment of maximum pressure” for compromise.

“It’s either at Madrid or it’s likely to go on for a long while,” he said. Ending the deadlock would allow NATO leaders to focus on their key issue: an increasingly unpredictable and aggressive Russia. A Russian missile strike Monday on a shopping mall in the central Ukrainian city of Kremenchuk was a grim reminder of the war’s horrors.

Some saw the timing, as Group of Seven leaders met in Germany and just ahead of NATO, as a message from Moscow. Ukrainian President Volodymyr Zelenskyy, who is due to address NATO leaders by video on Wednesday, called the strike on the mall a “terrorist” act. Kyiv Mayor Vitali Klitschko traveled to Madrid to urge the alliance to provide his country with “whatever it takes” to stop the war.

“Wake up, guys. This is happening now. You are going to be next, this is going to be knocking on your door just in the blink of an eye,” Klitschko told reporters at the summit venue. Stoltenberg said Monday that NATO allies will agree at the summit to increase the strength of the alliance’s rapid reaction force nearly eightfold, from 40,000 to 300,000 troops. The troops will be based in their home nations, but dedicated to specific countries on NATO’s eastern flank, where the alliance plans to build up stocks of equipment and ammunition. Beneath the surface, there are tensions within NATO over how the war will end and what, if any, concessions Ukraine should make to end the fighting.

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Japan, Australia, South Korea and New Zealand are attending the summit as guests. Some European members are wary of the tough U.S. line on Beijing and don't want China cast as an opponent.

Stoltenberg said last week that “we don't regard China as an adversary,” but added that it “poses some challenges to our values, to our interests, to our security.” In the Strategic Concept, NATO is set to declare Russia its number one threat. Russia's state space agency, Roscosmos marked the summit's opening by releasing satellite images and coordinates of the Madrid conference hall where it is being held, along with those of the White House, the Pentagon and the government headquarters in London, Paris and Berlin. The agency said NATO was set to declare Russia an enemy at the summit, adding that it was publishing precise coordinates “just in case.”

<https://www.thehindu.com/news/international/nato-summit-madrid-2022-to-open-as-leader-warns-of-dangerous-world/article65577723.ece>

Science & Technology News



Tue, 28 Jun 2022

Open-Source and Open Hardware Autonomous Quadrotor Flies Fast and Avoids Obstacles

A team of researchers at the University of Zurich, has developed a highly agile quadrotor drone that is able to avoid obstacles and carry out trajectory tracking. In their paper published in the journal *Science Robotics*, the group describes how they designed their drone, what they put into it and how well it worked when tested. Quadrotor drones can be very agile fliers, most particularly when they have a human pilot guiding their movements.

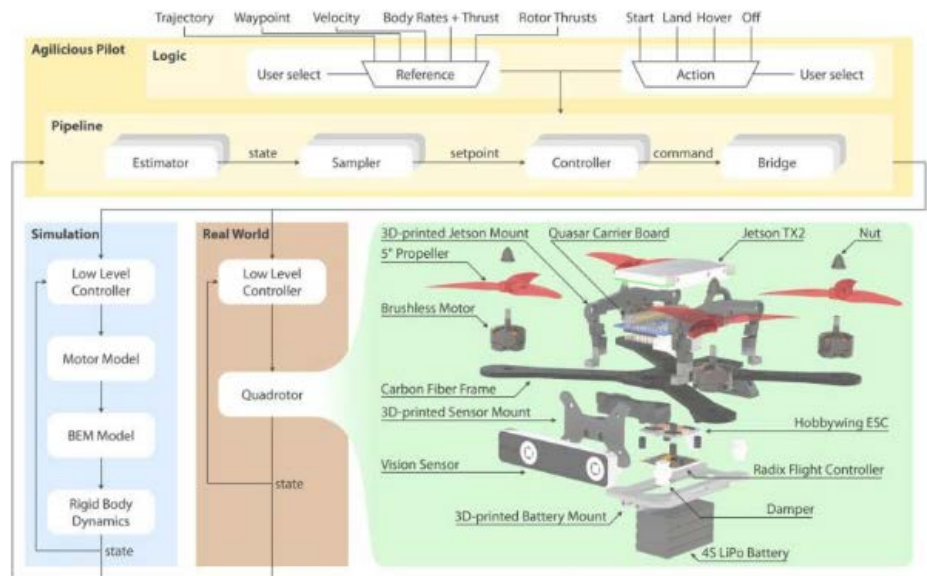
Autonomous quadrotors, on the other hand, have suffered from agility issues, particularly when traveling at high speeds. In this new effort, the team in

Switzerland has improved the agility of a quadrotor drone with their new design built using a variety of technologies. The new design involved adding onboard vision sensors, monitoring systems for flight control and a host of other components meant to improve the ability of the drone to receive and process flight information in real time. They also added an advanced AI module, NVIDIA Jetson TX2—one that is able to carry out complex tasks supporting the drone's hardware quickly enough to allow for smooth agile flight.



Robotics and Perception Group

The researchers tested their drone under a wide range of flights, from slow and steady, to full speed to obstacle avoidance. They found their drone capable of maintaining agility at speeds ranging from 50 to 70 kph. They also found it could conduct motion-capture trajectory tracking, where the drone continuously observes its position in the air



and adds time instances to show where it is and when.

The Agilicious software and hardware quadrotor platform are tailored for agile flight while featuring powerful onboard compute capabilities through an NVIDIA Jetson TX2.

They also tested its use in virtual reality simulations. And they also noted, that the system was able to learn as it went and because of that its performance improved over time.

In looking at the results of their testing, the researchers found that their drone outperformed other systems in both agility and obstacle tracking and avoidance. They suggest its performance raises it to the degree that it could be used for time-sensitive real-world missions, such as search and rescue operations and perhaps delivery of goods. The team has also made both the software and hardware open source, allowing anyone who wishes to use their design to do so.

More information: Philipp Foehn et al, Agilicious: Open-source and open-hardware agile quadrotor for vision-based flight, *Science Robotics* (2022). DOI: [10.1126/scirobotics.abl6259](https://doi.org/10.1126/scirobotics.abl6259)

<https://techxplore.com/news/2022-06-open-source-hardware-autonomous-quadrotor-flies.html>

Why A Zero Trust Approach Is Key To Cyber Security Now

Why a zero trust approach is key to cyber security now

Shilpa Phadnis & Sujit John | TNN

When people worked mostly from offices using on-premise data centres, the perimeters of the enterprise were fairly well-defined, and IT departments could feel reasonably safe with perimeter defences against cyberattacks. That comfort disappeared when everyone started working remotely, and when large amounts of workloads started moving to the cloud.

This has brought to fore a concept that's now widely talked about in cyber-security - zero trust. What it means is, enterprise systems must not trust anyone or anything, must consider everyone and everything a potential threat, and must verify them every single time they try to access an internal resource.

Tushar Haralkar, security software technical sales leader for IBM's technology sales in India, noted at our webinar last week that zero trust is not a product or a tool; it's the overall security strategy aligned to your business goal. The principle, he said, is to distrust every user, device, application, or process. "We need to continuously evaluate access to firms' sensitive data, looking at contextual information. Every connection must prove to be legitimate from a need perspective," he said.

Nilesh Shirke, associate partner at EY, said in the traditional approach, firms focus on defending the perimeters and assume that every user inside the network is trusted and cleared for access. "Today, when people are working remotely, workloads are moving to the cloud, and information is shared by APIs, this traditional approach seems vulnerable," he said.

The pandemic, he said, has thrown a new challenge for organisations to secure remote work and identify legitimate users from all types of people trying to get

LOOK AT ZERO TRUST AS A 30-90-DAY PHASED PROGRAMME

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Nilesh Shirke | ASSOCIATE PARTNER, EY

Zero trust is based on core principles such as never trust and always verify. Don't assume any user, device, application, or any process is trustworthy. We need to continuously evaluate access to firms' sensitive

data, looking at contextual information. Every connection must prove to be legitimate.

Tushar Haralkar | SECURITY SOFTWARE TECHNICAL SALES LEADER, IBM TECHNOLOGY SALES, INDIA/SOUTH ASIA



Zero trust is a sequence of maturity levels an organisation must go through as part of their security preparedness. One should keep reference frameworks for zero trust, and they can look at a 30-90-day phased programme.

Mayank Vaish | VICE PRESIDENT, IDENTITY & ACCESS MANAGEMENT, AUJAS



into your networks. "Every day we get to hear about ransomware attacks. Being proactive is critical," he said.

Mayank Vaish, vice-president of identity and access management at cybersecurity firm Aujas, said zero trust is about identity centric security - instead of perimeter based security. Every identity

itself, he said, is today a perimeter. Vaish said that given the massive automation happening, identities for non-humans have also become very important.

Haralkar said a core principle of zero trust must be to enable 'least privilege' and provide minimum access based on the job role. "Firms are hardening devices so that only whitelisted application processes have access to data. So, even if there is a ransomware attack on any end point, it will not be able to access the data," he said. A big challenge today, he said, is also to get consistent security across multiple clouds. Zero trust, he said, will help you get visibility into where your critical data is lying, and then you will start monitoring it closely.

Does zero trust slow down access? No, said Vaish. There are technologies like password-less sign-in, he said, that ensure seamless access.

