

Nuclear, Missile & Space Digest

Volume 16, Number 12

A Fortnightly Newsletter from the MP-IDSA

June 30, 2024

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A. India

India to carry out trials of indigenous short-range air defence missiles

India Today, June 16, 2024

The Defence Research and Development Organisation (DRDO) will carry out trials of the indigenous Very Short Range Air Defence Systems (VSHORADS) soon, senior defence officials said.

Trials of the missile, which can hit aerial targets at very short ranges, are going to be carried out in high altitude areas such as Ladakh or Sikkim very soon, the officials told India Today TV.

The tripod fired air defence system is being developed as part of an indigenously designed, developed and manufactured system, they said.

In February, the DRDO successfully conducted two flight tests of the VSHORADS missile from the Integrated Test Range off Odisha's Chandipur.

These tests were carried out against high speed unmanned aerial targets under different interception scenarios. During all the test flights, the targets were intercepted and destroyed by the missiles.

The VSHORADS is propelled by a dual thrust solid motor and will be used for neutralising low altitude aerial threats at short ranges.

<https://www.indiatoday.in/india/story/drdo-very-short-range-air-defence-system-missile-trial-run-make-in-india-2553989-2024-06-16>

India's nuclear stockpile crosses Pakistan for first time in 25 years: SIPRI

The Economic Times, June 19, 2024

For the first time in 25 years, the Indian nuclear weapons stockpile has surpassed that of Pakistan, with a leading global tracker assessing that India now has 172 warheads, against 170 estimated to be with Pakistan.

The latest report by arms tracker SIPRI also suggests that for the first time, China has put its nuclear weapons on high operational alert, mating warheads with delivery platforms like long-range missiles for short-notice strikes.

<https://economictimes.indiatimes.com/news/defence/indias-nuclear-stockpile-crosses-pakistan-for-first-time-in-25-years-sipri/articleshow/111066567.cms?from=mdr>

India, US discussing co-production of Javelin anti-tank missiles

The Economic Times, June 24, 2024

New Delhi: India and the US held discussions on the co-production of American javelin missiles in India to meet the requirements of the Indian military.

The discussions on the joint production of the missiles took place recently during a high-level visit from the US to India, defence sources told ANI.

India and the US have been discussing expanding their cooperation, including joint production of military equipment. Sources said the requirement of the Army for the latest anti-tank guided missiles is quite significant and the force had to acquire a limited number of Israeli Spike ATGMs under emergency procurement to meet its requirements.

<https://economictimes.indiatimes.com/news/defence/india-us-discussing-co-production-of-javelin-anti-tank-missiles/articleshow/111236292.cms?from=mdr>

Philippines envoy hails BrahMos missiles as a 'game changer'

The Hindu, June 24, 2024

Terming the BrahMos cruise missiles inducted by the Philippines as a "game changer", which provides credible capabilities, Philippines envoy Josel F. Ignacio said India was a major source for the modernisation of the Philippines armed forces which was under way. "There is a renaissance in the relationship between India and the Philippines and they are rediscovering each other," Mr.

Ignacio said on Monday. They were keen on concluding the Preferential Trade Agreement (PTA), under negotiation, he said.

"It [the deal] is a great milestone for both countries. BrahMos is a game changer for the Philippines in that it confers credible defence and deterrent capabilities. For India, the significance is it is the first overseas export of the BrahMos and it is an affirmation of India's rising capabilities and of its own indigenous defence industry. In a way, it expands India's footprint overseas," Mr. Ignacio said, speaking at the Observer Research Foundation.

In January 2022, the Philippines concluded a \$375 million deal with India for three batteries of shore-based anti-ship variant of the BrahMos supersonic cruise missiles, becoming the first export customer for the joint venture missile between India and Russia. The first batch of missiles was delivered this April.

<https://www.thehindu.com/news/national/philippines-envoy-hails-brahmos-missiles-as-a-game-changer/article68328182.ece>

India to add 7 new nuclear reactors, increase power generation capacity by 70% in 5 years: Minister

Mint, June 25, 2024

India's nuclear power generation capacity is likely to rise by around 70% over the next five years, reaching 13.08 GW, with the installation of seven new nuclear reactors, said union minister Jitendra Singh during a meeting to review the Department of Atomic Energy's 100-day action plan. India currently has 24 nuclear reactors.

Singh also reviewed ongoing projects and issued directives for upcoming units. The meeting was attended by Ajit Kumar Mohanty, chairman, Atomic Energy Commission, and secretary of the Department of Atomic Energy, along with senior department officials.

<https://www.livemint.com/industry/energy/india-to-add-7-new-nuclear-reactors-increase-power-generation-capacity-by-70-in-5-years-minister-11719330939139.html>

Indian Space Station, Chandrayaan-4 plans ready for govt approval: Isro chairman

Mint, June 26, 2024

The Indian Space Research Organisation (Isro) has finalized the plan for building its own space station, Bharatiya Antariksha Station (BAS), and will soon submit it to the government for approval, Isro chairman S. Somanath said at a press briefing in New Delhi on Wednesday.

The final plans for Chandrayaan-4, India's next lunar mission, which includes a crucial space docking station, and the Next Generation Launch Vehicle (NGLV), is also awaiting approval. The NGLV will replace the current heavy space launcher, Launch Vehicle Mark III (LVM3).

"We've completed defining the nature of India's space station, and the way our NGLV will look. We have worked out the configuration of Chandrayaan-4, on how to bring samples back from the moon to earth. We will test this with multiple launches, because our current rocket is not enough to go and bring back the samples," he said on the sidelines of Indian Space Congress 2024.

<https://www.livemint.com/industry/indian-space-station-chandrayaan-4-plans-ready-for-govt-approval-isro-chairman-11719410912746.html>

B. China

China pursuing 'significant' expansion of nuclear arsenal, report says

The Washington Post, June 16, 2024

China is in the midst of a "significant" expansion of its nuclear capabilities and may have as many intercontinental ballistic missiles as the United States or Russia by 2030, according to a new global analysis of nuclear weapons. The expansion of China's capabilities came as SIPRI warned that even as the total number of nuclear warheads around the world was declining as Cold War-era weapons were phased out, there were steady year-on-year

increases in the number of operational warheads that could be used quickly in the event of conflict

<https://www.washingtonpost.com/world/2024/06/16/china-nuclear-arsenal-weapons/>

China boosting nuclear arsenal, has 3x India's warheads: SIPRI

The Times of India, June 18, 2024

China is boosting its nuclear arsenal faster than any other country around the globe, and has triple the number of warheads that India has, while it also deploys some of them on "high operational alert" on ballistic missile.

Pakistan, in turn, maintains its rough parity with India in the number of nuclear warheads, while Russia and the US are leagues ahead of others together accounting for 90% of all nuclear weapons.

<https://timesofindia.indiatimes.com/india/china-boosting-nuclear-arsenal-has-3x-indias-warheads-sipri/articleshow/111067300.cms>

China space probe returns with rare Moon rocks

BBC, June 25, 2024

China's lunar probe has returned to Earth with the first ever samples from the Moon's unexplored far side.

The Chang'e-6 landed in the Inner Mongolia desert on Tuesday, after a nearly two-month long mission which was fraught with risks.

Scientists are eagerly awaiting the Chang'e-6 as the samples could answer key questions about how planets are formed.

China is the only country to have landed on the far side of the Moon, having done so before in 2019.

The far side - which faces away from Earth - is technically challenging to reach due to its distance, and its difficult terrain of giant craters and few flat surfaces. Scientists are interested in this less-explored side as it is hoped it may contain traces of ice, which can be harvested for water, oxygen, and hydrogen.

The Chang'e-6 mission is a source of pride for a nation which has stepped up its missions to the Moon - drawing attention from its rival, the US.

State media showed officials planting the Chinese flag with a flourish just after the Chang'e-6 capsule landed in the desert of Inner Mongolia.

China's President Xi Jinping has called to congratulate those at the command centre of the Chang'e-6 mission.

<https://www.bbc.com/news/articles/c04447venm1o>

China gears up for deep space missions after collecting 1,935 grams of lunar far side samples

Space News, June 28, 2024

China is getting set for future deep space missions, having retrieved nearly two kilograms of lunar samples from the moon's far side.

The Chang'e-6 reentry capsule landed back on Earth June 25, successfully ending a 53-day mission. The capsule was recovered as planned in grasslands of Siziwang Banner, Inner Mongolia.

The capsule was airlifted to Beijing and opened June 26 to retrieve the sample canister. The China National Space Administration (CNSA) announced Friday that it contains 1,935.3 grams of samples.

The mission aimed to collect up to 2,000 grams. The 2020 Chang'e-5 near side mission collected 1,731 grams. That mission encountered a drilling issue that impacted the amount collected.

The National Astronomical Observatories of Chinese Academy of Sciences will next unseal the sample container. NAOC will then prepare the samples obtained from drilling and surface retrieval, and pack them for storage.

It is expected that domestic scientific research institutions will be able to make applications for samples after six months.

Samples will be opened to international applications two years later, according to CNSA regulations on lunar sample management.

<https://spacenews.com/china-gears-up-for-deep-space-missions-after-collecting-1935-grams-of-lunar-far-side-samples/>

C. Russia

Almaz-Antey to display counter-sea drone systems at Navy salon

TASS, June 17, 2024

Almaz-Antey Company said it would display systems to fight sea drones and air weapons at the Fleet 2024 Navy salon in Kronshtadt on June 19-23.

"It will be possible to see mockups of Komar 3M47-01E turret and its upgraded 3M47-03E option. They are effective weapons to fight both air weapons and sea drones," it said.

The upgraded Komar fires 9M342 missiles of Igla-S and 9M120-1 Ataka missiles. It has a stabilization system for missile engagement at sea. Target tracking and missile launch can be automatic and manual.

The company will also display models of Palma automatic antiaircraft artillery complex with Sosna-R guided missiles. It protects against antiship missiles and smart bombs and fights hostile airplanes and helicopters, as well as small sea and coastal targets.

<https://tass.com/defense/1804401>

Rosoboronexport to display unmanned boats at Navy salon

TASS, June 17, 2024

Rosoboronexport will for the first time display the Visir, Orkan and BEK-1000 unmanned boats and MMT-300 autonomous unmanned craft at Navy salon in Kronshtadt.

"We offer to foreign partners cooperation in building netcentric systems with integrated unmanned boats and autonomous unmanned craft and in

introducing the concept of over-the-horizon operations with the use of Russian robotic complexes," CEO Alexander Mikheyev said.

The trend to use unmanned technologies in military and counterterrorist operations has spread to sea surface and underwater habitat. Russian enterprises have created a line of modern unmanned boats capable of carrying various payloads, he added.

<https://tass.com/defense/1804411>

Russia's Pacific Fleet begins deployment to exercise involving 40 ships

TASS, June 18, 2024

Russia's Pacific Fleet has initiated the development of forces within the exercise, which will take place on June 18-28 and will involve approximately 40 ships and vessels, the fleet press office said.

"The Pacific Fleet forces have initiated the deployment from their base locations to designated areas within the planned bilateral exercise, which will take place on June 18-28 in the Pacific Ocean, in seas of Japan and Okhotsk under the general management of the Pacific Fleet Commander Admiral Viktor Liina," the statement says. The Fleet explained that this is the first time this exercise is considered bilateral, because it involves a scenario of the Primorskaya Flotilla of Diverse Forces and the joint command of Forces in Russia's Northeast.

<https://tass.com/defense/1804713>

Russian Navy to get 12 warships by end of year

TASS, June 18, 2024

The Russian Navy will receive 12 warships, including blue-water ships and nuclear submarines, by the end of 2024, Navy Commander-in-Chief Admiral Alexander Moiseyev said.

"According to this year plan, we are implementing the program of 50 various ships, vessels, boats. The main ones are 1st

rank ships, distant sea zone warships, and nuclear submarines. This year we hope to receive twelve such warships," he told journalists adding the Knyaz Pozharsky SSBN is among them.

The Navy plans to complete the trials and accept small missile ships, which are tested in the Baltic and Caspian Seas this year.

"It is important to note that we plan to complete the construction and trials of patrol ships also of the ice class. There are four submarines, including two nuclear ones," he said.

The Russian Navy received 40 surface warships and 24 submarines in the past ten years. Only three submarines were supplied a decade before.

<https://tass.com/defense/1804861>

Russia discussing deployment of long-range weapons with partners, senior diplomat says

TASS, June 19, 2024

Moscow has been discussing the deployment of long-range weapons with its partners, Russian Deputy Foreign Minister Sergey Ryabkov said in an interview with TASS.

In the context of recent remarks by Russian President Vladimir Putin who earlier did not rule out the possibility of sending long-range weapons to other countries, Ryabkov pointed to Russia's "closest partners" in Asia and Latin America with which he said Moscow has been discussing "security in detail, not as an exchange of opinions only."

"This will continue to happen, but we will do so with full respect for both their sovereign choice and the commitments our partners have under other international treaties, including those to which Russia is not a party," the senior Russian diplomat said. "There is nothing new to it. We have been discussing this (deployment of long-range weapons - TASS) with relevant agencies in a number of our partner countries," he said.

<https://tass.com/politics/1805185>

Northern fleet nuclear submarines fire cruise missiles in Barents Sea

TASS, June 19, 2024

Nuclear submarines of the Northern fleet fired cruise missiles at a sea target in the Barents Sea, the fleet said.

"The Severodvinsk nuclear submarine of project 885 and the Oryol of project 949A conducted live missile fire at a sea target in the Barents Sea. Missile fire was held in compliance with the combat training plan of the Northern fleet for the winter training period," it said.

The target imitated a group of hostile landing ships. The submarines fired Kalibr and Granit missiles to a distance of close to 170 kilometers. Objective controls confirmed successful combat exercise. The missiles confirmed the characteristics and high reliability.

The exercise area was sealed off for civilian navigation and air flights by warships of the Kola flotilla, it said.

<https://tass.com/defense/1805189>

Soyuz MS-26 manned spaceship to be launched on September 11 – crew commander

TASS, June 23, 2024

The manned Soyuz MS-26 spaceship will be launched on September 11, the crew commander, Roscosmos cosmonaut Alexey Ovchinin said.

"The start of our expedition is scheduled for September 11, 2024," he said, adding that mission will return to Earth on April 1, 2025, or after 202 days of spaceflight.

The spaceship will take the crew of the 72nd expedition, Roscosmos cosmonauts Alexey Ovchinin and Ivan Vagner, and NASA's oldest active astronaut Donald Pettit, to the International Space Station (ISS).

<https://tass.com/science/1807133>

BMP-3 combat vehicles start receiving drone suppression systems

TASS, June 24, 2024

BMP-3 infantry combat vehicles have started receiving serially outfitted drone suppression systems, the press service of High Precision Weapons company told TASS

“BMP-3 are now serially outfitted with a system for local suppression of drone control lines,” the press service informed.

<https://tass.com/defense/1807261>

Russian tech firm upgrading Post-3M radio-electronic reconnaissance system

TASS, June 25, 2024

Russia’s state tech corporation Rostec is working on expanding the functionality and increasing the reliability of Post-3M radio-electronic reconnaissance stations capable of spotting aerial, ground and sea targets, the Rostec press office said on Tuesday.

“The Vektor Research Institute of our Ruselectronics Holding Company is carrying out work to modernize Post-3M radio-electronic reconnaissance stations. The upgrade will expand the functional capabilities and raise the reliability of these systems,” the press office said on Rostec’s Telegram channel.

As its major advantage, the Post-3M features a 360-degree panoramic view, it said.

“The equipment instantly scans military hardware and its analysis helps determine exactly the type of an emitting source and the nature of its activity,” the press office said.

Reconnaissance data make it possible to warn the military command about security threats in advance and eliminate them timely. The station is fully autonomous and requires a crew of two per shift for its operation, it specified.

The Post-3M helps detect radars of aircraft, helicopters, unmanned aerial vehicles and ships and also ground-based radar stations of various designation deployed at troop command and control posts, air bases, landing sites, launch and firing positions, the press office said.

The Vektor Research Institute is a leading Russian enterprise engaged in developing and producing radio-technical and radio-electronic systems. The company was founded in 1908. It has been part of the Vega Group since 2009 engaged in developing and producing various UAV detection and counter-drone systems, ornithological flight safety systems and the Penicillin acoustic-thermal artillery reconnaissance system.

<https://tass.com/defense/1808025>

Russia, Oman stand for establishing collective security system in Gulf – foreign ministry

TASS, June 25, 2024

Issues of establishing a system of collective security and sustainable development in the Gulf were discussed by Russian presidential envoy for the Middle East and African countries and Deputy Foreign Minister Mikhail Bordanov and Omani Deputy Foreign Minister Sheikh Khalifa Al Harthi, the Russian foreign ministry said.

The sides exchanged views on the key issues on the international and regional agenda, with a special focus “on the situation in the zone of the Palestinian-Israeli conflict, Syria, Sudan, Yemen, and the Red Sea.”

“The diplomats reiterated Moscow and Muscat’s interest in finding effective solutions to the pressing crises in the Middle East and North Africa solely by political and diplomatic means on the basis of due account of the legitimate interests of all parties concerned. The sides noted the importance of establishing a reliable system of collective security and

sustainable development based on the principles of mutual respect and good neighborliness," the ministry said.

Apart from that, the two senior diplomats discussed measures to promote the development of bilateral relations, including trade-and-economic and cultural-and-humanitarian cooperation.

<https://tass.com/defense/1808297>

Russia to launch five Earth imaging satellites by yearend – Roscosmos

TASS, June 27, 2024

Russia is set to launch five Earth imaging satellites by the end of this year, Roscosmos Deputy CEO for Space Systems Mikhail Khailov said on Thursday.

The space vehicles slated for launch include two Aist-2T stereoscopic imaging satellites, a Kondor-FKA remote sensing satellite, a Resurs-P observation satellite and an Obzor-R multipurpose observation satellite, he specified.

"At the end of the year, we will launch two Aist satellites - these are space vehicles with stereoscopic equipment," the Roscosmos executive said at a meeting of the interagency commission for using space activity results.

Shortly, Kondor-FKA No. 2 radar satellite will be dispatched to the cosmodrome's launch site. Its launch is also scheduled for this year along with Resurs-P No. 5 Earth observation satellite, he specified.

"In addition, another multipurpose radar observation satellite, Obzor-R No. 1, will be launched," the Roscosmos executive said.

Aist-2T satellites have been engineered for stereoscopic imaging of the Earth's surface and creating a three-dimensional model. Two satellites of this type will be able to create digital terrain models and monitor emergencies.

<https://tass.com/science/1809181>

D. Europe

Germany takes next steps in hypersonic weapons project with Norway, Spiegel reports

Reuters, June 21, 2024

German Defence Ministry has submitted a request for around 652 million euros (\$697.18 million) to the parliament's budget committee to finance a hypersonic weapons development project with Norway, Spiegel magazine reported on Friday.

In mid-May, Norway's defence group Kongsberg (KOG.OL), opens new tab announced a partnership with Germany's Diehl and MBDA to develop a super-sonic missile known as 3SM Tyrfin.

Hypersonic missiles, which can travel at up to 25 times the speed of sound, have been used by Russia in its war in Ukraine and are a cause of concern among NATO members.

<https://www.reuters.com/business/aerospace-defense/germany-takes-next-steps-hypersonic-weapons-project-with-norway-spiegel-reports-2024-06-21/>

France, China launch satellite in attempt to explore the universe

Al Jazeera, June 22, 2024

A satellite developed by France and China has blasted off on a hunt for the mightiest explosions in the universe, in a notable example of cooperation between a Western power and the Asian giant.

On Saturday, the 930kg (2,050-pound) satellite carrying four instruments – two French, two Chinese – took off at about 3pm (07:00 GMT) aboard a Chinese Long March 2C rocket from a base in Xichang, in the southwestern Chinese province of Sichuan, state broadcaster CCTV reported.

Developed by engineers from both countries, the Space Variable Objects

Monitor (SVOM) will seek out gamma-ray bursts, the light from which has travelled billions of light years to reach Earth.

<https://www.aljazeera.com/news/2024/6/22/france-china-launch-satellite-in-attempt-to-explore-the-universe>

France, Germany, Poland unite to strengthen European arsenal with long-range missiles

Al Arabiya News, June 25, 2024

France, Germany and Poland announced plans on Monday to join forces to buy longer-range precision weapons to fill a gap in European arsenals that they say has been exposed by Russia's war in Ukraine.

The defence ministers from the three countries said they would set up a mechanism to procure "deep precision strike weapons" such as cruise missiles, which other European powers could join.

Cruise missiles with a range of several hundred kilometres have seen a huge revival since Russia's full-scale invasion of Ukraine in 2022, with Moscow launching cross-border strikes and Kyiv seeking to hit back at targets inside Russian territory.

"Deep precision strike weapons are a serious capability gap in Europe," German Defence Minister Boris Pistorius said after meeting his French and Polish counterparts in Paris - the first session of the so-called Weimar triangle grouping at that level since 2015.

"Until the (NATO) summit in Washington, we aim to bring together a group of like-minded European countries who agree to plug this gap in the medium to long term," Pistorius added.

<https://english.alarabiya.net/News/world/2024/06/25/france-germany-poland-unite-to-strengthen-european-arsenal-with-long-range-missiles>

Germany orders hundreds of Brimstone missiles for Eurofighters

Air Force Technology, June 27, 2024

Germany has placed another order for Brimstone missiles manufactured by

Europe's primary missile contractor MBDA, thus closing an enduring framework agreement encompassing several thousand systems.

The closing contract is worth •376m (\$402.3m) – funds that will be allocated from the German Bundeswehr's special fund and defence budget. The package also includes training missiles, launch and test equipment, as well as tool sets and training materials.

Brimstone is an air-to-surface missile guided by radar; they are used to attack stationary and moving targets on land and above water from the air.

They were originally intended for the UK Royal Air Force. Their first batch of missiles were in 2004 and were later deployed from British Tornado GR4 aircraft in 2005. Since then the missiles have been used in operations in Afghanistan, Libya, Syria and Iraq.

<https://www.airforce-technology.com/news/germany-orders-hundreds-of-brimstone-missiles-for-eurofighters/>

E. The United States of America

U.S. and India advance human spaceflight cooperation

Space News, June 18, 2024

The governments of the United States and India announced June 17 they are moving ahead with cooperation on human spaceflight that would include flying an Indian astronaut to the International Space Station, although with few details on who would fly and when.

The White House released a fact sheet regarding a meeting of the U.S.-India initiative on Critical and Emerging Technology (iCET), held June 17 in New Delhi and chaired by the national security advisers of the two countries. The statement highlighted the progress made by the two countries in cooperation in various technology sectors.

In space, the fact sheet hailed "securing a carrier for the first-ever joint effort

between NASA and ISRO astronauts at the International Space Station.” This appeared to reference an announcement last June that the United States would train Indian astronauts with the goal “of mounting a joint effort to the International Space Station in 2024.”

<https://spacenews.com/u-s-and-india-advance-human-spaceflight-cooperation/>

U.S., Japan and Korea Begin Freedom Edge Exercise, North Korea Attempts Ballistic Missile Test

US Naval Institute, June 27, 2024

The U.S., Japan and South Korea kicked off the first trilateral Freedom Edge exercise on Thursday, according to a joint statement. North Korea meanwhile claimed on Thursday that it carried out successful test with multiple warheads on Wednesday.

“Freedom Edge expresses the will of Japan, ROK, and U.S. to promote trilateral interoperability and protect freedom for peace and stability in the Indo-Pacific, including the Korean Peninsula.”, read the statement.

The U.S, Japan and South Korea agreed to the exercise during the Camp David Summit in August 2023. The defense chiefs of the three countries announced the exercise on June 2 during the Shangri-La Dialogue in Singapore, “Starting with this iteration, Japan, ROK, and U.S. will continue to expand the Freedom Edge exercise”, reads the statement.

U.S. forces taking part in the exercise are the Theodore Roosevelt Carrier Strike Group (CSG) comprising of carrier USS *Theodore Roosevelt* (CVN-71) with embarked Carrier Air Wing (CVW) 11 and destroyers USS *Halsey* (DDG-97) and USS *Daniel Inouye* (DDG-118) along with a P-8 Poseidon Maritime Patrol Aircraft (MPA). Japan is represented by the Japan Maritime Self Defense Force (JMSDF) which is deploying destroyer helicopter carrier JS *Ise* (DDH-182), destroyer JS *Atago* (DDG-177) and a P-1 MPA. South Korea will participate with Republic of Korea Navy (ROKN) destroyers ROKS *Seoae-Ryu-Seong-ryong* (DDG-993)

and ROKS *Gang Gam-Chan* (DDG-979), a ROKN Lynx helicopter, a ROKN P-3C Orion MPA and F-16 Falcon fighters from the Republic of Korea Air Force.

<https://news.usni.org/2024/06/27/u-s-japan-and-korea-begin-freedom-edge-exercise-north-korea-attempts-ballistic-missile-test>

DOD Completes Flight Test of Hypersonic Missile

US Department of Defense, June 28, 2024

The U.S. Navy and U.S. Army recently completed an end-to-end flight test of a hypersonic missile from the Pacific Missile Range Facility, Kauai, HI. The test provided data on the end-to-end performance of the Conventional Prompt Strike and Long Range Hypersonic Weapon All Up Round. The test marks a step forward for the CPS and LRHW programs. “This flight test of the common hypersonic missile marks a milestone for our nation in the development of this capability,” said Vice Adm. Johnny R. Wolfe Jr, Director, Navy’s Strategic Systems Programs, which is the lead designer of the common hypersonic missile.

“Through our joint efforts, we are developing new equipment and adopting new defense concepts that will enable the Army to maintain superiority over any potential adversaries,” said Lt. Gen. Robert Rasch Jr., Director, Army’s Rapid Capabilities and Critical Technologies Office.

<https://www.defense.gov/News/Releases/Release/Article/3821376/dod-completes-flight-test-of-hypersonic-missile/>

US to send Ukraine air defense missiles in next aid package-officials

Reuters, June 29, 2024

The Biden administration will provide Ukraine with \$150 million worth of weapons and ammunition, including HAWK air defense interceptors and 155 millimeter artillery munitions, two U.S. officials said on Friday.

The weapons aid package is expected to be unveiled on Monday, the officials said, declining to be named because the package was not public.

The administration is responding to Ukraine's desperate requests for air defense support as Russia has pounded Ukrainian energy facilities in recent weeks via aerial attacks.

The U.S. began shipping HAWK interceptor missiles to Ukraine in 2022 as an upgrade to the shoulder-launched Stinger air defense missile systems - a smaller, shorter-range system.

The MIM-23 HAWK - an acronym for "Homing All the Way Killer" - was introduced in the 1950s and upgraded over the years to deal with jamming and other countermeasures. It was eventually exported to more than a dozen countries, according to the U.S. Army Aviation and Missile Life Cycle Management Command.

<https://www.reuters.com/world/europe/us-send-ukraine-air-defense-missiles-next-aid-package-officials-2024-06-28/>

West Asia

F. Israel

Israeli Navy Welcomes New Landing Craft

Israel Defense, June 19, 2024

The Israeli Navy received its new, US-built landing craft, the INS Komemiyut (Hebrew for "independence" or "sovereignty"), which docked at the Haifa Naval Base on Sunday, having completed its voyage from the port of Pascagoula in Mississippi.

"Today, alongside the intensified fighting by IDF soldiers in various sectors, the Navy has integrated a vessel of strategic significance for the State of Israel," said the Commander of the Navy, Vice Admiral David Saar Salama, during the welcoming ceremony "In these historic moments, we salute our fallen comrades who sacrificed their lives in the supreme mission of safeguarding Israel's security."

"Sailors of INS Komemiyut, you have completed a voyage of thousands of miles today," he continued. "The end of the voyage is just the beginning for you. Your future actions will strengthen inter-branch cooperation, extend operational ranges, and ensure the security of the State of Israel." This is the second of two new US-made landing crafts, procured using US military aid funds. The first vessel, the INS Nahshon, arrived in Israel in 2023 and is set to become operational this year.

The length of each vessel is approximately 95 meters, its width approximately 20 meters and its displacement exceeds 2500 tons. The Israeli navy notes that the team of the landing craft consists of dozens of naval combat soldiers, with a quarter of them being female.

<https://www.israeldefense.co.il/en/node/62347>

Mobilicom to Supply UAV Ground Control Station to Leading Loitering Munitions Provider

Israel Defense, June 23, 2024

Mobilicom, an Israeli provider of cybersecurity and robust solutions for drones and robotics, has announced that one of the world's largest providers of loitering munitions, with approximately \$4 billion in annual revenue, has placed a follow-on order worth \$240,000 for Mobilicom's 10" Ground Control Station (GCS). This GCS is a tactical mobile handheld controller designed for small-sized drones.

While Mobilicom has not disclosed the customer's name, the company did indicate that this Tier-1 customer is a prime vendor for Lockheed Martin in the U.S. and a major supplier of defense systems, including loitering munitions sold to over 40 countries, including the European Union and NATO member states.

According to Mobilicom, their solutions, including the GCS, are tailored to support operations with multiple drones (Swarm & Fleet) equipped with various payloads, offering a range of control and viewing

options. Mobilicom's SkyHopper PRO Micro datalink is also integrated into this customer's loitering platform.

<https://www.israeldefense.co.il/en/node/62369>

The Advanced Drone Solution for Israel's Security and Civilian Needs

Israel Defense, June 25, 2024

Skydio, a leading U.S. drone manufacturer, has announced DefenSync as its Official Authorized Partner in Israel. According to DefenSync, this collaboration with Skydio enables the deployment of an advanced drone platform featuring autonomous technologies capable of operating in both GPS-denied environments and high electromagnetic interference (EMI) scenarios, while ensuring obstacle avoidance and a heightened level of information security.

Nimrod Eshel, CEO of DefenSync, emphasized the significance of Skydio's local office in Israel, which focuses on delivering advanced drone solutions for security and civilian needs. DefenSync highlights one of Skydio's remarkable advantages: its high degree of autonomy. This autonomy enables unmanned missions to be executed day and night without manual intervention, utilizing computer vision and artificial intelligence technologies. The capability to autonomously detect obstacles and adapt the flight path provides a significant advantage in modern combat zones.

Following the events of October 7th, hundreds of Skydio drones have been distributed in Israel, predominantly to Israeli security forces. Presently, the Skydio X10 and X10D drones are being deployed in Israel by DefenSync.

<https://www.israeldefense.co.il/en/node/62403>

G. Yemen

Yemen Houthi attack targets vessel farther out in Gulf of Aden

Voice of America, June 25, 2024

An attack by Yemen's Houthi rebels on Monday targeted a ship farther away from

nearly all of the previous assaults they've launched in the Gulf of Aden, potentially part of a widening escalation by the group.

The attack comes as the U.S. has sent the USS Dwight D. Eisenhower back home after an eight-month deployment in which it led the American response to the Houthi assaults. Those attacks have reduced shipping drastically through the route crucial to Asian, Middle East and European markets in a campaign the Houthis say will continue as long as the Israel-Hamas war in the Gaza Strip rages on.

The attack happened Monday morning in the Gulf of Aden about 450 kilometers southeast of Nishtun, a town in the far reaches of Yemen that's close to the border with Oman, according to the British military's United Kingdom Maritime Trade Operations center. That region has long been held by forces allied to Yemen's exiled government, which has battled the Houthis since the rebels took the capital, Sanaa, back in 2014.

The attack was just off to the northeast of Yemen's Socotra Island, also held by allies of the exiled government.

<https://www.voanews.com/a/yemen-houthi-attack-targets-vessel-farther-out-in-gulf-of-aden/7674178.html>

Yemen's Houthi group claims home-made hypersonic missile attack on ship in Arabian Sea

Xinhua, June 27, 2024

Yemen's Houthi group said on Wednesday they used a domestically developed hypersonic missile in an attack on a cargo ship in the Arabian Sea earlier this week.

The Houthis released a video statement purporting to show the launch of the missile, dubbed "Hadim 2," without disclosing the exact timing of the attack. The video depicts a long, yellow rocket with Roman numerals on its fins, launched from a mobile platform in an unidentified desert location.

The statement described the Hadim 2 as a solid-fuel hypersonic ballistic missile manufactured by Houthi military facilities.

The group said this marked the first public revelation of the missile, used to target the Israeli-related cargo ship MSC Sarach V. The Houthis claimed responsibility for attacking the vessel on Tuesday.

The Red Sea and Gulf of Aden Joint Maritime Information Center reported on Monday that the Liberian-flagged MSC Sarah V was targeted by a missile in the Arabian Sea but not struck. No casualty or ship damage was reported.

The Houthis have escalated attacks on shipping lanes in the Red Sea and Gulf of Aden since November, using drones and missiles. They justify these actions as acts of solidarity with Palestinians in the ongoing Israeli-Palestinian conflict.

<https://english.news.cn/20240627/b6da027518f946ecacc99bfaea564410/c.html#:~:text=The%20statement%20described%20the%20Hadim,cargo%20ship%20MSC%20Sarach%20V.>

5 missiles land near ship in Red Sea, likely the latest attack by Yemen's Houthis

ABC News, June 28, 2024

A ship traveling through the Red Sea came under repeated missile fire Friday in an attack launched by Yemen's Houthi rebels, authorities said, the latest targeting the crucial maritime route.

Five missiles landed near the vessel as it traveled off the coast of the rebel-held port city of Hodeida in Yemen, the British military's United Kingdom Maritime Trade Operations center said.

The missiles landed near the vessel, but caused no damage, the UKTMO added.

Houthi military spokesman, Brig. Gen. Yahya Saree, claimed late Friday the group made two attacks on ships in the Red Sea, but it wasn't immediately clear which ship was the one reported targeted by authorities. He also made other claims as well on attacks

otherwise unreported on vessels. The Houthis have exaggerated their claims in the past.

The rebels have targeted more than 60 vessels by firing missiles and drones in their campaign that has killed a total of four sailors. They seized one vessel and sank two since November. A U.S.-led airstrike campaign has targeted the Houthis since January, with a series of strikes on May 30 killing at least 16 people and wounding 42 others, the rebels say.

<https://abcnews.go.com/International/wireStory/5-missiles-land-ship-red-sea-latest-attack-111506401>

H. Lebanon

Israel says 3 anti-armor missiles launched from Lebanon toward Upper Galilee

Anadolu Ajansi, June 29, 2024

At least three anti-armor missiles were launched toward the Upper Galilee area near the Lebanese border, the Israeli Public Broadcasting Corporation reported on Saturday.

One of these missiles landed in the Tel Hai area, while the other two landed in the Misgav Am area in the Upper Galilee region, with no reported casualties, it added.

It also noted that the Israeli army "responds with artillery fire to the sources of the attack."

Meanwhile, the Lebanese group Hezbollah reported targeting of surveillance equipment at Misgav Am, opposite the southern Lebanese border.

The group claimed achieving a "direct hit."

Tensions have soared along Lebanon's border with Israel amid cross-border attacks between Hezbollah and Israeli forces as Tel Aviv pressed ahead with its deadly offensive on the Gaza Strip, which has killed more than 37,800 people since last Oct. 7.

Hezbollah has linked the cessation of its attacks on Israel to the end of Tel Aviv's onslaught on Gaza.

<https://www.aa.com.tr/en/middle-east/israel-says-3-anti-armor-missiles-launched-from-lebanon-toward-upper-galilee/3261679>

I. Southeast Asia

Philippine BrahMos missile base drops a sea gauntlet on China

Asia Times, June 19, 2024

The Philippines' construction of its first BrahMos anti-ship missile base highlights a bold military modernization move amid rising tensions with China in the South China Sea.

However, the move's success is imperiled by inadequate intelligence, surveillance, and reconnaissance (ISR) and air defense capabilities, potential logistical challenges and the complexities of regional geopolitics.

This month, Naval News reported that the Philippines is constructing its first BrahMos anti-ship missile base at the Naval Station Leovigildo Gantioqui in Zambales, Western Luzon. Naval News says that the base, which faces the contested South China Sea, is set to house the supersonic cruise missiles acquired from India in a landmark US\$375 million deal in 2022.

The report notes that the Philippines' procurement of three BrahMos missile batteries marked the first international sale of India's highly regarded system, sparking interest from other regional nations including Vietnam and Indonesia – both of which also have South China Sea disputes with China. Satellite imagery has revealed the new missile base includes a high-bay facility for missile maintenance and assembly and a sheltered magazine bunker for storage. The Philippine Marine Corps Coastal Defense Regiment will operate the base, which is strategically positioned to strike targets up to 290-300 kilometers away, including the disputed Scarborough Shoal occupied by China.

<https://asiatimes.com/2024/06/philippine-brahmos-missile-base-drops-a-sea-gauntlet-on-china/>

J. East Asia

North Korea launches ballistic missile toward sea, after end of US-South Korea-Japan drill

Voice of America, June 30, 2024

North Korea launched at least one short-range ballistic missile off its east coast Monday, South Korea's military said, a day after the North vowed "offensive and overwhelming" responses to a new U.S. military drill with South Korea and Japan.

The Joint Chiefs of Staff said the missile was launched from North Korea's southeastern town of Jangyon at 5:05 a.m. It said an additional, unidentified ballistic missile launch trajectory was detected 10 minutes later, a suggestion that North Korea might have performed two missile launches.

The Joint Chiefs of Staff said South Korea's military has boosted its surveillance posture and is closely exchanging related information with the United States and Japan.

The launch came two days after South Korea, the U.S. and Japan ended their new multidomain trilateral drills in the region. In recent years, the three countries have been expanding their trilateral security partnership to better cope with North Korea's evolving nuclear threats and China's increasing assertiveness in the region.

The "Freedom Edge" drill was meant to increase the sophistication of previous exercises with simultaneous air and naval drills geared toward improving joint ballistic-missile defense, anti-submarine warfare, surveillance and other skills and capabilities. The three-day drill involved a U.S. aircraft carrier as well as destroyers, fighter jets and helicopters from the three countries.

<https://www.voanews.com/a/north-korea-launches-ballistic-missile-off-its-east-coast-south-korea-says/7678784.html>

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