

Nuclear, Missile & Space Digest

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A Fortnightly Newsletter from the MP-IDSA

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A. India

Kakrapar Atomic Power Project Unit-4 achieves first criticality, several experiments lined up

PIB, December 18, 2023

The Unit 4 of Kakrapar Atomic Power Project (KAPP 4 – 700 MW) achieved the important milestone of Criticality (start of controlled fission chain reaction) for the first time on December 17, 2023 (Sunday) at 01:17 hrs. The criticality was achieved after meeting all the stipulations of the Atomic Energy Regulatory Board (AERB), which had issued clearance after a rigorous review of safety of the plant systems. KAPP-4 is the second in the series of sixteen indigenous Pressurised Heavy Water Reactors (PHWR) of 700 MW each being set up in the country.

After the first criticality, several experiments / tests will be conducted in KAPP-4 and the power level raised in steps, in line with the clearances of the Atomic Energy Regulatory Board (AERB), ultimately culminating in operation of the unit at full power.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1987688>

“Aditya-L1”, India’s first solar mission, will reach its destination, Lagrange Point 1, early next month, to be precise, around first week of January, says Union Minister Dr Jitendra Singh

PIB, December 18, 2023

“Aditya-L1”, India’s first solar mission, will reach its destination, Lagrange Point 1, early next month, to be precise, around the first week of January 2024, Union Minister Dr Jitendra Singh said today. Meanwhile, ISRO will conduct a series of tests related to India’s maiden human Space mission, Gaganyaan, in the course of the next year, he said. During an exclusive interview to Sansad TV in New Delhi, Union Minister of State (Independent Charge) Science & Technology, MoS PMO, Personnel, Public

Grievances, Pensions, Atomic Energy and Space, Dr Jitendra Singh said, this has been possible due to the courage and conviction of Prime Minister Shri Narendra Modi, who broke taboos of the past and provided an enabling milieu by opening up India’s Space sector to private players, as a result of which there is an overwhelming response from Startups and Industry.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1987870>

Government has initiated steps to increase the nuclear power capacity from 7480 MW to 22480 MW by 2031-32, says Union Minister Dr Jitendra Singh

PIB, December 20, 2023

The Government has initiated steps to increase the nuclear power capacity from 7480 MW to 22480 MW by 2031-32, Union Minister Dr Jitendra Singh said today.

The annual electricity generation from nuclear power plants has increased from 35334 Million Units (including infirm) in 2013-14 to 46982 Million Units (including infirm) in 2022-23. The installed nuclear power capacity in 2013-14 has also increased from 4780 MW to 7480 MW at present, he said.

The Union Minister of State (Independent Charge) Science & Technology; MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space, gave this information in separate written replies in the Lok Sabha.

Dr Jitendra Singh said, the electricity generation from nuclear power plants in the current year 2023-24 (up to November 2023) is about 32017 Million Units against the aspirational MoU target of 52340 Million Units for the year.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1988863>

India launched 396 foreign and 70 domestic satellites during the period 2014-23 as compared to 33 and 31 satellites respectively during 2003-14, says Union Minister Dr Jitendra Singh

PIB, December 20, 2023

The number of foreign and domestic satellites launched by India during period 2014-23 were 396 and 70 respectively, Union Minister Dr Jitendra Singh said today, while the number of foreign and domestic satellites launched by India during period 2003-13 were 33 and 31 respectively. In a written reply in the Lok Sabha today, the Union Minister of State (Independent Charge) Science & Technology; MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space, said the revenue generated from satellite launches during decade 2014-23 is USD157 Million and 260 Million Euros. The corresponding figure during decade 2003-13 were USD15 Million and 32 Million Euros, he said.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1988862>

The number of Space Start-Ups have gone up, from just 1 in 2014 to 189 in 2023 as per DPIIT Start-Up India Portal, says Union Minister Dr Jitendra Singh

PIB, December 20, 2023

The number of Space Start-Ups have gone up, from just 1 in 2014 to 189 in 2023 as per DPIIT Start-Up India Portal, Union Minister Dr Jitendra Singh said today. The investment in Indian Space Start-Ups has increased to \$ 124.7 Million in 2023, he added.

The Union Minister of State (Independent Charge) Science & Technology; MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space, said this in a written reply in the Lok Sabha today.

Dr Jitendra Singh said, the current size of the Indian Space Economy is estimated

around \$8.4 billion (around 2-3% of global space economy) and it is expected that with the implementation of the Indian Space Policy 2023, \$44 billion Indian space economy can be achieved by the year 2033.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1988864>

Raksha Mantri commissions stealth guided missile destroyer INS Imphal in Mumbai; Terms it as a symbol of 'Aatmanirbharta' in defence

PIB, December 26, 2023

INS Imphal, a Project 15B stealth guided missile destroyer, was commissioned into the Indian Navy in the presence of Raksha Mantri Shri Rajnath Singh at an impressive ceremony held at the Naval Dockyard, Mumbai on December 26, 2023. The event marks the formal induction of the third of four indigenous 'Visakhapatnam' class destroyers, being designed by the Indian Navy's Warship Design Bureau and constructed by Mazagon Dock Shipbuilders Limited (MDL), Mumbai. Speaking on the occasion, the Raksha Mantri described *INS Imphal* as a shining example of 'Aatmanirbharta' in defence and a reflection of the commitment of Indian Navy, MDL & all other stakeholders towards national security. "*INS Imphal* is a symbol of India's growing maritime power and it will strengthen it further. It will bolster our principle of '*Jalmev Yasya, Balmev Tasya*' (*One Who Controls the Sea is All Powerful*) in the Indo-Pacific region," he said.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1990408>

India, Russia sign pacts on future units of Kudankulam plant

Indian Express, December 27, 2023

India and Russia Tuesday signed some "very important" agreements related to the construction of the future power-generating units of the Kudankulam nuclear power plant.

External Affairs Minister S Jaishankar made the announcement after his “comprehensive and productive” meeting with Deputy Prime Minister Denis Manturov on bilateral economic cooperation.

<https://indianexpress.com/article/india/india-russia-construction-power-kudankulam-nuclear-plant-jaishankar-9083865/>

India’s nuclear sector will power future space missions, says Isro chief

Times of India, December 29, 2023

India’s nuclear sector is set to fuel and power future space missions of the country, Isro chairman S Somanath said at Indian Institute of Technology-Bombay’s Techfest on Thursday. He said the space agency will also go for nuclear propulsion in collaboration with the department of atomic energy.

Stating that two radioisotope heating units that were included in the propulsion module of Chandrayaan-3 on a trial basis worked flawlessly, Somanath said the atomic energy department was enthusiastic about the project. His statement assumes significance with global space agencies entering the nuclear power sector. He said the first phase of the Bharatiya Antariksh Station will be ready by 2028, while the entire facility will be completed in 2035. “It will be an international platform for collaborative research,” he said, adding that the space station will be a gateway for interplanetary missions, microgravity studies, space biology, medicine and research.

<https://timesofindia.indiatimes.com/city/mumbai/nuclear-sector-to-power-indian-space-missions-isro-chief/articleshow/106363549.cms>

B. Russia

Russian Strategic Missile Forces raise proportion of new-generation missile systems to 88%

TASS, December 16, 2023

The Russian Strategic Missile Forces have raised their proportion of new-generation missile systems to 88% amid new deliveries,

Colonel General Sergey Karakayev, the commander of the forces, told the Krasnaya Zvezda newspaper.

“In 2023, about 80 new main types weapons and military equipment were delivered to the Strategic Missile Forces as part of the government’s defense contracts. This made it possible to complete an upgrade of three missile regiments with Yars and Avangard missile systems. That means the proportion of the latest missile systems in the Strategic Missile Forces battlegroup has reached 88%,” Karakayev said.

<https://tass.com/defense/1722171>

Russian Missile Forces’s stationary group has more nuclear warheads than mobile one

TASS, December 16, 2023

The stationary group of Russia’s Strategic Missile Forces currently has more nuclear warheads than the mobile group, the forces’ Commander Colonel General Sergey Karakayev said.

“The two-component structure of the Strategic Missile Forces has not significantly changed over the years. The number of deployed carriers in the stationary and mobile groups of the Strategic Missile Forces remains roughly the same. However, the stationary group currently has more nuclear warheads than the mobile one,” he pointed out in an interview with the Krasnaya Zvezda (or Red Star) newspaper on the eve of Strategic Missile Forces Day.

<https://tass.com/defense/1722159>

Press review: Putin files papers to begin campaign and Pyongyang gives Seoul ICBM migraine

TASS, December 19, 2023

Russian President Vladimir Putin files nomination papers with the Central Election Commission (CEC) to begin the formal registration process to run for re-election in 2024; Pyongyang tests a record

number of ICBMs in 2023, triggering alarm bells in Seoul; and President Aleksandar Vucic's coalition claims a solid victory in Serbian parliamentary elections. These stories topped Tuesday's newspaper headlines across Russia. On Monday, Russian President Vladimir Putin filed all necessary nomination documents with the country's Central Election Commission (CEC) to formally begin the process of being registered as a candidate in the presidential election to be held on March 15-17, 2024.

<https://tass.com/pressreview/1723197>

Share of modern equipment in Russia's strategic nuclear forces up to 95% – Putin

TASS, December 19, 2023

The share of modern equipment in Russia's strategic nuclear forces has reached 95%, President Vladimir Putin said at a meeting of the Defense Ministry's board.

"This year, thanks to the consistent implementation of the state program for armaments and smooth work of defense enterprises, the share of modern weapons and equipment in the strategic nuclear forces as a whole has been brought to 95%, and in the naval component, to almost 100%," Putin said. He noted that 15 launchers of the Yars and Avangard missile systems would enter combat duty in the strategic missile forces by the end of the year. "We have received four submarines, two of them just recently. Last week I attended the inauguration of The Krasnoyarsk, a multi-purpose nuclear submarine, and The Emperor Alexander III, equipped with Bulava ballistic missiles," Putin recalled.

<https://tass.com/defense/1723837>

Sevmash to build three Borey-A-class strategic submarines in coming years

TASS, December 21, 2023

Sevmash Shipyard will build three Borey-A-class strategic nuclear submarines with ballistic missiles (SSBN) in the coming years, shipyard CEO Mikhail Budnichenko told TASS.

"In the coming years, another three strategic submarines of Borey-A class have to be floated and handed over to the Navy in the framework of the state arms program," he said.

The shipyard is also building five Yasen-M-class strategic nuclear submarines with guided missiles (SSGN). The Arkhangelsk is at the final construction stage, he said.

"The tasks of the arms procurement order have been fulfilled. Two groups of Yasen-M and Borey-A class nuclear submarines are being built in the slipways," Budnichenko said adding the Knyaz Pozharsky SSBN will be floated as scheduled.

<https://tass.com/defense/1724571>

Admiral Nakhimov cruiser to get long-range weapons, air defense

TASS, December 21, 2023

The Admiral Nakhimov heavy nuclear cruiser of Orlan-class project 1144.2M will receive long-range weapons and modern air defense after an upgrade at Sevmash Shipyard.

"After modernization the cruiser will be armed with long-range precision weapons. Modern air defense complexes and antisubmarine weapons will protect the warship," Sevmash CEO Mikhail Budnichenko told TASS.

The overhaul and the upgrade of the cruiser proceed as scheduled, he said.

"After the completion of all technological operations at the mooring berth the Admiral Nakhimov will sail for sea trials," he said.

<https://tass.com/defense/1724573>

Russia's further adherence to INF Treaty-related moratorium remains acute issue – Lavrov

TASS, December 28, 2023

The issue whether Russia will continue to adhere to the moratorium on the deployment of land-based intermediate-

and shorter-range missiles remains acute due to US actions, Foreign Minister Sergey Lavrov told TASS in an exclusive interview on the results of 2023.

"As the plans for deploying US land-based intermediate and shorter-range missiles in Europe and the Asia-Pacific Region (APR) materialize, the question of further compliance with the moratorium imposed by Russia on the deployment of similar weapons turns more acute against the backdrop of the emergence of the same type US-made weapons in the relevant regions," Lavrov said.

<https://tass.com/politics/1727349>

C. China

China launches new remote sensing satellite

CGTN, December 16, 2023

China successfully launched a new remote sensing satellite into its planned orbit from the Wenchang Spacecraft Launch Site on the southern island province of Hainan. The carrier rocket, coded as Long March-5 Y6, blasted off carrying the Yaogan-41, a high-orbit optical remote sensing satellite. The satellite will be used in land survey, crop yield estimation, environmental management, meteorological warning and forecasting and comprehensive disaster prevention and reduction. The launch marks the 502nd mission for the Long March series carrier rockets.

<https://news.cgtn.com/news/2023-12-16/China-launches-new-remote-sensing-satellite1pzxy6Ot6CY/index.html>

China unveils space war-gaming system for military operations and training

Stephen Chen

South China Morning Post, December 16, 2023

Chinese military scientists have unveiled a space war-gaming system that was previously shrouded in secrecy. With a "user-friendly" design, the system has the

power to simulate and foresee the intricate process of space combat, according to its developers. It was not just a tool for China's military operations, but also for shaping and sharpening the finest space warriors and commanders on a large scale, they said. Developed by the National University of Defence Technology in Changsha, the system has already proved its worth in a covert space mission, the team led by associate professor Zhang Jin wrote in a paper published in domestic journal National Defence Technology in October.

<https://www.scmp.com/news/china/science/article/3245148/china-unveils-space-war-gamingsystem-military-operations-and-training>

China launches commercial carrier rocket

China Daily, December 17, 2023

China successfully launched SQX 1 commercial carrier rocket into space from the Jiuquan Satellite Launch Center in Northwest China. The rocket blasted off from the launch site, sending the Di'er 1 satellite into the planned orbit. It was the sixth flight mission of the SQX 1 commercial carrier rocket.

<https://www.chinadaily.com.cn/a/202312/17/WS657eb509a31040ac301a821c.html>

PLA Air Force pursues fast equipment development with future air combat in mind

Liu Xuanzun

Global Times, December 18, 2023

The Chinese People's Liberation Army (PLA) Air Force is pursuing fast equipment development with the aim of adapting to future air combat, which could involve vastly expanded battlefield boundaries, highly dynamic games, greatly enhanced unmanned combat and main battle elements characterized by high altitude and fast speed, said an official recently. Colonel Tang Shaojun at the PLA Air Force's equipment department made the remarks in an interview with the

Xinhua News Agency's Outlook Weekly, which was reposted by the PLA Air Force's official WeChat account. When asked about his thoughts on future air combat, the roles of air combat elements and the challenges in developing equipment, Tang said that to design weapons and equipment is to design future warfare, and the development of weapons and equipment is a key factor in the changing form of war, so it must be fundamentally oriented by the demands of combat.

<https://www.globaltimes.cn/page/202312/1303864.shtml>

China's Sea-Based Nuclear Deterrent: Organizational, Operational, and Strategic Implications

David C. Logan

China Maritime Report No. 33, China Maritime Studies Institute, U.S. Naval War College, December 18, 2023

China's development of a credible sea-based deterrent has important implications for the PLAN, for China's nuclear strategy, and for U.S.-China strategic stability. For the PLAN, the need to protect the SSBN force may divert resources away from other missions; it may also provide justification for further expansion of the PLAN fleet size. For China's nuclear strategy and operations, the SSBN force may increase operational and bureaucratic pressures for adopting a more forward-leaning nuclear strategy. For U.S.-China strategic stability, the SSBN force will have complex effects, decreasing risks that Chinese decisionmakers confront use-or-lose escalation pressures, making China less susceptible to U.S. nuclear threats and intimidation and therefore perceiving lower costs to conventional aggression, and potentially introducing escalation risks from conventional-nuclear entanglement to the maritime domain.

<https://digital-commons.usnwc.edu/cmsi-maritime-reports/33/>

Remarks by Ambassador Geng Shuang at the UN Security Council briefing on the Iranian Nuclear issue

Permanent Mission of the People's Republic of China to the UN, December 19, 2023

As a permanent member of the Council at a party to the JCPOA, China has always been committed to upholding the validity of the agreement and the authority of the Council resolutions, and has been working to promote political and diplomatic solution to the Iranian nuclear issue. We will continue to take an objective and impartial position, stay engaged with the parties concerned, and play a positive and constructive role in bringing the JCPOA back to the right track at an early date, so as to safeguard the international nuclear non-proliferation regime and peace and stability in the Middle East.

http://un.china-mission.gov.cn/eng/hyfyf/202312/t20231220_11207321.htm

China's Military-Civil Fusion Strategy: A Blueprint for Technological Superiority

Nicholas R. Licata

Foreign Policy Research Institute, December 19, 2023

In an effort to transform the People's Liberation Army (PLA) into the most technologically advanced military in the world, the Chinese Communist Party (CCP) is systematically reorganizing its science and technology sectors to ensure that new innovations simultaneously advance the growth of its military capabilities. This "Military-Civil Fusion" (MCF, 军民融合) strategy targets technologies such as quantum computing, semiconductors, 5G, nuclear technology, aerospace technology, gene editing and artificial intelligence to achieve military dominance. While other nations have tried this strategy before, China's MCF is expansive and institutionalized in a way

that exceeds previous efforts. China is likely to produce a variety of new weapons of mass destruction using this policy in the next decade and threaten the United States' regional interests more than it already has.

<https://www.fpri.org/article/2023/12/chinas-military-civil-fusion-strategy-a-blueprint-for-technological-superiority/>

Qinshan nuclear power station sets new record for power generation

Zheng Xin

China Daily, December 20, 2023

Qinshan nuclear power station in Zhejiang province, the first nuclear power plant designed and built in China, has generated more than 53.5 billion kilowatt-hours of clean power, a record high, said its operator China National Nuclear Corp. This has exceeded the annual power generation of last year and marks the ninth year of power generation increase, it said. The first pilot nuclear heating project in southern parts of China, which is built upon the residual thermal power of Qinshan nuclear power station, is also currently under operation in Haiyan county in Zhejiang province, it said.

<https://www.chinadaily.com.cn/a/202312/20/WS65829d8da31040ac301a8b58.html>

China quietly rebuilds secretive base for nuclear tests

William J. Broad, Chris Buckley and Jonathan Corum

The New York Times, December 20, 2023

In the remote desert where China detonated its first atom bomb nearly 60 years ago, a drilling rig recently bored a deep vertical shaft that is estimated to plunge down at least a third of a mile. It is the strongest evidence yet that Beijing is weighing whether to test a new generation of nuclear arms that could increase the lethality of its rapidly expanding missile force. For years, U.S. government reports and independent experts have expressed vague concerns about the old base, Lop Nur. The reports point to possible preparations for year-round

operations and a “lack of transparency.” Now, however, waves of satellite images reveal that the military base has newly drilled boreholes — ideal for bottling up firestorms of deadly radiation from large nuclear blasts — as well as hundreds of other upgrades and expansions.

<https://www.nytimes.com/interactive/2023/12/20/science/china-nuclear-tests-lop-nur.html>

China is showing off its oversized air-to-air missile

Sébastien Roblin

Popular Mechanics, December 21, 2023

Early in December, the website ChinaMil posted (and later took down) a dramatic photo showing a flight of four Chinese J-16 heavy fighters, allegedly from combat training flights on November 25. Two of the J-16 are seen bristling with no less than 10 air-to-air missiles, each one of four types. The Shenyang J-16 is a Chinese derivative of the large Russian two-seat Sukhoi Su-30MKK Flanker-G strike plane, exported to China between 2000 and 2004. It's conceptually similar to the U.S. Air Force's versatile and heavy-lifting F-15E Strike Eagle jet, so its ability to carry a lot of weapons isn't surprising in itself. What attracted attention were the missiles protruding like lances from under a DF-4 pylon on the jets' left wings: a PL-17 very-long-range air-to-air missile, or VLRAAM.

<https://www.popularmechanics.com/military/aviation/a46042683/china-shows-off-oversized-air-to-air-missile/>

To shoot or not to shoot: Chinese-developed 'golden veil' could make deadly missiles look like passenger planes

Stephen Chen

South China Morning Post, December 22, 2023

A gold-plated camouflage veil that can make a cruise missile look like a passenger plane on a radar screen could “change the

face of war", according to the team of Chinese scientists behind the design. The low-cost technology can confuse expensive air defence systems and significantly reduce the time available for military commanders to respond – if at all. Developed by a research team in northwest China, the project is part of an ongoing effort by China to build up a wide range of ways it can penetrate air defence systems in the first island chain, Guam or even the US homeland. While China's overall military posture remains defensive, such abilities would serve as an effective deterrence against foreign intervention in regional affairs such as Taiwan or the South China Sea, according to some Chinese military experts.

<https://www.scmp.com/news/china/science/article/3240861/shoot-or-not-shoot-chinese-developed-golden-veil-could-make-deadly-missiles-look-passenger-planes>

US the blocker of space cooperation with China

China Daily, December 22, 2023

Responding to media inquiries about United States Ambassador to China Nicholas Burns' recent claim that Beijing has no plan to cooperate with the US in lunar exploration, a spokesperson for the China National Space Administration denied the allegation, stating the real obstacle is the barriers Washington has erected. Burns' comment stemmed from a US complaint that the Chinese space agency has refused to give NASA access to the lunar soil China's Chang'e 5 space mission brought back from the moon in 2020. The Chinese mission collected and brought home 1,731 grams of moon soil, and in a goodwill gesture to facilitate international collaboration, the Chinese space authorities offered to share the soil samples with interested international scientific institutions. Beginning October, interested parties could submit an application to obtain some of the soil.

<https://www.chinadaily.com.cn/a/202312/22/WS6584ebfda31040ac301a902e.html>

China preparing to test new generation nuclear weapons? Satellite images reveal dangerous visuals

Mint, December 22, 2023

Amid a major diplomatic tussle with the United States, China is probably preparing to test a new generation of nuclear arms with an aim to increase the lethality of its rapidly expanding missile force, a report by the New York Times said. The report, substantiated by satellite images claims to confirm the concerns around China's old base Lop Nur. The base where China detonated its first atomic bomb nearly 60 years ago has recently seen some massive infrastructural installments which include a deep vertical shaft. Chinese authorities have recently restarted excavation and construction in the horizontal tunnels bored into the side of the mountains. These tunnels were used for the past nuclear weapons testing. The satellite imagery also confirms the addition of several new roads around the area.

<https://www.livemint.com/news/world/china-preparing-to-test-new-generation-nuclear-weaponssatellite-images-reveal-dangerous-visuals-11703253164271.html>

Long March-7 Y8 carrier rocket for Tianzhou-7 mission transferred to Wenchang launch site

CGTN, December 22, 2023

The Long March-7 Y8 carrier rocket for the Tianzhou-7 mission was transferred to the Wenchang launch site in south China's Hainan Province, according to the China Manned Space Agency. Final assembly and testing will be carried out later at the launch site, together with the Tianzhou-7 cargo spacecraft that arrived in November. Currently, all testing systems at the launch site are gearing up for the launch as planned, said the agency.

<https://news.cgtn.com/news/2023-12-22/Long-March-7-Y8-carrier-rocket-transferred-toWenchang-launch-site-1pJB4j0qndK/p.html>

The US and China are looking into big boxes full of missiles to give their navies new firepower

Michael Peck

Business Insider, December 24, 2023

Call them prepackaged missiles or missiles-in-a-box, but containerized missile launchers, which can be fitted to most any commercial or military vessel, have the potential to revolutionize naval warfare. The massive expenditure of munitions in Ukraine has underscored for many Western military leaders that huge arsenals will be needed to wage modern warfare. US Navy leaders in particular are worried about their ability to keep their ships' magazines filled in a showdown with China's rapidly expanding air and maritime forces. Containerized launchers have appeal as a relatively easy way to arm a ship with more missiles and have resurrected interest in "Q-ships," the warships disguised as merchant vessels that prowled the seas during World War I and II.

<https://www.businessinsider.in/international/news/the-us-and-china-are-looking-into-big-boxesfull-of-missiles-to-give-their-navies-new-firepower/articleshow/106253373.cms>

China launches four Tianmu-1 satellites to form a weather constellation

CGTN, December 25, 2023

China launched a new set of four satellites as part of the Tianmu-1 weather constellation into space. These satellites have successfully entered their preset orbit and will be utilized to provide commercial meteorological data services. Tianmu-1 01 and 02 were launched on January 9, followed by satellites 03-06 on March 22, and satellites 07-10 on July 20. The Tianmu-1 satellite constellation aims to collect global atmosphere data for comprehensive detection of the ocean, atmosphere and ionosphere worldwide at all times. This launch marks the 23rd flight mission conducted by the Kuaizhou-1A carrier rockets.

<https://news.cgtn.com/news/2023-12-25/China->

[launches-four-new-satellites-to-form-a-weatherconstellation-1pOCD9ug8EM/p.html](https://www.eunews.it/en/2023/12/19/brussels-will-launch-industrial-alliance-on-mini-nuclear-reactors-in-early-2024/)

D. Europe

Brussels will launch industrial alliance on mini nuclear reactors in early 2024

EU News, December 19, 2023

Brussels – The announced Industrial Alliance for Mini Nuclear Reactors should be launched as early as early 2024. This was confirmed today by the European Energy Commissioner Kadri Simson, arriving at the EU Energy Council held in Brussels.

"We believe that small modular nuclear reactors can play a role and help us achieve our ambitious goals for 2040. To enable this development and take into account the highest safety standards, we need to establish rules for EU member states, but of course we want to meet our industry's needs as well, and that is why we are planning to establish an Industrial Alliance for Small Modular Reactors early next year," said the Estonian commissioner.

<https://www.eunews.it/en/2023/12/19/brussels-will-launch-industrial-alliance-on-mini-nuclear-reactors-in-early-2024/>

France Pushes Nuclear Energy, Raising German Hackles

Barrons, December 19, 2023

France stood up for nuclear power as part of the EU's low-carbon energy mix on Tuesday, raising the hackles of anti-nuclear Germany.

"We rather believe that this is an expensive experiment," Germany's minister for economic affairs and climate action, Sven Giegold, said as he arrived for a Brussels meeting of EU energy and transport ministers.

On Tuesday, France signed a nuclear cooperation memorandum with Sweden. Stockholm, like Paris, is banking on using nuclear power to meet its climate goals.

The memorandum “will let us tighten our links on the issue of nuclear power,” France’s energy minister, Agnes Pannier-Runacher, said after signing the document with her Swedish counterpart, Ebba Busch.

<https://www.barrons.com/news/france-pushes-nuclear-energy-raising-german-hackles-89beb1b2>

Sweden, France strengthen cooperation on nuclear

Euractiv, December 19, 2023

France could soon build several nuclear reactors in Sweden, according to a letter of intent signed by the two countries’ energy ministers on the sidelines of the EU’s Energy Council on Tuesday (19 December).

The agreement comes after French President Emmanuel Macron and Swedish Prime Minister Ulf Kristersson signed a joint declaration in January to give nuclear energy a prominent place in bilateral cooperation between the two countries.

On the domestic front, the French government has decided to build six new reactors by 2035 and a possible eight more by 2050, while Sweden also has plans to revive its nuclear industry.

<https://www.euractiv.com/section/energy-environment/news/france-and-sweden-strengthen-cooperation-on-nuclear/>

France and Sweden strengthen nuclear ties

Power Technology, December 20, 2023

France plans to build several nuclear reactors in Sweden, according to an agreement signed on the sidelines of the EU’s Energy Council meeting in Brussels on Tuesday.

The letter of intent, signed by Sweden’s Minister for Energy, Ebba Busch, and French Energy Minister Agnès Pannier-Runacher, notes: “French industry’s interest in submitting an offer for French nuclear power reactors in Sweden.”

Specifically, French state-owned energy company EDF, which specialises in nuclear

power, is “actively engaged” in discussions with Swedish state-owned utility Vattenfall about the advancement of nuclear energy in the Scandinavian country.

<https://www.power-technology.com/news/france-sweden-nuclear-collaboration-agreement-signed/>

French-led nuclear alliance calls for new ‘low-carbon’ directive

Euractiv, December 20, 2023

Countries participating in Tuesday’s alliance meeting – Bulgaria, Croatia, Czechia, Finland, Hungary, Poland, Romania, Slovakia, Slovenia, Sweden and France – called for a root-and-branch review of the EU’s climate and energy policy framework.

In their view, the EU must fully “fully acknowledge the contribution of all fossil-free energy sources” to the bloc’s objective of halving emissions by 2030 and reaching climate neutrality by mid-century.

“Nuclear power is indisputably a sustainable and equally valid technology to achieve these objectives for member states that opted to resort to its use,” the joint declaration says.

<https://www.euractiv.com/section/energy-environment/news/french-led-nuclear-alliance-calls-for-eu-to-pen-low-carbon-directive/>

Hungary Powers Through with Paks Nuclear Plant Expansion Defying EU Stance on Russian Energy Links

Modern Diplomacy, December 22, 2023

Despite mounting pressure and calls to cut all energy ties with Russia in Brussels and some European capitals, the construction works on the Paks-2 project are progressing as scheduled.

Despite mounting pressure and calls to cut all energy ties with Russia in Brussels and some European capitals, the construction works on the Paks-2 project are progressing as scheduled. Hungary will

never agree to stop or slow down the project. By trying to push companies like German Siemens or French Framatome into quitting Paks, EU politicians are just shooting themselves in the foot. Companies would be losing business and facing astronomical fines for breaching binding contracts.

<https://modern diplomacy.eu/2023/12/22/hungary-powers-through-with-paks-nuclear-plant-expansion-defying-eu-stance-on-russian-energy-links/>

Russian nuclear weapons in Belarus in place, 'in good condition' — Lukashenko

TASS, December 25, 2023

Russian tactical nuclear weapons in Belarus are "in place and in good condition," Belarusian President Alexander Lukashenko has told the media.

"A long time ago [the warheads were delivered]. I've already told you when it was finished. In September, I think, or in October. At the beginning of October. Everything is in its place and in good condition," Lukashenko said.

He stressed that military personnel were undergoing routine daily training.

"Every day they learn something new. Every day. Even former PMC Wagner members, who have stayed with us, are working in our military units today, sharing their experience," the Belarusian leader said.

<https://tass.com/defense/1726371>

E. United States of America

U.S. and South Korea to draw up joint nuclear defense guideline

The Japan Times, December 16, 2023

The United States and South Korea plan to draw up joint guidelines on a nuclear defense strategy by the middle of next year and establish an integrated system to deter North Korea's nuclear weapons, the Yonhap news agency said Saturday.

Washington and Seoul have decided to complete a comprehensive guideline by next year on how to contain and respond to

Pyongyang's nuclear threat together, Yonhap reported, citing Kim Tae-hyo, South Korea's deputy national security adviser, who was speaking to reporters in the U.S.

The guideline is expected to include methods of sharing sensitive information related to North Korea's nuclear weapons, the consultation process in the event of a nuclear crisis, and real-time communication channels between the two countries' leaders, it said.

<https://www.japantimes.co.jp/news/2023/12/16/asia-pacific/us-south-korea-nuclear-guideline/>

US issues dire warning to North Korea on nuclear threat

The Hill, December 16, 2023

The U.S. issued an intense warning to North Korea over nuclear threats Friday.

In a Friday statement on the second U.S.-Republic of Korea (ROK) Nuclear Consultative Group coming together in Washington, D.C., the White House warned that any "nuclear attack by North Korea against the United States or its allies is unacceptable and will result in the end of the Kim regime." The Republic of Korea is the official name of South Korea.

"The United States reaffirmed its unwavering commitment to provide extended deterrence to the ROK, backed by the full range of U.S. capabilities including nuclear," the statement said.

<https://thehill.com/policy/defense/4363955-us-issues-dire-warning-to-north-korea-on-nuclear-threat/>

2024 US NDAA boosts nuclear cybersecurity, highlights artificial intelligence

CSO, December 18, 2023

By a 310-118 vote, the US House of Representatives passed the \$886 billion National Defense Authorization Act for Fiscal Year 2024 (NDAA), which passed the Senate one day later. The annual must-pass legislation for US

military funding is now headed to President Biden for his signature. Partisan fights over defense spending for Ukraine and controversies over women's health care and gender-affirming rights generated a lot of headlines in the months leading up to the bill's passage. Most of the hardline culture war provisions were ultimately stripped out of the final legislative package and much of the Ukraine funding is still mired in debate. The bill also contained a stop-gap four-month reauthorization of the controversial Section 702 of the Foreign Intelligence Surveillance Act, which enables the US government to spy on foreign nationals, and sometimes US citizens and residents, which was due to expire at year-end.

<https://www.csoonline.com/article/1265288/2024-us-ndaa-boosts-nuclear-cybersecurity-highlights-artificial-intelligence.html>

US Lab Enters New Era, Achieving 'Ignition' Over And Over

Nucnet, December 19, 2023

Scientists have managed to repeatedly produce nuclear fusion ignition for the first time, marking a major milestone towards achieving near-limitless clean energy at scale.

A team at the Lawrence Livermore National Laboratory (LLNL) in the US achieved fusion ignition last December, producing a net energy gain from a fusion reaction for the first ever time. The feat was hailed as a "moment of history" by physicists, which LLNL scientists have now repeated a further three times.

LLNL used the National Ignition Facility (NIF) to fire 192 laser beams at a frozen pellet of isotopes held within a diamond capsule suspended in a gold cylinder.

<https://www.nucnet.org/news/us-lab-enters-new-era-achieving-ignition-over-and-over-12-2-2023>

Nuclear fusion ignition reaction achieved multiple times in the US

Power Technology, December 19, 2023

Scientists at the US National Ignition Facility (NIF) have produced fusion reactions that

released more energy than they consumed, a process known as ignition, multiple times after the reaction was first achieved in December 2022. The ability to execute the process repeatedly marks a huge step towards producing near-unlimited quantities of the energy.

The NIF, based in the Lawrence Livermore National Laboratory in California, has achieved ignition in four of its last six attempts, creating a reaction that generates pressures and temperatures greater than those that occur inside the sun.

The process involves firing 192 laser beams at a frozen pellet of hydrogen isotopes that sits in a diamond capsule suspended inside a gold cylinder. In the recent experiments, the implosion caused by the laser beam generated 3.88 megajoules of fusion energy, an 89% increase over the input energy.

<https://www.power-technology.com/news/us-scientists-achieve-repeated-nuclear-fusion-ignition-for-the-first-time/>

Concern In US Over Iran's Accelerated Uranium Enrichment

Iran International, December 27, 2023

The White House says it is "greatly concerned" regarding the International Atomic Energy Agency (IAEA) report detailing Iran's heightened production of highly enriched uranium.

In a statement on Tuesday, a spokesperson for the National Security Council underscored the alarming nature of Iran's nuclear escalation, saying "Iran's nuclear escalation is all the more concerning at a time when Iran-backed proxies continue their dangerous and destabilizing activities in the region, including the recent deadly drone attack and other attempted attacks in Iraq and Syria and the Houthi attacks against commercial shipping vessels in the Red Sea,".

<https://www.iranintl.com/en/202312275832>

US 'destroyed' INF Treaty needing missiles against China – Lavrov

TASS, December 28, 2023

The US decided to break off the Intermediate-Range Nuclear Forces Treaty (INF Treaty - TASS) because Washington needs missiles banned under it, including against China, Russian Foreign Minister Sergey Lavrov said in an exclusive interview with TASS on the results of 2023.

"Here is just one example: under contrived pretexts, the US decided to break the INF Treaty. In reality, the US just needed the missiles banned under the treaty, including against China. Restrictions against them got in the way and they were removed without any qualms. The negative consequences of this step for regional and global security are obvious," Lavrov noted.

<https://tass.com/politics/1727341>

West Asia

F. Iran

Iran Army drones, missiles arrayed around borders to fend off threats: commander

Tehran Times, December 18, 2023

Iran's Army Ground Force deploys missile, drone, and artillery units along the northeastern border for a swift response to potential threats, focusing on areas requiring additional forces. Air Force Deputy Commander Brigadier General Mahdi Hadian highlights strong defense capabilities, readiness, and the highest combat readiness, crediting sacrifices, Islamic Revolution principles, and Ayatollah Khamenei's leadership. Adversaries' investments in hybrid warfare are futile due to Khamenei's guidance and public support. Hadian reaffirms the Air Force's ability to respond to threats. Khamenei emphasizes the need to maintain and improve defensive capabilities, praising Armed Forces' accomplishments and highlighting the adversary's vulnerability in April. Iranian Interior Minister Ahmad Vahidi urges Pakistan to secure borders and prevent terrorist havens, disclosing infiltration from

Pakistan. Recent advancements in domestically produced equipment enhance Iran's armed forces' self-sufficiency.

<https://www.tehrantimes.com/news/492664/Iran-Army-drones-missiles-arrayed-around-borders-to-fend-off>

AEOI Chief: Iran Successfully Loads Radiation Source in Tehran Facility

Fars News Agency, December 20, 2023

Iran's Tehran Gamma Irradiation Facility, under the leadership of AEOI's Mohammad Eslami, successfully reloads the radiation source, reducing medical item irradiation time to 2.5 minutes, boosting efficiency fourfold. Eslami highlights the facility's role in ensuring healthcare safety. Despite US sanctions, Iran persists in nuclear advancements, expressing confidence in its peaceful nuclear energy program. The country targets 20,000 kilowatts of nuclear power by 2041, emphasizing commitment to international regulations and IAEA principles through the JCPOA agreement with world powers.

<https://www.farsnews.ir/en/news/14020929000340/AEOI-Chief-Iran-Successfully-Loads-Radiation-Source-in-Tehran-Facility>

Iran says malware used in cyberattack on fuel stations detected

Tehran Times, December 2023

During the opening of an exhibition on domestic civil defense industries, Iran's Civil Defense Organization head reported the successful identification of malware in a recent cyberattack on the fuel distribution system. Brigadier General Gholam Reza Jalali stated that the disruption at gas stations on December 18 involved sophisticated malware, currently under analysis. He highlighted the role of artificial intelligence in cyberattacks, constituting over 55% of global incidents, with 30% targeting Iran being AI-powered. General Jalali emphasized the urgent need to modernize Iran's fuel distribution system for secure connections. The

cyberattacks in October and December, linked to Israel, were swiftly mitigated by Iranian experts.

<https://www.tehrantimes.com/news/492846/Iran-says-malware-used-in-cyberattack-on-fuel-stations-detected>

Iranian Navy receives new cruise missiles with cutting-edge equipment

Tehran Times, December 24

The Iranian Navy strengthens its maritime capabilities with the induction of advanced weaponry and cutting-edge equipment, showcased at a coastal naval base in southern Iran. The new additions include the 'Talayieh' strategic cruise missile system with a range exceeding 1,000 kilometers and the 'Nasir' cruise missile with a range over 100 kilometers. Two helicopters, equipped for electronic warfare capabilities, enhance resilience against electronic attacks. The helicopters feature advanced optical devices, intelligence gathering systems, and Identification Friend or Foe (IFF) systems. The 'Sanjar' smart loitering and suicide drone, a diver detection system, a multipurpose drone system for electronic warfare, and the 'Sirvan' tugboat for port operations further complement the Navy's expanding arsenal. The modernization efforts underscore Iran's commitment to maintaining a secure maritime presence.

<https://www.tehrantimes.com/news/492887/Iranian-Navy-receives-new-cruise-missiles-with-cutting-edge-equipment>

Iran's Envoy: IAEA Should Be Impartial in Resolving Safeguard Issues

Fars News Agency, December 25, 2023

Iran's ambassador to Vienna organizations, Mohsen Naziri Asl, confirms providing the IAEA with answers on Safeguards Agreement claims, emphasizing Iran's commitment to cooperation. The claims originated from fake documents of the Zionist regime, rejected after the US withdrawal. In March, Iran voluntarily increased IAEA monitoring, resolving technical issues. Despite voluntary

measures, IAEA's demands increased, prompting the need for specified assurances. Naziri criticizes IAEA Chief Rafael Grossi's remarks, urging accurate representation of Iran's peaceful nuclear program. Iran maintains exemplary cooperation with 12 inspectors in November. Naziri expects IAEA chief to address concerns over Israeli nuclear threats. AEOI head Eslami warned against politically motivated acts, urging IAEA impartiality. Tensions rose as Iran barred some IAEA inspectors, drawing criticism from Grossi. IAEA remains committed to ensuring Iran's nuclear program is exclusively peaceful.

<https://www.farsnews.ir/en/news/14021004000444/Iran's-Envy-IAEA-Shld-Be-Impartial-in-Resolving-Safeguard-Issues>

Iran threatens to Deploy Fishing Militia Based on Chinese Doctrine

Israel Defense, December 26, 2023

Iran has unveiled a Maritime Basij, a fishing militia comprising 33,000 fully recruited boats and 55,000 volunteer vessels, aligning with the Chinese Navy's doctrine. The militia aims to gather intelligence, extend maritime presence, and enhance firepower, particularly countering the U.S. Navy. Armed with machine guns, light weapons, and 107mm rockets, it is expected to operate from the Hormuz Strait to the Horn of Africa, potentially disrupting maritime routes. Distinguishing between civilian fishing boats and potential threats poses challenges for navies, including the U.S. Navy. Israel's naval intelligence is advised to establish a comprehensive database to monitor Iranian maritime militias for strategic preparedness.

<https://www.israeldefense.co.il/en/node/60739>

Army Aviation most powerful helicopter fleet in West Asia: commander

Tehran Times, December 26, 2023

The commander of the Islamic Republic of Iran Army Aviation (IRIAA), General

Yousef Ghorbani, announces that the IRIAA's helicopter fleet is the most powerful in West Asia. With over 800 types of locally crafted helicopter parts, the fleet boasts self-reliance achieved through eight years of experience during the Sacred Defense era. The IRIAA exclusively utilizes indigenous weapons, including cutting-edge armaments, demonstrating Iran's determination to withstand international sanctions. The fleet possesses advanced weaponry, surpassing even recent U.S. helicopter capabilities. General Ghorbani emphasizes the integration of artificial intelligence into the defense industry, showcasing Iran's commitment to technological advancement and regional power status.

<https://www.tehrantimes.com/news/492992/Army-Aviation-most-powerful-helicopter-fleet-in-West-Asia-commander>

Iran ready to respond to any threat: commander

Tehran Times, December 27, 2023

Iranian Army Ground Force Commander, General Kioumars Heydari, declares the army's readiness to respond to any threat in any location at any time. During a visit to the 840th Missile Group, he announces plans to establish five additional missile bases across the country to enhance combat readiness and defense capabilities. Heydari emphasizes the Army's commitment to self-sufficiency, operating 23 defense lines and prioritizing the development of missile units. The Ground Force focuses on long-range, pinpoint accuracy, intelligence, and network capability in the production and design of advanced weapons and missiles. With these capabilities, Heydari asserts the force's effectiveness in countering potential threats.

<https://www.tehrantimes.com/news/493019/Iran-ready-to-respond-to-any-threat-commander>

Iran Dismisses IAEA's Report on Accelerating Uranium Enrichment

Fars News Agency, December 28, 2023

AEOI Head Mohammad Eslami rejects IAEA's report on Iran's alleged increased

uranium enrichment, labelling it as routine and unchanged. Eslami dismisses the claim of enriching uranium up to 60% as media propaganda, suggesting it aims to divert attention from global concerns about Israeli actions in Gaza. Despite the 2015 accord, the US exit in 2018 and sanctions cast uncertainty on the agreement. Iran calls on IAEA to prioritize technical aspects, avoid politicization influenced by Israel, and expresses readiness to resolve differences through collaboration. Iranian officials highlight disproportionate inspections, covering only 2% of global sites, and deny pursuing military nuclear capability, citing a fatwa by Supreme Leader Khamenei. Iran rejects Western accusations, considering them a propaganda campaign against its peaceful nuclear program.

<https://www.farsnews.ir/en/news/14021007000123/Iran-Dismisses-IAEA%E2%80%99s-Repr-n-Accelerating-Uranium-Enrichmen>

Iran Advises Western Countries to Take Needed Political Measures for JCPOA Talks

Fars News Agency, December 30

Iran's Foreign Ministry Spokesman, Nasser Kana'ani, urges France, Germany, Britain, and the United States to cease issuing statements and exerting fruitless pressure on Tehran. This follows a joint statement by the three European parties to the JCPOA and the U.S., condemning Iran for an alleged increase in the production rate of highly enriched uranium up to 60% purity. Kana'ani reaffirms the peaceful nature of Iran's nuclear program and emphasizes diplomacy as the best approach to address concerns. Iran has made nuclear achievements despite U.S. sanctions, cooperating with the IAEA and highlighting its commitment to the JCPOA.

<https://www.farsnews.ir/en/news/14021009000209/Iran-Advises-Western-Ctries-Take-Needed-Political-Measures-for-JCPOA-Talks>

G. Iraq

Iraq, France discusses the development of combat capabilities

Iraqi News Agency, December 23, 2023

Lieutenant General Qais al-Mohammadawi, deputy commander of Joint Operations Command (JOC), discusses combat capabilities development with Lieutenant General Pierre Schell, Chief of Staff of French Land Forces. The focus is on joint French-Iraqi cooperation in training, consulting, and combat preparations, supporting Iraqi desert forces and Counter Terrorism Service forces. Al-Mohammadawi highlights Iraq's progress in enhancing capabilities and achieving a qualitative level of combat readiness. The French Chief of Staff praises Iraqi security forces' continuous field victories against terrorism. Al-Mohammadawi expresses gratitude to French forces for supporting Iraq's victories over defeated terrorist elements.

<https://ina.iq/eng/30542-iraq-france-military-talks-to-develop-combat-capabilities.html>

H. Israel

Philippine Air Force to Purchase Two Maritime Patrol Aircraft with Elbit Systems

Israel Defense, December 19, 2023

The Philippine Air Force is set to acquire two ATR-72 600 long-range maritime patrol aircraft equipped with systems by Israel's Elbit Systems for \$114 million. The aircraft aim to strengthen the 300th Air Intelligence and Security Wing. The purchase, part of an intergovernmental agreement, will be fulfilled over five years. Elbit's competitor in the project was Airbus with a P-295MPA/AS aircraft. The ATR 72-600 will feature a Mission Management System, advanced radar, electro-optics, Signals Intelligence (SIGINT) capabilities, and comprehensive communication systems. Despite concerns about the ongoing conflict involving Israel, the contract is proceeding as planned.

<https://www.israeldefense.co.il/en/node/60662>

IMCO to Provide Additional Sub-Systems for IDF's Eitan AFV

Israel Defense, December 20, 2023

Israeli IMCO Group has secured a more than \$7 million order from the Israel Ministry of Defense Directorate of Production and Procurement (DOPP) for additional electrical and electro-optic sub-systems for the IDF's Eitan (8X8) Armored Fighting Vehicles (AFVs) used in the current conflict. The order includes IMCO Projects' electric power and control units, operational control panels, platform interconnection cabling, platform main computing cradle unit, and illumination solutions. It also features Nir-Or's computer units and Video Management System, providing real-time AI analytics for optimal performance, survivability, and enhanced situational awareness of the AFV. IMCO Group remains committed to contributing to the nation's defense capabilities.

<https://www.israeldefense.co.il/en/node/60680>

New Czech Tanks Might Include Israeli "Trophy" Active Protection System by Rafael

Israel Defense, December 20, 2023

The Czech government is reportedly planning to purchase 77 Leopard 2A8 main battle tanks from Germany for the Czech army. The breakdown includes 44 combat and command tanks, along with 15 support tanks. Rafael's "Trophy" Active Protection System (APS) is often installed in Leopard 2A8 tanks and is manufactured for them in German factories through a joint European venture involving Rafael, German KMW, and General Dynamics Land Systems Europe. The acquisition is intended to replace the Soviet T-72 MC4Z tanks in service with the Czech army.

<https://www.israeldefense.co.il/en/node/60681>

The Cyber Arena Attacks are Expanding, Both Against Iran and Against Israeli Society

Israel Defense, December 21, 2023

The article highlights escalating cyber attacks between Israel and Iran, with a focus on an Iranian influence campaign aiming to sow discord in Israeli society. Recent incidents include attacks on Ziv Hospital by Hezbollah and distribution of fuel supply in Iran attributed to Israel. The cyber domain's unique nature allows attacks without explicit responsibility. The article underscores the growing significance of the cyber dimension in global conflicts, emphasizing its role in wars. Iran's influence campaign involves spreading fake news and polarization, particularly regarding Israeli politics and societal issues. The National Cyber Directorate in Israel is actively addressing the challenge, but combating the spread of fake news remains a significant concern.

<https://www.israeldefense.co.il/en/node/60698>

Elbit Wins Another Contract for Upgrading its F-35 Pilot Helmets

Israel Defense, December 21, 2023

Lockheed Martin secured a \$174.6 million contract from the US Navy to enhance the F-35 pilot helmets jointly produced by Collins Aerospace and Elbits Systems. This follows a previous \$347.4 million upgrade contract awarded last summer. Elbit Systems highlights the virtual capabilities of the electro-optical helmet, providing pilots with enhanced spatial orientation, weapons targeting, and tactical advantage day and night.

<https://www.israeldefense.co.il/en/node/60699>

Elbit Combat Systems Presented at a Philippine Army Parade

Israel Defense, December 27, 2023

Elbit Combat Systems showcased its cutting-edge military technology at a recent parade in Quezon City, Philippines, commemorating the 88th anniversary of the Armed Forces of the Philippines. The display

featured the Sabrah Light Tank, ASCOD 2 Command Vehicle, M125A2 IFVs with a 120mm armoured mortar, and the ATMOS 155mm howitzer system. Notably, the Sabrah light tank, equipped with a 105mm cannon and autoloader turret, was highlighted. Elbit's communications systems and UT25 unarmed turret with a 25mm autocannon on the ASCOD 2 were also spotlighted. This display follows a \$172 million contract awarded in 2022 for Elbit to supply light tanks to the Philippine Army.

<https://www.israeldefense.co.il/en/node/60755>

Israeli Blue Spear Missiles installed on Singaporean Navy frigates

Israel Defense, December 27, 2023

Israeli Blue Spear missiles, a 5th generation upgrade of the "Gabriel" missile, will enhance Singapore's Formidable-class frigate fleet, replacing Harpoon missiles. Developed by IAI and ST Engineering, the mid-life upgrade, secured by ST Engineering Marine Ltd., includes marine and electrical systems enhancements. Armed with various weaponry, the Formidable-class Frigates will undergo progressive upgrades, with the first completion expected in 2028.

<https://www.israeldefense.co.il/en/node/60757>

Israeli Artillery corps Fires Over 100,000 Shells During the War

Israel Defense, December 29, 2023

Israeli Artillery Corps has played a pivotal role in the ongoing war, firing over 100,000 shells, with 90,000 directed at the Gaza Strip. The IDF Spokesperson's Unit highlights the engagement of UAV operators, specifically Unit 5252 "Zik" using Hermes 450 UAVs, and Unit 5353, "Sky Rider," contributing to observations and attack coordination. Rocket battalions utilized MLRS launchers for precision strikes with over 200 rockets. Recent reports on Bloomberg reveal U.S. support, with Israel receiving 57,000 155mm high-power artillery shells originally stored in

Israel for the U.S. Army European Command, now redirected to meet the conflict demands. An additional supply includes 400 120mm mortars.

<https://www.israeldefense.co.il/en/node/60445>

Elbit Systems of America Secures \$500M Contract for Night Vision Goggles for U.S. Marines

Israel Defense, December 29, 2023

Elbit Systems of America has secured a significant \$500 million indefinite-delivery/indefinite-quantity (ID/IQ) contract for Squad Binocular Night Vision Goggle (SBNVG) systems, spare parts, logistics support, and refurbishment. The contract, set to be completed by 2028, includes an initial delivery order worth approximately \$127 million. The SBNVG enhances nighttime viewing for U.S. Marines, featuring improved battery life and high-performing white phosphor image intensification tubes. Elbit Systems of America's President and CEO, Bezhael Machlis, emphasized the company's commitment as a leading partner for the U.S. Marine Corps, providing cutting-edge equipment to enhance battlefield awareness.

<https://www.israeldefense.co.il/en/node/60448>

I. East Asia

N. Korea test-fires ballistic missile, blasts US for provoking 'preview of nuclear war'

France 24, December 17, 2023

The missile was launched towards the sea off North Korea's east coast, according to the South Korean Joint Chiefs of Staff.

About 20 minutes after initially reporting the launch, the Japanese coast guard said the missile had already fallen.

It appeared to have fallen outside Japan's exclusive economic zone (EEZ), broadcaster NTV reported. The launch came after warnings from officials in Seoul and Tokyo that nuclear-armed North Korea was preparing to test-fire a missile, including one

of its longest-range intercontinental ballistic missiles (ICBMs) this month.

<https://www.france24.com/en/asia-pacific/20231217-n-korea-test-fires-ballistic-missile-blasts-us-for-provoking-preview-of-nuclear-war>

North Korea test-fires missile capable of reaching 'whole of US territory', Japan calculates

SCMP, December 18, 2023

North Korea on Monday test-fired its most advanced intercontinental ballistic missile that has the potential to reach the United States, extending a record-breaking number of weapons tests this year and triggering further international condemnation.

South Korea said the North fired an ICBM that used solid fuel, which makes missiles easier to transport and faster to fire than liquid-fuelled versions. Monday's launch was the third time the North had tested a solid-fuel ICBM, after launches in April and July, which analysts said signalled consistent efforts to improve the technology.

<https://www.scmp.com/news/asia/east-asia/article/3245397/south-koreas-military-says-north-fires-ballistic-missile>

South Korean military warns North Korea of consequences of missile launches

TASS, December 18, 2023

The full responsibility for complicating the situation that may follow the launch of a long-range ballistic missile lies with North Korea, the South Korean Joint Chiefs of Staff said.

"North Korea continues its dangerous provocations despite repeated warnings from our army. We once again sternly warn that all responsibility for any further development lies with North Korea," the Yonhap News TV quoted a senior member of the committee, Major General Lee Seung-o, as saying.

<https://tass.com/world/1722669>

North Korea's Kim Warns of 'Nuclear Attack' if Provoked with Nukes

VOA, December 20, 2023

North Korean leader Kim Jong Un said Pyongyang would not hesitate to launch a nuclear attack if an enemy provokes it with nuclear weapons, state media reported on Thursday.

Kim made the remark as he met with soldiers working for the military's missile bureau and congratulated them over Pyongyang's recent drill of an intercontinental ballistic missile launch, KCNA news agency said.

He said the test demonstrated the loyalty and strong stand of the armed forces and was "a clear explanation of the offensive counteraction mode and the evolution of the nuclear strategy and doctrine of the DPRK not to hesitate even a nuclear attack when the enemy provoke it with nukes," KCNA reported.

<https://www.voanews.com/a/north-korea-s-kim-warns-of-nuclear-attack-if-provoked-with-nukes/7406734.html>

North Korea's Kim vows to respond unhesitatingly with nuclear strike if Pyongyang provoked

TASS, December 21, 2023

The Democratic People's Republic of Korea (DPRK) will not hesitate to respond with a nuclear strike to any incitement by an adversary related to the use of nuclear arms against the country, North Korean leader Kim Jong Un said.

According to the Korean Central News Agency (KCNA), at a meeting with the servicemen of the Second Red Banner Company, who participated in the recent launch of the Hwasong-18 intercontinental ballistic missile (ICBM), "Comrade Kim Jong Un said that he was deeply impressed with the combat efficiency of the company, which displayed high mobility and rapid attack capability in the launching drill.

<https://tass.com/defense/1724591>

Japan Lifts Operational Ban on Fukushima Nuclear Plant Owners

VOA News, December 27, 2023

Japanese nuclear safety regulators lifted an operational ban Wednesday imposed on a nuclear plant owned by Tokyo Electric Power Company Holdings, the operator behind the Fukushima plant that ended in disaster, allowing the company to resume preparations for restarting the Kashiwazaki-Kariwa plant after more than 10 years.

At its weekly meeting, the Nuclear Regulation Authority formally lifted the more than two-year ban imposed on the TEPCO's Kashiwazaki-Kariwa plant over its lax safety measures at the site, saying a series of inspections and meetings with company officials has shown sufficient improvement. The decision removes an order that prohibited TEPCO from transporting new fuel into the plant or placing it into reactors, a necessary step for restarting Kashiwazaki-Kariwa's reactors.

<https://www.voanews.com/a/japan-lifts-operational-ban-on-fukushima-nuclear-plant-owners/7414251.html>

North Korea's Kim Jong Un orders military to prepare for possible 'war'

France 24, December 31, 2023

Kim lambasted the United States during a lengthy speech at the end of five days of year-end party meetings that set his country's military, political, and economic policy decisions for 2024.

The meeting announced plans for further military development in the coming year, including launching three more spy satellites, building unmanned drones and developing electronic warfare capabilities, as well as strengthening nuclear and missile forces, according to the official Korean Central News Agency (KCNA).

Pyongyang this year successfully launched a reconnaissance satellite,

enshrined its status as a nuclear power in its constitution, and test-fired the most advanced intercontinental ballistic missile (ICBM) in its arsenal.

<https://www.france24.com/en/asia-pacific/20231231-north-korea-s-kim-jong-un-orders-military-to-prepare-for-possible-war>

North Korea's Kim Jong-un promises launch of new spy satellites in 2024

Independent, December 31, 2023

North Korean leader Kim Jong-un declared his country will launch three military spy satellites and build more nuclear weapons in 2024.

The North Korean leader announced on Saturday that the "grave situation requires us to accelerate works to acquire overwhelming war response capabilities and thorough and perfect military readiness to suppress any types of provocations by the enemies at a stroke".

According to KCNA, Mr Kim, at the end of the Workers' Party meeting, emphasised the "overwhelming" need for war readiness amid rising tensions with the US and its allies.

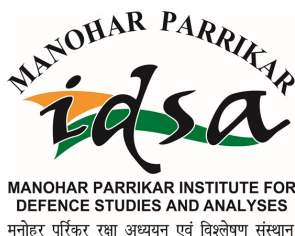
<https://www.independent.co.uk/asia/east-asia/north-korea-kim-nuclear-weapons-b2471478.html>

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