

Nuclear, Missile & Space Digest

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A Fortnightly Newsletter from the Indian Pugwash Society

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O. North Korea

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- AUKUS part of strategy to preserve US regional dominance
- Australia's Navy takes centre stage in defence amid Indo-Pacific tensions

A. India

India set to get 11 key technologies as part of fighter jet engine deal

Indian Express, June 18, 2023

In what is likely to be one of the most significant takeaways from Prime Minister Narendra Modi's first state visit to the US, India is set to get at least 11 "major manufacturing technologies" as part of the India-US fighter jet engine deal, top government sources have told The Indian Express. For the first time in his nine years in office, Modi will travel to the US on an official state visit from June 21-24, which includes a state dinner and an address to the joint session of the Congress. The deal on transfer of critical technologies is set to be finalised during Modi's trip to the US, said sources. This is in sync with the India-US defence cooperation, which is based on the "New Framework for India-US Defence Cooperation" that was renewed for 10 years in 2015.

<https://indianexpress.com/article/india/india-set-to-get-11-key-technologies-as-part-of-fighter-jet-engine-deal-8669804/>

With IndusX, India and US seek to build a defence innovation bridge for the first time

Hindustan Times, June 18, 2023

With the objective of building a defence innovation bridge between India and the US, on the sidelines of Prime Minister Narendra Modi's state visit to Washington DC, both sides are likely to announce a joint innovation fund, launch joint challenges, and establish a joint working group to enhance collocation between the defence startup ecosystems of both countries, people familiar with the development said.

India and the US are likely to announce a joint innovation fund and establish a working group to enhance collocation between the defence startup ecosystems.

<https://www.hindustantimes.com/india-news/usindia-to-announce-joint-innovation-fund-for-defense-startups-during-pm-modi-s-visit-to-washington-dc-101687007594010.html>

Defence, technology on agenda as PM Modi begins key US visit

Hindustan Times, June 21, 2023

Prime Minister Narendra Modi arrived in New York on Tuesday afternoon eastern time (late Tuesday night IST) to reinforce what he termed ties "based on shared values of democracy, diversity and freedom" between India and the US, and to address the "shared global challenges" of the two countries. In a departure statement before leaving New Delhi, Modi, who is in the US at the invitation of President Joe Biden and First Lady Jill Biden, said the visit would reflect the "vigour and vitality of the partnership between our democracies". Saying that India-US ties were multifaceted, with deepening engagements across sectors, Modi said, "USA is India's largest trade partner in goods and services. We collaborate closely in science and technology, education, health, defence and security fields."

<https://www.hindustantimes.com/india-news/defence-tech-in-focus-as-modi-begins-key-us-visit-101687286509648.html>

US-India Collaboration: Semiconductors and defense deals for mutual benefits and strategic interests

Financial Express, June 21, 2023

With a focus on semiconductor and defense deals, Prime Minister Narendra Modi's US visit carries significant implications for both sides. The collaboration in these sectors not only benefits India's technological advancements and defense capabilities but also serves the strategic interests of the United States. The visit comes at a crucial time when both nations are seeking to deepen their relationship and explore opportunities for collaboration in various sectors. The focus on semiconductors holds immense significance as it addresses a pressing global issue. Semiconductors are vital components in various high-tech industries, including electronics, telecommunications, and automotive. The

recent global semiconductor shortage has disrupted supply chains, affecting industries worldwide.

<https://www.financialexpress.com/business/defence-us-india-collaboration-semiconductors-and-defense-deals-for-mutual-benefits-and-strategic-interests-3134993/>

Micron's Game-Changing Investment: State-of-the-Art Semiconductor Facility to Revolutionize India's High-Tech Landscape

Financial Express, June 22, 2023

During Prime Minister Narendra Modi's state visit to the United States, Micron Technology, a global semiconductor powerhouse, has unveiled plans to construct a cutting-edge assembly and test facility in Gujarat, India. With an investment of over US\$800 million, supported by the Indian National Semiconductor Mission and additional financial backing from Indian authorities to a total of USD 2.75 billion to set up semiconductor assembly and test facility in India. The facility will enhance Micron's manufacturing capabilities for DRAM and NAND products, meeting the escalating demand from both domestic and international markets.

<https://www.financialexpress.com/business/defence-microns-game-changing-investment-state-of-the-art-semiconductor-facility-to-revolutionize-indias-high-tech-landscape-3138226/>

Ambitious plans for US-India defence technology sharing face hurdles

Economic Times, June 23, 2023

The United States unveiled agreements this week to sell weapons to India and share with it sensitive military technology, a clear sign of the Biden administration's desire to deepen ties with New Delhi to counter China's ambitions in Asia. But those plans, announced on Thursday during a state visit by Indian Prime Minister Narendra Modi, and future defense cooperation face significant challenges from the U.S. government's own weapons export

rules. The Biden administration says sweeping agreements on semiconductors, critical minerals, technology, space and defense cooperation and sales will ring in a new era in relations.

<https://economictimes.indiatimes.com/news/defence/ambitious-plans-for-us-india-defence-technology-sharing-face-hurdles/articleshow/101208500.cms?from=mdr>

India, US speed up talks for 6 nuclear reactors in Andhra, next gen small-modular reactor tech

The Print, June 23, 2023

India and the US have fast-tracked talks to set up six nuclear reactors as part of the Kovvada nuclear project in Andhra Pradesh's Srikakulam district by American power giant Westinghouse Electric Company (WEC). The two countries are also in talks for jointly developing next-generation, small-modular reactor technologies for the domestic market and for export. This came up for discussion between Narendra Modi and President Joe Biden during the Prime Minister's ongoing state visit to the country. A joint statement after the talks said both leaders underscored the important role nuclear energy played in global decarbonisation efforts and affirmed it was a necessary resource to meet the two nations' climate, energy transition, and energy security needs.

<https://theprint.in/india/india-us-speed-up-talks-for-6-nuclear-reactors-in-andhra-next-gen-small-modular-reactor-tech/1639657/>

India, US to jointly produce engines for next generation fighter jet aircraft

Economic Times, June 23, 2023

India and the US have signed a pact to jointly produce engines for next generation combat fighter jet aircraft. The pact is expected to see significant transfer of technology to the Indian defence manufacturing sector. The two sides also launched an initiative for sharing defence technology and fostering research and

development to enhance defence industrial partnership. A major milestone during Prime Minister Narendra Modi's visit to the US, the pact will provide engines for the Tejas Mk 2 fighter jet programme and place GE Aerospace as the leading contender for the future Advanced Multirole Combat Air craft (Amca) requirement as well.

<https://economictimes.indiatimes.com/news/defence/india-us-to-jointly-produce-engines-for-next-generation-fighter-jet-aircraft/articleshow/101208499.cms?from=mdr>

Prime Minister Modi's Historic US Visit Shines Spotlight On Technology And Defense Agreements

Outlook, June 23, 2023

Leading American newspapers have given extensive coverage to Prime Minister Narendra Modi's first state visit to the United States, focusing on the technology and defense agreements signed between the two countries. The visit has garnered attention, with reports highlighting key moments, including Modi's address before Congress and the historic summit with President Joe Biden, according to PTI. The Washington Post dedicated a full-page coverage to the visit, featuring an article titled 'In Prime Minister's Address before Congress, Modi Puts his Focus on Growth.' The report highlighted the warm reception Modi received from lawmakers, with a loud standing ovation and chants of his name as he made his way to the dais.

<https://www.outlookindia.com/international/prime-minister-modi-s-historic-us-visit-shines-spotlight-on-technology-and-defense-agreements-news-297453>

India signs global Artemis accord with US, to share data resources over Moon mission

India Today, June 24, 2023

India has signed the Artemis Accords, a US-led effort to send humans to the moon again by 2025, with the ultimate goal of expanding space exploration to Mars and beyond. The program aims to build a permanent presence in lunar orbit and on the surface, over half

a century after the Apollo missions ended. National Aeronautics and Space Administration (Nasa) has welcomed India as the 27th Artemis Accords signatory. "On behalf of NASA, on behalf of President Biden and Vice President Harris, we are very pleased to grow our partnership with India here on Earth and in space," said Administrator Bill Nelson. This agreement between India and the US aims to boost the cooperation between the two nations and explore the domain beyond the boundaries of Earth.

<https://www.indiatoday.in/science/story/india-signs-artemis-accord-us-nasa-share-data-resources-moon-mission-2397380-2023-06-24>

NASA Welcomes India as 27th Artemis Accords Signatory

NASA, June 24, 2023

During a ceremony at the Willard InterContinental Hotel in Washington on Wednesday, June 21, India became the 27th country to sign the Artemis Accords. NASA Administrator Bill Nelson participated in the signing ceremony for the agency and Taranjit Singh Sandhu, India's ambassador to the United States, signed on behalf of India. The Artemis Accords establish a practical set of principles to guide space exploration cooperation among nations, including those participating in NASA's Artemis program. "On behalf of NASA, on behalf of President Biden and Vice President Harris, we are very pleased to grow our partnership with India here on Earth and in space," said Administrator Bill Nelson.

<https://www.nasa.gov/press-release/nasa-welcomes-india-as-27th-artemis-accords-signatory>

France will share defence tech, back Atmanirbhar Bharat like no other country: Ambassador Lenain

Times of India, June 30, 2023

Ahead of PM Narendra Modi's summit with President Emmanuel Macron in Paris, where he will also be the guest of honour at the iconic Bastille Day parade on July 14, French Ambassador Emmanuel Lenain

said Friday that Modi's visit is likely to see substantive outcomes in areas like defence, space, security, energy and people to people contacts. On the proposed multibillion-dollar deal for the procurement of Rafale-M aircraft by the Indian Navy, in an interview to TOI's Sachin Parashar, the ambassador said it's India that has to take the final decision and that France is committed to providing the best technology and offer to India. Modi's visit will come weeks after his summit in the US that saw pathbreaking initiatives to dismantle defence and hi-tech trade barriers.

<https://timesofindia.indiatimes.com/india/france-will-share-defence-tech-back-atmanirbhar-bharat-like-no-other-country-embassy/articleshow/101401791.cms?from=mdr>

Implications of India Acquiring MQ-9B Reaper Drones

Indian Defence Review, June 30, 2023

In an era characterised by rapidly evolving security threats, advanced military technologies have become paramount for nations to safeguard their interests. One such technology, the MQ-9B Reaper Drone, has revolutionised the field of unmanned aerial vehicles (UAVs) and is increasingly sought after by many nations for its diverse applications in surveillance, intelligence gathering, and precision strikes. In the case of India, the acquisition of the MQ-9B Reaper Drone holds significant geopolitical implications, ranging from bolstering its defence capabilities to enhancing its regional influence. This issue delves into the multifaceted geopolitical consequences of India's acquisition of the MQ-9B Reaper Drone, highlighting its potential to reshape India's defence posture and regional dynamics.

<http://www.indiandefencereview.com/news/implications-of-india-acquiring-mq-9b-reaper-drones/>

B. Russia

Moscow Warns Kyiv Against Targeting Crimea with Western Arms

The Moscow Times, June 20, 2023

Moscow claimed Tuesday that Ukrainian forces were planning to use Western-

supplied missiles to strike targets inside Russia and the annexed peninsula of Crimea, threatening "immediate retaliation."

"The leadership of Ukraine's armed forces plans to strike Russian territory, including Crimea, with HIMARS and Storm Shadow missiles," Defense Minister Sergei Shoigu said during a meeting with military officials.

Shoigu warned of swift retaliation in the event the weapons were used to strike targets inside Russia or on the Black Sea territory that Moscow annexed in 2014.

<https://www.themoscowtimes.com/2023/06/20/moscow-warns-kyiv-against-targeting-crimea-with-western-arms-a81570>

'Massive' Overnight Drone Attack on Kyiv - Ukrainian Officials

The Moscow Times, June 20, 2022

Russian forces launched a major drone assault on Kyiv overnight and attacked several other regions, Ukrainian officials said on Tuesday, but there were no reports of casualties. "New massive air attack on the capital," wrote the Kyiv City Military Administration, adding that it was the first attack on the Ukrainian capital in 18 days to use Iranian-made Shahed explosive drones.

Russia had launched a wave of aerial attacks on critical Ukrainian infrastructure over the winter months but those cruise missile and drone strikes have become less frequent. The Ukrainian air force said on Tuesday it had downed a total of 32 attack drones out of 35 launched by Russia's forces.

<https://www.themoscowtimes.com/2023/06/20/massive-overnight-drone-attack-on-kyiv-ukrainian-officials-a81563>

Russian Nuclear Scientist Jailed 9 Years for Treason

The Moscow Times, June 21, 2023

A scientist at a Russian nuclear research facility in the Nizhny Novgorod region has

been sentenced to nine years in prison on charges of “high treason,” local media reported Wednesday, citing law enforcement officials. Investigators accused Viktor Ilyin — an employee at the Federal Nuclear Center in the closed town of Serov — of attempting to engage in espionage activities on behalf of Ukraine, the U.S. and Britain. Ilyin was said to have sought to provide Western security services with “information about the latest scientific developments” in Russia. “To conceal his illegal activities, the man used forged documents and special software,” the Federal Security Service’s (FSB) press service said.

<https://www.themoscowtimes.com/2023/06/21/russian-nuclear-scientist-jailed-9-years-for-treason-a81580>

5 Killed in Blast at Russian Explosives Plant

The Moscow Times, June 21, 2023

Five people have been killed in a blast at an explosives factory in Russia’s central Tambov region, state-run media reported Tuesday, citing local authorities. “At the moment, there is information about four people killed, and two others were injured,” emergency services told the TASS news agency.

Officials later said one of the wounded victims died from their injuries in the hospital, bringing the total death toll to five.

Tambov Governor Maxim Yegorov said the explosion was caused by “human error” and “definitely not [the result of] a terrorist attack.”

“Factory workers and residents of nearby areas are not in danger,” Egorov said on the Telegram messaging app, adding that production at the factory continued “as usual.”

<https://www.themoscowtimes.com/2023/06/20/5-killed-in-blast-at-russian-explosives-plant-a81571>

3 Drones Downed Outside Moscow Military Base

The Moscow Times, June 21, 2023

A group of drones is believed to have targeted a Russian army base outside

Moscow early Wednesday, the latest in a string of attacks near the Russian capital in recent weeks, authorities and state media reported. “In the village of Kalininet today, two drones crashed at approximately 5:30 and 5:50 a.m. on approach to a military warehouse,” Moscow region Governor Andrei Vorobyov said, adding that “military countermeasures” had brought down the drones. Russia’s Defense Ministry later confirmed that three drones were involved in the attack, which it called an “act of terrorism” carried out by Ukraine.

<https://www.themoscowtimes.com/2023/06/21/3-drones-downed-outside-moscow-military-base-a81573>

Zelensky Claims Russia Preparing Radiation Leak at Nuclear Plant

The Moscow Times, June 22, 2023

Ukrainian President Volodymyr Zelensky said Thursday that Moscow’s forces were considering launching a “terror attack” at the Russian-controlled Zaporizhzhia nuclear plant, a recurring flash point of concern throughout Russia’s invasion.

“Intelligence services have received information that Russia is considering the scenario of a terrorist act at the Zaporizhzhia nuclear plant — a terrorist act with the release of radiation. They have prepared everything for this,” Zelensky said in a statement on social media.

<https://www.themoscowtimes.com/2023/06/22/zelensky-claims-russia-preparing-radiation-leak-at-nuclear-plant-a81591>

Soviet Hydrogen Bomb Creator Dies By Suicide

The Moscow Times, June 22, 2023

A Russian physicist and co-creator of the Soviet Union’s first two-stage hydrogen bomb committed suicide in his central Moscow apartment at the age of 92, Russian media reported late Wednesday, citing investigators. Grigory Klinishov’s body was found by his 67-year-old daughter on Saturday alongside a death

note, according to the Kommersant business daily. He was said to have written that he was grieving over the death of his wife and was battling his own health issues.

Klinishov had worked under the prominent Soviet nuclear physicist and later dissident Andrei Sakharov in the 1950s.

<https://www.themoscowtimes.com/2023/06/22/soviet-hydrogen-bomb-creator-dies-by-suicide-a81587>

Russia Says Foiled Attempted Smuggling of Radioactive Material

The Moscow Times, June 23, 2023

Russia's domestic intelligence agency has detained five people suspected of trying to smuggle a dangerous radioactive isotope out of Russia, claiming the group planned to incriminate Moscow in a false-flag attack on Ukraine, state media reported Friday.

The Federal Security Service (FSB) said the five unnamed individuals – “acting in coordination with a Ukrainian citizen” – were caught illegally purchasing 1 kilogram of Cesium-137 for \$3.5 million “in the interests of a foreign customer.”

Exposure to Cesium-137 – which is commonly used in mining operations – can cause serious illness and even death.

<https://www.themoscowtimes.com/2023/06/23/russia-says-foiled-attempted-smuggling-of-radioactive-material-a81603>

Russian Aerospace Scientist Jailed 12 Years for Treason – Reports

The Moscow Times, June 26, 2023

A Moscow court has sentenced a Russian aerospace scientist to 12 years in prison on charges of treason linked to his participation in a multinational high-speed flight project, media reported Monday.

Valery Golubkin, 71, was detained in April 2021 on suspicion of passing state secrets to a NATO country that was not identified at the time. The Moscow City Court found Golubkin guilty of high treason and handed him a 12-year sentence in a maximum-

security penal colony, according to the independent news website Mediazona.

Prosecutors last week requested a 12-year prison sentence for Golubkin.

<https://www.themoscowtimes.com/2023/06/26/russian-aerospace-scientist-jailed-12-years-for-treason-reports-a81644>

C. Pakistan

Iran, Pakistan Defense Officials Discuss Cooperation to Fight Terrorism

Caspian News, June 17, 2023

Iranian Deputy Defense Minister and Pakistani Defense Secretary discussed cooperation between the two countries to contain “terror” groups. In a meeting with the visiting Defense Secretary of Pakistan Hamood uz Zaman Khan in Tehran on June 14, Iranian Deputy Minister of Defense for Armed Forces Logistics Brigadier-General Seyyed Mahdi Farahi said: “Cooperation between Iran and Pakistan would (seriously) constrain the field of operations for takfiri and terrorist groups.” Farahi noted that improving defence cooperation with Islamabad could strengthen trust and act as a spur to combat “terrorist” organisations like the Islamic State (IS/ISIS) and “separatist groups”, according to Iranian Labour News Agency.

<https://caspiannews.com/news-detail/iran-pakistan-defense-officials-discuss-cooperation-to-fight-terrorism-2023-6-16-21/>

Pakistan Signs \$4.8 Billion Nuclear Power Plant Deal With China

VOA News, June 20, 2023

Pakistan and China signed a \$4.8 billion deal Tuesday to build what would be the seventh Chinese nuclear power plant in the South Asian nation.

The 1,200-megawatt project will be installed in the central Pakistani city of Chashma, where Beijing already has built

four nuclear power generation units with a collective output of nearly 1,230 megawatts. Prime Minister Shehbaz Sharif oversaw Tuesday's signing of the memorandum of understanding between China National Nuclear Cooperation and the Pakistan Atomic Energy Commission.

<https://www.voanews.com/a/pakistan-signs-4-8-billion-nuclear-power-plant-deal-with-china/7144967.html>

Iranian navy chief visits Pakistan to increase military cooperation

Tehran Times, June 20, 2023

Rear Admiral Shahram Irani, the commander of the Iranian Navy, visited Islamabad on Monday for a three-day visit to discuss methods to strengthen bilateral collaboration in a number of military domains with top military commanders of Pakistan. Irani visited Islamabad at the request of his Pakistani counterpart Admiral Muhammad Amjad Khan Niazi's request. Irani, who is accompanied by a senior military team, visited naval headquarters in Islamabad, where he was greeted by his Pakistani counterpart and witnessed a guard of honor, according to a Pakistan Navy press release. The Iranian and Pakistani navy commanders met to discuss common interests such as bilateral marine, defense, and educational cooperation, as well as the exchange of naval delegations.

Additionally, Irani and Niazi discussed regional partnerships and marine security in the region.

<https://www.tehrantimes.com/news/485997/Iranian-navy-chief-visits-Pakistan-to-increase-military-cooperation>

Agreement reached for Chashma unit 5

World Nuclear News, June 21, 2023

Pakistan has signed a USD4.8 billion deal with China to construct a Hualong One reactor as unit 5 of the Chashma nuclear power plant in Pakistan's Punjab province, Prime Minister Shehbaz Sharif announced. Speaking on state-run news channel PTV

following the signing of the memorandum of understanding between China National Nuclear Cooperation (CNNC) and the Pakistan Atomic Energy Commission (PAEC), Sharif said construction of Chashma 5 will begin immediately. He noted the decision to start this project had been taken and the main conditions were agreed during the government of former Prime Minister Nawaz Sharif. In November 2017, CNNC and PAEC signed a cooperation agreement on the construction of a Hualong One reactor as Chashma unit 5. The project was originally planned to start around 2021 but it was delayed under the following government.

<https://www.world-nuclear-news.org/Articles/Agreement-reached-for-Chashma-unit-5>

Pakistan unveils increased defense budget, IMF decries spending plan

Defense News, June 22, 2023

The Pakistani government has requested a nearly 16% increase to its defense budget, despite a standoff with the International Monetary Fund over economic stagflation.

The government unveiled its request for 1.804 trillion rupees (U.S. \$6.267 billion) for fiscal 2023-2024 — a 15.7% increase over the revised total for fiscal 2022-2023 — on June 9. The IMF is withholding a \$1.1 billion tranche of the remaining \$2.2 billion from a total \$6.7 billion bailout package agreed to in 2019. The pause in funds is due to Pakistan's failure to meet obligations set out by the IMF, according to the organization.

<https://www.defensenews.com/global/asia-pacific/2023/06/22/pakistan-unveils-increased-defense-budget-imf-decries-spending-plan/>

Pakistan Rejects US, India Call to Curb Cross-Border Terrorism

VOA News, June 23, 2023

Islamabad has rejected a joint call by the U.S. and India for Pakistan to act against perpetrators of cross-border terrorism,

calling it “unwarranted, one-sided and misleading.” In a joint statement issued by the White House on Thursday after talks between U.S. President Joe Biden and Indian Prime Minister Narendra Modi, who is on a state visit to Washington, the two sides “strongly condemned cross-border terrorism and the use of terrorist proxies.”

The statement called on Pakistan “to take immediate action to ensure that no territory under its control is used for launching terrorist attacks.”

<https://www.voanews.com/a/pakistan-rejects-us-india-call-to-curb-cross-border-terrorism-/7150753.html>

Will be left with no option but to go for counter measures, says Pakistan on US-India defence ties

Economic Times, June 29, 2023

Pakistan has expressed concerns to the US over its growing defense cooperation with India, viewing it as a direct threat to its security interests. Pakistan informed the US that the transfer of advanced military hardware to India without considering its concerns would undermine strategic stability in the region. Islamabad warned that such cooperation between India and the US would leave Pakistan with no choice but to take counter measures. Following the deepening defence cooperation between India and US, Pakistan has conveyed its strong reservations to the US and has stated the development as a direct threat to the country’s security interests.

<https://economictimes.indiatimes.com/news/defence/pakistan-hints-at-counter-measures-after-us-defence-deals-with-india/articleshow/101360976.cms?from=mdr>

D. Europe

IAEA Mission Says the Netherlands Is Committed to a High Level of Safety, Sees Areas for Further Enhancement

IAEA, June 16, 2023

An International Atomic Energy Agency (IAEA) mission said the Government of the

Netherlands and the national regulatory bodies have demonstrated their commitment to continuous improvement in nuclear and radiation safety. The team advised the country to ensure adequate regulations and sufficient resources to regulate future facilities and activities. The Integrated Regulatory Review Service (IRRS) team concluded an 11-day mission to the Netherlands from 5 to 16 June. The mission was conducted at the request of the Government of the Netherlands and hosted by the Authority for Nuclear Safety and Radiation Protection (ANVS). It was part of the second IRRS cycle to the Netherlands. The first IRRS mission in the Netherlands took place in 2014, with a follow-up review in 2018.

<https://www.iaea.org/newscenter/pressreleases/iaea-mission-says-the-netherlands-is-committed-to-a-high-level-of-safety-sees-areas-for-further-enhancement>

IAEA Concludes Long Term Operation Safety Review at Bulgaria’s Kozloduy Nuclear Power Plant

IAEA, June 16, 2023

An International Atomic Energy Agency (IAEA) team of experts today completed a review of long term operational safety of the Kozloduy Nuclear Power Plant (NPP) in Bulgaria. The Safety Aspects of Long Term Operation (SALTO) follow-up review mission was requested by the country’s government. The mission reviewed the Kozloduy NPP’s response to recommendations and suggestions made during an IAEA SALTO mission in 2021.

During the 13-15 June mission, the SALTO team’s review focused on aspects essential to the safe Long Term Operation (LTO) of unit five and six at Kozloduy, which went into commercial operation in 1987 and 1991 respectively. Kozloduy NPP is Bulgaria’s only nuclear power plant and the two pressurized-water reactor units provide an installed power of approximately 1000 MWe each. The operation licenses of the two units have been extended until 2027 for unit five and

until 2029 for unit six. Units one to four were all shut down by 2007 and are in the course of decommissioning.

<https://www.iaea.org/newscenter/pressreleases/iaea-concludes-long-term-operation-safety-review-at-bulgarias-kozloduy-nuclear-power-plant>

EU Nations Back Renewable Deal as France Wins Nuclear Assurances

Bloomberg, June 16, 2023

European Union member states paved the way to finally signing off on rules to massively scale up renewable energy this decade after France won assurances for a greater role for its nuclear sector in the green transition and dropped last-minute opposition. Ambassadors from the bloc's 27 member states signaled their approval Friday for a deal reached with parliament to boost renewables to at least 42.5% of the energy mix by the end of the decade. Both France and Germany backed the deal. France was offered a small tweak to the preamble of the deal reached with parliament, acknowledging the challenges of transitioning its ammonia sector from gas to more climate-friendly fuels. The European Commission also provided a declaration that emphasized the importance of nuclear energy in meeting the bloc's climate goals – recognition that Paris has been consistently pushing for.

<https://www.bloomberg.com/news/articles/2023-06-16/eu-nations-back-renewable-deal-as-france-wins-nuclear-assurances>

Tractebel increases cooperation in Nuward SMR project

World Nuclear News, June 19, 2023

Belgian engineering firm Tractebel has signed a framework cooperation agreement to strengthen and extend its collaboration with France's Nuward and EDF in the development of the Nuward small modular reactor (SMR) technology. Tractebel - a subsidiary of France's Engie - noted that its collaboration with EDF on the Nuward SMR project started in 2021. In May 2022, Tractebel was contracted by the Centre National d'Équipement de Production

d'Électricité - EDF's engineering centre located in Tours, France - to conduct conceptual design studies for parts of the conventional island (turbine hall), the balance of plant (water intake and servicing system) and the 3D modeling of the buildings housing these systems.

<https://www.world-nuclear-news.org/Articles/Tractebel-increases-cooperation-in-Nuward-SMR-proj>

Slovenia preparing next steps for JEK2 project

World Nuclear News, June 19, 2023

Slovenia's government will take a decision in principle by 1 August on the JEK2 new nuclear project, Prime Minister Robert Golob has said - meanwhile the operating company said it was considering increasing the proposed capacity of the scheme. During a visit to the Krško nuclear power plant, Golob said: "Slovenia is, and will remain, a nuclear country. We have a lot of knowledge in the field of nuclear technology, which we must use in the construction of the JEK2 unit. The government will make a conceptual decision and initiate the necessary procedures on 1 August. We are aligned with GEN Energija, because it is crucial that we work together."

<https://www.world-nuclear-news.org/Articles/Slovenia-pushing-ahead-with-JEK-2-new-nuclear-proj>

Nuclear engineering alliance formed to support EDF

World Nuclear News, June 21, 2023

A new joint venture, known as NUCEAL, has been established by French, Spanish and Slovakian engineering firms Assystem, IDOM and VUJE to support the development of EDF's projects in the European Union and possibly in the UK. The launch of the NUCEAL joint venture took place in Lyon, France, in the presence of Agnès Pannier-Runacher, France's Minister for Energy Transition. Assystem holds a 60% share of the joint venture, with IDOM and VUJE each taking a 20%

share. NUCEAL proposes “to accompany EDF on European projects, on the various technologies that EDF proposes to its customers: EPR2, EPR 1200 or Nuward”. It added: “With over 12,000 experts in the EU, and with a strong knowledge of nuclear throughout the EU, NUCEAL has the key skills and the teams organised in all the geographical areas concerned and will be able to put its global and local expertise at the service of EDF.”

<https://www.world-nuclear-news.org/Articles/Nuclear-engineering-alliance-formed-to-support-EDF>

IAEA Mission Says Croatia Committed to Managing Radioactive Waste Safely, Sees Areas for Improvement

IAEA, June 22, 2023

An International Atomic Energy Agency (IAEA) mission said that Croatia is committed to addressing the challenges of managing its radioactive waste. The review identified specific areas for additional efforts including the development of arrangements for the safe and secure centralized storage of radioactive waste. The Integrated Review Service for Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation (ARTEMIS) review team concluded a nine-day mission to Croatia on 19 June. The review was carried out at the request of Croatia and hosted by the Croatian Fund for financing the decommissioning of Krško Nuclear Power Plant (NPP) (the Fund).

<https://www.iaea.org/newscenter/pressreleases/iaea-mission-says-croatia-committed-to-managing-radioactive-waste-safely-sees-areas-for-improvement>

France and Germany “agree on 90 percent” of energy issues, must close ranks - researcher

Clean Energy Wire, June 23, 2023

The role of nuclear power within Europe’s energy transition is a clear point of contention between Paris and Berlin. However, there is much more agreement

between the EU’s two largest powers on major strategic priorities, including the need for expanding renewable power sources or energy transition technologies like battery or hydrogen production. According to Thomas Pellerin-Carlin, director of the EU Programme at the Paris-based Institute for Climate Economics (I4CE), the debate over Europe’s energy future should focus more on common ground instead of disputes and underline the EU’s ideal of “unity in diversity.”

<https://www.cleanenergywire.org/news/france-and-germany-agree-90-percent-energy-issues-must-close-ranks-researcher>

Sweden abandons 100% renewable energy goal as EU reconsiders climate policies

Western Standard, June 24, 2023

More than 40 years after the country voted to phase out nuclear power, Sweden is now looking to build more nuclear reactors after its parliament formally abandoned its 100% renewable energy target to meet net-zero by 2045. On Tuesday the country modified its net zero targets to 100% “fossil-free” which its right-leaning government creates the conditions for the return of nuclear power to the country’s energy mix. “We need more electricity production, we need clean electricity and we need a stable energy system,” Finance Minister Elisabeth Svantesson said in parliament.

https://www.westernstandard.news/business/sweden-abandons-100-renewable-energy-goal-as-eu-reconsiders-climate-policies/article_c74a30be-11fd-11ee-a507-4b098c97c6f5.html

Spain’s election frontrunners plan U-turn in nuclear power phase-out

Reuters, June 26, 2023

The future of Spain’s nuclear power industry hinges on next month’s election, with the opposition party that now leads the polls campaigning to extend the use of the plants that the government wants to start closing from 2027. The debate, which comes as the country faces

a sweltering summer blamed on climate change, reflects competing views between the conservative opposition People's Party (PP) and ruling Socialist Party about how to decarbonise the economy. Sticking with nuclear requires investment in aging power plants, but offers the assurance of stable power and could improve ties with nuclear-reliant France next door.

<https://www.reuters.com/world/europe/spains-election-frontrunners-plan-u-turn-nuclear-power-phase-out-2023-06-26/>

Contract for Cernavoda tritium removal facility

World Nuclear News, June 27, 2023

Korea Hydro & Nuclear Power (KHNP) has signed a contract worth KRW260 billion (USD200 million) to construct a tritium removal facility at Romania's Cernavoda nuclear power plant site. The facility will use technology developed by Romania. The engineering, procurement and construction (EPC) contract was signed by Hwang Joo-ho, CEO of KHNP, and Cosmin Ghiã, general manager of Romanian nuclear power plant operator Societatea Nationala Nuclearelectrica in Seoul on 27 June.

<https://www.world-nuclear-news.org/Articles/Contract-for-Cernavoda-tritium-removal-facility>

Nuclear Technique Used in Europe for First time to Battle Yellow Fever Mosquito Found in Cyprus

IAEA, June 27, 2023

Cyprus this month released the first batch of 100,000 sterile mosquitos to begin the implementation of a Food and Agriculture Organization (FAO) and International Atomic Energy Agency (IAEA) project testing the use of a nuclear technique to eradicate an invasive species of mosquitoes found in the country. Cyprus confirmed the presence of the *Aedes aegypti* mosquito, also called Yellow Fever mosquito, on the island in 2022. This species of mosquito can carry serious vector-borne diseases such as chikungunya, dengue, yellow fever and Zika. The *Aedes albopictus* - also a carrier for such diseases - was also confirmed to be

present on the island in 2022. Vector-borne diseases cause over 700,000 global deaths per year and the presence of the two species poses an immediate threat to Cyprus' economy and healthcare system in case of a disease outbreak.

<https://www.iaea.org/newscenter/pressreleases/nuclear-technique-used-in-europe-for-first-time-to-battle-yellow-fever-mosquito-found-in-cyprus>

Finnish SMR targets district heating market

World Nuclear News, June 27, 2023

Steady Energy aims to build the world's first district heating plant featuring its LDR-50 small modular reactor (SMR) by 2030. The company - which has been spun out from the VTT Technical Research Centre of Finland - has raised EUR2.0 million (USD2.2 million) in seed funding led by VTT, Yes VC and Lifeline Ventures. Steady Energy said it will use the funds raised for research and development work to demonstrate the functionality of the plant by building a full-scale mockup powered by electric heat. The LDR-50 district heating SMR - with a thermal output of 50 MW - has been in development at VTT since 2020. Designed to operate at around 150°C and below 10 bar (145 psi), Steady Energy says its "operating conditions are less demanding compared with those of traditional reactors, simplifying the technical solutions needed to meet the high safety standards of the nuclear industry".

<https://www.world-nuclear-news.org/Articles/Finnish-SMR-targets-district-heating-market>

IAEA Mission Commends Belgium's Commitment to Nuclear and Radiation Safety, Identifies Areas for Further Enhancement

IAEA, June 30, 2023

An International Atomic Energy Agency (IAEA) mission said the Government of Belgium and the national regulatory bodies have demonstrated their commitment to continuous improvement in nuclear and radiation safety while

noting the need to identify and secure sufficient financial resources and competences for the regulator in light of Belgium's evolving nuclear energy context.

The Integrated Regulatory Review Service (IRRS) team concluded a 12-day mission to Belgium from 19 to 30 June. The mission was conducted at the request of the Government of Belgium and hosted by the Federal Agency for Nuclear Control (FANC) and Bel V, that together form Belgium's regulatory body. It was part of the second IRRS cycle to Belgium. The first IRRS mission in Belgium took place in 2013, with a follow-up review in 2017.

<https://www.iaea.org/newscenter/pressreleases/iaea-mission-commends-belgiums-commitment-to-nuclear-and-radiation-safety-identifies-areas-for-further-enhancement>

E. France

Framatome's PROtect fuel to be tested in French reactor

World Nuclear News, June 30, 2023

Framatome has signed a collaboration agreement with EDF to test its PROtect enhanced accident tolerant fuel (EATF) technology. Under the agreement, four lead fuel assemblies will be loaded into one of EDF's French reactors by the end of this year. Accident-tolerant fuel is a term used to describe new technologies that enhance the tolerance of light-water reactor fuel under severe accident conditions as well as offering improvements to reactor performance and economics. Such fuels may incorporate the use of new materials and designs for cladding and fuel pellets.

<https://www.world-nuclear-news.org/Articles/Framatome-s-PROtect-fuel-to-be-tested-in-French-re>

F. Ukraine

Update 166 – IAEA Director General Statement on Situation in Ukraine

IAEA, June 16, 2023

Director General Rafael Mariano Grossi this week assessed the impact of the Kakhovka

dam disaster on the safety of Ukraine's Zaporizhzhya Nuclear Power Plant (ZNPP) and reinforced the team of International Atomic Energy Agency (IAEA) experts at the facility, during his third visit to the site in less than a year.

The Director General and his team crossed the frontline to reach Europe's largest nuclear power plant (NPP) just over a week after the water level in the huge reservoir that supplies cooling water to the ZNPP started to drop significantly when the downstream dam was severely damaged on 6 June.

<https://www.iaea.org/newscenter/pressreleases/update-166-iaea-director-general-statement-on-situation-in-ukraine>

IAEA's Grossi 'learned a lot' from Zaporizhzhia visit

World Nuclear News, June 16, 2023

International Atomic Energy Agency (IAEA) Director General Rafael Mariano Grossi said it was important to "see with my own eyes" the water supply situation at the Zaporizhzhia nuclear power plant after leading the latest rotation of agency experts to the plant where they will be stationed. The IAEA team had to cross the frontline between Russian and Ukraine controlled areas on foot to reach, and later return from, what is Ukraine's and Europe's largest nuclear power plant. Grossi said his visit, which lasted a matter of hours was "compact, but was important for me because it concentrated on the situation as a consequence of the destruction of the dam".

<https://www.world-nuclear-news.org/Articles/Grossi-learned-a-lot-from-Zaporizhzhia-visit>

Update 167 – IAEA Director General Statement on Situation in Ukraine

IAEA, June 21, 2023

Ukraine's Zaporizhzhya Nuclear Power Plant (ZNPP) is planning to resume pumping water that still remains accessible despite a major loss of water in the

Kakhovka reservoir caused by the destruction of the downstream dam earlier this month, Director General Rafael Mariano Grossi said today.

For the past two weeks, Europe's largest nuclear power plant (NPP) has received the cooling water it needs from the reserves held by a discharge channel of the nearby Zaporizhzhya Thermal Power Plant (ZTPP). This is separate from the reservoir, whose water level has plunged since the dam was severely damaged on 6 June.

<https://www.iaea.org/newscenter/pressreleases/update-167-iaea-director-general-statement-on-situation-in-ukraine>

Ukraine says Russia considering nuclear plant 'terror' attack, Moscow denies it

Reuters, June 23, 2023

President Volodymyr Zelenskyy said on Thursday Ukrainian spies had received information showing Russia was considering carrying out a "terrorist" attack at the Zaporizhzhia nuclear plant involving a release of radiation. Speaking later, after a meeting of security chiefs and diplomats, the Ukrainian president issued a fresh call to put pressure on Russia to end its occupation of the plant, seized by Russian troops days after the February 2022 invasion of Ukraine. The Kremlin dismissed Zelenskyy's allegation of an attack on the plant as "another lie", and said a team of U.N. nuclear inspectors had visited the plant and rated everything highly.

<https://www.reuters.com/world/europe/ukraine-says-russia-considering-terror-attack-zaporizhzhia-nuclear-plant-2023-06-22/>

Update 168 – IAEA Director General Statement on Situation in Ukraine

IAEA, June 30, 2023

International Atomic Energy Agency (IAEA) experts have so far found no visible

indications of mines or other explosives currently planted at Ukraine's Zaporizhzhya Nuclear Power Plant (ZNPP), but they still need additional access to carry out further such checks at the site, Director General Rafael Mariano Grossi said today.

The team of IAEA experts were today able to inspect parts of the plant's cooling system, including some sections of the perimeter of the large cooling pond and the isolation gate of the discharge channel of the nearby Zaporizhzhya Thermal Power Plant (ZTPP). Both this channel and the cooling pond hold reserves of water that remain available for use by the ZNPP despite the destruction of the downstream Kakhovka dam more than three weeks ago.

<https://www.iaea.org/newscenter/pressreleases/update-168-iaea-director-general-statement-on-situation-in-ukraine-0>

Ukraine holds drills in Zaporizhzhia to prepare for radiation leaks from Russian-held nuclear plant

AP News, June 30, 2023

Dressed in white and yellow protective suits and armed with devices to detect radiation levels, Ukrainian emergency workers took part in a drill Thursday to prepare for a potential risk of radiation leakage from the Russian-occupied Zaporizhzhia nuclear power plant. Dozens of civilians joined the drill on the outskirts of the city of Zaporizhzhia, located around 100 kilometers (62 miles) from the nuclear power plant, Europe's largest. In a tent set up to provide first aid, emergency workers practiced hosing people down with soap and going through the motions of administering treatment to individuals who play-acted victims from possible radiation-affected areas.

<https://apnews.com/article/ukraine-russia-zaporizhzhia-nuclear-drill-856d616b63c7d3b48645fc55ad3b0853>

G. United Kingdom

UK and EU continue talks over Euratom

World Nuclear News, June 26, 2023

The UK government says its preference remains reaching agreement with the European Union to participate in the Horizon Europe, Euratom and Copernicus programmes, but has also published a prospectus for its “bold and ambitious alternative” plans. Euratom - the European Atomic Energy Community - was established by the European Coal and Steel Community, which was a forerunner of the EU. Euratom provides the basis for the regulation of civilian nuclear activity, implements a system of safeguards to monitor the use of civil nuclear materials, controls the supply of materials within EU member states, and funds leading international research.

<https://www.world-nuclear-news.org/Articles/UK-and-EU-continue-talks-amid-Euratom-impasse>

Digital twin of STEP fusion machine to be created

World Nuclear News, June 30, 2023

A collaboration between the UK Atomic Energy Authority (UKAEA), Dell Technologies, Intel and the University of Cambridge will explore how supercomputers and artificial intelligence technologies with advanced predictive capabilities can deliver a ‘digital twin’ of the UK’s prototype fusion power plant design. The UKAEA carries out fusion energy research on behalf of the UK government, overseeing the country’s fusion programme, including the MAST Upgrade (Mega Amp Spherical Tokamak) experiment as well as hosting the Joint European Torus (JET) at Culham, which is operated for scientists from around Europe. It is also developing its own fusion power plant design with plans to build a prototype known as STEP (Spherical Tokamak for Energy Production) at West Burton in Nottinghamshire, which is due to begin operating by 2040.

<https://www.world-nuclear-news.org/Articles/Digital-twin-of-STEP-fusion-machine-to-be-created>

H. United States of America

A US nuclear-powered sub arrives in South Korea, a day after North Korea resumes its missile tests

AP News, June 16, 2023

The United States deployed a nuclear-powered submarine capable of carrying about 150 Tomahawk missiles to South Korea on Friday, a day after North Korea resumed missile tests in protest of the U.S.-South Korean live-fire drills.

The USS Michigan’s arrival in South Korea, the first of its kind in six years, is part of a recent bilateral agreement on enhancing “regular visibility” of U.S. strategic assets to the Korean Peninsula in response to North Korea’s advancing nuclear program, according to South Korean officials. With the deployment of the USS Michigan, the U.S. and South Korean navies are to conduct drills on boosting their special operation capabilities and joint ability to cope with growing North Korean nuclear threats, the South Korean Defense Ministry said in a statement.

<https://apnews.com/article/us-submarine-north-korea-missiles-3bf330fa9f8a19cb9b90f0af3d6bac3a>

Gallant, Austin talk upping cooperation on Iran as US said close to interim nuke deal

The Times of Israel, June 16, 2023

Defense Minister Yoav Gallant and US Defense Secretary Lloyd Austin discussed expanding bilateral Israel-US cooperation against Iran in a meeting in Europe on Thursday, as Washington is reported to be closing in on an interim nuclear deal with Tehran that would aim to reduce the risk of military confrontation in the Middle East. These efforts are said to have Israel’s approval. Gallant and Austin met on the sidelines of a gathering of NATO defense ministers in Brussels on Thursday and agreed to work together to “address the wide range of threats posed by Iran,” according to a readout from the US Department of Defense. These threats

include Iran's "nuclear program, destabilizing regional activities, and proliferation of uncrewed aerial systems and other lethal assistance" to the Middle East and to Russia, which has been deploying Iranian-made attack drones in Ukraine for close to a year.

<https://www.timesofisrael.com/gallant-austin-talk-upping-cooperation-on-iran-as-us-closes-in-on-interim-nuke-deal/>

Blinken: US has 'no reason to adjust' nuclear posture over Russia's weapons transfer to Belarus

The Hill, June 16, 2023

Secretary of State Antony Blinken on Friday said the Biden administration is closely monitoring Russia's claims that it's stored a tactical nuclear weapon in Belarus, but Washington has "no reason to adjust" its own nuclear posture. Russian President Vladimir Putin earlier in the day said Moscow sent the first of several nuclear weapons to its ally Belarus, with the rest to be delivered by the end of summer. Putin, who in March first announced the plan to deploy nuclear bombs in the country bordering Ukraine, said the move is meant as a "deterrence measure." Blinken said he has seen Putin's recent comments, and the United States will "continue to monitor the situation very closely and very carefully."

<https://thehill.com/policy/defense/4054196-blinken-on-us-nuclear-posture-russia-belarus-weapons-transfer/>

Blinken: Reports of US Nuclear Deal With Iran 'Not Accurate'

VOA News, June 16, 2023

U.S. Secretary of State Antony Blinken rejected reports Friday that Washington and Tehran were close to deals on limiting Iran's nuclear program and releasing U.S. citizens detained in the country. "With regard to Iran, some of the reports that we've seen about an agreement on nuclear matters or, for that matter, on detainees, are simply not accurate and not true," Blinken said when asked about indirect talks via Oman. Iran said Monday it was conducting indirect

negotiations with the United States through the Sultanate of Oman, with nuclear issues, U.S. sanctions and detainees on the menu.

That sparked reports that the two sides, who haven't negotiated directly for years, could be closing a deal. "We welcome the efforts of Omani officials, and we exchanged messages with the other party through this mediator" over the lifting of U.S. sanctions, Iran's foreign ministry spokesman Nasser Kanani said Monday.

<https://www.voanews.com/a/blinken-reports-of-us-nuclear-deal-with-iran-not-accurate-/7140897.html>

U.S. and Iran in indirect talks over nuclear program and prisoners

The Washington Post, June 20, 2023

The Biden administration is conducting indirect bilateral talks with Iran that it hopes, at a minimum, will curtail Tehran's nuclear program short of weapons development, end its proxy attacks on U.S. forces in Syria and bring home three longtime American prisoners in exchange for limited access to some of Iran's billions of dollars frozen overseas. Begun several months ago, the talks are not a revival of negotiations over restoring the 2015 nuclear deal between Iran and world powers, according to U.S., European and Middle Eastern officials who spoke on the condition of anonymity to discuss a sensitive issue. Until President Donald Trump unilaterally withdrew from the agreement in 2018, it eased U.S. sanctions on Iran in exchange for verifiable nuclear restrictions.

<https://www.washingtonpost.com/national-security/2023/06/20/iran-us-nuclear-talks-prisoners/>

A US Aircraft Carrier Will Make a Rare Vietnam Port Call as Countries Compete for Favor in SE Asia

Millitary.com, June 23, 2023

An American aircraft carrier was due to make a port call in Vietnam on Sunday –

a rare visit by one of the U.S. Navy's biggest ships that comes as Washington and Beijing both step up efforts to bolster ties with Southeast Asian nations.

The USS Ronald Reagan, a nuclear-powered Nimitz-class aircraft carrier, was scheduled to arrive in Da Nang on June 25 and stay through June 30, making use of a port that was modernized and expanded by the United States during the war in Vietnam, the country's Foreign Ministry announced. It will be only the third such visit by an American aircraft carrier since the end of the hostilities. The visit comes about a month after a Chinese navy training ship made its own port call in Da Nang as part of what it called a goodwill tour that also took it to Thailand, Brunei and the Philippines.

<https://www.military.com/daily-news/2023/06/23/us-aircraft-carrier-will-make-rare-vietnam-port-call-countries-compete-favor-se-asia.html>

Statement on Nuclear Weapon State Working-Level Experts Meeting On Strategic Risk Reduction and Doctrines

U.S. Department of State, June 23, 2023

The United States is currently the chair of the dialogue among the five Nuclear Weapons States, an ongoing exchange in the context of the Nuclear Non-Proliferation Treaty. In this capacity, the United States organized a working-level experts meeting with counterparts from the People's Republic of China, France, the Russian Federation, and the United Kingdom of Great Britain and Northern Ireland on June 13-14 in Cairo. The experts from respective Ministries of Foreign Affairs and Defense discussed strategic risk reduction, as well as nuclear doctrines and policy. The U.S. delegation included experts from the Departments of State and Defense and the National Nuclear Security Administration. The U.S. delegation welcomed the professional approach of the delegations and the inclusion of defense officials in the thematic discussions. As part of its chairmanship, the United States will continue efforts to facilitate discussion

among nuclear experts from these five countries on these important topics.

<https://www.state.gov/statement-on-nuclear-weapon-state-working-level-experts-meeting-on-strategic-risk-reduction-and-doctrines/>

Nuclear cloud will trigger NATO's Article 5, US warns Russia

Euractiv, June 24, 2023

The US Senate has introduced a resolution which proposes that the actions of Russia, Belarus "or proxy of Russia" be considered as an attack on NATO, if their actions lead to radioactive contamination of the allies' territory. Republican Senator Lindsey Graham and Democrat Richard Blumenthal made the statements at a news conference on Thursday (22 June). While the US has already warned Russia of dire consequences should the Kremlin make use of tactical nuclear weapons, this is the first time that US officials say this also applies if Russia engineers a nuclear accident at a civil nuclear central.

<https://www.euractiv.com/section/global-europe/news/nuclear-cloud-will-trigger-natos-article-5-us-warns-russia/>

White House 'Confident' In AUKUS Plan for Australian Nuclear-powered Submarine Fleet

USNI News, June 26, 2023

The White House's senior coordinator for the Indo-Pacific is "confident" that Australia, the United Kingdom and United States can meet the challenge of Canberra fielding its own nuclear-powered submarine force. Speaking Monday at the Center for Strategic and International Studies, Kurt Campbell said that after 18 months of intense study and discussion, "we have the necessary understanding" of what must be done to build and maintain the submarines and also to explore technology transfers among the three allies. Chief of Naval Operations Adm. Michael Gilday said the conversations among the three navies' leaderships over the last 18 months were

candid in judging risk, seeing how the arrangement was progressing and where it wasn't moving as fast as expected.

"We don't underestimate difficulties that can lie ahead," Gilday said.

<https://news.usni.org/2023/06/26/white-house-confident-in-aukus-plan-for-australian-nuclear-powered-submarine-fleet>

West Asia

I. Iran

Iran: No Surveillance Cameras Reactivated at Natanz Nuclear Site

Fars News Agency, June 17, 2023

The Atomic Energy Organization of Iran (AEOI) ruled out as false media reports over Tehran's agreement with the International Atomic Energy Agency (IAEA) on re-installation of 10 monitoring cameras at Natanz nuclear facility in Central Iran for recording the activities. The AEOI said in a statement AEOI Spokesman Behrouz Kamalvandi has recently announced the re-activation of the IAEA cameras at a nuclear facility in Isfahan. In the interview, the spokesperson described the site as a "centrifuge manufacturing facility". The statement noted that some media outlets have mistakenly identified the site as Natanz in the Central city of Isfahan.

<https://www.farsnews.ir/en/news/14020327000224/Iran-N-Srveillance-Cameras-Reacivaed-a-Naanz-Nclear-Sie>

'Seas are frontline of our confrontation with foes': Iran defense chief

Tehran Times, June 18, 2023

The Iranian defense minister has made it clear that Tehran sees international waters as the nation's first line of defense against its adversaries, emphasizing the necessity for the highly developed maritime industry to maintain a commanding presence there.

Brigadier General Mohammad Reza Ashtiani made the statement on Saturday at a ceremony at the Marine Industries

Organization (MIO), a division of the Iranian Defense Ministry. "The seas are the frontline of our confrontation and encounter with the enemies, and some of the threats against the Islamic Republic of Iran are rooted in the seas," he added. He went to highlight, "Therefore, we need an advanced, powerful and multi-purpose marine industry with international capabilities in order to have a strong presence in waterways and water lands."

Additionally, Ashtiani referred to marine science and technology as "the driving force" behind the nation's naval sector.

<https://www.tehrantimes.com/news/485920/Seas-are-frontline-of-our-confrontation-with-foes-Iran-defense>

Iranian President Describes Nuclear Industry Role-Model for Other Industries

Fars News Agency, June 18, 2023

Iranian President Seyed Ebrahim Rayeesi praised the country's remarkable achievements in the nuclear industry despite the US sanctions and threats, and further underlined the need to transfer the technologies developed in the nuclear industry to other industries. During a visit to an exhibition of the achievements of Iran's nuclear industry on Sunday, President Rayeesi underscored that the success achieved in the nuclear industry in the tough conditions should serve as a model for other industries. He stressed that the gains made in the nuclear industry show how the Iranian youths and scientists "turned threats and sanctions into opportunities".

<https://www.farsnews.ir/en/news/14020328000732/Iranian-Presiden-Describes-Nclear-Indsry-Rle-Mdel-fr-Oher-Indsries>

Nuclear Chief Rules Out Installation of 100 Surveillance Cameras at Isfahan Power Plant

Fars News Agency, June 21, 2023

Head of the Atomic Energy Organization of Iran (AEOI) Mohammad Eslami

dismissed rumors about activation of 100 monitoring cameras at a power plant in Central Iran, and said that such a site basically doesn't exist at the stated location. Speaking to reporters on the sidelines of a weekly cabinet meeting in Tehran on Wednesday, Eslami dismissed comments from an Iranian lawmaker that as many as 100 new cameras have been set up at a nuclear power plant in Isfahan. The nuclear head stressed that "no such plant exists there". "We have no [nuclear] power plant in Isfahan to install 100 cameras there," he stated.

<https://www.farsnews.ir/en/news/14020331000417/Nuclear-Chief-Rules-Out-Installation-of-100-Surveillance-Cameras-at-Isfahan-Power>

First hypersonic missile range may be extended to 2,000 km: IRGC

Tehran Times, June 23, 2023

Iran may eventually extend the range of Fattah, its first hypersonic missile, to 2,000 kilometers, a senior commander of the Islamic Revolution Guards Corps (IRGC) has said. Amir-Ali Hajizadeh, commander of the IRGC Aerospace Division, stated during a ceremony at the University of Mazandaran on Wednesday that the next version of the missile may have a range of 2000 kilometers as opposed to its present range of 1,400 kilometers. Earlier this month, Fattah was put on display as a significant accomplishment for the Iranian Armed Forces in fortifying the nation's defensive might. Due to its tremendous mobility and speed, it is also able to break through any air defense systems and strike them. Also in his remarks, Brigadier General Hajizadeh hailed President Ebrahim Raisi's attendance at Fattah's unveiling ceremony.

<https://www.tehrantimes.com/news/486090/First-hypersonic-missile-range-may-be-extended-to-2-000-km-IRGC>

Commander: Vessels Trying to Pass Through Hormuz Strait Should Communicate in Persian

Fars News Agency, June 23, 2023

Commander of the Islamic Revolution Guards Corps (IRGC) Navy Rear Admiral

Alireza Tangsiri underlined that vessels seeking to pass through the Strait of Hormuz must communicate with Iranian Naval Forces in the Persian language. "Any ship that wants to pass through the Strait of Hormuz must inform us of its nationality, type of cargo, and destination in Farsi, and if it does not do this, we will definitely go after it," Admiral Tangsiri said on Friday.

<https://www.farsnews.ir/en/news/14020402000358/Commander-Vessels-Trying-Pass-Through-Hormuz-Strait-Should-Communicate-in>

Top Commander: Manufacturing Advanced Long-Range Military Equipment on Iran's Agenda

Fars News Agency, June 29, 2023

Commander of the Iranian Army Air Defense Force Brigadier General Alireza Sabahifard underscored the country's high military might and deterrence power, and further said that Iran's Air Defense Force plans to produce various types of long-range military equipment for potential challenges and threats.

Brig. Gen. Sabahifard said on Wednesday that concordant with "potential threats and possible challenges ahead", the production of "advanced long-range radar, missile and drone equipment" is definitely on the agenda of the Army's Air Defense Force in 2023.

<https://www.farsnews.ir/en/news/14020408000301/Top-Commander-Manufacturing-Advanced-Long-Range-Military-Equipment-on-Iran's>

J. Israel

France Interested in Procuring Loitering Munition: Will Israel Be Involved?

Israel Defense, June 18, 2023

Will we soon see the use of Israeli-made loitering munitions by the French army? The French General Directorate of Armaments is stepping up its efforts to procure loitering munitions (LMs) with the issuing of a tender for a portable system.

While estimates in Israel are that France would prefer local manufacturers, it is not impossible that also Israeli companies, such as UVision, will take part in the competition. According to the German website European Security & Defense, last year – drawing on lessons learned from the Nagorno-Karabakh conflict in 2020 and the ongoing war in Ukraine, that emphasized the impact of unmanned aerial vehicles (UAVs) and loitering munitions in tactical-level combat, France urgently requested US-made AeroVironment Switchblade LMs as an initial stop-gap measure.

<https://www.israeldefense.co.il/en/node/58540>

Elbit Unveils New Active RF Decoy & Electronic Warfare Capabilities at Paris Air Show

Israel Defense, June 18, 2023

Elbit Systems is unveiling the Nano SPEAR™ at The Paris Air Show, an advanced, digital, miniature system designed as a countermeasure against radar-guided air-to-air and surface-to-air missiles that threaten aircrews and their platforms.

The Nano SPEAR™ is part of the Self Protection Electronic Attack and Reconnaissance (SPEAR) product family, which is based on advanced hardware, including Digital Receiver Exciters, that are modular and provide ease of scalability.

The Nano SPEAR™ is an advanced, expendable RF decoy that uses the aircraft's existing dispensing system, and once launched, acts independently to lure away hostile radar-guided missiles.

<https://www.israeldefense.co.il/en/node/58543>

Rafael Introduces “Puzzle” Intelligence System, Revolutionizing Target Precision with AI Integration

Israel Defense, June 18, 2023

Puzzle represents a major paradigm shift in situational analysis and the Sensor to Shooter circuit, enabling unprecedented efficiency, speed, and precision Rafael Advanced

Defense Systems Ltd announced the unveiling of Puzzle, an innovative intelligence knowledge management system that combines various intelligence and artificial intelligence capabilities. Puzzle, which will be unveiled at the Paris Air Show, represents a groundbreaking paradigm shift in situational analysis and the Sensor to Shooter circuit, enabling unprecedented efficiency, speed, and precision.

<https://www.israeldefense.co.il/en/node/58544>

Israel Aerospace Industries× MMR radars pass Czech Army tests

Israel Defense, June 21, 2023

Israel Aerospace Industries× (IAI) MMR radars have successfully passed Czech Army tests. According to IAI, these MMR radars are the world's most advanced air surveillance and air-defense radars. To date, 200 systems have been sold worldwide, and integrated into air-defense systems such as Barak and Iron Dome. The radar deal was signed with the Czech Defence Ministry in December 2019, and included close industrial cooperation between Israel Aerospace Industries (IAI) and local Czech companies RETIA and VTU. The joint production includes the transfer of technology to local Czech industries for production and lifetime maintenance, and upgrading existing systems to incorporate the world's most advanced technologies.

<https://www.israeldefense.co.il/en/node/58594>

BlueBird Presents the SpyX, Its New Loitering Munition

Israel Defense, June 21, 2023

BlueBird Aero Systems, an Israel Aerospace Industries (IAI) Group Company, has unveiled its SpyX, a Loitering Munition UAV platform with tactical capabilities such as 50Km operational range, 1.5 hours mission time, autonomous electro-optical guided attack, optimal effect-on-target and tight integration with Bluebird's VTOL ISR

UAV family. According to BlueBird, this groundbreaking technology represents a significant milestone in the evolution of unmanned aerial vehicle (UAV) systems and brings a new era of precision and efficiency to the battlefield, and at an affordable price. SpyX is an expendable electric mini-UAV, designed for loitering & strike missions, to enable tactical teams to organically detect, confirm and hit targets at ranges up to 50 km.

<https://www.israeldefense.co.il/en/node/58593>

“Sky Spear” Long-Range, Air-to-Air Missile at Paris Air Show

Israel Defense, June 21, 2023

Rafael has unveiled “Sky Spear” - its 6th generation long-range, air-to-air missile, at the Paris Air Show. The newest member of the air-to-air missile family for Rafael is a long-range solution that provides users with unparalleled operational capabilities in the complex arena of aerial combat. With the advent of long-range air-to-air missiles, the challenges faced by aerial forces have increased exponentially over time. The engagement range has extended longer, and the time gap between launch and endgame has created a significant zone of uncertainty. Therefore, the need to maintain a clear and accurate aerial picture is even more crucial.

<https://www.israeldefense.co.il/en/node/58595>

Elbit Awarded \$180 Million Purchase Order to Supply Romania with Tactical UAS

Israel Defense, June 22, 2023

Elbit Systems announced that it received a first purchase order worth approximately \$180 million to supply the first three out of a maximum of seven Watchkeeper X tactical Unmanned Aerial Systems (UAS) as part of a framework contract with the Romanian Ministry of National Defense with a maximum value of approximately \$410 million (1.89 billion Lei). The purchase order will be performed over a period of two years. Under the purchase order, Elbit Systems will provide upgraded Watchkeeper X tactical UAS with advanced capabilities including

the Spectro XR™ multi-spectral electro-optical payload and new communication capabilities. The Watchkeeper X tactical, Dual Payload UAS is the UK export variant of the British Army manufactured by U-TacS, Elbit Systems’ UK subsidiary in cooperation with Thales, and is a derivative of the Hermes™ UAS family. The Watchkeeper X is compatible with NATO standards enabling essential interoperability with NATO and other allied forces.

<https://www.israeldefense.co.il/en/node/58613>

AI Signs Contracts with NATO Countries to Supply Loitering Munition System

Israel Defense, June 25, 2023

Following the recent announcement that NATO member Estonia has purchased long-range loitering munitions from Israel Aerospace Industries (IAI), the company has signed separate contracts with three additional NATO countries worth several millions of dollars to supply Rotem loitering munitions. Rotem is a unique combat-proven Vertical Takeoff and Landing (VTOL) tactical loitering munition, intended for use by customers’ special forces and can also serve for test and evaluation purposes. Rotem is part of IAI’s family of loitering munitions which includes Harpy, Harop and Mini-Harpy, and has been proven in different combat situations since 2019.

https://www.israeldefense.co.il/en/node/58627#google_vignette

UVision Expanding Loitering Munition Portfolio

Israel Defense, June 28, 2023

UVision, an Israeli developer of aerial loitering systems, is expanding its product portfolio. At the Paris Air Salon held last week, the company unveiled its new Hero-90, Hero-900, and Hero-1250 systems, as well as the Viper system developed by SpearUAV. UVision developed the HERO-90 following the requests of customers, who expressed the need for an

intermediate system between the 3.5 kg HERO-30 and the HERO-120. The weight is halved, 9 kg at launch compared to the 18 kg of the HERO-120, while range and endurance performances are slightly reduced, respectively over 40 km compared to 60 km and 45 minutes compared to one hour.

<https://www.israeldefense.co.il/en/node/58693>

Elbit America Selected for US Navy Information Warfare Research Project

Israel Defense, June 28, 2023

Elbit Systems of America has been awarded a prime contract by the Naval Information Warfare Center Pacific (NIWC Pacific) to develop and demonstrate an autonomous maritime target tracking capability as part of the United States Navy's Information Warfare Research Project (IWRP). The company will test its prototype in a series of at-sea demonstrations over the next twelve months. The IWRP supports the implementation of the Naval Operational Architecture to enable Joint All Domain Command and Control (JADC2) and ensure connectivity of U.S. and allied forces across land, air, sea, space, and cyberspace. Elbit America's autonomy prototype will extend the reach of those forces by leveraging attributable systems to covertly find, fix and track maritime targets, as directed by operational commanders.

https://www.israeldefense.co.il/en/node/58697#google_vignette

Former Senior Pentagon Official Says Israel Must Maintain AI Edge

Israel Defense, June 29, 2023

In a recent interview during Tel Aviv University's Cyber Week conference, former US Acting Undersecretary of Defense for Intelligence and Security, Ezra Cohen, shared his perspectives on the utilization of artificial intelligence (AI) in military applications. Addressing the potential of AI in reducing civilian casualties and maintaining Israel's advantage over adversaries, Cohen – who is now VP for

Corporate Strategy at Oracle Corp., highlighted the significance of technological advancements and ethical considerations in the field.

https://www.israeldefense.co.il/en/node/58718#google_vignette

K. Kuwait

Kuwait to Acquire Turkish-Made Bayraktar Drones for \$367 Million

The Defense Post, June 16, 2023

Kuwait has signed a \$367-million agreement with Turkish firm Baykar for an undisclosed number of Bayraktar TB2 combat drones. The move comes in the wake of the system's apparent success in helping Ukraine neutralize Russian assets. According to Kuwaiti Air Force operations chief General Fahad Al-Dosari, the drones will support various operations, including monitoring maritime and land borders. He added that the loitering munition can carry out reconnaissance and strike missions and support search and rescue efforts. The deal includes providing necessary maintenance and logistical supplies. Baykar will also prepare NATO-standard facilities in the Middle Eastern nation for weapons arming and electronic warfare component integration.

<https://www.thedefensepost.com/2023/06/16/kuwait-turkey-bayraktar-drones/>

L. Saudi Arabia

Riyadh wants nuclear programme for 'Israel ties': report

The New Arab, June 18, 2023

Saudi Arabia could make demands for US approval of a civilian nuclear programme as a condition for normalisation with Israel, a US report said on Saturday. *The New York Times* claims that Crown Prince Mohammed bin Salman, Saudi Arabia's de facto ruler, made such demands to US Secretary General Antony Blinken during his trip to Riyadh earlier this month. The Crown Prince may also seek greater access to US weapons and a

guaranteed defence pact with Washington in exchange for Israeli normalisation, which the US has been attempting to broker in recent years.

<https://www.newarab.com/news/riyadh-wants-nuclear-programme-israel-ties-report>

Airbus Agrees \$6.7 Billion Helicopter Pact With Saudi Arabia

Bloomberg, June 19, 2023

Scopa group will start building the plant in early 2024. The plant will produce 100 helicopters over the next decade. Airbus SE has signed an investment agreement worth more than 25 billion riyals (\$6.7 billion) to build military and civilian helicopters in Saudi Arabia with a local defense company.

<https://www.bloomberg.com/news/articles/2023-06-19/airbus-agrees-6-7-billion-helicopter-pact-with-saudi-arabia#xj4y7vzkg>

SAMI-AEC forges strategic partnership with Lockheed Martin to bolster regional repair capabilities

Zawya, June 20, 2023

SAMI-AEC, a subsidiary of SAMI (the Saudi Arabia's national champion of defense industries), proudly announces a strategic partnership with Lockheed Martin. This partnership officially designates SAMI-AEC's Sniper Advanced Targeting Pod (ATP) Repair Center as the world's premier, Middle East-based repair facility for Line-Replaceable Units (LRUs), offering enhanced maintenance and repair services. Lockheed Martin's decision to select SAMI-AEC's facility as its primary hub for specialized unit repairs reinforces the unrivalled competencies and expertise of SAMI-AEC in the realm of contemporary electronics and manufacturing. This unique designation in the Middle East signifies a major milestone for both SAMI-AEC and the Kingdom of Saudi Arabia in fortifying their defense capabilities through state-of-the-art technology and innovation.

<https://www.zawya.com/en/press-release/companies-news/sami-aec-forges-strategic-partnership>

with-lockheed-martin-to-bolster-regional-repair-capabilities-pr3s7uqc

US orders \$1.15 bln of AMRAAM missiles, including for sales to Ukraine, Saudi Arabia

Alarabiya News, June 22, 2023

The US Air Force awarded a \$1.15 billion contract to Raytheon Missiles and Defense (RTX) for AIM-120 Advanced Medium Range Air-to-Air Missile (AMRAAM), the Pentagon said. This will cover missile sales to several foreign allies and partners of the US, including Ukraine and Saudi Arabia. The Pentagon said the AMRAAM contract involved "unclassified foreign military sales" to 18 countries: Bahrain, Belgium, Bulgaria, Canada, Finland, Hungary, Italy, Japan, Netherlands, Norway, Qatar, Saudi Arabia, Singapore, South Korea, Spain, Switzerland, Ukraine, and the UK. RTX will produce AMRAAM missiles, telemetry systems and spare parts under the contract, in addition to providing production engineering support, the Pentagon said. The company is expected to complete the work on Lot 37 of the missiles by January 31, 2027.

<https://english.alarabiya.net/News/world/2023/06/22/US-orders-1-15-bln-of-AMRAAM-missiles-including-for-sales-to-Ukraine-Saudi-Arabia>

Saudi Arabia eyes defense deals at Paris show

Arab News, June 22, 2023

Saudi Arabia is seeking to explore partnerships and investment opportunities at the Paris Air Show 2023, which began on Monday in France. The General Authority for Military Industries, along with its partners Saudi Arabian Military Industries and the World Defense Show, is taking part in the event to showcase the Kingdom's progress in the defense industry. Saudi Arabia is keen on localizing the sector in line with its Vision 2030 goals, the Saudi Press Agency reported. GAMI Gov. Ahmad Abdulaziz Al-Ohali said the authority's participation in the event is part of its efforts to enable

the sector to achieve its objectives by creating strategic partnerships and networking with international investors interested in investing in the Kingdom.

<https://www.arabnews.com/node/2324426/business-economy>

Saudi Arabia, India bolster defense ties with joint naval training

Arab News, June 26, 2023

A new initiative that saw Saudi naval cadets training with their Indian counterparts will help to strengthen defense relations between the two countries, the Indian Navy said on Monday, as it considers extending the program. Fifty-five students and five instructors from the King Fahd Naval Academy in Saudi Arabia recently completed four weeks of training aboard two Indian vessels. The students, from the main naval academy of the Royal Saudi Naval Forces, traveled to a naval base in Kochi, Kerala last month and were attached to India's First Training Squadron ships INS Tir and INS Sujata. "Training onboard Indian Navy ships will ... strengthen the existing bonds and build bridges of friendship among the future leadership of both the navies," the Indian Navy told Arab News.

<https://www.arabnews.com/node/2328376/world>

India Has Become a Middle Eastern Power

Foreign Policy, June 30, 2023

A decade ago, I went to India on a three-week speaking tour that took me to New Delhi, Lucknow, Chennai, Mumbai, Pune, and Hyderabad. The idea behind the trip, which the U.S. State Department sponsored, was to foster an exchange of ideas about the Middle East with officials in the Indian government, academics, students, and journalists. From the perspective of the diplomats who invited me, it was a great opportunity for Indians to understand a nonofficial U.S. perspective on a part of the world that was likely to loom large for New Delhi in the future. I had a wonderful trip,

but I came back skeptical about a future Indian role in the Middle East.

<https://foreignpolicy.com/2023/06/30/india-middle-east-power/>

M. Turkiye

Turkish defense companies meet NATO defense ministers

Daily Sabah, June 16, 2023

Representatives from Turkish defense companies met with defense ministers from different countries on the sidelines of a two-day NATO meeting in Brussels. Representatives of 26 defense companies from the United States and Europe were invited to join a meeting in Brussels, where Türkiye was represented by National Defense Minister Ya'ar Güler. The meeting was held on Thursday on the margins of the NATO defense ministers' meeting that focuses on stepping up support for Ukraine amid an ongoing war with Russia and strengthening deterrence and defense. The defense ministers are also preparing for NATO leaders' summit to be held in the Lithuanian capital Vilnius on July 11-12. Baykar and Roketsan were the companies invited from Türkiye, with CEOs Haluk Bayraktar and Murat İkinci, respectively, representing the firms at the reception.

<https://www.dailysabah.com/business/defense/turkish-defense-companies-meet-nato-defense-ministers>

From cargo drone to new chopper: Turkish firms dazzle at Paris Air Show

Daily Sabah, June 20, 2023

The Turkish Aerospace Industries (TAI) developed national combat aircraft KAAN is now ready to take flight thanks to its successful manufacturing and design, according to the general manager of the company. Temel Kotil made the related statements to the press on the sidelines of the Paris Air Show, which returned Monday after a four-year COVID-19-induced hiatus. The Turkish company is showcasing many products, from

unmanned platforms to helicopters, at the biennial event that features military and civilian aircraft streaking across the sky.

<https://www.dailysabah.com/business/defense/from-cargo-drone-to-new-chopper-turkish-firms-dazzle-at-paris-air-show>

Turkish-built Anka combat drone to be deployed in 4 other countries

Daily Sabah, June 21, 2023

The Anka drone, a medium-altitude long-endurance (MALE) class unmanned aerial vehicle (UAV) manufactured by a pioneering Turkish defense industry company, is scheduled to commence its operational duties in several other countries in 2023, a company official said Wednesday. "Turkish Aerospace Industries (TAI) will ship Anka drones to four other countries this year," Chief Product Engineer Ziya Doğan told Anadolu Agency (AA). "One overseas customer is actively using Anka drones," Doğan said. He added that an export deal was signed with another country for the delivery in 2024. The total flight time of Anka drones delivered to domestic customers reached 200,000 hours, Doğan noted.

<https://www.dailysabah.com/business/defense/turkish-built-anka-combat-drone-to-be-deployed-in-4-other-countries>

'Türkiye in contact with China for planned 3rd nuclear plant'

Daily Sabah, June 23, 2023

Türkiye is in contact with China regarding the construction of a planned third nuclear power plant (NPP) and is surveying sites for a fourth, a top ministry official said. Russia's Rosatom is building the country's first nuclear power plant, Akkuyu NPP, in its southern Mersin province, with the first reactor expected to go online next year.

The country plans to build a second one in the northern province of Sinop and a third in the northwestern province of Kırklareli.

Türkiye needs to generate slightly over 11% of electricity through nuclear energy by 2035, and 29% by 2053 to reach its climate goals, Salih Sarý, the head of nuclear

infrastructure at the energy ministry told a local nuclear industry conference Wednesday.

<https://www.dailysabah.com/business/energy/turkiye-in-contact-with-china-for-planned-3rd-nuclear-plant>

Turkish defense giant Aselsan to soon deliver new miniature bomb

Daily Sabah, June 25, 2023

Turkish defense giant Aselsan's miniature bomb, TOLUN, is poised to debut as mass production has commenced following successful development. The company showcased its array of solutions, particularly focusing on ammunition, avionics and electro-optical products tailored for air platforms at the prestigious Paris Airshow, renowned for bringing together global aviation experts. Noteworthy among these cutting-edge offerings were the TOLUN Miniature Bomb, the TOLUN IIR Guided Miniature Bomb, the SADAK-4T Smart Pneumatic Quad Rack, as well as the GÖZDE and LGK-82 guidance kits.

<https://www.dailysabah.com/business/defense/turkish-defense-giant-aselsan-to-soon-deliver-new-miniature-bomb>

Türkiye's Akkuyu NPP progressing rapidly, set to boost economy, power supply

Daily Sabah, June 26, 2023

Construction of Türkiye's first nuclear power plant, the Akkuyu Nuclear Power Plant (NPP) in southern Mersin province, is progressing at an impressive pace. Denis Sezemin, the production and construction organization director of the power plant, has confirmed that the first unit is on track to be completed this year. Once operational, the plant is expected to significantly contribute to the country's budget, estimated at \$50 billion (TL 1.296 trillion) over the lifespan of all four power units. The Akkuyu NPP project is important for Türkiye as it aims to supply 10% of the country's electricity.

<https://www.dailysabah.com/business/energy/turkeyes-akkuyu-npp-progressing-rapidly-set-to-boost-economy-power-supply>

East Asia

N. Japan

As Japan prepares to release Fukushima wastewater, anxiety grows across South Korea

NPR, June 27, 2023

For 30 years, Choi Jeong-hee has been selling olive flounder, rockfish and live octopus at the bustling Gwangjang traditional market in the heart of Seoul. But come July, he fears he may have to switch to another business. As Japan plans to release treated radioactive water from the crippled Fukushima nuclear power plant into the sea this summer, South Koreans concerned about its effect on the marine environment and seafood are buying less fish and stocking up on sea salt.

“Compared to last year, sales have more than halved,” Choi says. The impending water discharge can threaten the fragile rapprochement between the two neighboring countries that began earlier this year, following a long period of tension over historical disputes.

<https://www.npr.org/2023/06/27/1184267924/japan-south-korea-fukushima-nuclear-wastewater>

Joint Statement on U.S.-Japan Extended Deterrence Dialogue

U.S. Department of State, June 27, 2023

The Government of the United States and the Government of Japan held the Extended Deterrence Dialogue (EDD) at Whiteman Air Force Base in Missouri on June 26-27, 2023. The United States and Japan established the EDD in 2010 as an enduring venue to discuss ways to sustain and strengthen extended deterrence, which is at the core of the U.S.-Japan Alliance. The Japanese side was co-chaired by Mr. MIYAMOTO Shingo, Deputy Director-General, North American Affairs Bureau, Ministry of Foreign Affairs, and Mr. ANDO Atsushi, Deputy Director-General, Defense Policy Bureau, Ministry of Defense. The U.S. side was co-chaired by Ms. Alexandra Bell, Deputy Assistant Secretary for the Bureau of Arms Control, Verification and

Compliance, Department of State, and Mr. Richard Johnson, Deputy Assistant Secretary of Defense for Nuclear and Countering Weapons of Mass Destruction Policy, Office of the Secretary of Defense, Department of Defense.

<https://www.defense.gov/News/Releases/Release/Article/3441646/joint-statement-on-us-japan-extended-deterrence-dialogue/>

Director General Grossi to Visit Japan to Present IAEA’s Comprehensive Report on Fukushima Treated Water Release

IAEA, June 30, 2023

The Director General of the International Atomic Energy Agency (IAEA), Rafael Mariano Grossi, will travel to Japan next week to present the comprehensive findings of the IAEA’s safety review of Japan’s plan to release treated water from the Fukushima Daiichi plant into the sea.

During his 4-7 July visit, Director General Grossi will meet with senior Japanese officials and also travel to the Fukushima Daiichi plant where he will inaugurate an IAEA office at the site.

The Director General will hold a press conference at 16:50-17:20pm on 4 July in the Nippon Press Centre Building in Tokyo.

<https://www.iaea.org/newscenter/pressreleases/director-general-grossi-to-visit-japan-to-present-iaeas-comprehensive-report-on-fukushima-treated-water-release>

Taiwan Detects Two Russian Warships Off Its Coast

The Moscow Times, June 28, 2023

Taiwan sighted two Russian frigates sailing off its eastern coast on Tuesday and deployed surveillance ships and aircraft to monitor their movements, the island’s Ministry of National Defense said.

The Russian warships were “detected sailing from south to north in the waters off our eastern coast” as of 11 p.m. local

time (15:00 GMT), it said in a statement on Tuesday. Taiwan's military monitored their movements and "dispatched aircraft, ships and [activated] shore-based missile systems to keep watch," it added.

The ministry did not say how far the warships were from Taiwan's coast.

<https://www.themoscowtimes.com/2023/06/28/taiwan-detects-two-russian-warships-off-its-coast-a81672>

O. North Korea

North Korea's nuclear claims hint at innovation, raising alarms

Indian Express, June 16, 2023

A propaganda photo of a warhead called the Hwasan-31 released in March by North Korea's state media intends to send a clear message: The North has achieved multiple significant advancements for its nuclear arsenal while the world was looking elsewhere. The warhead is also portrayed as being able to be mounted on a variety of missiles, which could give North Korea more production options. New short-range ballistic missiles, which the small warhead is designed for, are hallmarks of North Korean leader Kim Jong Un's effort to modernise his missile fleet.

<https://indianexpress.com/article/world/north-korea-nuclear-claims-hint-at-innovation-raising-alarms-8666816/>

North Korea says botched satellite launch was 'gravest failure'

The Straits Times, June 19, 2023

An unusually candid North Korea has said the botched launch of a military satellite in May was the "gravest failure" but it vowed that it would soon succeed in its quest, the state media reported on Monday. North Korea's ruling party made the assessment of its May 31 launch at a three-day meeting that ended on Sunday, ordering workers and researchers to analyse the mission that ended with the rocket and its spy satellite payload plunging into the sea, and to prepare for another launch soon. Officials

"who irresponsibly conducted preparations" for the failed launch were "bitterly criticised" at the meeting, the KCNA state news agency reported.

<https://www.straitstimes.com/asia/east-asia/north-korea-says-failed-satellite-launch-was-gravest-failure>

P. South Korea

South Korean Public Growing Uneasy With North Korean Nuclear Threat, U.S. Role in Protection, Officials Say

USNI News, June 23, 2023

Some South Koreans are questioning how well the U.S. would defend Seoul against a nuclear attack, two members of its National Assembly said Thursday. The "Korean public is less confident about the alliance" now as Pyongyang continues to test cruise and ballistic missiles and China rapidly increases its nuclear arsenal, said Jae-jung Lee, chair of a key technology committee in the National Assembly, speaking at the Woodrow Wilson Center Thursday. The rising support from 60 to 70 percent of the population "to self-protect ourselves" is surprisingly coming from Koreans who don't believe Seoul is behind Pyongyang in military capabilities, as well as from those who feel it is increasingly vulnerable to attack, she said.

<https://news.usni.org/2023/06/23/south-korean-public-growing-uneasy-with-north-korean-nuclear-threat-u-s-role-in-protection-officials-say>

S Korea inching toward long-term THAAD deployment

Asia Times, June 23, 2023

South Korea is edging closer to the long-term deployment of the Terminal High Altitude Area Defense (THAAD) anti-ballistic missile defense system, a controversial move that threatens to stoke tensions with China and North Korea.

This month, Jane's reported that South Korea's Ministry of Environment (MOE)

had completed an environmental impact assessment (EIA) of the US Army's THAAD temporarily deployed at Seongju, 215 kilometers southeast of Seoul.

"As the MOE and the MND have completed the environmental impact assessment of Seongju base in cooperation, we will closely cooperate with the US to faithfully reflect the consultation opinions and proceed with the project," said the MND in a statement cited by Janes.

<https://asiatimes.com/2023/06/s-korea-inching-toward-long-term-thaad-deployment/>

South Korea, Vietnam to boost work on North Korea nuclear threat

Reuters, June 23, 2023

South Korea and Vietnam agreed on Friday to boost security cooperation, citing North Korea's nuclear threat, and committed to increasing bilateral trade and investment despite a slump this year and Vietnam's planned tax hikes on large firms. In his first visit to Vietnam as president, South Korean leader Yoon Suk Yeol acknowledged economic woes but reiterated Vietnam's key role for Seoul's growth strategy. He signed 17 agreements with Vietnam's President Vo Van Thuong on a number of issues, from critical minerals to Vietnamese workers in Korea, and said Seoul would step up cooperation with Vietnam against North Korea's nuclear threat.

<https://www.reuters.com/world/asia-pacific/south-korean-president-visits-vietnam-bilateral-trade-slumps-2023-06-22/>

Q. Australia

HII execs visit Australia, prepping for 'generational partnership' for AUKUS

Breaking Defense, June 21, 2023

Executives of the company that builds half of America's Virginia-class submarines are paying their first visit to Australia since the AUKUS announcement, touring the

facilities at sub base HMAS Stirling, visiting the yards near Adelaide and ending with time in Canberra to speak with key political leaders. "We very much view this as a generational partnership, one that we're leaning into, and one that we believe will help generate capability and capacity in Australia," Eric Chewning, HII's executive vice president for strategy and development, told a group of reporters. Their visit began in Sydney, where they met with officials from the Australian Trade and Investment Commission, and then on to Western Australia, where the first expanded presence of US submarines will be felt over the next few years as Australia embarks on making \$8 billion in improvements to the sub base.

<https://breakingdefense.com/2023/06/hii-execs-visit-australia-prepping-for-generational-partnership-for-aucus/>

AUKUS part of strategy to preserve US regional dominance

Asia Times, June 23, 2023

The AUKUS agreement reached in September 2021 has left Australia more deeply entangled with US strategic priorities and war preparations than ever before. AUKUS reflects the prevalent view within the US security establishment that China's rise poses a major threat to America's regional and global dominance – a view, as it happens, strongly supported by Australia's security elite. Australian governments, under the previous conservative coalition and now under Labor, have repeatedly pointed to China's misdeeds. In a major address in April, Foreign Minister Penny Wong took issue with China's rapidly rising defense budget, its militarization of disputed islands in the South China Sea, its ballistic missiles falling in Japan's exclusive economic zone (EEZ), and its military drills and blockades around Taiwan.

<https://asiatimes.com/2023/06/aukus-part-of-strategy-to-preserve-us-regional-dominance/>

Australia's Navy takes centre stage in defence amid Indo-Pacific tensions

Naval Technology, June 27, 2023

Australia is ramping up its defence capabilities, focusing on its Navy, as it seeks to address growing geopolitical challenges and escalating tensions in the Indo-Pacific region. According to GlobalData's "Australia Defence Market 2023-2028" report, the country's defence budget is set to witness a compound annual growth rate (CAGR) of 5.2%, reaching \$48.3 billion by 2028. The transformative trilateral security alliance, AUKUS, and strategic partnerships drive the modernization efforts, positioning Australia to respond effectively to emerging security threats.

<https://www.naval-technology.com/news/australias-navy-defence-indo-pacific-tensions/>

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Indian Pugwash Society welcomes research articles from students, researchers and faculties on Space, Missile, nuclear technology, WMD proliferation, arms control, disarmament, export controls and other related issues. Articles should be crisply written and should address contemporary debates in the policy arena. Manuscripts submitted for the consideration of the Indian Pugwash Society should be original contributions and should not have been submitted for consideration anywhere else. For further assistance, please contact us at : indianpugwashsociety@gmail.com

The Indian Pugwash Society aims to promote the study, discussion, and knowledge of and to stimulate general interest in, and to diffuse knowledge in regards to problems relating on WMD proliferation, arms control, disarmament, space security, export controls, nuclear technology and other related issues. This newsletter is part of the project "Emerging Nuclear Order in Asia: Implications for India" sanctioned to us by Department of Atomic Energy-Board of Research in Nuclear Sciences (DAE-BRNS).

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