

Nuclear, Missile & Space Digest

Volume 15, Number 20

A Fortnightly Newsletter from the Indian Pugwash Society

October 31, 2023

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A. India

- Chief of Army Staff of Indian Army to strengthen Defence Cooperation with visit to Tanzania
- Indian and Bangladesh armies begin Joint Exercise
- LCA Tejas symbolizes Nation's journey towards self-sufficiency in defence manufacturing: RRM
- 'They tried to do the same with India ...': Russia's Putin slams West in speech filled with nuclear threats
- India's nuclear reactors, boiler, and generator exports soar, says World Bank
- ANNUAL JOINT HADR EXERCISE 2023 - (CHAKRAVAT 2023)
- "Gaganyaan" Test Vehicle Space flight, that is, "Gaganyaan" Test Vehicle Development flight (TV-D1) scheduled on 21st October, says Union Minister Dr Jitendra Singh
- Raksha Mantri Shri Rajnath Singh holds talks with Italian Defence Minister Mr Guido Crosetto in Rome; Discusses opportunities in defence industrial cooperation
- Raksha Mantri meets top Italian defence industry leaders in Rome
- Raksha Mantri Shri Rajnath Singh meets CEOs of top French defence companies in Paris
- Russia finalises testing of reactor monitoring systems for Kudankulam N-plant units 3 & 4
- Indo-Russia Nuclear Cooperation – here's a closer look at how it marked a milestone in India's energy generation capabilities
- Raksha Mantri & French Minister of Armed Forces hold 5th Annual Defence Dialogue in Paris; Focus on enhancing defence industrial cooperation
- DRDO's oceanographic research vessel 'INS Sagardhwani' embarks on Sagar Maitri Mission-4 to establish long-term scientific partnerships with Indian Ocean Rim countries in 'Ocean Research & Development'

B. Russia

- Russia looks to restart Zaporozhye nuke plant next year – Rosatom CEO
- Sarmat superheavy missile about to be mass produced, go operational – Putin



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- Russia successfully conducts last test of Burevestnik strategic missile, says Putin
- Kremlin mum on timeframe of Burevestnik strategic missile tests
- Putin announced missile test because Valdai club participants were interested – spokesman
- West provokes Russia’s possible walkout from CTBT – senator
- Russia plays important role in Nuclear-Test-Ban Treaty Organization – statement
- Russia accuses US of nuclear testing site activity, says it won’t test unless US does

C. China

- BrahMos & The Philippines: a strategic fortification against China’s ambitions
- Chang’e-8 mission planned for launch around 2028, to form basic structure of a lunar research station with Chang’e-7
- China exhibition shows latest advances in drone technology, especially for military use
- Aukus could weaken China deterrence, US congress research paper suggests
- Chinese FM slams Japan’s second round of nuclear-contaminated wastewater dumping; experts warn of further damage to Japan’s exports and tourism sectors
- US provocatively points new nuke-tipped missile at China
- China launches remote-sensing satellite
- What Chinese nuclear modernization means for U.S. deterrence strategy
- China opposes U.S. placing Chinese firms on export control entity list
- China’s first nuclear power plant with super-large cooling towers being built in Guangdong
- Did the Chinese submarine accident happen?
- China, Azerbaijan sign cooperation document on joint building of the International Lunar Research Station
- China’s gigantic telescope detects new fast radio burst from space
- IAEA should play constructive role in establishing monitoring system for Fukushima wastewater: Chinese FM
- General highlights China’s military advantages, disadvantages
- China starts building new telescope for lunar, deep-space missions
- US ‘ill-prepared’ for nuclear challenge from China and Russia, says report
- China achieves first commercial satellite-ground laser high-speed image transmission test, a significant communication breakthrough

D. Bangladesh

- Bangladesh gets first uranium shipment from Russia for nuclear power plant

E. Pakistan

- Loud Explosion Heard In Pakistan’s Dera Ghazi Khan City With Nuclear Facility; Officials Say ‘Sonic Boom’
- Radiation detection equipment to be set up at 8 land ports on Pakistan, Bangladesh, Myanmar, Nepal borders

F. Europe

- UK gives BAE 4 billion pound contract for AUKUS submarine programme
- UK selects six designs for construction of small modular nuclear reactors
- France Pitches Plan to End EU Nuclear-Energy Deadlock With Germany
- EDF submits final bid for Czech nuclear plant expansion
- IAEA Training Centre for Nuclear Security Opens Doors to Build Expertise in Countering Nuclear Terrorism
- French utility chief urges France to boost nuclear output
- Finnish grid and nuclear plant in dispute over power backup
- Deployment of Nuclear Weapons to Belarus Debated in First Committee, as Delegates Rethink Global Security
- France blocks American takeover of nuclear suppliers
- Edison eyes SMR deployment in Italy
- UK May Host U.S. Nuclear Weapons Again
- France urges swift deal on EU power reform to counter US subsidies
- IAEA Mission Says Italy Committed to Managing Radioactive Waste Safely, Sees Areas for Improvement
- Bulgaria, France to explore cooperation in nuclear energy, defense
- UK's nuclear fusion site ends experiments after 40 years
- The nuclear dispute driving a wedge between France and Germany

G. Ukraine

- Update 186 - IAEA Director General Statement on Situation in Ukraine
- Situation at ZNPP stable, enough personnel to maintain safety
- Update 187 - IAEA Director General Statement on Situation in Ukraine
- Update 188 - IAEA Director General Statement on Situation in Ukraine

H. USA

- The U.S. Nuclear Arsenal Can Deter Both China and Russia
- US Moves Closer to Underground Testing of Nuclear Weapons Stockpile Without Any Actual Explosions
- Trump allegedly discussed US nuclear subs with foreign national after leaving White House: Sources
- US carrier Ronald Reagan to visit South Korea in show of force
- Concerns Mount Over Possible New Nuclear Tests
- Enrichment operations start at US HALEU plant
- NATO holds long-planned annual nuclear exercise
- Congressional Commission Calls for Third Nuclear Shipyard to Bolster U.S. Strategic Forces
- Israel and US cannot accept a nuclear Iran amid fears of Tehran atomic breakout: 'red line'

West Asia

I. Iran

- Military Chief Voices Iran's Readiness to Cooperate with Pakistan in Anti-Terror Fight
- Iran to Enhance Naval Power with Another Advanced Indigenous Destroyer
- Navy Chief: 12 Anti-Ship Cruise Missiles Mounted on Iranian Destroyer
- IAEA has fully verified all Iran's nuclear activities, Iran tells US
- Iranian Army Employs New Drone in War Game
- Nuclear Chief: Hostile Behaviors Reason for Iran's Barring of IAEA Inspectors
- Iran Releases Footage Recorded from US Navy Ship by Indigenous Drone
- IAEA inspectors expelled for political behaviors: nuclear chief
- Iranian Suicide Drones Pound Ground, Naval Targets During Massive Drills
- Iranian Drone Annihilates Another Pilotless Aircraft for First Time
- IRGC Chief: AI-Powered Drones Capable of Wrecking Faraway Military Vessels
- Iran Kicks Off Construction of New Reactor at Bushehr Nuclear Power Plant
- Iranian Coast Guards Hold Massive Naval Drills in Persian Gulf

J. Israel

- IAI to Exhibit at AUSA 2023, Unveil Latest Defense System
- Saudi Arabia Determined to Secure US Defense Pact in Exchange for Normalization with Israel
- IAI's BlueWhale ASW Makes Debut in Dynamic Messenger 2023 Exercise
- Oshkosh to Design, Build the US Army's Future Robotic Combat Vehicle
- IAI Announces Agreement with Azerbaijan Space Agency
- Aeronautics Secures New Contracts Totaling \$60 Million from Int'l Clients
- Swords of Iron: US Deploys USS Gerald R. Ford Carrier Strike Group to Eastern Mediterranean
- Israel Purchases 10,000 Locally Manufactured Rifles
- Hamas Used Kamikaze Drones During Attack on Israel
- Report: Hamas Uses Home-made Short-Range Air Defense Systems
- Israel at War: "Ofek" Heavy Armored Personnel Carriers Partake in the Fighting
- German Press: Berlin Clears Israeli Use of Two Heron TP Combat Drones
- Israeli Navy Fires Spike NLOS Missiles at Gaza Coastline Targets
- Boeing to Equip Israel with Smart Bombs
- Meet Duvdevan: The Elite Counter-Terrorism Commando Unit
- Reports: Hamas Uses North Korean Weapons Systems
- Analysis: The IDF Didn't Invest in the Border Defense Force Due to the Fence

K. Oman

- Oman to acquire 301 TOW missiles in possible US\$70m deal

L. Qatar

- Qatar intensifies call for global oversight of Israel's nuclear activities

M. Saudi Arabia

- In nuclear push, Saudi Arabia could play US, China off each other
- Saudi Arabia seeks to study small nuclear reactor technology
- IAEA Mission Recognizes Saudi Arabia's Commitment to Radiation Safety, Identifies Areas for Further Improvement

N. Turkiye

- Türkiye's defense giant Aselsan introduces 3 new marine systems
- Türkiye's 1st aircraft factory to reopen with Gökbey, Hürku^o production
- Türkiye plans commissioning of Akkuyu NPP's 1st reactor next year
- In global 1st, Turkish naval drones sink ship in UAV-backed trial

O. East Asia

- North Korea slams UN nuclear agency as US mouthpiece
- North Korea reportedly stops nuclear reactor to obtain plutonium – media
- S. Korea, US closely monitoring N. Korea for signs of nuclear reactor halt
- North Korea's halt of nuclear reactor suggests bid to obtain weapons-grade plutonium – report
- Fukushima Nuclear Plant Starts 2nd Release of Treated Radioactive Wastewater
- IAEA Confirms Tritium Level Far Below Japan's Operational Limit in Second Batch of ALPS Treated Water Released Today
- IAEA to Conduct First Extensive Sampling of Marine Environment Near Fukushima Daiichi Since Start of Treated Water Release
- North Korea slams US aircraft carrier visit to South Korean port, calls it 'undisguised provocation'
- Congressional commission calls for more nuclear arsenal expansion
- Satellite key amid U.S. 'space militarization,' says North Korea

P. Australia

- Aukus could weaken China deterrence, US congress research paper suggests
- Australian government funding to 'futureproof' radioisotope supplies
- Is nuclear energy feasible in Australia (and how much would it cost)?
- How many nuclear-powered submarines for Australia?

A. India

Chief of Army Staff of Indian Army to strengthen Defence Cooperation with visit to Tanzania

PIB, October 2, 2023

General Manoj Pande, Chief of the Army Staff (COAS) of the Indian Army embarks on an official visit to Tanzania from 2nd to 5th October 2023, reinforcing the long-standing defence ties between the two countries. The COAS is scheduled to visit Dar es Salaam, the Tanzanian capital, the historical city of Zanzibar, and Arusha. He will engage in discussions and meetings with a host of dignitaries and senior officers from Tanzania. During his visit, the COAS is likely to call on the Hon'ble President of the Union Republic of Tanzania Her Excellency Samia Suluhu Hassan.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1963166>

Indian and Bangladesh armies begin Joint Exercise

PIB, October 3, 2023

India and Bangladesh commenced the 11th edition of annual joint military exercise, SAMPRITI on 03rd October 2023 in Umroi, Meghalaya. This exercise, alternately organised by both countries, signifies strong bilateral defence cooperation initiatives. With its inception in Jorhat, Assam in 2009, the exercise has witnessed ten successful editions till 2022.

SAMPRITI-XI, scheduled for 14 days, will engage approximately 350 personnel from both sides. The exercise underscores the importance of enhancing interoperability between the two armies, sharing tactical drills, and promoting best practices. The Bangladesh contingent comprises 170 personnel, led by Brigadier General Mohammed Mafizul Islam Rashed, Commander of 52 Bangladesh Infantry Brigade.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1963629>

LCA Tejas symbolizes Nation's journey towards self-sufficiency in defence manufacturing: RRM

PIB, October 4, 2023

Raksha Rajya Mantri Shri Ajay Bhatt said that the LCA Tejas symbolizes India's journey towards self-sufficiency in defence manufacturing. This programme has been a shining example of commitment to reduce country's dependency on foreign aircrafts, and it serves as a beacon of hope for a self-reliant India. He was speaking at the handing over ceremony of LCA Tejas Twin Seater to the Indian Air Force in Bangalore on 04 October, 2023. RRM further said that the LCA Tejas program has been an inspiring saga of relentless dedication and innovation. The inception of the LCA Tejas aircraft was rooted in the dream of equipping our Indian Air Force with a world-class indigenous fighter aircraft.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1964133>

'They tried to do the same with India ...': Russia's Putin slams West in speech filled with nuclear threats

Times of India, October 6, 2023

India is a country where the hustle and bustle never takes a coffee break. Irrespective of whether you are outside or staying in, noise is just a part of the daily soundtrack. India's roads are a colourful chaos of honking horns, revving engines, and an occasional cattle mooing through it all. The street vendors and hawkers are out there with their carts and stalls, selling everything from chai and snacks to clothes and trinkets. And they're not shy about using their voices to attract customers, who, by the way, are also not shy about bargaining at the top of their voices. Be it rhythmic beats of drums, blaring music, and enthusiastic chants filling the air of religious processions or a hustling, bustling wedding baraat.

<https://timesofindia.indiatimes.com/india/russian-president-putin-speech-putin-sochi-speech-russia-nuclear-weapons-india-UNSC-seat/articleshow/104194049.cms?from=mdr>

India's nuclear reactors, boiler, and generator exports soar, says World Bank

Economic Times, October 6, 2023

Nuclear reactors, boilers, and generators have performed particularly well in India's high and medium-high (HMH) technology manufactured exports, according to a World Bank report. Over the last decade, the share of HMH technology in India's total goods exports grew by almost 10 percentage points. India's share in global high technology exports also inched up from 0.6% in 2012 to 0.8% in 2019. While the proportion of low-technology goods exports remained stable over the past ten years, medium-low technology exports declined from 48% in 2012 to 42% in 2022. However, the standout category was HMH technology exports, which were the fastest-growing over the period.

<https://energy.economictimes.indiatimes.com/news/power/indias-nuclear-reactors-boiler-and-generator-exports-soar-says-world-bank/104201050>

ANNUAL JOINT HADR EXERCISE 2023 – (CHAKRAVAT 2023)

PIB, October 9, 2023

The Annual Joint HADR Exercise (AJHE) is an outcome of Hon'ble PM's directive promulgated during Combined Commanders' Conference-2015. Since its first edition in 2015, the Annual Joint HADR Exercise, CHAKRAVAT, has transformed itself into a multi-agency endeavour involving participation of all three Services, Paramilitary Forces, as well as several disaster response organisations, NGOs, academic institutions and international organisations. The 2023 edition would further synergise efforts at the national level among all stakeholders, as well as witness participation from eight countries of the Indian Ocean Region.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1965929>

"Gaganyaan" Test Vehicle Space flight, that is, "Gaganyaan" Test

Vehicle Development flight (TV-D1) scheduled on 21st October, says Union Minister Dr Jitendra Singh

PIB, October 10, 2023

The launch of "Gaganyaan" Test Vehicle Space flight, that is, "Gaganyaan" Test Vehicle Development flight (TV-D1) is scheduled on 21st of this month. This was disclosed here today by Union Minister of State (Independent Charge) Science & Technology; MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space, Dr Jitendra Singh while addressing the gathering at a felicitation programme of ISRO scientists associated with the Chandrayaan Mission, here today. ISRO will also test the efficacy of the Crew Escape System which is the crucial part of "Gaganyaan" mission, resulting in unmanned and manned missions to outer space by 2024. The test is to be conducted at Satish Dhawan Space Centre in Sriharikota. Crew Module will carry the astronauts during the Gaganyaan mission to outer space.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1966325>

Raksha Mantri Shri Rajnath Singh holds talks with Italian Defence Minister Mr Guido Crosetto in Rome; Discusses opportunities in defence industrial cooperation

PIB, October 10, 2023

Raksha Mantri Shri Rajnath Singh held talks with Italian Defence Minister Mr Guido Crosetto in Rome on October 09, 2023, on the first leg of his visit to Italy and France. During the meeting, both sides discussed a host of defence cooperation issues, including training, sharing of information, maritime exercises and maritime security. The focus was on the opportunities in defence industrial cooperation. The two Ministers discussed the complementary capacities of India & Italy in defence and the possibilities of joint development. The Raksha Mantri suggested fostering the interaction of the

Indian start-ups with the Italian defence companies.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1966172>

Raksha Mantri meets top Italian defence industry leaders in Rome

PIB, October 10, 2023

On the second day of his visit to Italy, Raksha Mantri Shri Rajnath Singh met the CEOs and other top industry leaders of Italian defence companies in Rome on October 10, 2023. During the meeting, the Raksha Mantri recalled his warm meeting with Italian Defence Minister Mr Guido Crosetto & the defence agreement concluded on the preceding day and emphasised on the need for defence industries of the two countries to work together. Shri Rajnath Singh stated that the government, led by Prime Minister Shri Narendra Modi, has significantly improved the ease of doing business in India, eased the norms for FDI in defence, created two Defence Industrial Corridors and is consistently working to encourage defence manufacturing in India.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1966364>

Raksha Mantri Shri Rajnath Singh meets CEOs of top French defence companies in Paris

PIB, October 11, 2023

Raksha Mantri Shri Rajnath Singh, on October 11, 2023, visited the Safran Engine Division's R&D Centre at Gennevilliers near Paris, France during the second and final leg of his two-nation tour. During his visit to the Centre, he witnessed the latest developments in aero-engine technology. Mr Olivier Andries, Global CEO Safran welcomed the Raksha Mantri to the facility and, along with his team, gave a detailed briefing to him. Safran expressed interest in being a part of the Indian growth story by working with its counterparts on mutually agreed joint projects.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1966810>

Russia finalises testing of reactor monitoring systems for Kudankulam N-plant units 3 & 4

Times of India, October 11, 2023

The Russian government-run Rosatom State Corporation, along with representatives from India, has in Russia tested key equipment for the Kudankulam nuclear plant unit-3, which is key to reactor monitoring, control and diagnostic system. Following the tests of the instrumentation system and system for integrated analysis, the key equipment will be shipped to the Kudankulam nuclear plant in Tamil Nadu by the end of this year. At the same time, testing of automated leakage detection subsystems for the TN nuclear plant units 3 and 4 has been completed. Rusatom Automated Control Systems JSC, a company of Russia's Rosatom State Corporation, along with representatives of Indian PSU Nuclear Power Corporation of India, tested the instrumentation system and system for integrated analysis for the Kudankulam nuclear plant unit-3.

<https://timesofindia.indiatimes.com/world/europe/russia-finalises-testing-of-reactor-monitoring-systems-for-kudankulam-n-plant-units-3-4/articleshow/104324616.cms?from=mdr>

Indo-Russia Nuclear Cooperation – here's a closer look at how it marked a milestone in India's energy generation capabilities

CNBC, October 12, 2023

India and Russia have shared a historic and enduring bilateral relationship that has spanned centuries. From the early days of trading activities between Indian merchants and the Pazyryk area near Novosibirsk in the 4th to 3rd century BCE to the establishment of diplomatic missions in the 20th century, the ties between these two nations have stood the test of time. Despite India's global nuclear isolation following the 1974 Pokhran nuclear test, the Soviet Union continued to support India's nuclear endeavours. Notably, the USSR supplied heavy water

for Canadian-built reactors and provided fuel for the BWRs at Tarapur, Maharashtra. However, the dissolution of the USSR in 1991 temporarily disrupted the momentum of nuclear cooperation between the two countries.

<https://www.cnbcto18.com/technology/indo-russia-nuclear-cooperation-heres-a-closer-look-at-how-it-marked-a-milestone-in-indias-energy-generation-capabilities-18026291.htm>

Raksha Mantri & French Minister of Armed Forces hold 5th Annual Defence Dialogue in Paris; Focus on enhancing defence industrial cooperation

PIB, October 12, 2023

Raksha Mantri Shri Rajnath Singh conducted the 5th Annual Defence Dialogue with French Minister of Armed Forces Mr Sebastien Lecornu in Paris late on October 11, 2023, before concluding his two-nation Europe tour. The two Ministers discussed a wide range of topics from the assessment of regional situation to the ongoing military-to-military engagements, with a focus on enhancing defence industrial cooperation.

The Ministers reviewed the ongoing defence projects and discussed ways to deepen the collaboration between the defence industries of both the countries. They also discussed potential collaboration in niche domains such as space, cyber and Artificial Intelligence.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1966922>

DRDO's oceanographic research vessel 'INS Sagardhwani' embarks on Sagar Maitri Mission-4 to establish long-term scientific partnerships with Indian Ocean Rim countries in 'Ocean Research & Development'

PIB, October 12, 2023

INS Sagardhwani, an oceanographic research vessel of Naval Physical &

Oceanographic Laboratory (NPOL) of DRDO, embarked on a two-month long Sagar Maitri (SM) Mission-4 from South Jetty, Southern Naval Command (SNC), Kochi on October 11, 2023. Secretary, Department of Defence R&D and Chairman DRDO Dr Samir V Kamat flagged-off the ship in the presence of Officiating Flag Officer Commanding-in-Chief (South) Rear Admiral Upal Kundu and other senior officials of DRDO & Indian Navy.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1967131>

B. Russia

Russia looks to restart Zaporozhye nuke plant next year – Rosatom CEO

TASS, October 5, 2023

Russia will be looking for an opportunity to render the Zaporozhye Nuclear Power Plant (ZNPP) functional again in 2024, Alexey Likhachev, CEO of Russian state nuclear power operator Rosatom, told Rossiya-24 television. "No matter how hard it is, we have been ensuring the safe operation of the nuclear facility. I think, next year, as the situation unfolds, we will be looking for an opportunity to restart this facility (ZNPP – TASS)," he said. Likhachev also pointed out that there is no alternative to the safe use of the plant. "We are confident in the position of the Russian military and the Defense Ministry, the Russian National Guard (Rosgvardiya).

<https://tass.com/defense/1684985>

Sarmat superheavy missile about to be mass produced, go operational – Putin

TASS, October 5, 2023

Russia will soon begin to mass produce and make operational the Sarmat strategic missile system, Russian President Vladimir Putin said at a plenary session of the Valdai discussion club.

“We are actually through with the work on the Sarmat, a super-heavy missile. The question is that we just need to finalize some procedures in a purely administrative and bureaucratic way and proceed with their (missile systems’ - TASS) mass production and put them on combat duty. We will do this in the near future,” Putin said.

<https://tass.com/defense/1685373>

Russia successfully conducts last test of Burevestnik strategic missile, says Putin

TASS, October 5, 2023

Russia has almost completed its work on advanced strategic weapons and conducted the last successful test of the Burevestnik nuclear-powered cruise missile, President Vladimir Putin said at a plenary session of the Valdai International Discussion Club on Thursday.

“Right now, we have actually completed work on advanced strategic weapons that I spoke about and announced several years ago. We conducted the last successful test of the Burevestnik nuclear-powered global-range cruise missile,” the head of state said.

<https://tass.com/defense/1685403>

Kremlin mum on timeframe of Burevestnik strategic missile tests

TASS, October 6, 2023

The Kremlin does not disclose the date of the successful testing of the breakthrough Burevestnik nuclear-powered cruise missile, Russian Presidential Spokesman Dmitry Peskov said on Friday.

Russian President Vladimir Putin announced at the Valdai forum on October 5 that Russia had conducted the last successful test of the Burevestnik strategic missile.

“No, I cannot provide any information on this issue in this case,” Peskov told reporters, responding to a question about when the missile’s tests had been held.

<https://tass.com/defense/1685867>

Putin announced missile test because Valdai club participants were interested – spokesman

TASS, October 6, 2023

Russian President Vladimir Putin announced the trial of the Burevestnik missile, because this topic posed interest for the participants of the Valdai Discussion Club meeting, Kremlin Spokesman Dmitry Peskov told reporters.

“The president announced, he made the statement that we continue development of these weapon systems. This topic had repeatedly been discussed in the international informational agenda in the recent weeks, it posed interest for the participants of the Valdai club, so Putin announced it,” the spokesman said.

<https://tass.com/defense/1685905>

West provokes Russia’s possible walkout from CTBT – senator

TASS, October 6, 2023

Russia’s possible walkout from the Comprehensive Nuclear-Test-Ban Treaty (CTBT) is provoked by the US-led Western countries’ aggressive and boorish attacks, Viktor Bondarev, head of the Federation Council’s defense and security committee, has said.

“The possibility of withdrawal from the Comprehensive Nuclear Test Ban Treaty (CTBT) is Russia’s forced response, provoked by the US-led collective West in retaliation for aggressive and even boorish outbreaks, unbridled ambitions and long-harbored undisguised designs for destroying Russia,” Bondarev wrote on his Telegram channel.

<https://tass.com/defense/1686091>

Russia plays important role in Nuclear-Test-Ban Treaty Organization – statement

TASS, October 6, 2023

Russia plays an important role in the operation of the Comprehensive Nuclear-

Test-Ban Treaty Organization (CTBTO), the Organization's Executive Secretary Robert Floyd said, commenting on the potential withdrawal of Russia's ratification of the Comprehensive Nuclear-Test-Ban Treaty.

"Russia plays an important role in the work of the Comprehensive Nuclear-Test-Ban Treaty Organization, hosting the second largest segment of International Monitoring System (IMS) stations (32 stations)," Floyd said in a statement, adding that the IMS will be completed this year, "thanks to the dedicated work of Russian officials."

<https://tass.com/defense/1686181>

Russia accuses US of nuclear testing site activity, says it won't test unless US does

Reuters, October 11, 2023

Russia accused the United States on Tuesday of carrying out preparations at its nuclear test site in Nevada but said that Moscow would not restart its own nuclear testing programme unless Washington did.

Deputy Foreign Minister Sergei Ryabkov made the charge as Russia's lower house of parliament urgently studies how to revoke Moscow's ratification of a landmark treaty banning nuclear tests and as tensions with the West are at their highest level since the 1962 Cuban missile crisis. A U.S. State Department spokesperson rejected Ryabkov's allegation, calling it "a disturbing effort by Moscow to heighten nuclear risks and raise tensions in the context of its illegal war in Ukraine."

<https://www.reuters.com/world/russia-would-only-resume-nuclear-testing-when-us-does-agencies-2023-10-10/>

C. China

BrahMos & The Philippines: a strategic fortification against China's ambitions

Indian Aerospace and Defence Bulletin, October 3, 2023

The tides of the South China Sea (SCS) have been historically turbulent, bearing witness

to several disputes and aggressive postures. In recent years, however, these waters have garnered significant global attention as China has amplified its maritime ambitions, often treading on the sovereignty of smaller nations like the Philippines. In response, the Manila has found an ally in New Delhi, and their partnership materialises in the form of the BrahMos missile—a defensive weapon and a significant geopolitical statement.

<https://www.iadb.in/2023/10/03/brahmos-the-philippines-a-strategic-fortification-against-chinasambitions/>

Chang'e-8 mission planned for launch around 2028, to form basic structure of a lunar research station with Chang'e-7

Global Times, October 3, 2023

China's lunar exploration mission, Chang'e-8, is planned for launch around 2028 and will join Chang'e-7 to form the basic structure of a lunar research station, the China National Space Administration (CNSA) announced international cooperation opportunities linked to the Chang'e8 mission during the 74th International Astronautical Congress. The Chang'e-8 mission aims to explore and research multiple lunar physical fields, regional geological profiles, lunar-based Earth observations and research, in-situ lunar sample analysis and resource utilization, and small, enclosed terrestrial ecosystems on the lunar surface, the Paper reported.

<https://www.globaltimes.cn/page/202310/1299205.shtml>

China exhibition shows latest advances in drone technology, especially for military use

Liu Zhen

South China Morning Post, October 4, 2023

Beijing displayed an array of new military drones at an exhibition in southwest China last week, a technology the PLA considers

a key area to advance. More than 300 models of unmanned aerial vehicles (UAVs) – many for military uses – were on display at the UAV Industry Development Conference in the Science and Technology City in Mianyang, a major defence industry base in Sichuan province. One small high-speed drone, or loitering munition, can carry out a suicide bombing at 174km (108 miles) per hour, according to state broadcaster CCTV.

<https://www.scmp.com/news/china/military/article/3236713/china-exhibition-shows-latestadvances-drone-technology-especially-military-use>

Aukus could weaken China deterrence, US congress research paper suggests

Daniel Hurst

The Guardian, October 4, 2023

Doubts about Australia's willingness to join forces with the US in a war against China are being cited by congressional researchers as a potential obstacle to the Aukus nuclear-powered submarine deal. It lists six "potential arguments from sceptics", including that the sale could weaken deterrence "if China were to find reason to believe, correctly or not, that Australia might use its Virginia-class boats less effectively than the US Navy would use them".

<https://www.theguardian.com/world/2023/oct/04/aukus-alliance-weaken-china-deterrenceresearch-paper-submarine-deal>

Chinese FM slams Japan's second round of nuclear-contaminated wastewater dumping; experts warn of further damage to Japan's exports and tourism sectors

Global Times, October 5, 2023

In spite of international outrage, Japan began releasing a second round of nuclear-contaminated wastewater from Fukushima. Chinese experts warned that this latest irresponsible move will not only further damage Japan's international reputation, but also continue to eat away at Japan's

exports to China and discourage travel to Japan. After Japan's move, a spokesperson from the Chinese Ministry of Foreign Affairs stated that China's stance on Japan's dumping of nuclear-contaminated wastewater from Fukushima has always been consistent and clear. The spokesperson emphasized, "We firmly oppose Japan's unilateral action of discharging the water into the sea."

<https://www.globaltimes.cn/page/202310/1299251.shtml>

US provocatively points new nuke-tipped missile at China

Gabriel Honrada

Asia Times, October 5, 2023

The US has just tested a new type of nuclear-tipped air launch cruise missile, reaffirming the viability of the air-based leg of its nuclear triad against evolving threats from near-peer adversaries China and Russia with profound implications for regional stability and global non-proliferation norms. The AGM-181A LRSO with the variable yield W80-4 warhead may be crucial for the US to fill a perceived nuclear deterrence gap resulting from the downsizing of its nuclear arsenal after the previous Cold War while its near-peer adversaries, China and Russia, continued to develop tactical nuclear weapons.

<https://asiatimes.com/2023/10/us-provocatively-points-new-nuke-tipped-missile-at-china/>

China launches remote-sensing satellite

Zhao Lei

China Daily, October 5, 2023

China launched a remote-sensing satellite, according to the nation's leading space contractor China Aerospace Science and Technology Corp. The State-owned conglomerate said in a news release that the Yaogan 39 was carried by a Long March 2D rocket that lifted off at 0824hrs (China Standard Time) at the Xichang Satellite Launch Center in Sichuan province and soon arrived in its orbit. The

satellite was jointly developed by the China Academy of Space Technology in Beijing and the Shanghai Academy of Spaceflight Technology, and is the latest member in the nation's Yaogan network.

<https://www.chinadaily.com.cn/a/202310/05/WS651e2b87a310d2dce4bb9105.html>

What Chinese nuclear modernization means for U.S. deterrence strategy

George Krompacky

Freeman Spogli Institute for International Studies, Stanford University, October 6, 2023

Amidst evolving geopolitical shifts, the foundation of U.S. nuclear deterrence, forged in the crucible of the Cold War, faces a new set of challenges. The principle of mutually assured destruction (MAD), once the bedrock of deterrence, is now being tested by Russia's aggressive posturing and China's strategic advancements. In the wake of Russia's invasion of Ukraine and signals of a willingness to employ tactical nuclear weapons, questions arise about the efficacy of traditional deterrence strategies. Concurrently, China's expanding nuclear arsenal adds complexity to the equation. Do these developments mean America needs to rethink its deterrence strategy?

<https://fsi.stanford.edu/news/what-chinese-nuclear-modernization-means-us-deterrence-strategy>

China opposes U.S. placing Chinese firms on export control entity list

Xinhua, October 7, 2023

China resolutely opposes the move of the U.S. Commerce Department to place some Chinese companies on its export control "entity list," a spokesperson with China's Ministry of Commerce said. The spokesperson made the remarks in response to a media query on the U.S. Department of Commerce recently putting a number of Chinese entities on its export control "entity list" under the so-called Russia-related excuses. "The move is a typical act of economic coercion and unilateral bullying," said the spokesperson, noting that the U.S.

side has generalized national security, abused export control measures, and arbitrarily imposed unilateral sanctions and "longarm jurisdiction" on Chinese companies.

<https://english.news.cn/20231007/0aa1353c0d874cbd958df8769e908ebc/c.html>

China's first nuclear power plant with super-large cooling towers being built in Guangdong

Global Times, October 9, 2023

State Power Investment Corporation (SPIC) announced on Sunday that phase one construction of its Lianjiang nuclear power plant started on September 29. As the country's first nuclear power plant with super-large cooling towers, it is expected to reduce the amount of sea water used and to generate up to 70.2 billion kWh annually after its construction. The super-large cooling towers are designed to transfer the heat of the power plant to the atmosphere to reduce the amount of cooling seawater used, and to lower the heat of the drainage.

<https://www.globaltimes.cn/page/202310/1299470.shtml>

Did the Chinese submarine accident happen?

Radio Free Asia, October 9, 2023

Submarine experts and observers are casting doubt on reports by British media, citing leaked intelligence, that a Chinese nuclear submarine had an accident in late August, resulting in the deaths of 55 sailors. The tabloid Daily Mail reported that the Chinese People's Liberation Army (PLA) Navy submarine '093-417' "apparently got caught in a trap intended to ensnare British subsurface vessels in the Yellow Sea." "According to a secret UK report the seamen died following a catastrophic failure of the submarine's oxygen systems which poisoned the crew," the Mail said.

<https://www.rfa.org/english/news/china/china-submarine-deaths-10092023041959.html>

China, Azerbaijan sign cooperation document on joint building of the International Lunar Research Station

Global Times, October 9, 2023

China and Azerbaijan signed a joint statement on cooperation on International Lunar Research Station program, which marked Azerbaijan's official participation in the program, with the two sides agreeing to conduct extensive and in-depth cooperation in the areas of demonstration, engineering implementation, operation and application at the station. The statement was signed by Li Guoping, Chief Engineer of the China National Space Administration, and Samaddin Asadov, chairman of Azerbaijan's space agency Azercosmos, during the 74th International Astronautical Congress held in Azerbaijan's capital Baku.

<https://www.globaltimes.cn/page/202310/1299467.shtml>

China's gigantic telescope detects new fast radio burst from space

CGTN, October 11, 2023

Chinese scientists have detected a new fast radio burst (FRB) from elsewhere in the universe with the help of the world's largest radio telescope. FRBs are mysterious radio flashes lasting only a few thousandths of a second that were confirmed in 2016 to originate from the cosmos. There is still no explanation for their origins. Using the Five-hundred-meter Aperture Spherical Radio Telescope (FAST), located in southwest China's Guizhou Province, a local research team found the faint radio signal, namely FRB 20200317A, after an analysis of the massive survey data of FAST, and reported the discovery in late September to the international astronomical community through the Astronomer's Telegram.

<https://news.cgtn.com/news/2023-10-11/China-s-gigantic-telescope-detects-new-fast-radio-burst-from-space-1nO4FyI9Acg/index.html>

IAEA should play constructive role in establishing monitoring system

for Fukushima wastewater: Chinese FM

Global Times, October 11, 2023

The International Atomic Energy Agency (IAEA) should play a constructive role in establishing a long-term effective international monitoring system and bear the responsibility of strict supervision over the Japanese side, Chinese Foreign Ministry said in response to IAEA's announcement of its scientists and international scientific observers including Chinese experts visiting Japan next week to collect ocean samples near the Fukushima Daiichi Nuclear Power Station. The IAEA announced that the IAEA scientists and international scientific observers will visit Japan next week to take marine samples near the Fukushima Daiichi nuclear power plant.

<https://www.globaltimes.cn/page/202310/1299655.shtml>

General highlights China's military advantages, disadvantages

David Vergun

US Department of Defence, October 11, 2023

There are three things that the Chinese military has that the U.S. military, allies and partners in the region do not have, said Army Gen. Charles A. Flynn, commander of U.S. Army Pacific. "They have interior lines," he said. He noted that they're just 100 miles from Taiwan, and they have antiaccess, area-denial means to keep opposing forces at a distance—such as missiles, aircraft and ships, as well as cyber and space capabilities. "The second thing they have is mass," he said, meaning they have a very large military force. "The third thing they have is magazine depth," he said, which would include large quantities of stand-off munitions.

<https://www.defence.gov/News/News-Stories/Article/Article/3553901/general-highlights-chinasmilitary-advantages-disadvantages/>

China starts building new telescope for lunar, deep-space missions

CGTN, October 12, 2023

China started the construction of a 40-meter-aperture radio telescope in the Changbai Mountain area in the northeastern province of Jilin to support future lunar and deep-space probe missions. Developed by the Shanghai Astronomical Observatory under the Chinese Academy of Sciences, the optical instrument is designed to be a large, fully movable, high-precision multipurpose radio telescope.

<https://news.cgtn.com/news/2023-10-12/China-starts-building-new-telescope-for-lunar-deepspace-missions-1nPlhxAgIec/index.html>

US 'ill-prepared' for nuclear challenge from China and Russia, says report

Demetri Sevastopulo

Financial Times, October 12, 2023

The US must expand or restructure its nuclear arsenal to tackle the "existential challenge" posed by the growing nuclear threat from China and existing risk from Russia, a new report by a congressionally mandated commission has said. The bipartisan Congressional Commission on the Strategic Posture of the US, which is tasked with examining American strategic policy, warned that Washington was "ill-prepared" to tackle the challenge posed by having two peer nuclear adversaries for the first time.

<https://www.ft.com/content/cffff9f8-f99f-4637-8514-e43d25d4cdaf>

China achieves first commercial satellite-ground laser high-speed image transmission test, a significant communication breakthrough

Global Times, October 12, 2023

A laser communication ground station independently developed by a satellite

manufacturer and constellation operator in Northeast China's Jilin Province has successfully carried out a satellite-based high-speed laser image transmission test using a propriety satellite Jilin-1 MF02A04 starborne laser terminal. This is China's first successful test of a domestically developed, commercial satellite-based high-speed laser image transmission. The successful test signifies that Jilin Province has integrated engineering capabilities for the entire chain covering satellite-ground laser high-speed image transmission, highlighting that engineering application capacity has reached an advanced level in the world.

<https://www.globaltimes.cn/page/202310/1299711.shtml>

D. Bangladesh

Bangladesh gets first uranium shipment from Russia for nuclear power plant

Aljazeera, October 6, 2023

Bangladesh has received the first Russian shipment of uranium fuel for its first nuclear power plant, making it the 33rd country in the world to produce nuclear energy.

The South Asian country is building the first of two nuclear power plants in collaboration with Russian state-owned atomic company Rosatom. Ninety percent of the \$12.65bn project is financed through a Russian loan repayable within 28 years with a 10-year grace period.

"Today is a day of pride and joy for the people of Bangladesh," Prime Minister Sheikh Hasina said on Thursday during a video conference with Russian President Vladimir Putin that the Russian Embassy in Bangladesh called a "nuclear fuel delivery ceremony".

<https://www.aljazeera.com/news/2023/10/6/bangladesh-gets-first-uranium-shipment-from-russia-for-nuclear-power-plant>

E. Pakistan

Loud Explosion Heard In Pakistan's Dera Ghazi Khan City With Nuclear Facility; Officials Say 'Sonic Boom'

Bloomberg, October 6, 2023

Pakistan authorities on Friday said that the sound of a loud explosion in Punjab province could be due to a sonic boom as there was no information of a bombing incident or an act of sabotage.

The loud thud in the vicinity of Dera Ghazi Khan town in southern Punjab caused panic and soon it started trending on social media. Videos circulating on X showed people vacating the area even as rescue teams and police personnel were moving around.

Pakistan's nuclear research site is in the neighbourhood.

<https://www.bqprime.com/politics/loud-explosion-heard-in-pakistans-dera-ghazi-khan-city-with-nuclear-facility-officials-say-sonic-boom>

Radiation detection equipment to be set up at 8 land ports on Pakistan, Bangladesh, Myanmar, Nepal borders

Deccan Herald, October 15, 2023

Radiation Detection Equipment (RDE) will soon be installed at eight land crossing points along India's borders with Pakistan, Bangladesh, Myanmar and Nepal to check the trafficking of radioactive materials for its possible use in making nuclear devices, officials said. The RDE will be installed at the Integrated Check Posts and land ports of Attari (Pakistan border), Petrapole, Agartala, Dawki and Sutarkandi (all on the Bangladesh border), Raxaul and Jogbani (Nepal) and Moreh (Myanmar). Work order for supply, installation and maintenance of Radiation Detection Equipment at eight operational ICPs has been awarded by the government through an agreement executed last year and the vendor will supply and complete the installation process shortly, an official privy to the development said.

<https://www.deccanherald.com/india/radiation-detection-equipment-to-be-set-up-at-8-land-ports-on-pakistan-bangladesh-myanmar-nepal-borders-2727616>

F. Europe

UK gives BAE 4 billion pound contract for AUKUS submarine programme

Reuters, October 1, 2023

Britain has awarded BAE Systems (BAES.L) a 4 billion pound (\$4.9 billion) contract as part of the AUKUS programme with Australia and the United States to build attack submarines, defence minister Grant Shapps and the company said on Sunday.

The U.S., Australia and Britain in March unveiled details of the AUKUS plan to provide Australia with nuclear-powered attack submarines from the early 2030s to help counter China's ambitions in the Indo-Pacific region. Britain, which will also operate the submarines, is pivoting its foreign and defence policy towards Indo-Pacific and is also seeking trade deals with fast-growing economies there after it left the European Union.

<https://www.reuters.com/world/uk/uk-announces-4-billion-pound-deal-build-attack-submarines-2023-10-01/>

UK selects six designs for construction of small modular nuclear reactors

Construction Europe, October 2, 2023

The UK government has selected six companies to advance to the next phase of a competition to design and build small modular reactors (SMRs) to generate nuclear power. The companies are: EDF, GE-Hitachi Nuclear Energy International, Holtec Britain, NuScale Power, Rolls Royce SMR and Westinghouse Electric Company UK. The Department for Energy Security and Net Zero said the designs were "the most able to deliver operational SMRs by the mid-2030s". The government selected the designs alongside Great British Nuclear - the government-backed body driving forward nuclear projects across the country. The next stage will see successful companies able to bid for government contracts. The government said it hoped

to announce in spring 2024 which of the six companies the government will support, with contracts awarded by summer 2024.

<https://www.construction-europe.com/news/uk-selects-six-designs-for-construction-of-small-modular-nuclear-reactors/8031967.article>

France Pitches Plan to End EU Nuclear-Energy Deadlock With Germany

Bloomberg, October 3, 2023

France and eight other European nations dependent on nuclear energy put forward their plan to break the deadlock over state support to extend the life of aging reactors.

Now comes the hard part: winning over Germany, which is concerned that those efforts could undercut prices in its economy, Europe's largest. Berlin has floated its own vision in search of a breakthrough, but the two sides remain far apart ahead of a meeting of energy ministers on Oct. 17.

<https://www.bloomberg.com/news/articles/2023-10-03/france-pitches-plan-to-end-nuclear-energy-deadlock-with-germany#xj4y7vzkg>

EDF submits final bid for Czech nuclear plant expansion

Construction Europe, October 3, 2023

EDF joins US-based Westinghouse and South Korea's Korea Hydro & Nuclear Power (KHNP) in the race to secure the contract for the expansion project.

The company revealed that it had modified its offer after clarification talks with energy group CEZ, which is responsible for overseeing the project. More than 100 representatives from EDF and its industrial partners, including Framatome, GE Steam Power and Bouygues Travaux Publics, were said to have attended the talks. CEZ will now scrutinise the three final bids and present its evaluation report to the Czech government for approval.

<https://www.construction-europe.com/news/edf-submits-final-bid-for-czech-nuclear-plant-expansion/8032030.article>

IAEA Training Centre for Nuclear Security Opens Doors to Build Expertise in Countering Nuclear Terrorism

IAEA, October 3, 2023

The International Atomic Energy Agency (IAEA) opened today a unique nuclear security training centre, the first international facility of its type, to support the growing efforts to tackle global nuclear terrorism. IAEA Director General Rafael Mariano Grossi officially opened the IAEA Nuclear Security Training and Demonstration Centre during a ceremony at the Agency's Seibersdorf laboratories in Austria, attended by representatives from 45 countries and territories.

The centre will provide more than 2000 square meters of specialized technical infrastructure and equipment for course participants to learn about the physical protection of nuclear and other radioactive material, as well as detection and response to criminal acts involving nuclear material and facilities.

<https://www.iaea.org/newscenter/pressreleases/iaea-training-centre-for-nuclear-security-opens-doors-to-build-expertise-in-countering-nuclear-terrorism>

French utility chief urges France to boost nuclear output

Euractiv, October 4, 2023

French grid operator RTE estimates the country's nuclear production will reach 360, or even 400 TWh per year according to its latest outlook for the French energy mix between now and 2035.

This comes as a relief to France and the EU after a chaotic 2022, marked by the energy crisis and the closure of some French reactors for safety reasons, due to corrosion of the cooling elements.

As a result, production for the year was around 280 TWh, far from the annual average of 415 TWh recorded between 2005 and 2015 - and France has announced that it will increase its nuclear

capacity with between six and 14 new reactors by 2050.

<https://www.euractiv.com/section/energy-environment/news/french-utility-chief-urges-france-to-boost-nuclear-output/>

Finnish grid and nuclear plant in dispute over power backup

Reuters, October 5, 2023

Finland's energy authority says it will rule "as soon as possible" on a dispute between the owners of Europe's largest nuclear reactor and national grid operator Fingrid over the cost of power backup for the 1.6 gigawatt (GW) reactor. Finland's Olkiluoto 3 (OL3) nuclear reactor started regular power production in April after 18 years of construction and testing, and years of legal battles over costs and delays. Now the owners - the TVO consortium that includes utility Fortum (FORTUM.HE), chemicals producer Kemira (KEMIRA.HE), and forestry groups UPM (UPM.HE) and Stora Enso (STERV.HE) among others - have accused Fingrid of setting "unfounded restrictions" on OL3's power generation, the energy authority said.

<https://www.reuters.com/business/energy/finnish-grid-nuclear-plant-dispute-over-power-backup-2023-10-05/>

Deployment of Nuclear Weapons to Belarus Debated in First Committee, as Delegates Rethink Global Security

United Nations, October 5, 2023

The recent deployment of the Russian Federation's tactical nuclear weapons in Belarus amid the war in Ukraine raises the dangers of escalation, severely impacting regional and global security, the First Committee (Disarmament and International Security) heard today as it continued its general debate.

The delegate from Poland condemned Russian aggression in the strongest possible terms and the country's determination to restore imperial ambitions and sphere of influence. The Russian Federation is the biggest direct threat to global peace and

security, he said, adding that, for the first time in history, a nuclear power plant is deliberately located in a zone of a full-scale armed conflict.

<https://press.un.org/en/2023/gadis3712.doc.htm>

France blocks American takeover of nuclear suppliers

Politico, October 6, 2023

France has vetoed the acquisition of nuclear parts suppliers Segault and Velan SAS by American group Flowserve, the French economy ministry said Friday.

The deal came under the spotlight earlier this year, when both the opposition and the government turned the takeover into a political test for France's industrial sovereignty ambitions. French Economy Minister Bruno Le Maire has been walking the tightrope between maintaining France as an attractive investment destination and maintaining sovereignty when it comes to strategic technology. When American industrial machinery giant Flowserve announced earlier this year its intention to take over Canada's industrial valves group Velan, French authorities signaled they would look into the deal to potentially carve out Velan's French subsidiaries (Segault and Velan SAS) based on strategic reasons.

<https://www.politico.eu/article/france-vetoes-american-takeover-nuclear-supplier-segault-velan-flowserve/>

Edison eyes SMR deployment in Italy

World Nuclear News, October 6, 2023

The company, which is celebrating its 140th anniversary, said it aims to double EBITDA to a range between EUR2.0-2.2 billion (USD2.1-2.3 billion) by 2030 from EUR1.1 billion in 2022. It said this goal will be achieved by a significant change in the industrial portfolio, which will result in direct zero or near-zero emission activities accounting for 70% of EBITDA, compared with an average of 35% over the past three years. Edison added that its 2030 business portfolio will see zero-emission electricity

generation accounting for more than 45% of the group's profitability.

By 2040, Edison said it aims to have 90% of its generation mix decarbonised through the use of renewables and new technologies, such as CO2 capture and possibly new nuclear power. It anticipates reducing its CO2 emission factor from 293 grams per kilowatt-hour in 2022 to 190 g/kWh in 2030 and as low as 50 g/kWh in 2040, reducing absolute emissions in parallel.

<https://www.world-nuclear-news.org/Articles/Edison-eyes-SMR-deployment-in-Italy>

UK May Host U.S. Nuclear Weapons Again

Arms Control Association, October 2023

The United Kingdom may host U.S. nuclear weapons on its territory for the first time since their complete withdrawal 15 years ago, a move that Russia stated would escalate already high nuclear tensions in Europe.

U.S. Air Force budget documents for fiscal year 2024 revealed plans for the construction of a dormitory at Royal Air Force Lakenheath that will be needed to handle "the influx of airmen due to the arrival of the potential Surety mission," according to an analysis by Hans Kristensen and Matt Korda of the Federation of American Scientists on Aug. 28. The United States often employs the term "surety" when referring to the safety and security of U.S. nuclear weapons.

<https://www.armscontrol.org/act/2023-10/news/uk-may-host-us-nuclear-weapons-again>

France urges swift deal on EU power reform to counter US subsidies

Financial Times, October 8, 2023

The US will be the main winner if a Franco-German divide over nuclear power prevents a long-awaited reform of Europe's electricity market being finalised, France's energy minister has warned.

Agnès Pannier-Runacher said in an interview with the Financial Times that the

sweeping overhaul of EU rules was needed as soon as possible to give businesses visibility on power prices, at a time when the US was luring industry with President Joe Biden's clean energy subsidy programme under the Inflation Reduction Act. "The aim is to have an adequate and strong answer to the [IRA] and the fact that industrial investments in the US have been multiplied by three" since the law was enacted, Pannier-Runacher said. "We have a matter of weeks to act and find a solution."

<https://www.ft.com/content/91d1242d-514a-4530-a4ec-ec7de862db3d>

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

IAEA, October 13, 2023

An International Atomic Energy Agency (IAEA) peer review mission said Italy is committed to addressing the challenges of safely managing its radioactive waste. The review identified areas for additional efforts, including the swift approval of plans for a national repository for spent fuel and radioactive waste.

The Integrated Review Service for Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation (ARTEMIS) review team concluded the ten-day mission to Italy on 10 October. The review was carried out at the request of Italy and hosted by the Ministry of the Environment and Energy Security ('MASE').

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

Bulgaria, France to explore cooperation in nuclear energy, defense

Anadolu Agency, October 13, 2023

Bulgaria and France have agreed to explore cooperation opportunities in

nuclear energy and defense, local media reported on Thursday. This understanding was reached during a meeting between Bulgarian Prime Minister Nikolay Denkov and visiting French Secretary of State for European Affairs Laurence Boone, according to the state-run BTA news agency. Bulgaria has already signed a contract with the French company Framatome for the supply of fresh nuclear fuel for the Kozloduy Nuclear Power Plant, the news agency said, adding that France is also interested in participating in the project for two new reactors at the plant.

Furthermore, France is interested in Bulgarian army modernization projects, for which French companies have made technological equipment supply offers, the media outlet said.

<https://www.aa.com.tr/en/europe/bulgaria-france-to-explore-cooperation-in-nuclear-energy-defense/3018012>

UK's nuclear fusion site ends experiments after 40 years

BBC, October 14, 2023

Barry Green recounts the moment in June 1983 when the JET fusion laboratory in Oxford undertook its first experiment.

For the next four decades, the European project pursued nuclear fusion and the promise of near-limitless clean energy.

But on Saturday the world's most successful fusion experiment will wind down. Nuclear fusion was "discovered" in the 1920s and the subsequent years of research focused on developing fusion for nuclear weapons.

In 1958, when the United States' war research on fusion was declassified, it sent Russia, UK, Europe, Japan and the US on a race to develop fusion reactions for energy provision.

Fusion is considered the holy grail of energy production as it releases a lot of energy without any greenhouse gas emissions.

<https://www.bbc.com/news/science-environment-67101176>

The nuclear dispute driving a wedge between France and Germany

Financial Times, October 15, 2023

Near the French village of Fessenheim, facing Germany across the Rhine, a nuclear power station stands dormant. The German protesters that once demanded the site's closure have decamped, and the last watts were produced three years ago.

But disagreements over how the plant from 1977 should be repurposed persist, speaking to a much deeper divide over nuclear power between the two countries on either side of the river's banks.

German officials have disputed a proposal to turn it into a centre to treat metals exposed to low levels of radioactivity, Fessenheim's mayor Claude Brender says. "They are not on board with anything that might in some way make the nuclear industry more acceptable," he adds.

<https://www.ft.com/content/b1dbd7b4-d8b9-45eb-bd18-4976f7c9af5e>

G. Ukraine

Update 186 - IAEA Director General Statement on Situation in Ukraine

IAEA, October 4, 2023

Ukraine's Zaporizhzhya Nuclear Power Plant (ZNPP) is now once again using reactor unit 4 to generate steam for various safety functions at the facility after the repair of a water leak detected in mid-August, Director General Rafael Mariano Grossi said today.

After completing the transition of unit 4 to hot from cold shutdown last Saturday, the ZNPP placed reactor unit 6 - which had temporarily been producing such steam during the repair work - in cold shutdown, which was reached yesterday morning.

As previously reported, Ukraine's national regulator, the State Nuclear Regulatory

Inspectorate of Ukraine (SNRIU), has issued regulatory orders to limit the operation of all six units of the ZNPP to a cold shutdown state. In addition, the IAEA has been strongly encouraging the ZNPP to find an alternative source of steam generation to cover the plant's needs, including for processing liquid radioactive waste, and allow for all the reactors to be maintained in a cold shutdown state.

<https://www.iaea.org/newscenter/pressreleases/update-186-iaea-director-general-statement-on-situation-in-ukraine>

Situation at ZNPP stable, enough personnel to maintain safety

TASS, October 5, 2023

The situation at the Zaporozhye Nuclear Power Plant (ZNPP) is currently stable, Rosatom State Corporation Director General Alexey Likhachev told reporters before the start of a ceremony dedicated to the delivery of fresh nuclear fuel to the site of the Rooppur NPP (Bangladesh).

"I can answer in one word – stable. The station is under the absolute control of the operating organization," Likhachev said, answering a question from TASS.

Two days ago, according to Rosatom's Director General, another rotation of the IAEA mission took place at the plant.

<https://tass.com/defense/1684993>

Update 187 - IAEA Director General Statement on Situation in Ukraine

IAEA, October 11, 2023

International Atomic Energy Agency (IAEA) experts were today granted access to the rooftop of reactor unit 2 of Ukraine's Zaporizhzhya Nuclear Power Plant (ZNPP) and did not observe any mines or explosives there, Director General Rafael Mariano Grossi said. From the top of the building, the IAEA team could also observe the entire rooftop of its turbine hall as well as parts of the rooftops of the reactor buildings and turbine halls of units 1 and 3, also without seeing any mines or explosives, Director

General Grossi said. The team will continue making its long-standing request to also visit the rooftops of reactor units 1, 5 and 6 to monitor compliance with the five concrete principles for protecting Europe's largest nuclear power plant (NPP) during the military conflict in Ukraine, which state that it should neither be attacked nor be used as a base for heavy weapons.

<https://www.iaea.org/newscenter/pressreleases/update-187-iaea-director-general-statement-on-situation-in-ukraine>

Update 188 - IAEA Director General Statement on Situation in Ukraine

IAEA, October 13, 2023

The International Atomic Energy Agency (IAEA) has been informed that Ukraine's Zaporizhzhya Nuclear Power Plant (ZNPP) is transitioning a second reactor to hot shutdown to provide warm water and district heating, Director General Rafael Mariano Grossi said today. The ZNPP, Europe's largest such facility, stopped generating electricity for the grid in September last year. Since April, it has kept five reactors in cold shutdown and just one, currently unit 4, in hot shutdown to generate steam to process liquid radioactive waste and to heat water for Enerhodar, where most plant staff live. Ahead of the upcoming winter season, it started transferring unit 5 to hot shutdown this week after carrying out safety maintenance and testing at this unit.

<https://www.iaea.org/newscenter/pressreleases/update-188-iaea-director-general-statement-on-situation-in-ukraine>

H. USA

The U.S. Nuclear Arsenal Can Deter Both China and Russia

Foreign Affairs, October 5, 2023

In a speech this June, U.S. National Security Adviser Jake Sullivan drew attention to China's nuclear buildup, Russia's development of new nuclear

capabilities, and the United States' planned response. His remarks signaled the Biden administration's assessment that nuclear risks are growing, particularly in the wake of Russia's suspension of New START, the last U.S.-Russian treaty governing the two states' nuclear arms, in February. What was most notable about his speech, however, was what he promised President Joe Biden would not do: launch a countervailing U.S. nuclear buildup.

Top of Form

Bottom of Form

<https://www.foreignaffairs.com/united-states/us-nuclear-arsenal-can-deter-both-china-and-russia>

US Moves Closer to Underground Testing of Nuclear Weapons Stockpile Without Any Actual Explosions

U.S. News, October 5, 2023

Scientists charged with ensuring the aging U.S. stockpile of nuclear weapons are good to go – if needed – say they'll start shipping key components to Nevada's desert next year to prepare for underground testing they call "tickling the dragon's tail."

Experts at national defense laboratories haven't been able to physically validate the effectiveness and reliability of nuclear warheads since a 1992 underground test ban. But Energy Department officials announced Thursday they're on the verge of piecing together the technology needed to do the next best thing.

As early as 2027, the \$1.8 billion Scorpion project will make it possible to move beyond theoretical computer modeling to study in much more detail the conditions found inside the final stages of a nuclear weapon implosion but without the nuclear explosion, said Jon Custer, the Sandia project lead in Albuquerque, New Mexico.

<https://www.usnews.com/news/news/articles/2023-10-05/us-moves-closer-to-underground-testing-of-nuclear-weapons-stockpile-without-any-actual-explosions>

Trump allegedly discussed US nuclear subs with foreign national after leaving White House: Sources

ABC News, October 6, 2023

Months after leaving the White House, former President Donald Trump allegedly discussed potentially sensitive information about U.S. nuclear submarines with a member of his Mar-a-Lago Club – an Australian billionaire who then allegedly shared the information with scores of others, including more than a dozen foreign officials, several of his own employees, and a handful of journalists, according to sources familiar with the matter.

The potential disclosure was reported to special counsel Jack Smith's team as they investigated Trump's alleged hoarding of classified documents at Mar-a-Lago, the sources told ABC News. The information could shed further light on Trump's handling of sensitive government secrets.

<https://abcnews.go.com/US/after-white-house-trump-allegedly-discussed-potentially-sensitive/story?id=103760456>

US carrier Ronald Reagan to visit South Korea in show of force

Reuters, October 10, 2023

The U.S. nuclear-powered aircraft carrier Ronald Reagan is due to dock at the South Korean port of Busan on Thursday, as Seoul warned of a greater threat from North Korea and held joint maritime drills with the United States and Japan.

The carrier, which is expected to remain in Busan until Oct. 16, will strengthen the defence posture of South Korea and the United States in case of any North Korean provocations, South Korea's defence ministry said. The Ronald Reagan last visited South Korea in 2022 for the first time in about four years, joining other military vessels in a show of might intended to send a message to North Korea.

<https://www.reuters.com/world/us-aircraft-carrier-due-arrive-south-korea-thursday-2023-10-10/>

Concerns Mount Over Possible New Nuclear Tests

Arms Control Association, October 2023

New construction at nuclear test facilities in China, Russia, and the United States has heightened global apprehension that one or more of these nations potentially could resume nuclear testing.

A CNN report on Sep. 22 published satellite images showing increased activity at China's Lop Nur nuclear test site, Russia's Novaya Zemlya nuclear test site, and the U.S. Nevada nuclear test site. The construction activities of concern at these sites include "new tunnels under mountains, new roads and storage facilities, as well as increased vehicle traffic coming in and out of the sites," CNN reported.

"It's very clear that all three countries, Russia, China and the United States have invested a great deal of time, effort and money in not only modernizing their nuclear arsenals, but also in preparing the types of activities that would be required for a test," commented Retired US Air Force Col. Cedric Leighton, a former intelligence analyst who reviewed the images of the three countries' nuclear sites, according to CNN.

<https://www.armscontrol.org/act/2023-10/news/concerns-mount-over-possible-new-nuclear-tests>

Enrichment operations start at US HALEU plant

World Nuclear News, October 12, 2023

US nuclear fuel and services company Centrus Energy Corp has begun enrichment operations at the American Centrifuge Plant in Piketon, Ohio. The company said it expects to begin withdrawing high-assay low-enriched uranium (HALEU) product later this month. Centrus said the American Centrifuge Plant is the only HALEU facility in the USA licensed by the Nuclear Regulatory Commission (NRC) and the first new US-owned, US-technology uranium enrichment plant to begin production since 1954. "This moment holds great pride - and promise - for the nation," said Centrus

President and CEO Daniel Poneman. "We hope that this demonstration cascade will soon be joined by thousands of additional centrifuges right here in Piketon to produce the HALEU needed to fuel the next generation of advanced reactors, low-enriched-uranium to sustain the existing fleet of reactors, and the enriched uranium needed to sustain our nuclear deterrent for generations to come. This is how the United States can recover its lost nuclear independence."

<https://world-nuclear-news.org/Articles/Enrichment-operations-start-at-US-HALEU-plant>

NATO holds long-planned annual nuclear exercise

NATO, October 13, 2023

The exercise is a routine training activity that has been conducted annually for over a decade. The manoeuvres will involve 13 Allied countries and a mix of aircraft types, including advanced fighter jets and U.S. B-52 bombers that will fly in from the United States. Conventional jets and surveillance and refuelling aircraft also take part. A different NATO Ally hosts Steadfast Noon each year. Training flights will take place over Italy, Croatia and the Mediterranean Sea.

"Our exercise will help to ensure the credibility, effectiveness and security of our nuclear deterrent", said NATO Secretary General Jens Stoltenberg. "It sends a clear message that NATO will protect and defend all Allies."

https://www.nato.int/cps/en/natohq/news_219443.htm

Congressional Commission Calls for Third Nuclear Shipyard to Bolster U.S. Strategic Forces

USNI News, October 13, 2023

The Pentagon needs a third shipyard that can build nuclear-powered ships so the U.S. can keep pace with China and Russia's nuclear modernization, a congressional commission said in a new report published Thursday.

A third private shipyard would expand industry's capacity to build nuclear-powered submarines, therefore bolstering U.S. strategic forces, according to the Congressional Commission on the Strategic Posture of the United States.

The commission suggests the Pentagon "increase shipbuilding capacity, by working with industry to establish or renovate a third shipyard dedicated to production of nuclear-powered vessels, with particular emphasis on nuclear-powered submarines," according to the report.

<https://news.usni.org/2023/10/12/congressional-commission-calls-for-third-nuclear-shipyard-to-bolster-u-s-strategic-forces>

Israel and US cannot accept a nuclear Iran amid fears of Tehran atomic breakout: 'red line'

Fox News, October 14, 2023

Israel is facing a crisis on multiple fronts, battling back from a surprise attack by Hamas that began last week while continuing efforts to prevent a nuclear armed Iran. "Iran would follow through on its promise to wipe Israel off the map, they mean it," Robert Greenway, the director of the Center for National Defense at the Heritage Foundation, told Fox News Digital of the repercussions of Iran becoming a nuclear state. Greenway's comments come after Israel was suddenly forced to defend itself from a surprise attack by Hamas, an Iranian-backed terrorist organization, last weekend, with continued clashes leaving thousands dead as Israeli forces launch counterattacks into the Gaza Strip.

<https://www.foxnews.com/world/israel-cannot-accept-a-nuclear-iran-as-war-rages-experts-say-red-line>

West Asia

I. Iran

Military Chief Voices Iran's Readiness to Cooperate with Pakistan in Anti-Terror Fight

Fars News Agency, October 1, 2023

Chief of Staff of the Iranian Armed Forces Major General Mohammad Baqeri strongly

condemned a terrorist attack on a religious ceremony in Pakistan, and further expressed Tehran's readiness for collaboration with Islamabad in the fight against terrorism.

In a message to Pakistan's Chief of the Army General Asim Munir on Saturday, Maj. Gen. Baqeri deplored the "savagely, anti-religious and anti-human" bombings at two mosques in Pakistan on Friday, which killed and injured dozens of people.

The top general expressed confidence that the perpetrators behind the crime would be identified, arrested and punished soon with the efforts of the Pakistani armed forces and the security and judicial bodies.

<https://www.farsnews.ir/en/news/14020709000185/Military-Chief-Vices-Iran's-Readiness-Cooperate-with-Pakistan-in-Anti-Terr>

Iran to Enhance Naval Power with Another Advanced Indigenous Destroyer

Fars News Agency, October 1, 2023

Commander of the Iranian Navy Rear Admiral Shahram Irani said that his forces will soon receive a new domestically-manufactured destroyer, dubbed "Deylaman", which is more sophisticated than the military vessels already showcased. Speaking at a ceremony in commemoration of the anniversary of the 1980-88 Iraq-imposed war on Saturday, Rear Admiral Irani stated Iran's naval fleet will take delivery of a new domestically-designed and developed destroyer, which is furnished with much more advanced and elaborate systems compared to "Dena".

<https://www.farsnews.ir/en/news/14020709000259/Iran-Enhance-Naval-Power-with-Another-Advanced-Indigenous-Destroyer>

Navy Chief: 12 Anti-Ship Cruise Missiles Mounted on Iranian Destroyer

Fars News Agency, October 2, 2023

Commander of the Iranian Navy Rear Admiral Shahram Irani said that the

Sabalan military vessel has become the first destroyer equipped with a dozen anti-ship cruise missiles. Rear Admiral Irani made the remarks in an interview with Tasnim news agency, stating that the Iranian Navy has furnished the Sabalan destroyer with 12 anti-ship cruise missiles, breaking the record for the number of guided missiles installed on Iranian vessels. He noted the missile-equipped destroyer will be unveiled soon.

<https://www.farsnews.ir/en/news/14020710000169/Navly-Chief-2-Ani-Ship-Cruise-Missiles-Mned-n-Iranian-Desryer>

IAEA has fully verified all Iran's nuclear activities, Iran tells US

Tehran Times, October 3, 2023

The U.S. government's allegations against Iran's nuclear program have been disputed by the Iranian mission to the United Nations, which emphasized that all of Iran's nuclear material and operations have been fully disclosed to and confirmed by the International Atomic Energy Agency.

Releasing a statement on Monday, Iran's mission said Iran has an excellent record of cooperation with the IAEA, having had the most safeguards inspections of its civilian nuclear program.

<https://www.tehrantimes.com/news/489671/IAEA-has-fully-verified-all-Iran-s-nuclear-activities-Iran-tells>

Iranian Army Employs New Drone in War Game

Fars News Agency, October 3, 2023

The Iranian Army brought into operation a new homegrown drone, dubbed Kaman-19, in a military exercise underway across the country. The main stage of the drone drill, participated by troops from the four units of the Army, kicked off on Tuesday morning with around 200 various unmanned aircraft in attendance. The spokesperson for the exercise said the electronic warfare units have practiced a range of tactics in the drill. According to General Alireza Sheikh, the Kaman-19 drone has joined the Army's fleet

and carried out combat sorties for the first time in the war game.

<https://www.farsnews.ir/en/news/14020711000394/Iranian-Army-Emplys-New-Drne-in-War-Game>

Nuclear Chief: Hostile Behaviors Reason for Iran's Barring of IAEA Inspectors

Fars News Agency, October 4, 2023

Head of the Atomic Energy Organization of Iran (AEOI) Mohammad Eslami said that Tehran has withdrawn the designation of a number of the UN nuclear agency's inspectors due to their "harsh and political behaviors". Speaking to reporters on the sidelines of a cabinet meeting on Wednesday, Eslami stressed Tehran and the International Atomic Energy Agency (IAEA) have continuous interaction in accordance with the Non-Proliferation Treaty (NPT) and the Safeguards Agreement. He stated Iran has barred a few European inspectors with the IAEA from future activities in the country who have a history of "harsh and political behavior" against Tehran. The AEOI head put the number of the delisted inspectors at "three or four", explaining that the number is a tiny fraction of the total 127 approved inspectors.

<https://www.farsnews.ir/en/news/14020712000553/Nclear-Chief-Hsile-Behavirs-Reasn-fr-Iran's-Barring-f-IAEA-Inspeprs>

Iran Releases Footage Recorded from US Navy Ship by Indigenous Drone

Fars News Agency, October 4, 2023

Tehran on Tuesday released the footage that has been recorded by its domestically-developed drone from the Arleigh Burke-class guided-missile destroyer during a surveillance mission in the Indian Ocean.

The Iranian Army's unmanned aircraft conducted the operation against the Arleigh Burke-class destroyer in the

Northern part of the body of water. The Ababil (Flock of Birds)-V drone managed to keep the US warship under surveillance for around 24 hours. The aerial vehicle reportedly took off from a base located on the Southern Iranian island of Jask before heading to conduct the surveillance mission against the US vessel.

<https://www.farsnews.ir/en/news/14020712000206/Iran-Releases-Fage-Recrded-frm-US-Navy-Ship-by-Indigens-Drne>

IAEA inspectors expelled for political behaviors: nuclear chief

Tehran Times, October 4, 2023

Mohammad Eslami, the head of the Atomic Energy Organization of Iran (AEOI), said on Wednesday that the inspectors of the UN nuclear watchdog were expelled from Iran for their “hardline political behavior.”

Speaking to reporters on the sidelines of a cabinet meeting on Wednesday, Eslami said, “The dismissed inspectors were from three European countries that regularly demonstrated harsh political behaviors, and we removed the inspectors from those countries from the list.”

He also said that the International Atomic Energy Agency (IAEA) has dozens of designated inspectors in Iran. “The Agency has 127 approved inspectors in Iran, and the people who have been fired have not come to Iran for several years; on the other hand, this number [of dismissed inspectors] is not a [big] number compared to the number of official inspectors,” he said, according to state news agency IRNA.

<https://www.tehrantimes.com/news/489752/IAEA-inspectors-expelled-for-political-behaviors-nuclear-chief>

Iranian Suicide Drones Pound Ground, Naval Targets During Massive Drills

Fars News Agency, October 4, 2023

The Iranian Army continued its large-scale wargames to exercise tactical operations, using “Arash” suicide drones to smash the ground and naval targets.

Iran’s Army on Tuesday staged a wide-scale drone drill, which features hundreds of sophisticated reconnaissance and combat drones. Almost 200 unmanned military aircraft have covered strategic waters of the Persian Gulf and the Sea of Oman, all four corners of the country and its central part.

The surveillance drones, operated by the four units of the Iranian Army, namely the Ground Force, Navy, Air Force and Air Defense Force, successfully carried out their intelligence-gathering and patrol missions on the first day of the 1402 joint drone military exercise.

<https://www.farsnews.ir/en/news/14020712000488/Iranian-Sicide-Drnes-Pnd-Grnd-Naval-Targes-Dring-Massive-Drills>

Iranian Drone Annihilates Another Pilotless Aircraft for First Time

Fars News Agency, October 4, 2023

An Iranian drone managed to target another unmanned aircraft with a missile during a large-scale maneuver – an unprecedented achievement for Iran’s Armed Forces which puts the country in the list of the limited number of states enjoys such capability.

On Wednesday, Commander of the Iranian Army’s Air Defense Force Brigadier General Alireza Sabahi Fard said, in an aerial battle, a drone targeted another with a missile and destroyed it.

“Only one or two countries have the ability to carry out this very complex and advanced operation, which of course they have not displayed yet,” he acknowledged.

<https://www.farsnews.ir/en/news/14020712000744/Iranian-Drne-Annihilaes-Anher-Pilless-Aircraf-fr-Firs-Time>

IRGC Chief: AI-Powered Drones Capable of Wrecking Faraway Military Vessels

Fars News Agency, October 5, 2023

Commander of the Islamic Revolution Guards Corps (IRGC) Major General

Hossein Salami praised Iran's defense industry for developing various types of unmanned aerial vehicle (UAV), and said that domestically-developed drones equipping with artificial intelligence can hit any hostile naval targets sailing thousands of miles away.

Addressing a conference of medical students in Tehran on Wednesday, Maj. Gen. Salami stated that indigenous unmanned aerial vehicles, which are equipped with artificial intelligence, can intercept and destroy hostile naval targets sailing thousands of miles away.

<https://www.farsnews.ir/en/news/14020713000159/IRGC-Chief-Al-Pwered-Drnes-Capable-f-Wrecking-Faraway-Miliary-Vessels>

Iran Kicks Off Construction of New Reactor at Bushehr Nuclear Power Plant

Fars News Agency, October 9, 2023

Iran has started building a new reactor at the second unit of the Bushehr nuclear power plant. In a ceremony on Sunday, attended by Head of Iran's Atomic Energy Organization (AEOI) Mohammad Eslami, pouring concrete for the wall of the above-zero level reactor of the unit was kicked off.

"We took fundamental steps for faster implementation of units 2 and 3 of the Bushehr nuclear power plant, and in this regard, the obstacles ahead have been removed," Eslami said. He said over 1.8 billion euros has been allocated for the project since last year, adding that the volume of activities in the project has increased 10-fold compared to last year.

<https://www.farsnews.ir/en/news/14020717000758/Iran-Kicks-Off-Cnsrcin-f-New-Reacr-a-Bshehr-Nclear-Pwer-Plan>

Iranian Coast Guards Hold Massive Naval Drills in Persian Gulf

Fars News Agency, October 11, 2023

Iran's Coast Guards launched a large-scale military exercise along the shores of the Persian Gulf, Sea of Oman and the Northern parts of the Indian Ocean.

The massive drill, dubbed Mohammad Rasulullah 2 (Prophet Mohammad 2), kicked off in the Southern Iranian port city of Bandar Abbas on Wednesday, with Iran's police chief Brigadier General Ahmad Reza Radan and several military commanders in attendance.

The drill involves naval units from the country's Southeastern province of Sistan-Baluchestan, as well as the Southern provinces of Bushehr and Hormuzgan.

<https://www.farsnews.ir/en/news/14020719000719/Iranian-Cas-Gards-Hld-Massive-Naval-Drills-in-Persian-Glf>

J. Israel

IAI to Exhibit at AUSA 2023, Unveil Latest Defense System

Israel Defense, October 1, 2023

Israel Aerospace Industries (IAI) will exhibit at the prestigious AUSA 2023 Annual Meeting & Exposition, taking place October 9-11th in Washington, DC. IAI's booth will showcase some of its leading systems such as the flagship Barak MX air and missile defense system, advanced technologies and solutions for the future armored fighting vehicle and multi-mission unmanned land vehicle, the unmanned aerial vehicle Heron MKII, gunfire detection system Othello P, leading loitering munition systems (Rotem, Roc X, Mini Harpy), and more.

AUSA is the Army's premier professional association and host of the largest land power exposition in the United States.

<https://www.israeldefense.co.il/en/node/59743>

Saudi Arabia Determined to Secure US Defense Pact in Exchange for Normalization with Israel

Israel Defense, October 1, 2023

Saudi Arabia is determined to secure a military agreement with the United States, which will require the U.S. to defend the kingdom in exchange for forging ties with

Israel. Saudi Arabia will not abandon this agreement even if Israel does not offer concessions to the Palestinians seeking statehood, as several sources told Reuters over the weekend.

According to their accounts, such an agreement between Saudi Arabia and the United States is almost like security guarantees in a NATO-style format, as Saudi Arabia has demanded since the beginning of discussions, between Crown Prince Mohammed bin Salman and President Biden during his visit to Riyadh in July 2022.

<https://www.israeldefense.co.il/en/node/59746>

IAI's BlueWhale ASW Makes Debut in Dynamic Messenger 2023 Exercise

Israel Defense, October 2, 2023

Israel Aerospace Industries (IAI) announced that its BlueWhale ASW unscrewed submarine has participated, for the first time, in NATO's Dynamic Messenger exercise, which took place in September.

BlueWhale ASW, developed by IAI subsidiary ELTA, is an autonomous submarine that can conduct some of the missions of manned submarines, without the need for operators at sea. It can operate for several weeks at a time and has minimal operating costs.

The uncrewed submarine is equipped with a variety of sensors, including a telescopic mast with radar and electro-optical sensors, and Atlas Elektronik's towed array sonar.

<https://www.israeldefense.co.il/en/node/59756>

Oshkosh to Design, Build the US Army's Future Robotic Combat Vehicle

Israel Defense, October 3, 2023

American defense giant Oshkosh Defense announced that it was selected by the U.S. Army, through the Ground Vehicle Systems Other Transaction Agreement (GVS OTA), to participate in Phase I, Platform Prototype Design and Build, of the Robotic Combat Vehicle (RCV) program.

In May 2023, Oshkosh Defense and Pratt Miller Defense – both Oshkosh Corporation subsidiaries – alongside Qinetiq, a British defense tech manufacturer, submitted a proposal for the US Army's future RCV.

Oshkosh will deliver two platform prototypes for testing in August 2024. The Army has announced the intent to select one vendor for Phase II, Full-System Prototype Design and Build, in FY24.

<https://www.israeldefense.co.il/en/node/59759>

IAI Announces Agreement with Azerbaijan Space Agency

Israel Defense, October 3, 2023

Israel Aerospace Industries (IAI) and Azerbaijan's space agency Azercosmos, have announced a cooperation agreement for the sale of two of IAI's cutting-edge multispectral electro-optical satellites, better-than-0.5-meter-native-resolution, with a long life span and high imaging performance.

This deal represents a significant step forward in space technology and cooperation between the two companies. Under the terms of the agreement, IAI will provide Azercosmos with two satellites within the Azersky -2 program, technology, and knowledge for the construction and operation of the satellites.

The agreement includes a long-term business partnership between IAI and Azercosmos, reflected in the establishment of innovation, entrepreneurship, academic, and study ecosystems in the field of space in Azerbaijan over the years.

<https://www.israeldefense.co.il/en/node/59768>

Aeronautics Secures New Contracts Totaling \$60 Million from Int'l Clients

Israel Defense, October 3, 2023

Aeronautics Ltd., an Israeli designer, developer, and manufacturer of

unmanned aerial systems (UAS) for the global defense and HLS markets, announced it has secured several contracts, for a total sum of \$60 million, to supply advanced ground control stations (GCS) for its Orbiter UAV systems. The contracts also include essential maintenance.

In the framework of one of the new contracts, Aeronautics will provide two types of ground control stations to complement the Orbiter UAS operations. The first is the portable ground control station (PGCS), which features flight- and mission-operation software, video-tracker software, and payload sensor data. According to the company, the PGCS provides flexibility and mobility for tactical deployments and caters to dynamic mission requirements in various environments.

<https://www.israeldefense.co.il/en/node/59758>

Swords of Iron: US Deploys USS Gerald R. Ford Carrier Strike Group to Eastern Mediterranean

Israel Defense, October 9, 2023

US Secretary of Defense Lloyd Austin has directed the movement of the USS Gerald R. Ford Carrier Strike Group to the Eastern Mediterranean, as part of the US efforts to strengthen regional deterrence efforts in the region and provide support to Israel following Hamas' devastating surprise attack.

The deployment includes US Navy aircraft carrier USS Gerald R. Ford, the Ticonderoga-class guided missile cruiser USS Normandy, the Arleigh-Burke-class guided missile destroyers USS Thomas Hudner, USS Ramage, USS Carney, and USS Roosevelt. The strike group, carrying some 5,000 troops, is already in the Mediterranean and has begun movement towards Israeli shores.

<https://www.israeldefense.co.il/en/node/59822>

Israel Purchases 10,000 Locally Manufactured Rifles

Israel Defense, October 11, 2023

Israel will purchase over 10,000 locally manufactured rifles, intended for

distribution to Border Police civilian security teams in approximately 400 communities across the country, with an emphasis on those close to the border, mixed Jewish-Arab cities, and West Bank settlements.

As the first step, 4,000 rifles have already been purchased and will be immediately distributed to the teams. Simultaneously, the Ministry of National Security has procured additional combat gear, including helmets and protective vests, which will be distributed alongside the Tavor rifles. According to the ministry, a shipment of thousands of helmets and vests is currently en route to Israel.

<https://www.israeldefense.co.il/en/node/59853>

Hamas Used Kamikaze Drones During Attack on Israel

Israel Defense, October 11, 2023

Hamas used suicide drones in the attack they carried out on the morning of October 7th in the Gaza Strip. According to the Defense Blog, the Palestinian terror organization claims to have launched more than 25 loitering munitions (suicide, or kamikaze drones), including the al-Zuwari winged drone, which targeted Israeli assets, including vehicles and equipment.

Hamas distributed videos on social media showing suicide drones being launched during the morning attack on the Gaza Strip, with a drone seen flying in the skies over Sderot."

<https://www.israeldefense.co.il/en/node/59859>

Report: Hamas Uses Home-made Short-Range Air Defense Systems

Israel Defense, October 12, 2023

Hamas is reportedly using Palestinian homemade short-range air defense systems. A Russian Twitter site published video footage made by Hamas of the operation of the Mubar-1 rocket system of its own design which is presented as a short-range air defense system.

Mubar-1 is a Palestinian-developed air defense system designed to combat low-flying air targets, including unmanned aerial vehicles and helicopters. Hamas forces are said to have managed to shoot down four Israeli AH-64 Apache helicopters with such a system.

<https://www.israeldefense.co.il/en/node/59872>

Israel at War: "Ofek" Heavy Armored Personnel Carriers Partake in the Fighting

Israel Defense, October 12, 2023

IDF's new heavy armored personnel carrier, "Ofek," ("horizon" in Hebrew) is currently participating in the fighting in the Gaza Strip. According to the Army Recognition website, together with Merkava Mark 4 tanks that were brought down as reinforcements to the Gaza Strip, vehicles of this type based on the Merkava Mark 2 tank chassis were also identified.

The Ofek is an armored command and control that primarily supports select forces within the IDF, including medical, logistical, and rescue units, complementing the use of Namer and Achzarit (based on a T-55 tank) heavily armored personnel carriers primarily utilized by infantry units.

<https://www.israeldefense.co.il/en/node/59871>

German Press: Berlin Clears Israeli Use of Two Heron TP Combat Drones

Israel Defense, October 13, 2023

According to reports in the media reports, German Minister of Defense, Boris Pistorius, has given Israel the green light to use two Heron TP drones for the purpose of attacking Hamas in the Gaza Strip.

The Heron TP (Eitan) drones are High-Altitude Long-Endurance (HALE) drones produced by the Israeli Aerospace Industry (IAI). In June 2018, Germany leased several drones for an extended period of time, in a \$3 billion deal. The deal included the leasing of seven HALE drones, training, and certification of German operators, and the

use of relevant Israeli Air Force infrastructure. A joint German-Israeli squadron, named The Red Baron Squadron was established at Israel's Tel Nof Airbase for the training of German pilots.

<https://www.israeldefense.co.il/en/node/59887>

Israeli Navy Fires Spike NLOS Missiles at Gaza Coastline Targets

Israel Defense, October 13, 2023

The Israeli Navy attacked Hamas targets on the Gaza Strip coastline using Spike NLOS maritime missiles. According to a report in Navy Recognition, an IDF spokesperson confirmed that the Israeli Navy carried out an attack on coastal targets and estimated that it was conducted using Spike NLOS maritime missiles.

The Spike NLOS maritime missile is the naval version of the Spike NLOS land-based missile system, part of the missile family by this name produced by Rafael.

The missile has the capability to engage maritime and coastal targets during day and night, in all weather conditions, and at ranges beyond the line of sight, up to a distance of 32 kilometers.

<https://www.israeldefense.co.il/en/node/59890>

Boeing to Equip Israel with Smart Bombs

Israel Defense, October 15, 2023

Boeing has started supplying smart munitions to Israel. Bloomberg's website quotes an American military official, Brad Bowman, who reports that an Israeli Air Force transport plane recently flew with GBU-39/B 250-pound (113 kilograms) bombs from the United States to Israel.

In 2021, Israel purchased 1,000 GBU-39/B Small Diameter Bombs (SDB) for \$735 million. The SDB (small diameter bomb) is an air-launched bomb capable of hitting a target from a range of 40 miles (64

kilometers) and provides the means for precise targeting of militants in Gaza while minimizing civilian casualties, Bowman said.

<https://www.israeldefense.co.il/en/node/59912>

Meet Duvdevan: The Elite Counter-Terrorism Commando Unit

Israel Defense, October 15, 2023

"I am the commander of the Duvdevan Unit. The IDF combat units, and Duvdevan in particular, never take a moment's rest and are fighting nonstop and in every arena."

These words were spoken by Lieutenant Colonel D, the commander of the Duvdevan Unit, just a few months ago, when he was given the honor of lighting a torch during Israel's 75th anniversary celebrations.

Lieutenant Colonel D, whose full name or photo cannot be disclosed, had his face covered by a mask when he lit the torch. The operations of his unit are also mostly carried out in absolute secrecy.

<https://www.israeldefense.co.il/en/node/59919>

Reports: Hamas Uses North Korean Weapons Systems

Israel Defense, October 15, 2023

Hamas is using North Korean-made weapons systems. South Korean media reports that Hamas possesses Katyusha rockets with calibers of 107mm and 122mm, as well as communication equipment, which were acquired by Hamas from North Korea in 2014.

Additionally, South Korean media notes that Hamas also possesses several Bulsae-2 guided missile systems. These are replicas of the 9K111 Fagot anti-tank guided missile system, originally developed by the Soviet Union in the early 1960s. The 9K111 system is designed for mobile tank destruction on the battlefield, with a range of 1.2 miles, and it can penetrate 19 to 23 inches of steel armor.

<https://www.israeldefense.co.il/en/node/59913>

Analysis: The IDF Didn't Invest in the Border Defense Force Due to the Fence

Israel Defense, October 15, 2023

The border defense system surrounding Gaza included approximately one hundred Rafael-made sniper positions, each with a 0.3 mm machine gun with radar and optics installed. These positions were connected to Elbit's MARS system, with female observers working in a concrete reinforced war room. When movement was detected close to the border, the observer would conduct a 'suspicious arrest' procedure using announcement equipment installed on the tower that saw the terrorist and - if necessary - shoot. On Saturday at approximately 6:30 a.m., Hamas launched, according to reports, about 140-150 drones with bombs and simultaneously managed to disable all the firing positions in the line.

<https://www.israeldefense.co.il/en/node/59929>

K. Oman

Oman to acquire 301 TOW missiles in possible US\$70m deal

Defense Connect, October 4, 2023

The Defense Security Cooperation Agency (DSCA) notified the US Congress of the potential sale of 301 tube-launched, optically-tracked, wireless-guided (TOW) 2B, radio frequency missiles (BGM-71F-7-RF) on 3 October. The sale, if approved, would also comprise the 301 TOW missiles including seven fly-to-buy missiles, technical, logistics, and engineering support.

TOW missile systems have been used extensively around the world since the 1970s as an anti-armour and anti-fortification weapon mounted on ground and rotary-wing vehicles. The system is still in service with the US Army, US Marines, and international forces.

<https://www.defenceconnect.com.au/land/12905-oman-to-acquire-301-tow-missiles-in-possible-us-70m-deal>

L. Qatar

Qatar intensifies call for global oversight of Israel's nuclear activities

Doha News, October 1, 2023

Qatar has intensified its call for Israel to subject all its nuclear facilities to International Atomic Energy Agency (IAEA) safeguards and join the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) as a non-nuclear state.

The amplified appeal came in a statement delivered by Abdulaziz Al-Jabri, Chairman of Qatar's National Committee for the Prohibition of Weapons, at the General Conference of the IAEA in Vienna.

Expanding on previous demands, Al-Jabri reasserted the need for immediate action based on "international legitimacy resolutions" that date back half a century. These resolutions include those from the UN General Assembly since 1974 and Security Council Resolutions 487 of 1981 and 687 of 1991.

<https://dohanews.co/qatar-intensifies-call-for-global-oversight-of-israels-nuclear-activities/>

M. Saudi Arabia

In nuclear push, Saudi Arabia could play US, China off each other

Breaking Defense, October 2, 2023

With Saudi Arabia making clear its desire for nuclear power, the Middle East could find itself on the edge of a potential nuclear arms race – one in which the Kingdom attempts to play the great powers off each other in order to achieve its goals.

Right now, the Kingdom is nowhere near having a operative nuclear program. But Saudi Crown Prince Mohammed bin Salman raised eyebrows in a late September interview when he said that if Iran were to get a nuclear weapon "we will have to get one." The timing of MBS' statement was noteworthy for many analysts who believe it reflected a growing concern of the advancement of the Iranian nuclear

program and to capitalize on the push by Washington and Tel Aviv to normalize relations with Riyadh by making the establishment of a Saudi nuclear program with full fuel cycle as a conditional step.

<https://breakingdefense.com/2023/10/in-nuclear-push-saudi-arabia-could-play-us-china-off-each-other/>

Saudi Arabia seeks to study small nuclear reactor technology

The Japan Times, October 8, 2023

Saudi Arabia said it's interested in studying technology for small modular nuclear reactors, as the Middle East's largest oil producer looks to diversify its energy sources and generate cleaner power for domestic use and export.

The kingdom is "a late-comer" to nuclear power and aims to study all types and applications of atomic generation, Prince Abdulaziz bin Salman, the Saudi energy minister, said Sunday at a climate conference in the capital, Riyadh. Saudi Arabia has been building a test reactor and is seeking U.S. assistance as it looks to develop a nuclear program.

<https://www.japantimes.co.jp/news/2023/10/08/world/saudi-arabia-nuclear-reactor/>

IAEA Mission Recognizes Saudi Arabia's Commitment to Radiation Safety, Identifies Areas for Further Improvement

IAEA, October 10, 2023

An International Atomic Energy Agency (IAEA) mission said the Kingdom of Saudi Arabia has demonstrated commitment to safety for all applications and occurrences of radiation sources in the country. The team recommended actions for improvement, including the establishment of a national strategy for radioactive waste management.

The Integrated Regulatory Review Service (IRRS) mission, the first to Saudi Arabia, was conducted at the request of the Government of Saudi Arabia and hosted by the Nuclear and Radiological

Regulatory Commission (NRRC). The ten-day mission took place from 1 to 10 October 2023.

<https://www.iaea.org/newscenter/pressreleases/iaea-mission-recognizes-saudi-arabias-commitment-to-radiation-safety-identifies-areas-for-further-improvement>

N. Türkiye

Türkiye's defense giant Aselsan introduces 3 new marine systems

Daily Sabah, October 1, 2023

Defense giant Aselsan has introduced three new marine systems during this year's third edition of Teknofest, Türkiye's renowned technology and aerospace event held in the Aegean city of Izmir.

Speaking to Anadolu Agency (AA), Ahmet Akyol, the company's general manager said the new systems will be added to the Turkish Naval Forces inventory this year with the fifth ship in the national ship project MILGEM. Noting that the GÖKDENİZ close air defense system was recently integrated into the fifth MİLGEM ship, Akyol said to date they have signed export contracts with three countries. Explaining that the ship also boasts the new CENK radar system, Akyol said, "It is extremely high tech and will allow the detection and identification of all aircraft, missiles and surface vehicles approaching the ship."

<https://www.dailysabah.com/business/defense/turkiyes-defense-giant-aselsan-introduces-3-new-marine-systems>

Türkiye's 1st aircraft factory to reopen with Gökbeý, Hürku° production

Daily Sabah, October 2, 2023

Türkiye's first aircraft factory, the reestablished TOMTA^a Aviation and Technology facility, will restart its production by manufacturing parts for the multipurpose Gökbeý helicopter and Hürku° trainer aircraft, according to a board member announcement during the recently held Teknofest in Izmir.

"Hopefully, we will be issuing our first invoice in October," Ali Ek°i, a board member at TOMTA^a, told Anadolu Agency (AA) on the sidelines of Türkiye's premier technology and aerospace event. Teknofest held in the Aegean city of Izmir marked this year's third edition of the festival that gathered some 1.1 million visitors at Çiðli Airport between Sept. 27 and Oct. 1.

<https://www.dailysabah.com/business/defense/turkiyes-1st-aircraft-factory-to-reopen-with-gokbey-hurkus-production>

Türkiye plans commissioning of Akkuyu NPP's 1st reactor next year

Daily Sabah, October 5, 2023

The commissioning of the first reactor of Türkiye's first nuclear power plant is expected next October, Energy and Natural Resources Minister Alparslan Bayraktar said Thursday, adding that talks on second and third plants are underway.

Discussing Türkiye's energy agenda in a televised interview with private broadcaster NTV, Bayraktar replied to questions regarding the commissioning of the Akkuyu Nuclear Power Plant (NPP), built in the southern city of Mersin, which received the initial batch of nuclear fuel in a ceremony earlier this year. "We have a target date, hopefully, next year, which is the 101st anniversary of our republic. We have a target date of Oct. 29, 2024. For this purpose, approximately 30,000 workers, subcontractors and the Russian company are working intensively day and night," Bayraktar said.

<https://www.dailysabah.com/business/energy/turkiye-plans-commissioning-of-akkuyu-npps-1st-reactor-next-year>

In global 1st, Turkish naval drones sink ship in UAV-backed trial

Daily Sabah, October 9, 2023

A fleet of Türkiye's homegrown kamikaze sea drones successfully struck a target in a sea trial featuring a joint operation with the country's unmanned aerial vehicles

(UAVs), the Defense Ministry said in a statement on Monday.

Developed by a pioneering defense contractor, Aselsan, a swarm of Albatros-S unmanned surface vessels (USVs) consisting of eight kamikaze sea drones engaged in a test targeting a 22-meter (72.18-foot) ship off the coast of Mersin province in the Eastern Mediterranean, the statement said. Detected by the famed Bayraktar TB2 unmanned aerial vehicle, the target ship sank within minutes after being approached and hit by one of the USVs equipped with a warhead produced by another top local defense manufacturer, Roketsan.

<https://www.dailysabah.com/business/defense/global-1st-turkish-naval-drones-sink-ship-in-uav-backed-trial>

O. East Asia

North Korea slams UN nuclear agency as US mouthpiece

Reuters, October 2, 2023

North Korea on Monday denounced the U.N. atomic watchdog for joining a U.S.-led pressure campaign and “cooking up” a resolution over its nuclear programmes, calling the agency a “paid trumpeter” for Washington.

An unnamed spokesman of Pyongyang’s Ministry of Nuclear Power Industry released a statement criticising a resolution adopted on Friday at the International Atomic Energy Agency (IAEA) general conference that calls for the North to curb its nuclear programmes. The spokesman described the resolution as a “result of conspiracy” by the United States and its allies, saying North Korea’s status as a nuclear weapons state has already become “irreversible.”

<https://www.reuters.com/world/north-korea-slams-un-nuclear-agency-us-mouthpiece-2023-10-01/>

North Korea reportedly stops nuclear reactor to obtain plutonium – media

TASS, October 5, 2023

The South Korean and US intelligence have reportedly detected signs that North Korea

has fully suspended a 5 MW reactor at its Yongbyon nuclear facility which may be related to the process of extracting plutonium for nuclear weapons, The Dong-A Ilbo reported, citing sources.

According to reconnaissance data from the United States and the Republic of Korea, operations of the reactor were stopped in late October. “The US and South Korean authorities believe it could be a sign of reprocessing work to obtain weapons-grade plutonium,” a Seoul official told the South Korean newspaper.

<https://tass.com/defense/1684779>

S. Korea, US closely monitoring N. Korea for signs of nuclear reactor halt

The Korea Herald, October 5, 2023

The intelligence authorities of South Korea and the United States are closely monitoring North Korea for signs the reclusive regime appears to have halted operations of a nuclear reactor in its Yongbyon nuclear complex, Seoul’s defense ministry said Thursday.

The Dong-A Ilbo earlier reported the allies’ intelligence authorities have detected signs indicating the 5-megawatt reactor temporarily stopped operations late last month, and South Korean and US officials believe the move could be related to reprocessing spent fuel rods to extract weapons-grade plutonium.

“South Korean and US intelligence authorities are closely monitoring related movements,” Jeon Ha-kyou, the ministry’s spokesperson, told a regular briefing when asked about the report.

<https://www.koreaherald.com/view.php?ud=20231005000480>

North Korea’s halt of nuclear reactor suggests bid to obtain weapons-grade plutonium – report

The Guardian, October 5, 2023

North Korea has halted the nuclear reactor at its main atomic complex,

probably to extract plutonium that could be used for weapons by reprocessing spent fuel rods, a South Korean news report has said, citing a government source.

The operation of the five-megawatt nuclear reactor at the Yongbyon nuclear complex has been suspended since late September, according to intelligence assessments by US and South Korean authorities, the report said.

“South Korea and the US believe this could be a sign of reprocessing work being done to obtain weapons-grade plutonium,” the Donga Ilbo newspaper on Thursday quoted a government source as saying.

<https://www.theguardian.com/world/2023/oct/05/north-korea-yongbyon-nuclear-reactor-complex-halt-plutonium>

Fukushima Nuclear Plant Starts 2nd Release of Treated Radioactive Wastewater

VOA News, October 5, 2023

Japan’s wrecked Fukushima nuclear power plant said it began releasing a second batch of treated radioactive wastewater into the sea on Thursday after the first round of discharges ended smoothly.

Plant operator Tokyo Electric Power Company Holdings said workers activated a pump to dilute the treated water with large amounts of seawater, slowly sending the mixture into the ocean through an underground tunnel.

The wastewater discharges, which are expected to continue for decades, have been strongly opposed by fishing groups and neighboring countries including South Korea, where hundreds of people staged protest rallies. China banned all imports of Japanese seafood, badly hurting Japanese seafood producers and exporters.

<https://www.voanews.com/a/fukushima-nuclear-plant-starts-2nd-release-of-treated-radioactive-wastewater-/7297678.html>

IAEA Confirms Tritium Level Far Below Japan’s Operational Limit in Second Batch of ALPS Treated Water Released Today

IAEA, October 5, 2023

The tritium concentration in the second batch of diluted ALPS treated water, which Japan’s Tokyo Electric Power Company (TEPCO) started discharging today, is far below the country’s operational limit, International Atomic Energy Agency (IAEA) experts present at the site confirmed. Japan started discharging the first batch of ALPS treated water from the Fukushima Daiichi Nuclear Power Station (FDNPS) on 24 August. It is released in batches and TEPCO began the process to discharge the second batch today. Just as they did before the discharge of the first batch, IAEA experts stationed at the IAEA Fukushima NPS Office took samples from the second batch of diluted water on 3 October, after it was prepared for discharge.

<https://www.iaea.org/newscenter/pressreleases/iaea-confirms-tritium-level-far-below-japans-operational-limit-in-second-batch-of-alps-treated-water-released-today>

IAEA to Conduct First Extensive Sampling of Marine Environment Near Fukushima Daiichi Since Start of Treated Water Release

IAEA, October 10, 2023

International Atomic Energy Agency (IAEA) scientists and international scientific observers will visit Japan next week to take marine samples near the Fukushima Daiichi Nuclear Power Station (FDNPS). The Agency’s samples will be used to corroborate Japan’s environmental monitoring and to assess the country’s relevant technical capabilities.

This work supports the IAEA’s ongoing monitoring and assessment activities in Japan under the Agency’s overall safety review of the ALPS treated water

discharges which is assessing whether TEPCO and the Government of Japan are applying the relevant international safety standards. The results from the new samples will also be compared against samples taken last year to determine whether any changes have occurred in the levels of radionuclides in the marine environment since the ALPS treated water discharges began in August this year.

<https://www.iaea.org/newscenter/pressreleases/iaea-to-conduct-first-extensive-sampling-of-marine-environment-near-fukushima-daiichi-since-start-of-treated-water-release>

North Korea slams US aircraft carrier visit to South Korean port, calls it 'undisguised provocation'

WION, October 13, 2023

North Korea on Friday (Oct 13) slammed the visit of the USS Ronald Reagan, an American aircraft carrier, to a South Korean port. Pyongyang denounced the move as a significant escalation of preparations by the United States for a potential nuclear conflict. North Korea's state media outlet KCNA condemned the drills, which simulated the interception of North Korean smuggling vessels, calling it an "undisguised military provocation". "The US scheme for nuclear attack on the DPRK and its implementation have reached the most serious phase of systematisation and visualisation," said the KCNA on Friday. "It is as clear as noonday what result will be brought to the Korean peninsula, where huge armed forces and nuclear weapons are standing in confrontation with one another, even if a spark is produced," it added.

<https://www.wionews.com/world/north-korea-slams-us-aircraft-carrier-visit-to-south-korean-port-calls-it-undisguised-provocation-646177>

Congressional commission calls for more nuclear arsenal expansion

Defense News, October 13, 2023

A congressionally mandated commission on Thursday released its final report on the U.S. nuclear posture, recommending an increase

in additional assets as China rapidly expands its own arsenal.

At the same time, the commission found the Pentagon and Energy Department are lagging behind their modernization goals, raising questions about the ability to develop additional nuclear assets. Republicans seized on the report to call for more aggressive nuclear modernization, including additional investments in an industrial base that's struggling to keep pace with the tight timelines needed to implement current strategic objectives.

House Armed Services Committee Mike Rogers, R-Ala., endorsed the report's findings in a statement calling it "a wakeup call for our strategic posture."

<https://www.defensenews.com/congress/2023/10/12/congressional-commission-calls-for-more-nuclear-arsenal-expansion/>

Satellite key amid U.S. 'space militarization,' says North Korea

Japan Times, October 10, 2023

North Korea's spy satellite program is an "indispensable" measure to counter U.S. space militarization aimed at strengthening the United States' preemptive nuclear strike capability and securing "world supremacy," state media outlet KCNA said on Tuesday.

Ri Song Jin, whom KCNA described as a researcher at the National Aerospace Technology Administration, accused the United States of seeking greater military hegemony in Asia by expanding its space force in an article titled "U.S. space force deployment aimed at preemptive aggression war."

Ri singled out a recent trip by the U.S. Space Force commander to Tokyo and the deployment of a Space Force component in South Korea, where its members took part in joint military drills for the first time this year.

<https://www.japantimes.co.jp/news/2023/10/10/asia-pacific/politics/north-korea-satellite-space-militarization/>

P. Australia

Aukus could weaken China deterrence, US congress research paper suggests

The Guardian, October 4, 2023

Doubts about Australia's willingness to join forces with the US in a war against China are being cited by congressional researchers as a potential obstacle to the Aukus nuclear-powered submarine deal. A new research paper looks at the US plan to sell Australia between three and five Virginia-class submarines in the 2030s but suggests the idea "could weaken deterrence of potential Chinese aggression". That stage of the deal aims to help Canberra bridge a "capability gap" before Australian-built nuclear-powered submarines begin to enter into service in the 2040s. The paper, prepared by the Congressional Research Service, aims to provide members of the US congress with a neutral summary of key arguments likely to be raised by supporters and sceptics of the plan.

<https://www.theguardian.com/world/2023/oct/04/aukus-alliance-weaken-china-deterrence-research-paper-submarine-deal>

Australian government funding to 'futureproof' radioisotope supplies

World Nuclear News, October 5, 2023

The Australian government has officially outlined plans for a new nuclear medicine manufacturing facility at ANSTO's Lucas Heights campus, replacing an existing facility that is now reaching the end of its operating life. The new facility is expected to be completed by the early to mid-2030s. Ed Husic, Minister for Industry and Science, said the new nuclear medicine manufacturing facility will ensure Australia's nuclear science and technology organisation can increase manufacturing and introduce cutting edge new medicines for decades to come. "ANSTO's nuclear medicine precinct in Sydney will revolutionise the domestic production of nuclear medicines and improve the lives of

thousands of Australians," he said. "Our significant investment in infrastructure is underpinned by ANSTO's strong track record as Australia's largest producer of nuclear medicines."

<https://www.world-nuclear-news.org/Articles/Australian-government-funding-to-futureproof-radio>

Is nuclear energy feasible in Australia (and how much would it cost)?

The Sydney Morning Herald, October 7, 2023

Australia is in the middle of an unprecedented energy revolution, switching from the fossil fuel-powered electricity grid that's been the bedrock of the nation's economy for decades to clean energy, through a rush of renewables as wind and solar farms spring up across the country. The shift is being driven by Australia's commitment to help tackle climate change by cutting damaging greenhouse emissions. But a fiery political debate has erupted over the future of Australia's energy supply in recent months, with federal Opposition Leader Peter Dutton demanding the Albanese government remove the nation's longstanding ban and deploy what he claims is clean, cheap and reliable nuclear power.

<https://www.smh.com.au/politics/federal/is-nuclear-energy-feasible-in-australia-and-how-much-would-it-cost-20231004-p5e9qc.html>

How many nuclear-powered submarines for Australia?

ASPI, October 12, 2023

The September 2021 announcement of Australia's transition to nuclear-powered attack submarines (SSNs) under the AUKUS program indicated that 'at least eight' would be acquired. More recently, the rhetoric has firmed up to eight, with the program director telling a Senate committee in May that there would be three Virginia-class SSNs and five AUKUS

SSNs. Vice Admiral Jonathan Mead implied that this was the full extent of the program and that decisions for what followed would be left for a future government. A decision to stop at eight overlooks critical strategic, industrial and personnel considerations that determine the number of submarines Australia acquires. Since the 2009 defence white paper, successive reviews have affirmed the need for 12 submarines supported by a base on each coast providing specialised infrastructure, workshops and a submarine squadron staff.

<https://www.aspistrategist.org.au/how-many-nuclear-powered-submarines-for-australia/>

Contribute Articles

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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