

Nuclear, Missile & Space Digest

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A Fortnightly Newsletter from the Indian Pugwash Society

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A. India

- RPV test assembly completed for Kudankulam 5
- Budget: NPCIL gets Rs 9,410 cr as India seeks to ramp up nuclear capacity
- Pakistan PM Shehbaz Sharif Inaugurates 3rd Unit Of Nuclear Power Plant In Karachi
- ISRO has also carried out a few feasibility studies for a sub-orbital space tourism mission onboard a liquid propellant stage booster
- Union Minister Dr Jitendra Singh says, Government has not allowed external agencies to use ISRO facilities, and only Non-Government Indian entities (NGEs) are being allowed to use ISRO facilities and the technical support
- Centre in discussion with Westinghouse for setting up nuclear power plant in Srikakulam district of Andhra Pradesh
- Union Minister Dr Jitendra Singh says, there are a total of 111 payloads and 105 Space Debris identified as Indian Objects orbiting the Earth, as tracked and catalogued by USSPACECOM and published in Spacetrack website as on 20 January, 2023
- Azad Engineering is India's first supplier of parts for nuclear turbines
- Beyond The News: Boost to tech ties key takeaway of NSA Ajit Doval's visit
- India opens largest helicopter factory in new defence push
- France, India and UAE announce cooperation roadmap
- Western sanctions will not disrupt India-Russia defence partnership: BrahMos chief
- Union Minister Dr Jitendra Singh says, 135 applications have been received by IN-SPACE from 135 Non-Governmental Entities (NGEs) in the Space Sector till date
- Successful flight of Small Satellite Launch Vehicle (SSLV)
- India, Finland set to expand ties in quantum computing, nuclear tech
- Union Minister Dr. Jitendra Singh says, 22 Nuclear Power Reactors operational in the country



Indian Pugwash Society

No.1, Development Enclave,
Rao Tula Ram Marg, Near USI, Delhi-110010
Email: indianpugwashsociety@gmail.com

Tel. No (91-11) 2671-7983

Fax No. (91-11)2615-4192

- India aims to triple defense exports to \$5 bln, says PM Modi at Aero India show
- NTPC to have 2,000 MW nuclear power by 2032, and 20,000 MW by 2050
- Indigenous manufacturing of aero-engines need of the hour for aerospace sector to achieve complete self-reliance; MoD working on the details, says Raksha Mantri during DRDO seminar at Aero India 2023

B. Russia

- US GLSDB rockets can easily be hit by air defense systems, says LPR officer
- Over 1,000 Ukrainian MLRS combat vehicles destroyed during Russia's operation – top brass
- Russian air defenses down 13 drones, four Olkha, HIMARS rockets, one Tochka-U missile
- Russia's nuclear-powered sub Dmitry Donskoy withdrawn from service
- Russian air defenses down 15 HIMARS rockets in Ukraine operation – top brass
- Russia to complete delivery of 3rd batch of S-400 missile systems to India soon – envoy
- DPR's air defense must be strengthened in case Ukraine gets GLSDB bombs
- Cutting-edge missile frigate to join Russia's Northern Fleet this year
- Russia's Novaya Zemlya nuclear test site ready to resume tests if need be, says official
- Russia's top-notch anti-radar missile proves high efficiency in Ukraine operation – source
- CEO says BrahMos Aerospace can prepare hypersonic missile in 6 years
- IAEA boss to visit Moscow on February 9-10, Russian diplomat announces
- Rosatom, IAEA chiefs start talks in Moscow
- Russia ready to go ahead with creating security zone around ZNPP – Rosatom
- Russia's newly-built Tu-160M strategic bomber named after first woman in space
- NORAD fighter jets scrambled to intercept Russian strategic bombers off Alaska

C. Pakistan

- Pakistan launches \$2.7 billion China-designed nuclear plant
- China, Pakistan mark completion of Karachi 2&3 project
- Meet British-Pakistani Billionaire who bought warplanes for Ukraine to fight Russia
- Pakistan to supply arms to Ukraine via German port now

D. Europe

- European Parliament calls for Russia sanctions to include nuclear
- Statement by France, Germany, the United Kingdom, and the United States on the IAEA's Latest Report on Iran's Nuclear Programme
- IAEA Mission Sees Enhanced Safety at Research Reactor in Czech Republic, Encourages Continued Improvement
- France leads push for EU to boost nuclear-produced hydrogen
- NATO Urges Russia to Comply With Last US Nuclear Treaty
- Iran's nuclear programme at a 'dangerous point', Macron says after talks with Netanyahu
- Poland eyes boost for nuclear energy in EU power market reform
- BWRX-300 selected for Estonia's first nuclear power plant
- IEA highlights nuclear's key role in coming years

- IAEA's Network for Response and Assistance for Nuclear Emergencies Grows Beyond 40 Countries
- IAEA Sees Commitment to Operational Safety at Netherlands' Borssele Nuclear Power Plant, Encourages Continued Improvement
- Russia, IAEA discuss safety of Zaporizhzhia nuclear power plant
- EU opens door to 'green' nuclear-derived hydrogen

E. Ukraine

- Update 145 – IAEA Director General Statement on Situation in Ukraine
- IAEA chief's fresh Zaporizhzhia talks, Ukraine brings in nuclear sanctions
- Russia won't use nuclear weapon in Ukraine: Russian envoy Alipov
- SMRs, AUKUS, Ukraine and Hinkley Point C Nuclear Power Station in IAEA Grossi's Visit to UK
- Cameco to supply Ukraine's uranium needs to 2035
- Update 146 – IAEA Director General Statement on Situation in Ukraine

F. United States of America

- US accuses Russia of endangering nuclear arms control treaty
- How the US is boosting military alliances to counter China
- Austin Notes Progress on Development of Australia's Nuclear-Powered Sub
- NATO urges Russia to respect nuclear pact with the US
- Russia reportedly discussed crucial nuclear arms treaty with US ambassador
- Several US Universities to Experiment With Micro Nuclear Power
- U.S. Test Launches ICBM Into Pacific as Part of Nuclear 'Deterrence Mission'
- China plans to triple nuclear warheads to 900 by 2035 amid tensions with US
- How to bring innovation to America's nuclear strategy

West Asia

G. Iran

- Iran's Military Chief Calls for Broadening of Cooperation with N. Korea
- AEOI Chief: Iran's N. Sites Inspected by IAEA 2,000 Times in 2 Years
- Iran Dismisses IAEA Report on Undeclared Change at Fordow Nuclear Facility
- Commander: IRGC Navy Deploys Modern Military Equipment
- Tehran Raps IAEA's Unprofessional, Unacceptable Attitude towards Iran's Nuclear Program
- Iranian Army Unveils Strategic Underground Air Base
- Top Commander: Iranian Army Underground Bases to Host Various Fighters
- Iranian Nuclear Chief Advises IAEA to Act Professionally
- Official: 90 Countries Seeking to Purchase Iranian Drones
- Iran arrests elements behind sabotage at military facility
- Iran Reiterates Commitment to Nuclear Disarmament
- Iranian homegrown plane to fly soon
- Senior Commander: Iran's Bavar 373 Missile Defense System Rivals Russia's S-400
- Pentagon says Washington, allies infuriated at Iranian drones
- Official: Iran Turns into Military Equipment Exporter Amid Sanctions

H. Israel

- US CENTCOM pulls closer to Israeli military as Mossad tests Iran
- IDF enemy simulation: getting into Hezbollah's head
- Elbit Systems to participate in India's top aerospace and defense exhibition
- IAI to showcase latest defense solutions at Aero India
- Israel's Steadicopter joins forces with Emirates Defense Technology
- Elbit Systems delivers its 600,000 Operational Tactical Radio
- From Israel to Egypt, how Adani Group's downfall could reverberate in Middle East
- SMARTSHOOTER to Present multi-purpose SMASH Hopper at IDEX
- HevenDrones launches hydrogen-powered drone for commercial, defense use

I. Qatar

- India's Petronet seeks more LNG under long-term Qatar deal
- US, Qatar Reportedly Discuss Talks To Revive Iran Nuclear Deal
- The U.S. and Iran are holding indirect talks on a possible prisoner exchange, with the help of the U.K. and Qatar, sources say

J. Saudi Arabia

- GCC's Iran nuclear talks proposal should be taken seriously
- Saudi, France to boost co-operation in nuclear energy sector
- Nuclear energy offers 'a golden opportunity' to build a clean world

K. Syria

- Attia: Syria doesn't recognize OPCW (Investigation and Identification Team) or its reports
- Ambassador Sabbagh: Syria warned that incorrect track of OPCW teams on alleged Douma incident will lead to false conclusions

L. Turkey

- 'Time to fly': Türkiye unveils domestic light attack jet
- US Congress wants to link F-16 sale to Türkiye to Nordic NATO bid
- Turkish defense industry radar saves lives in quake-hit regions
- Bayraktar UAVs provide uninterrupted support for earthquake relief in Türkiye

East Asia

M. North Korea

- North Korea warns of 'overwhelming nuclear force' to counter U.S. expansion
- N Korea says US drills pushing situation to 'extreme red-line'
- US and South Korea's Joint Military Drills Infuriate North Korea
- UN chief fears world 'sleepwalking into wider war' - as North Korea steps up preparedness
- North Korea shows off largest-ever number of nuclear missiles at nighttime parade

N. South Korea

- South Korea's KEPCO submits bid to build nuclear plant in Türkiye
- How a New U.S.-South Korea Deal Can Deter the North Korean Nuclear Threat
- South Korea Planning Ballistic Missile Test Launch on Friday: Report
- United States, South Korea stage air drills despite North Korean complaints
- Blinken: US Committed to Improving Allied Defense of South Korea
- Nuclear Envoys of US, South Korea Downplay Seoul's Nuclear Intent
- South Korean partnership to develop SMR-powered ships

O. Japan

- China urges Japan to dispose of nuclear-contaminated water safely
- Japan's Takahama 4 experiences automatic shutdown
- Japan to be more proactive in selecting disposal sites for nuclear waste
- Japan NRA delays decision on nuclear reactor operating life
- Cabinet approves change in Japanese nuclear policy
- Japan urged to work with intl community over nuclear-contaminated water
- Japan formally adopts policy of using nuclear reactors beyond 60 yrs
- NRA approves use of Japanese reactors beyond 60 years

P. Australia

- Australia's First Nuclear Submarine Could Be a Reality in Less Than 30 Years, Former PACOM Commander Testifies

A. India

RPV test assembly completed for Kudankulam 5

Nuclear Engineering International, February 1, 2023

The Volgodonsk branch of AEM-Technologies (part of Rosatom's mechanical engineering division Atomenergomash) has assembled the reactor vessel (RPV) with internals that has been manufactured for unit 5 of India's Kudankulam NPP. The control assembly was carried out using an underground caisson stand. First, specialists using a crane with a lifting capacity of 600 tons installed the 11-metre VVER-1000 RPV in its position. Next, one by one, a 10-metre internal shaft weighing 73 tons, a baffle of 38 tons, and a block of protective pipes weighing 68 tons were lowered inside. The nuclear reactor was then closed with a standard lid. The total weight of the assembled product was 603 tons.

<https://www.neimagazine.com/news/newsrpv-test-assembly-completed-for-kudankulam-5-10560664>

Budget: NPCIL gets Rs 9,410 cr as India seeks to ramp up nuclear capacity

Business Standard, February 1, 2023

NPCIL, India's sole nuclear power plant operator, on Wednesday received an allocation of Rs 9,410 crore in the Union Budget for 2023-24 as it sets out to ramp up atomic power generation capacity in the country. The allocation to the Nuclear Power Corporation of India Limited (NPCIL) was an increase of Rs 2,859 crore (more than 43 per cent) over the revised estimate of Rs 6,551 crore of the current fiscal. In addition to the budgetary allocation, the NPCIL will raise an additional Rs 12,863 crore through Internal and Extra Budgetary Resources, which constitutes the resources raised by the PSUs through profits, loans and equity. The Department of Atomic Energy has been allocated Rs 25,078.49 crore which is lower than Rs 25,965.67 crore it had received in the revised estimates in the 2022-23 fiscal.

<https://www.business-standard.com/budget/article/budget-npcil-gets-rs-9-410-cr-as-india->

[seeks-to-ramp-up-nuclear-capacity-123020101843_1.html](https://www.outlookindia.com/business/pakistan-pm-shehbaz-sharif-inaugurates-3rd-unit-of-nuclear-power-plant-in-karachi-news-258981)

Pakistan PM Shehbaz Sharif Inaugurates 3rd Unit Of Nuclear Power Plant In Karachi

Outlook, February 2, 2023

Pakistan Prime Minister Shehbaz Sharif on Thursday inaugurated the third unit of the Karachi Nuclear Power Plant (KANUPP) built with Beijing's assistance under the ambitious China-Pakistan Economic Corridor. Known as the K-3, the plant will provide 1,100 megawatts of electricity to the national grid. While addressing the inauguration ceremony, Sharif said Pakistan's energy fuel import bill has reached to USD 27 billion and the country urgently needed alternative and cheaper sources of energy including solar, wind, hydel and nuclear. Sharif said Pakistan has enormous potential of producing 60,000 megawatts through hydel power, but so far only 10,000 megawatts were being produced. The K-3 is a step forward in the Pak-China cooperation and the electricity projects under the China-Pakistan Economic Corridor (CPEC) are greatly contributing to meeting the country's energy demands, he said.

<https://www.outlookindia.com/business/pakistan-pm-shehbaz-sharif-inaugurates-3rd-unit-of-nuclear-power-plant-in-karachi-news-258981>

ISRO has also carried out a few feasibility studies for a sub-orbital space tourism mission onboard a liquid propellant stage booster

PIB, February 2, 2023

In a written reply to a question in the Rajya Sabha, Dr Jitendra Singh said, ISRO has also carried out a few feasibility studies for a sub-orbital space tourism mission onboard a liquid propellant stage booster.

Dr Jiteitendra Singh said, through Gaganyaan, India's maiden human spaceflight programme, ISRO is engaged in development of various technologies, which are essential building blocks for

human space missions. The Minister informed that the objective of the Gaganyaan programme is the demonstration of human spaceflight capability to Low earth orbit. Future missions will be taken up after the accomplishment of Gaganyaan mission, he added.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1895793>

Union Minister Dr Jitendra Singh says, Government has not allowed external agencies to use ISRO facilities, and only Non-Government Indian entities (NGEs) are being allowed to use ISRO facilities and the technical support

PIB, February 2, 2023

Union Minister of State (Independent Charge) Atomic Energy and Space, Dr Jitendra Singh today said, Government has not allowed external agencies to use ISRO facilities, and only Non-Government Indian entities (NGEs) are being allowed to use ISRO facilities and the technical support, as applicable, through IN-SPACe. In a written reply to a question in the Rajya Sabha, Dr Jitendra Singh said, recent facilities used by NGEs include the Sounding Rocket Launch Complex at SHAR by M/s. Skyroot for its mission PRARAMBH and the Vertical Test Facility at Thumba Equatorial Rocket Launching Station (TERLS), Thiruvananthapuram by M/s. Agnikul Cosmos Pvt. Ltd. for hot testing of its engine - Agnilet.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1895818>

Centre in discussion with Westinghouse for setting up nuclear power plant in Srikakulam district of Andhra Pradesh

The Hindu, February 2, 2023

The Central government is in discussions with Westinghouse Electric Company, USA, for setting up "six nuclear power plants" at

Kovvada in Srikakulam district, leading to the finalisation of the project proposal, including its cost and schedule. Union Minister of State for Personnel, Public Grievances and Pensions, and PMO Jitendra Singh made a statement to that effect in the Rajya Sabha on behalf of the Prime Minister in response to a question asked by YSR Congress MP V. Vijaya Sai Reddy on Thursday. Mr. Singh said pre-project activities i.e. land acquisition, obtaining statutory clearances and site investigations were underway. Mutation (transfer) of 2,061.1 acres of plant site land (out of total 2,079.66 acres) in the name of the Nuclear Power Corporation of India Limited has been completed.

<https://www.thehindu.com/news/national/andhra-pradesh/centre-in-discussion-with-westinghouse-for-setting-up-six-nuclear-power-plants-in-srikakulam-district-of-andhra-pradesh/article66463473.ece>

Union Minister Dr Jitendra Singh says, there are a total of 111 payloads and 105 Space Debris identified as Indian Objects orbiting the Earth, as tracked and catalogued by USSPACECOM and published in Spacetrack website as on 20 January, 2023

PIB, February 2, 2023

Union Minister of State (Independent Charge) Atomic Energy and Space, Dr Jitendra Singh today informed that there are a total of 111 payloads and 105 Space Debris identified as Indian Objects orbiting the Earth, as tracked and catalogued by USSPACECOM and published in spacetrack website, as on 20 Jan. 2023. In a written reply to a question in the Rajya Sabha, Dr Jitendra Singh said, all orbiting debris will have impact on the sustainability of outer space and future missions and added that ISRO has been carrying out many studies on impacts of growing space debris on space environment.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1895823>

Azad Engineering is India's first supplier of parts for nuclear turbines

Business Standard, February 3, 2023

Azad Engineering Private Limited, a Hyderabad-based market leader in precision engineering, has been approved as the first Indian company to supply critical rotating parts for nuclear turbines.

The company has delivered its first set of critical parts. These will now be assembled on nuclear turbines manufactured in Belfort, France. Azad Engineering has signed a long-term supply agreement with General Electric (GE) Steam Power for the supply of nuclear turbine parts. This, the company says, opens up a very big supply opportunity. "We feel very proud and delighted to announce that we are the first and only Indian company to get approved for nuclear parts. We have also signed a long-term agreement with GE Steam Power to manufacture critical rotating parts for nuclear turbines in one of the most stringent environments," said Rakesh Chopdar, who manages Azad Engineering.

https://www.business-standard.com/article/companies/azad-engineering-is-india-s-first-supplier-of-parts-for-nuclear-turbines-123020201509_1.html

Beyond The News: Boost to tech ties key takeaway of NSA Ajit Doval's visit

Hindustan Times, February 3, 2023

In an era where technology will shape future global equations and competitiveness among big powers, the result of three-day visit of national security advisor (NSA) Ajit Doval was a clear enunciation of the US's commitment towards India on sharing the most critical technologies. NSA Doval was able to leverage the global strategic relationship with US into enhancing Indian capacity and capability-building rather than merely creating diplomatic space. The two countries have decided, with specific deadlines, to collaborate on technologies that

will shape the future in a globalised 21st century. Simply put, the assurances are among the biggest game-changers in the India-US relationship – following-on from the 2005 civilian nuclear deal, the 2008 exemption for India by the Nuclear Suppliers Group (NSG), and the 2010 support from then US president Barack Obama for India's entry into NSG, the Missile Technology Control Regime (MTCR), the Wassenaar Arrangement, the Australia Group, and permanent candidature to the UN Security Council.

<https://www.hindustantimes.com/india-news/beyond-the-news-boost-to-tech-ties-key-takeaway-of-nsa-ajit-doval-s-visit-101675362992275.html>

India opens largest helicopter factory in new defence push

Dawn, February 6, 2023

India unveiled on Monday its largest helicopter factory, which can turn out at least 1,000 aircraft a year, as part of a defence self-reliance push to counter China's growing assertiveness. New Delhi also announced a double-digit increase in its annual defence budget last week with an eye on its geopolitical rival, with which it shares a disputed northern border. India is one of the largest arms importers in the world and, even with its recent push towards local defence production, still relies heavily on hardware from Moscow, its largest and oldest military supplier. The new helicopter facility fulfils "our government's pledge to gradually reduce India's dependence on foreign countries for its defence needs", Prime Minister Narendra Modi said after the inauguration.

<https://www.dawn.com/news/1735656>

France, India and UAE announce cooperation roadmap

World Nuclear News, February 6, 2023

The foreign ministers of the three nations have formally announced a trilateral initiative which will focus on solar and

nuclear energy, as well as the fight against climate change and the protection of biodiversity, particularly in the Indian Ocean region. The UAE's Minister of Foreign Affairs and International Cooperation Abdullah bin Zayed Al Nahyan, France's Minister for Europe and Foreign Affairs Catherine Colonna and India's Minister of External Affairs Subrahmanyam Jaishankar agreed to establish a formal trilateral cooperation initiative last September, when they met on the margins of the United Nations General Assembly in New York. "It is in this context that a phone call between the three Ministers was held today to adopt a roadmap for the implementation of this initiative," they said on 4 February.

<https://www.world-nuclear-news.org/Articles/France,-India-and-UAE-announce-cooperation-roadmap>

Western sanctions will not disrupt India-Russia defence partnership: BrahMos chief

The Economic Times, February 8, 2023

BrahMos Aerospace is a joint venture between India and Russia that specialises in nuclear-capable supersonic missiles. The company currently manufactures the BrahMos missile and is currently developing the BrahMos II, a hypersonic cruise missile. The India-Russia defence partnership will "never" be disrupted by the Western sanctions on Moscow, BrahMos Aerospace chief said on Wednesday, saying it's the "trust" that makes this partnership work. The West, led by the US, has imposed crippling sanctions on Russia for its invasion of Ukraine in February 2022. BrahMos Aerospace is a joint venture between India and Russia that specialises in nuclear-capable supersonic missiles. The company currently manufactures the BrahMos missile and is currently developing the BrahMos II, a hypersonic cruise missile.

<https://economictimes.indiatimes.com/news/defence/western-sanctions-will-not-disrupt-india-russia-defence-partnership-brahmos-chief/articleshow/97741970.cms>

Union Minister Dr Jitendra Singh says, 135 applications have been received by IN-SPACe from 135 Non-Governmental Entities (NGEs) in the Space Sector till date

PIB, February 8, 2023

Union Minister of State (Independent Charge) Atomic Energy and Space, Dr Jitendra Singh today informed that till date, 135 applications have been received by IN-SPACe from 135 Non-Governmental Entities (NGEs) in the Space Sector. Dr Jitendra Singh today laid a Statement on the table of the Lok Sabha in reply to a question on Start-Ups in Space and informed that a new Seed fund scheme has been approved by IN-SPACe Board to provide initial financial assistance to Indian space start-ups. Dr Jitendra Singh said, a revised FDI policy in space sector to facilitate overseas investment in NGEs and a National Space Policy are in the process of final approval of the Government.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1897335>

Successful flight of Small Satellite Launch Vehicle (SSLV)

PIB, February 10, 2023

Today, Small Satellite Launch Vehicle (SSLV) successfully launched three satellites into their intended orbits. In its second developmental flight, the SSLV-D2 vehicle placed EOS-07, Janus-1 and AzaadiSAT-2 satellites into their intended 450 km circular orbit with an inclination of 37 degrees. It took-off from the first launch pad at Satish Dhawan Space Centre, Sriharikota at 09:18 hours IST and took about 15 minutes to inject the satellites. SSLV is the new small satellite launch vehicle developed by ISRO to cater the launch of small satellites up to 500 kg to Low Earth Orbits on 'launch-on-demand' basis. It is configured with three solid stages 87 t, 7.7 t and 4.5 t respectively.

SSLV is a 34 m tall, 2 m diameter vehicle having a lift-off mass of 120 t. A liquid propulsion-based Velocity Trimming Module (VTM) achieves desired velocity for the insertion of the satellites into the intended orbit. SSLV is capable of launching Mini, Micro, or Nanosatellites (10 to 500 kg mass) to a 500 km orbit. It provides low-cost access to Space, offers low turn-around time, facilitates flexibility in accommodating multiple satellites and demands minimal launch infrastructure.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1897963>

India, Finland set to expand ties in quantum computing, nuclear tech

Livemint, February 10, 2023

India and Finland are looking to expand ties across a range of cutting-edge technologies including in quantum computing and nuclear energy. According to persons aware of the matter, India's Centre for the Development of Advanced Computing (C-DAC) and Finland's IQM Quantum Computers are expected to sign a memorandum of understanding (MoU) to expand cooperation on quantum computing research. C-DAC functions under the ministry of electronics and information technology while IQM is a major player in the quantum computing hardware market. In December last year, IQM signed an MoU with Tech Mahindra to expand research on quantum computing. In response to a press query from *Mint*, IQM confirmed that discussions were underway but did not indicate a firm date for the MoU.

<https://www.livemint.com/news/world/india-finland-set-to-expand-ties-in-quantum-computing-nuclear-tech-11675964137598.html>

Union Minister Dr. Jitendra Singh says, 22 Nuclear Power Reactors operational in the country

PIB, February 9, 2023

India's Nuclear Power capacity witnessed a quantum jump after 2014, when Narendra Modi took over as the Prime Minister. Going by the exact figures, in the year 2013-14 if the annual nuclear power generation stood

at 35,333 Million Units, in the latest year of 2021-22 it stands at 47,112 Million Units which is nearly 30 to 40 percent increase within a short span of over eight and a half years. This was stated here today in the Rajya Sabha by Union Minister of State (Independent Charge) Atomic Energy and Space, during a discussion in the Rajya Sabha on nuclear power reactors. The Minister cited a number of path-breaking out-of-the-box decisions taken by Prime Minister Narendra Modi to supplement the rise of nuclear power generation in India. For example, he said, if there were only 22 reactors in the country before this government came in, the cabinet headed by Prime Minister Modi gave simultaneous bulk approval for as many as 11 indigenous pressurised heavy water reactors in 2017 at a total cost of Rs.1,05,000 crore and total capacity of 7,000 Mega Watts.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1897803>

India aims to triple defense exports to \$5 bln, says PM Modi at Aero India show

Alarabiya News, February 13, 2023

India wants to more than triple annual defense exports to \$5 billion by 2024/25 from \$1.5 billion currently as it looks to ramp up domestic manufacturing, Prime Minister Narendra Modi said on Monday while inaugurating the Aero India show. The country is looking to sign defense deals worth 750 billion rupees (\$9 billion) at the biennial five-day event, its biggest ever, as its airlines try to complete jetliner purchases to meet civilian demand and press global aircraft manufacturers to produce more locally, mainly through partnerships. "Today, India is not just a market for defense companies, it is also a potential defense partner," Modi said in his speech at the show. "I call on India's private sector to invest more and more in the country's defence sector."

<https://english.alarabiya.net/business/economy/2023/02/13/India-aims-to-triple-defense-exports-to-5-bln-says-PM-Modi-at-Aero-India-show>

NTPC to have 2,000 MW nuclear power by 2032, and 20,000 MW by 2050

Money Control, February 13, 2023

India's largest electricity producer, state-run NTPC Limited, will build a clutch of nuclear power plants to help the country's target of achieving net-zero emissions by 2070. As per the its initial plan, the power major will start generating 2,000 MW of nuclear energy by 2032, 4,200 MW by 2035 and eventually scale up to 20,000 MW by 2050, senior NTPC officials shared with *Moneycontrol*. Apart from capacity addition through pressurised heavy water reactors (PHWR), NTPC is also planning to add nuclear capacity through small modular reactors. It also intends to do fuel tie-ups with Uranium Corporation of India Ltd to ensure requisite feedstock availability.

<https://www.moneycontrol.com/news/business/companies/ntpc-to-have-2000-mw-nuclear-power-by-2032-and-20000-mw-by-2050-10068911.html>

Indigenous manufacturing of aero-engines need of the hour for aerospace sector to achieve complete self-reliance; MoD working on the details, says Raksha Mantri during DRDO seminar at Aero India 2023

PIB, February 14, 2023

Ministry of Defence is working on the details of indigenous manufacturing of aero-engines to provide a new fillip to the aerospace sector and achieve complete self-reliance. This was stated by Raksha Mantri Shri Rajnath Singh during his inaugural address at a seminar titled 'Indigenous Development of 'Futuristic Aerospace Technologies including Way Forward for Development of Indigenous Aero Engines', organised by Defence Research & Development Organisation (DRDO) as part of 14th Aero India in Bengaluru on February 14, 2023. Shri Rajnath Singh stated that after completing 75 years of independence, India is entering 'Amrit Kaal' and it is time to ensure that Indian aircraft fly with indigenously-made engines. He stressed on

the need to focus on indigenous design & development of essential weapon systems using niche technologies like Artificial Intelligence, drones, stealth, hypersonic and quantum computing.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1899167>

B. Russia

US GLSDB rockets can easily be hit by air defense systems, says LPR officer

TASS, February 4, 2023

Ground Launched Small Diameter Bombs (GLSDB) Washington plans to supply to Kiev have a low velocity and can easily be downed by air defense systems deployed in the Lugansk People's Republic (LPR), Andrey Marochko, a retired colonel of the LPR People's Militia, told TASS on Friday.

"GLSDB's flight velocity is much lower than, say, that of type M31 HIMSARS rockets Ukraine is now receiving. Hence, our air defense systems will have more time to target and hit them," he said, adding that there is no official data about GLSDB rockets' range while open sources provide varying information. "Some sources say these rockets can fly to a distance of up to 150 kilometers, but there is no official verification. Many say the range is 130 kilometers," he said.

<https://tass.com/defense/1571327>

Over 1,000 Ukrainian MLRS combat vehicles destroyed during Russia's operation – top brass

TASS, February 4, 2023

The Russian armed forces have destroyed more than 1,000 combat vehicles of multiple rocket launch systems (MLRS) during the special military operation, Defense Ministry Spokesman Lieutenant-General Igor Konashenkov reported on Saturday. "A total of 382 Ukrainian warplanes, 206 helicopters, 3,021 unmanned aerial vehicles, 403 surface-to-air missile systems, 7,737 tanks and other armored combat vehicles, 1,007 multiple

rocket launchers, 3,996 field artillery guns and mortars and 8,262 special military motor vehicles have been taken out since the special military operation began in Ukraine,” he said at briefing on the course of the special military operation.

<https://tass.com/defense/1571427>

Russian air defenses down 13 drones, four Oikha, HIMARS rockets, one Tochka-U missile

TASS, February 4, 2023

Russian air defense forces destroyed 13 Ukrainian drones, four Oikha and HIMARS rockets as well as one Tochka-U missile in the zone of the special military operation over the past day, Defense Ministry Spokesman Lieutenant-General Igor Konashenkov reported on Saturday. “Over the past 24 hours, the anti-aircraft defense weapons destroyed 13 unmanned aerial vehicles near Raigorodka, Belogorovka, Kremennaya, Golikovo, and Krasnorechenskoye in the Lugansk People’s Republic; Aleksandrovka, Novosyolovka, Staromayorskoye in the Donetsk People’s Republic; Malaya Tokmachka and Stepanovka in the Zaporozhye Region, and Tyaginka in the Kherson Region,” he said at a briefing on the course of the special military operation.

<https://tass.com/defense/1571429>

Russia’s nuclear-powered sub Dmitry Donskoy withdrawn from service

TASS, February 6, 2023

The Russian Navy’s Project 941 Akula-class heavy nuclear-powered strategic submarine Dmitry Donskoy has been decommissioned, head of the Russian Movement for Navy Support Vladimir Maltsev told TASS. “The Dmitry Donskoy submarine cruiser has been decommissioned from the Russian Navy. It will await utilization at a naval base in Severodvinsk together with two other units of this project,” he said. The Dmitry Donskoy was laid down by the Sevmas Shipyard in 1976 and launched on September 29, 1980. The acceptance report

was signed on December 29, 1981. Initially, intercontinental ballistic missiles of the D-19 complex were the main weapon of the submarine. In 2002, the sub was upgraded under project 941UM. Then, it was used to test the Bulava missile. In the summer of 2017, the Dmitry Donskoy sailed to the Baltic Fleet to take part in the Navy parade.

<https://tass.com/defense/1571657>

Russian air defenses down 15 HIMARS rockets in Ukraine operation – top brass

TASS, February 6, 2023

Russian air defense forces shot down four Ukrainian unmanned aerial vehicles and 15 HIMARS rockets over the past day during the special military operation in Ukraine, Defense Ministry Spokesman Lieutenant-General Igor Konashenkov reported on Monday. “In the past 24 hours, air defense capabilities shot down four Ukrainian unmanned aerial vehicles in areas near the settlements of Kremennaya in the Lugansk People’s Republic, Nikolskoye and Volnovakha in the Donetsk People’s Republic and Velikaya Lepetikha in the Kherson Region,” the spokesman said. “In addition, they shot down 15 rockets of the HIMARS multiple launch rocket system near the communities of Kremennaya in the Lugansk People’s Republic, Kirillovka, Blagoveshchenka and Olginka in the Donetsk People’s Republic,” the general added.

<https://tass.com/defense/1572137>

Russia to complete delivery of 3rd batch of S-400 missile systems to India soon – envoy

TASS, February 6, 2023

The delivery of the third batch of S-400 air defense systems to India will be completed shortly, Russia’s Ambassador in New Delhi Denis Alipov said on Monday. “On S-400 I can say, the third part of supplies will be completed in the very near future.” the ambassador said at

the conference: “Next Steps in India-Russia Strategic Partnership” dedicated to the 30th anniversary of the friendship treaty signed between the two countries. The head of the Russian diplomatic mission stressed that “both sides have been committed to completion of the whole of the contract. We certainly will do that. Nothing prevents that,” Alipov said.

<https://tass.com/defense/1572281>

DPR’s air defense must be strengthened in case Ukraine gets GLSDB bombs

TASS, February 6, 2023

The US plans for supplying the Ukrainian army with ground-launched small-diameter bombs (GLSDB) having a range of about 150 kilometers will require measures to strengthen the Donetsk People’s Republic’s air defenses and to move the engagement line as far as possible away, the DPR’s acting head Denis Pushilin has said. “We are well aware that if the enemy obtains such weapons, we will have to push its forces farther away from the DPR’s territory to a point from where it will be physically unable to reach our communities. While this process - the liberation of the territory - is underway, we should give thought to additional air defense and missile defense measures,” Pushilin said on the Rossiya-24 TV channel.

<https://tass.com/politics/1572301>

Cutting-edge missile frigate to join Russia’s Northern Fleet this year

TASS, February 7, 2023

The Project 22350 latest missile frigate Admiral Golovko currently undergoing the third round of tests will enter service with the Northern Fleet this year, Russia’s Defense Ministry said in a statement released after a meeting chaired by Navy Commander-in-Chief Admiral Nikolay Yevmenov on Tuesday. A source close to the domestic defense industry earlier told TASS that the Project 22350 frigate Admiral Golovko was set for delivery to the Russian Navy in March this year. “Under the plans, the frigate

Admiral Golovko will enter service with the Northern Fleet this year while the corvette Merkury will replenish the Black Sea Fleet’s formation of surface ships,” the statement reads.

<https://tass.com/defense/1572883>

Russia’s Novaya Zemlya nuclear test site ready to resume tests if need be, says official

TASS, February 8, 2023

The Novaya Zemlya nuclear testing ground is ready to resume nuclear tests, if need be and given the corresponding political will, Vyacheslav Solovyov, scientific head of the Russian Federal Nuclear Center - All-Russian Scientific Research Institute of Experimental Physics, told TASS on Wednesday. “It is ready,” he said, replying to the corresponding question. As Solovyov explained, “a special program is in effect to maintain the testing site’s readiness.” The Novaya Zemlya nuclear test site is maintained by the Russian Defense Ministry’s 12th Main Department. From September 21, 1955 to October 24, 1990, 130 tests were carried out at the nuclear test site, including 88 atmospheric, three underwater and 39 underground tests.

<https://tass.com/defense/1573143>

Russia’s top-notch anti-radar missile proves high efficiency in Ukraine operation – source

TASS, February 8, 2023

The air-launched anti-radiation missile developed and produced by Russia’s Tactical Missiles Corporation has proven its high efficiency in the special military operation in Ukraine due to its new multi-purpose warhead, a source in the domestic defense ministry told TASS on Wednesday. “The latest air-launched anti-radiation missile was outfitted with a top-notch multi-purpose warhead capable of engaging all types of targets,” the source said. The new anti-radar missile has proven its high efficiency in the zone of

the special military operation in Ukraine, he stressed. The previous missile of this type had three different warheads employed depending on the designated target, he explained.

<https://tass.com/defense/1573165>

CEO says BrahMos Aerospace can prepare hypersonic missile in 6 years

TASS, February 8, 2023

The Indian-Russian company BrahMos Aerospace, in case of order, will be able to design a hypersonic missile in six years, Atul Rane, the company's managing director and CEO, told TASS on Wednesday. "First, the users need to tell us they need [such a missile]. In six year's time, it's possible," Rane said. He noted that hypersonic weapons do not yet exist en masse in the world. However, all countries have been working on such weapons: Russia, China, the US, as well as India.

<https://tass.com/defense/1573339>

IAEA boss to visit Moscow on February 9-10, Russian diplomat announces

TASS, February 9, 2023

Director General of the International Atomic Energy Agency (IAEA) Rafael Grossi will visit Moscow on Thursday and Friday, Russian Deputy Foreign Minister Sergey Ryabkov revealed. "Yes, the IAEA chief will be staying in Moscow today and tomorrow," Ryabkov said at a news conference. Russia is planning to have a detailed discussion with Grossi on establishing a security zone around the Zaporozhye nuclear power plant (ZNPP) and other aspects of cooperation with the IAEA, he added. "We will have an interesting talk. That is, protecting the ZNPP is the number one topic, it's a priority, and we will also discuss other aspects, including the JCPOA," the senior Russian diplomat specified.

<https://tass.com/defense/1573991>

Rosatom, IAEA chiefs start talks in Moscow

TASS, February 9, 2023

Rosatom Director General Alexey Likhachev and International Atomic Energy Agency Director General Rafael Grossi have started talks in Moscow that will focus on the establishment of a safety zone around the Zaporozhye nuclear power plant, the Strana Rosatom newspaper reported on Thursday. "Rosatom Director General Alexey Likhachev and IAEA head Director General Rafael Grossi have started talks in Moscow. They will focus on the establishment of safety zone around the Zaporozhye NPP," the newspaper said on its Telegram channel.

<https://tass.com/defense/1574119>

Russia ready to go ahead with creating security zone around ZNPP – Rosatom

TASS, February 9, 2023

Russia is ready to go ahead with creating a security zone around the Zaporozhye NPP and to discuss emerging issues, the Rosatom corporation's CEO Alexey Likhachev said at talks with the IAEA Director-General Rafael Grossi in Moscow on Thursday. "The discussion focused on ensuring the nuclear and physical nuclear safety of the Zaporozhye NPP," Rosatom's press-service said. "Likhachev briefed the IAEA director-general on steps that the Russian side was taking to this end. In addition, current and future cooperation between Russia and the IAEA in other areas was touched upon. The parties confirmed the consent to stay in touch," Rosatom's statement reads. Likhachev reviewed the measures aimed at ensuring comfortable social and living conditions for ZNPP personnel and their families, the press service said. Rafael Grossi, in turn, spoke about the progress in advancing his initiative to create a nuclear and physical security protection zone at the power plant.

<https://tass.com/defense/1574239>

Russia's newly-built Tu-160M strategic bomber named after first woman in space

TASS, February 14, 2023

The first Tupolev Tu-160M strategic missile-carrying bomber built under the resumed production program has been named after the Soviet cosmonaut and the first woman in space, Valentina Tereshkova, United Aircraft Corporation (UAC) Chief Yuri Slyusar told TASS at the Aero India 2023 international air show on Tuesday. "The first built Tu-160M has been named in honor of Valentina Tereshkova," he said. Tu-160 bombers traditionally get names of outstanding people in long-range aviation. In 2022, Tereshkova turned 85. In late 2022, the first Tupolev Tu-160M strategic missile-carrying bomber built anew, completed factory tests. During its test flight, the strategic bomber conducted maneuvers to check the aircraft's stability and control in the air, the working capacity of its airborne systems and engines, and the onboard radio-electronic equipment.

<https://tass.com/defense/1576091>

NORAD fighter jets scrambled to intercept Russian strategic bombers off Alaska

TASS, February 15, 2023

Fighter jets of the North American Aerospace Defense Command (NORAD) were scrambled on Monday to intercept Russia's Tu-95MS strategic bombers and Su-35 fighter jets, NORAD said on Tuesday. "The Alaskan Region of North American Aerospace Defense Command (NORAD) detected, tracked, positively identified and intercepted four Russian aircraft entering and operating within the Alaska Air Defense Identification Zone (ADIZ) on Feb. 13, 2023," NORAD said on Twitter. "The Russian aircraft included TU-95 BEAR-H and SU-35 fighter aircraft," it said. According to the NORAD statement, Russian planes "remained in international airspace and did not enter American or Canadian sovereign airspace."

<https://tass.com/defense/1576467>

C. Pakistan

Pakistan launches \$2.7 billion China-designed nuclear plant

The Peninsula, February 2, 2023

Pakistan inaugurated a \$2.7 billion nuclear reactor, providing some relief as the nation grapples with an energy crisis. The 1,100 megawatts capacity power plant will generate some of the nation's cheapest electricity, according to data from regulator National Electric Power Regulatory Authority. The facility was connected to the grid last March. It's the second unit at the Karachi nuclear power plant to use a Chinese-designed Hualong One reactor. China financed the facility's expansion. Pakistan "badly needs" clean and cheap sources of energy, whether it is nuclear, hydro or other renewables, Prime Minister Shehbaz Sharif said at a ceremony at the power plant in Karachi.

<https://thepeninsulaqatar.com/article/02/02/2023/pakistan-launches-27-billion-china-designed-nuclear-plant>

China, Pakistan mark completion of Karachi 2&3 project

World Nuclear News, February 3, 2023

During the event, speeches were made by Pakistan's Prime Minister Shabaz Sharif, Pakistan Atomic Energy Commission Chairman Ali Raza, China Atomic Energy Agency Deputy Director Liu Jing and CNNC General Manager Gu Jun. International Atomic Energy Agency Director General Rafael Mariano Grossi also delivered a speech via video. "Since entering commercial operation, the K-2 and K-3 units have generated nearly 20 billion kilowatt-hours of electricity, effectively alleviating the power shortage in Pakistan, as well as making positive contributions to Pakistan's social and economic development, energy security and independence, and addressing climate change," CNNC said. "At the same time, the K-2/K-3 project has provided more than 60,000 jobs for the local people throughout the whole cycle and trained a large number of local

industrial workers." Units 2 and 3 of the Karachi site - near Paradise Point in the province of Sindh - are the first exports of CNNC's 1100 MWe Hualong One pressurised water reactor, which is also promoted on the international market as HPR1000.

<https://www.world-nuclear-news.org/Articles/China,-Pakistan-mark-completion-of-Karachi-2-3-pro>

Meet British-Pakistani Billionaire who bought warplanes for Ukraine to fight Russia

The New Indian, February 4, 2023

A Pakistani-origin British richie-rich married to a Ukrainian is in the spotlight for his extravagant wartime gifts to Ukraine against Russians. During the peak of its conflict with Russia, the US and its allies were reluctant to supply fighter jets to Ukraine. A British Pakistani billionaire Mohammad Zahoor stepped in to provide Ukraine fighter jets to help in their war against Russians last year. This information was revealed to the world by Zahoor's wife Kamaliya (real name Natalya Shmarenkova) on a Ukrainian television talk show in May last year.

<https://newindian.in/meet-british-pakistani-billionaire-who-bought-warplanes-for-ukraine-to-fight-russia/>

Pakistan to supply arms to Ukraine via German port now

The Economic Times, February 11, 2023

Supplies of rockets were dispatched from the Karachi Port earlier this month and will enter Ukraine via Emden Port in Germany, said the people. More than 10,000 rockets meant for use in Grad multi-barrel rocket launchers have been shipped, they said. Although Pakistan has been pleading with Russia for discounted oil amid its economic crisis, it has been supplying arms to Ukraine on a regular basis, said one of the persons, who did not wish to be identified. Pakistan has reportedly stepped up military supplies to Ukraine via a German port, simultaneously with the

Poland route, to transfer rockets for use in multi-barrel rocket launchers, said people familiar with the matter. Supplies of rockets were dispatched from the Karachi Port earlier this month and will enter Ukraine via Emden Port in Germany, said the people. More than 10,000 rockets meant for use in Grad multi-barrel rocket launchers have been shipped, they said.

https://economictimes.indiatimes.com/news/defence/pakistan-to-supply-arms-to-ukraine-via-german-port-now/articleshow/97808726.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

D. Europe

European Parliament calls for Russia sanctions to include nuclear

World Nuclear News, February 3, 2023

The resolution "calls for the list of individuals and entities targeted by the sanctions to be expanded to include Russian companies still present on EU markets, such as Lukoil and Rosatom ... reiterates its call for an immediate and full embargo on imports of fossil fuels and uranium from Russia, and for the Nord Stream 1 and 2 pipelines to be completely abandoned". It also: "Condemns Russia's illegal occupation of Ukraine's Zaporizhzhia nuclear power plant and, in order to mitigate the risk of a nuclear or radiological incident, supports the proposal to set up a nuclear safety and security protection zone around it, as proposed by the International Atomic Energy Agency." The motion, backed by 489 votes to 36, with 49 abstentions, was designed to provide parliamentarians' expectations ahead of the summit of Ukraine and EU leaders on Friday. In addition to expanding the sanctions it also calls for further military assistance to Ukraine and steps towards the country joining the union.

<https://www.world-nuclear-news.org/Articles/European-Parliament-calls-for-Russia-sanctions-to>

Statement by France, Germany, the United Kingdom, and the United States on the IAEA's Latest Report on Iran's Nuclear Programme

UK Government, February 3, 2023

We, the governments of France, Germany, the United Kingdom and the United States, take note of the report by the International Atomic Energy Agency (IAEA) that Iran has implemented a substantial change in the configuration of some of its centrifuges without informing the Agency in advance. These centrifuges produce high-enriched uranium up to 60% and are located at the Fordow Enrichment Plant. As stated by the Agency, this unnotified change is inconsistent with Iran's obligations under its NPT-required Comprehensive Safeguards Agreement. Such lack of required notification undermines the Agency's ability to maintain timely detection at Iran's nuclear facilities. The newly reported change in configuration of centrifuge cascades used to produce near-weapons-grade uranium underscores the need for Iran to meet all its safeguards reporting obligations, and to accept whatever safeguards monitoring the IAEA sees as necessary in light of Iran's production of such highly enriched uranium.

<https://www.gov.uk/government/news/statement-by-france-germany-the-united-kingdom-and-the-united-states-on-the-iaeas-latest-report-on-irans-nuclear-programme>

IAEA Mission Sees Enhanced Safety at Research Reactor in Czech Republic, Encourages Continued Improvement

IAEA, February 3, 2023

An International Atomic Energy Agency (IAEA) team of experts said the Czech Republic had enhanced safety programmes and procedures at the country's first, and largest, research reactor, through implementation of the recommendations of a previous IAEA mission conducted in 2020. The team also found the need to continue to improve training and radiation monitoring practices. The four-day Integrated Safety Assessment of Research Reactor (INSARR)

follow-up mission was requested by the Government of the Czech Republic to assess implementation of safety measures at the 10 megawatt LVR-15 water cooled research reactor, which is located 10 km north of the capital Prague.

<https://www.iaea.org/newscenter/pressreleases/iaea-mission-sees-enhanced-safety-at-research-reactor-in-czech-republic-encourages-continued-improvement>

France leads push for EU to boost nuclear-produced hydrogen

Reuters, February 3, 2023

France is leading a campaign for the European Union to recognise low-carbon hydrogen produced from nuclear power in its renewable energy rules, but some member states oppose the idea for fear of undermining efforts to quickly scale up wind and solar. Ministers from France, Poland, the Czech Republic and six other EU countries wrote to the European Commission this week urging it to open up EU renewable energy targets to include hydrogen produced from nuclear energy. EU countries and lawmakers have been preparing for negotiations next week on the law, which will guide the pace of Europe's renewable energy expansion this decade.

<https://www.reuters.com/business/energy/france-leads-push-eu-boost-nuclear-produced-hydrogen-2023-02-03/>

NATO Urges Russia to Comply With Last US Nuclear Treaty

VOA News, February 3, 2023

NATO on Friday expressed concern that Russia was failing to comply with its last remaining nuclear arms control treaty with the United States. As tensions soar over Russia's invasion of Ukraine, leading NATO power the United States has accused Moscow of not meeting its commitments under the decade-old New START pact. On Tuesday, Washington slammed Russia for suspending inspections under the treaty and cancelling talks but did not accuse its Cold

War rival of expanding its nuclear warhead arsenal beyond agreed limits. "NATO allies agree the New START treaty contributes to international stability by constraining Russian and US strategic nuclear forces," the 30-strong alliance said in a statement.

<https://www.voanews.com/a/nato-urges-russia-to-comply-with-last-us-nuclear-treaty-/6946361.html>

Iran's nuclear programme at a 'dangerous point', Macron says after talks with Netanyahu

France 24, February 3, 2023

French President Emmanuel Macron denounced on Thursday the "headlong rush" of Iran's nuclear programme after talks with Israeli Prime Minister Benjamin Netanyahu, who was in Paris to seek a stronger European stance against Tehran. In a statement released after a dinner meeting in the Elysee Palace, Macron warned that Tehran continuing with the atomic project "would inevitably have consequences". Israel has long accused Iran of seeking a nuclear weapon, while Tehran insists its nuclear programme is aimed solely at generating energy. Netanyahu hopes Iran's role in supplying drones to Russian invaders in Ukraine, as well as its crackdown on protests at home, will prompt Western allies to drop any pursuit of a revival of the 2015 atomic programme deal.

<https://www.france24.com/en/europe/20230203-after-netanyahu-talks-macron-warns-of-iran-nuclear-consequences>

Poland eyes boost for nuclear energy in EU power market reform

The Economic Times, February 7, 2023

The European Union is set to propose a power market upgrade next month, to attempt to avoid a repeat of last year when cuts to Russian gas supply sent European power prices soaring, since gas plants often set overall electricity prices in the current EU system. Poland has urged the European Union to use upcoming reforms to Europe's

electricity market to do more to support investments in nuclear energy, according to a document seen by Reuters. The European Union is set to propose a power market upgrade next month, to attempt to avoid a repeat of last year when cuts to Russian gas supply sent European power prices soaring, since gas plants often set overall electricity prices in the current EU system.

<https://energy.economictimes.indiatimes.com/news/power/poland-eyes-boost-for-nuclear-energy-in-eu-power-market-reform/97679863>

BWRX-300 selected for Estonia's first nuclear power plant

World Nuclear News, February 8, 2023

Estonia's Fermi Energia has selected GE Hitachi Nuclear Energy's (GEH's) BWRX-300 small modular reactor (SMR) for potential deployment in the Baltic country by the early 2030s. Two other SMR designs had been under consideration. In September 2022, Fermi Energia said it would accept tenders from three SMR developers: GE Hitachi, NuScale and Rolls-Royce. Bids with the comprehensive technical documentation needed to estimate the construction cost were expected by December. The company said in the selection of technology, the criteria were technological maturity, the establishment of a reference plant, economic competitiveness and the participation of Estonian companies in the supply chain.

<https://www.world-nuclear-news.org/Articles/BWRX-300-selected-for-Estonia-s-first-nuclear-powe>

IEA highlights nuclear's key role in coming years

World Nuclear News, February 9, 2023

Renewables together with nuclear power are expected to meet the vast majority of the increase in global electricity demand over the next three years, making significant rises in the power sector's

carbon emissions unlikely, according to a new International Energy Agency (IEA) report. After slowing slightly in 2022 to 2% due to the global energy crisis and exceptional weather conditions in some regions, the growth in world electricity demand is expected to accelerate to an average of 3% through to 2025, the IEA's *Electricity Market Report 2023* finds. More than 70% of the increase in global electricity demand over the next three years is expected to come from China, India and Southeast Asia.

<https://www.world-nuclear-news.org/Articles/IEA-highlights-nuclear-s-key-role-in-coming-years>

IAEA's Network for Response and Assistance for Nuclear Emergencies Grows Beyond 40 Countries

IAEA, February 9, 2023

The IAEA's Response and Assistance Network (RANET), a group of states offering international assistance to countries responding to nuclear and radiological emergencies, has grown to 41 countries after Italy registered this week. Through RANET countries offer global support with radiological measurements, medical advice or treatment, and specialized equipment to help to mitigate the consequences of nuclear or radiological emergencies for human health, the environment, and property. Thanks to RANET, Ukraine has received vital equipment and other assistance coordinated by the IAEA to help ensure nuclear safety and security in the country since February 2022. The network was formally established in 2000. By registering with RANET, countries can fulfil one of their obligations under the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, adopted in 1986 after the Chernobyl nuclear power plant accident.

<https://www.iaea.org/newscenter/pressreleases/iaeas-network-for-response-and-assistance-for-nuclear-emergencies-grows-beyond-40-countries>

IAEA Sees Commitment to Operational Safety at Netherlands' Borssele Nuclear Power Plant, Encourages Continued Improvement

IAEA, February 9, 2023

An International Atomic Energy Agency (IAEA) team of experts said the operator of the Netherlands' Borssele nuclear power plant (NPP) is committed to ensuring operational safety and reliability of the plant, for example with its ageing management programme. The team also encouraged continued improvements, including with its radiation protection programme. The Operational Safety Review Team (OSART) concluded an 18-day mission to the Borssele NPP on 9 February to review operational safety at the plant on the request of the Dutch government. The aim of an OSART mission is to improve operational safety by independently assessing safety performance against the IAEA's safety standards, by proposing recommendations and, where appropriate, suggestions for improvement. Safety is an essential element during all phases of the lifetime of an NPP.

<https://www.iaea.org/newscenter/pressreleases/iaea-sees-commitment-to-operational-safety-at-netherlands-borssele-nuclear-power-plant-encourages-continued-improvement>

Russia, IAEA discuss safety of Zaporizhzhia nuclear power plant

The Economic Times, February 10, 2023

Russian officials and a delegation of the International Atomic Energy Agency (IAEA) held a new round of consultations in Moscow on cooperation in ensuring the safety of the Zaporizhzhia nuclear power plant (NPP). Alexei Likhachev, Director General of Russia's State Atomic Energy Corporation Rosatom, and IAEA Director General Rafael Grossi, participated in the talks among other representatives,

Rosatom said in a statement on Thursday. Likhachev informed Grossi of the steps the Russian side is taking to ensure the safety of the Zaporizhzhia NPP and provide comfortable social and living conditions for staff members and their families at the station, Xinhua news agency reported.

<https://energy.economictimes.indiatimes.com/news/power/russia-iaea-discuss-safety-of-zaporizhzhia-nuclear-power-plant/97794664>

EU opens door to 'green' nuclear-derived hydrogen

Reuters, February 13, 2023

The European Commission published rules on Monday that could allow some hydrogen produced in nuclear-based energy systems to count towards EU renewable energy goals, signalling a win for pro-nuclear France. Hydrogen is central to Europe's plans to decarbonise heavy industry, and the rules aim to incentivise investors and industries to shift from hydrogen produced from fossil fuels, to hydrogen produced instead from renewable electricity. The question of what the European Union will count as "renewable" has fuelled a dispute in recent months between France and countries such as Germany who say nuclear-based fuels should not be included. After a months-long delay amid lobbying from capitals, Brussels has now set out three types of hydrogen that will count towards the renewable targets.

<https://www.reuters.com/business/energy/eu-opens-door-green-nuclear-derived-hydrogen-2023-02-13/>

E. Ukraine

Update 145 - IAEA Director General Statement on Situation in Ukraine

IAEA, February 3, 2023

The main reservoir forming part of the Dnipro river, which provides cooling water for Ukraine's Zaporizhzhya Nuclear Power

Plant (ZNPP), has seen a recent reduction in water levels, in another indication of how the current conflict in the country is affecting infrastructure that is vital for nuclear safety and security, Director General Rafael Mariano Grossi said today.

The team of IAEA experts present at the site of Europe's largest nuclear power plant (NPP) - located on the frontlines of an active combat zone - reported that the water level in the Kakhovka reservoir has been reducing. However, by design, the large cooling pond next to the ZNPP reactor units is kept above the level of the Kakhovka reservoir.

<https://www.iaea.org/newscenter/pressreleases/update-145-iaea-director-general-statement-on-situation-in-ukraine>

IAEA chief's fresh Zaporizhzhia talks, Ukraine brings in nuclear sanctions

World Nuclear News, February 6, 2023

International Atomic Energy Agency Director General Rafael Mariano Grossi is expected in Russia this week for more talks on establishing a safety and security zone around the Zaporizhzhia nuclear power plant. Grossi has spent months seeking to get agreement on the details of a safety and security zone around the six-unit Zaporizhzhia nuclear power plant - Ukraine's largest - which has been under Russian military control since early March 2022. The plant is on the frontline of the war and parts of the site have been damaged by shelling during the war, as well as having had to use emergency diesel generators when connection to outside power sources has been lost. At the weekend he said: "While some progress has been made in those discussions, it remains too slow and more determined efforts are required from all sides."

<https://www.world-nuclear-news.org/Articles/IAEA-chief-to-hold-fresh-Zaporizhzhia-talks,-Ukrai>

Russia won't use nuclear weapon in Ukraine: Russian envoy Alipov

The New Indian, February 6, 2023

Amid concerns about the Russia-Ukraine conflict turning nuclear, the Russian envoy to India, Denis Alipov, assured that his nation won't use nuclear weapons in Ukraine unless the Kremlin is cornered in a dangerous situation. Ambassador Alipov's comments came during a one-day forum, 'Next Steps in India-Russia Strategic Partnership; Old Friends New Horizons', convened by the India Writes Network in association with the Centre for Global India Insights on India-Russia ties in New Delhi. Responding to a public query on the possible use of nuclear weapons, Ambassador Alipov remarked, "God forbid! This is unimaginable. Don't forget that the nuclear issue was first raised by the British in the context of the Ukraine conflict. They said that we were going to use, and Britain possibly would use, the nuclear option in the context of the Ukrainian conflict."

<https://newindian.in/russia-wont-use-nuclear-weapon-in-ukraine-russian-envoy-alipov/>

SMRs, AUKUS, Ukraine and Hinkley Point C Nuclear Power Station in IAEA Grossi's Visit to UK

IAEA, February 8, 2023

As the IAEA supports global efforts to tackle climate change and stop the spread of nuclear weapons, the United Kingdom of Great Britain and Northern Ireland (UK) is an indispensable partner to the Agency. That was a message from IAEA Director General Rafael Mariano Grossi this week during his three-day visit to the country in which he met with Foreign Secretary James Cleverly and Minister of State for Climate, Graham Stuart; spoke at Chatham House on a number of international challenges facing the IAEA; and toured the Hinkley Point C nuclear power station under construction in Somerset, England. Meeting with Foreign Secretary Cleverly in London on Monday, Mr Grossi thanked the UK for its support to the IAEA's mission. The two exchanged views on a number of issues

including nuclear verification in the Islamic Republic of Iran and the urgency of avoiding a nuclear accident at Zaporizhzhya Nuclear Power Plant (ZNPP) in Ukraine.

<https://www.iaea.org/newscenter/news/smrs-ukus-ukraine-and-hinkley-point-c-nuclear-power-station-in-iaea-grossi-visit-to-uk>

Cameco to supply Ukraine's uranium needs to 2035

World Nuclear News, February 9, 2023

Ukraine's state-owned nuclear energy utility Energoatom and Cameco Corporation have agreed commercial terms for a major supply contract that would see Cameco meeting Ukraine's needs for natural uranium for nuclear fuel until 2035. The contract will see the Canada-based fuel producer "provide sufficient volumes of natural uranium hexafluoride, or UF₆ (consisting of uranium and conversion services), to meet Ukraine's full nuclear fuel needs through 2035." The agreement will run from 2024 to 2035, with all deliveries in the form of UF₆. The contract - which the companies said they anticipate will be finalised during the first quarter of this year - will "contain a required degree of flexibility, given present circumstances in Ukraine".

<https://www.world-nuclear-news.org/Articles/Cameco-to-supply-Ukraine-s-uranium-needs-to-2035>

Update 146 - IAEA Director General Statement on Situation in Ukraine

IAEA, February 10, 2023

Director General Rafael Mariano Grossi held talks with senior Russian officials in Moscow this week as part of his ongoing efforts to agree and implement a much-needed nuclear safety and security protection zone around Ukraine's Zaporizhzhya Nuclear Power Plant (ZNPP), where a planned rotation of a team of experts from the International Atomic Energy Agency (IAEA) has been

delayed due to increased military activity. Director General Grossi – who also recently discussed the proposed zone with President Volodymyr Zelensky and other Ukrainian officials in Kyiv – met with the head of state nuclear company Rosatom, Alexey Likhachev, and an intra-governmental group of the Russian Federation after his arrival in Moscow on Thursday afternoon, and further discussions were held today at the Foreign Ministry.

<https://www.iaea.org/newscenter/pressreleases/update-146-iaea-director-general-statement-on-situation-in-ukraine>

F. United States of America

US accuses Russia of endangering nuclear arms control treaty

Defense News, February 2, 2023

Russia's refusal to allow the resumption of on-the-ground inspections is endangering the New START nuclear treaty and U.S.-Russian arms control overall, the Biden administration charged on Tuesday. The finding was delivered to Congress and summarized in a statement by the State Department. It follows months of more hopeful U.S. assessments that the two countries would be able to salvage cooperation on limiting strategic nuclear weapons despite high tensions over Russia's war on Ukraine. Inspections of U.S. and Russian military sites under the New START agreement were paused by both sides because of the spread of the coronavirus in March 2020. The U.S.-Russia committee overseeing implementation of the treaty last met in October 2021, but Russia then unilaterally suspended its cooperation with the treaty's inspection provisions in August 2022 to protest U.S. support for Ukraine.

<https://www.defensenews.com/global/the-americas/2023/02/01/us-accuses-russia-of-endangering-nuclear-arms-control-treaty/>

How the US is boosting military alliances to counter China

AP News, February 3, 2023

The U.S. is expanding its military presence in Asia, in a string of moves aimed at

countering Beijing and reassuring Indo-Pacific allies that America will stand with them against threats from China and North Korea. The U.S. actions stretch from Japan to the Solomon Islands. And they involve more and increasingly advanced military exercises in the region and additional troop rotations in key areas facing the Taiwan Strait and South China Sea. In some cases, they also could provide logistical support in the event of any conflict with China, specifically in defense of the self-governing island of Taiwan, which Beijing claims as its own.

<https://apnews.com/article/politics-antony-blinken-beijing-north-korea-china-9f9432c118f297fc27a9be01c460316e>

Austin Notes Progress on Development of Australia's Nuclear-Powered Sub

US Department of State, February 3, 2023

The U.S. and Australia signaled their continued commitment to AUKUS, which is the trilateral security pact among Australia, the United Kingdom and the U.S., formed in 2021, Secretary of Defense Lloyd J. Austin III said today. "We've already made significant progress on developing the optimal pathway for Australia to acquire a conventionally armed, nuclear-powered submarine capability at the earliest possible date. Our discussion today will help us to make further progress in our alliances and trilateral reach with AUKUS," the defense secretary said as he hosted an honor cordon and meeting at the Pentagon, welcoming Australian Deputy Prime Minister and Minister of Defense Richard Marles.

<https://www.defense.gov/News/News-Stories/Article/Article/3288279/austin-notes-progress-on-development-of-australias-nuclear-powered-sub/>

NATO urges Russia to respect nuclear pact with the US

AP News, February 3, 2023

NATO called Friday on Russia to respect the only treaty it has with the United States

aimed at keeping a lid on nuclear weapons expansion and urged Moscow to allow on-the-ground inspections of military sites to resume. The so-called New START Treaty was signed by Russia and the U.S. in 2010. It caps at 1,550 the number of long-range nuclear warheads they can deploy and limits the use of missiles that can carry atomic weapons. It allows short-notice inspections of each other's nuclear bases and support facilities. "We note with concern that Russia has failed to comply with legally-binding obligations under the New START Treaty," NATO ambassadors said in a statement. The 30-nation U.S.-led military alliance supports the treaty and believes that it helps to limit the expansion of nuclear forces.

<https://apnews.com/article/nato-politics-moscow-business-34f8d662548cc7da55fe7320e902a656>

Russia reportedly discussed crucial nuclear arms treaty with US ambassador

WION, February 7, 2023

Amid simmering tensions between Washington and Moscow, the Interfax news agency reported that Russia's deputy foreign minister Sergei Ryabkov claimed on Monday that he discussed the New START nuclear arms control treaty with new United States ambassador Lynne Tracy last week. The New START treaty is deemed crucial for global peace as it is a nuclear arms reduction treaty between the US and Russia. The treaty aims to have control over nuclear arms in both nations, but it is set to expire in 2026. Experts have raised concerns and urged that the treaty should be revived.

<https://www.wionews.com/world/russia-reportedly-discussed-crucial-nuclear-arms-treaty-with-us-ambassador-559395>

Several US Universities to Experiment With Micro Nuclear Power

VOA News, February 9, 2023

If your image of nuclear power is giant, cylindrical concrete cooling towers pouring

out steam on a site that takes up hundreds of acres of land, soon there will be an alternative: tiny nuclear reactors that produce only one-hundredth the electricity and can even be delivered on a truck. Small but meaningful amounts of electricity – nearly enough to run a small campus, a hospital or a military complex, for example – will pulse from a new generation of micronuclear reactors. Now, some universities are taking interest. "What we see is these advanced reactor technologies having a real future in decarbonizing the energy landscape in the U.S. and around the world," said Caleb Brooks, a nuclear engineering professor at the University of Illinois at Urbana-Champaign.

<https://www.voanews.com/a/several-us-universities-to-experiment-with-micro-nuclear-power-/6955392.html>

U.S. Test Launches ICBM Into Pacific as Part of Nuclear 'Deterrence Mission'

US News, February 10, 2023

The U.S. Air Force test-launched an intercontinental ballistic missile into the Pacific Ocean neighborhood of its adversaries in China and North Korea late Thursday at a time of growing international concern that brewing tensions among nuclear powers could escalate into a new arms race. Air Force Global Strike Command described the launch of the Minuteman III missile, which was unarmed, as "routine" and designed to reassure allies. But it also seemed to acknowledge the growing bellicose language from American adversaries in recent weeks. Firing the missile was "intended to demonstrate that the United States' nuclear deterrent is safe, secure, reliable and effective to deter twenty-first century threats," the command said in a release.

<https://www.usnews.com/news/national-news/articles/2023-02-10/u-s-test-launches-icbm-into-pacific-as-part-of-nuclear-deterrence-mission>

China plans to triple nuclear warheads to 900 by 2035 amid tensions with US

Business Standard, February 13, 2023

China is mulling tripling its stockpile of nuclear warheads to 900 by 2035, as tensions with the United States are expected to increase further over Taiwan, Kyodo News reported citing a source close to the matter on Saturday. The blueprint, prepared by the People's Liberation Army, has been approved by Chinese President Xi Jinping, head of the military, who has been eager to strengthen Beijing's deterrence against Washington, the report said citing Chinese sources. As the Chinese Communist Party has been strengthening the country's military capabilities, the United States in 2022 said that Beijing is on its way to increasing its stockpile of nuclear warheads to 1,500 by 2035 when it aims to complete the modernization of its military.

https://www.business-standard.com/article/international/china-plans-to-triple-nuclear-warheads-to-900-by-2035-amid-tensions-with-us-123021201013_1.html

How to bring innovation to America's nuclear strategy

Defense News, February 14, 2023

The United States should adopt a new nuclear strategy of innovation for deterrence resilience. The newly released 2022 Nuclear Posture Review continues a Cold War strategy that prioritizes modernizing legacy nuclear weapons systems and arms control. Reducing the risk of nuclear war requires us to update our policy and strategy to respond to changed geopolitical and technological realities. The United States faces serious nuclear threats. Russia's invasion of Ukraine has revived Cold War fears of nuclear war in Europe and demonstrates that nuclear powers can miscalculate. In addition, Russia is developing new long-range, nuclear-capable missile and underwater delivery systems designed to overcome missile defenses. China is establishing a nascent nuclear triad and has added nuclear missile

silos, driving calls for increased U.S. force requirements to deter both Russia and China simultaneously.

<https://www.defensenews.com/opinion/commentary/2023/02/14/how-to-innovate-americas-nuclear-strategy/>

West Asia

G. Iran

Iran's Military Chief Calls for Broadening of Cooperation with N. Korea

Fars News Agency, February 1, 2023

Chief of Staff of the Iranian Armed Forces Major General Mohammad Hossein Baqeri called for the further deepening of relations between Iran and North Korea, and underlined that close collaborations between Tehran and Pyongyang contributes to stability and security in the region. Major General Baqeri congratulated Pak Su-il on his appointment as the new General Staff Department (GSD) of the Korean People's Army. "Mutual cooperation on the path of establishing regional peace and stability and countering any disruptive measures of global security and unilateralism should be further developed," the top commander said in his congratulatory message. He also wished the government and the nation of North Korea success and glory.

<https://www.farsnews.ir/en/news/14011112000626/Iran's-Military-Chief-Calls-for-Broadening-of-Cooperation-with-N-Korea>

AEOI Chief: Iran's N. Sites Inspected by IAEA 2,000 Times in 2 Years

Fars News Agency, February 2, 2023

Head of the Atomic Energy Organization of Iran (AEOI) Mohammad Eslami said that the International Atomic Energy Agency (IAEA) has conducted nearly 2,000 inspections of the country's nuclear facilities only in the last two years. Eslami stated on the sidelines of a cabinet meeting

in Tehran on Wednesday claims that Iran has reduced its obligations are pointless when it comes to the NPT as Tehran is committed to the non-proliferation regime. He noted that Tehran has no unfulfilled obligations in this regard. The AEOI chief has described such allegations as part of a psychological warfare against Iran. The Iranian official stressed that any visit by the head of the IAEA to the country needs to have a "specific objective". Grossi last week announced that he intends to go to Tehran in February for "much-needed dialogue" over Iran's cooperation with the UN nuclear agency and to discuss outstanding issues.

<https://www.farsnews.ir/en/news/14011113000069/AEOI-Chief-Iran's-N-Sies-Inspected-by-IAEA-2-000-Times-in-2-Years>

Iran Dismisses IAEA Report on Undeclared Change at Fordow Nuclear Facility

Fars News Agency, February 2, 2023

Atomic Energy Organization of Iran (AEOI) Spokesman Behrouz Kamalvandi announced that Tehran has sent a letter to the International Atomic Energy Agency (IAEA) in rejection of the nuclear watchdog's statement over Tehran's undeclared change to uranium enriching equipment. Kamalvandi on Wednesday rejected a report by the UN nuclear watchdog that claims Tehran made an undeclared change to uranium enriching equipment at the Fordow facility in the Central province of Qom. "The report of the International Atomic Energy Agency was based on a mistake by an inspector of the oversight body who mistakenly flagged the issue," he stated. The spokesperson added that the matter has already been resolved after previous inspectors came to the site and Iranian officials explained to them about the issue. "The inspector who had previously reported about it also realized his mistake," the AEOI official said.

<https://www.farsnews.ir/en/news/14011113000329/Iran-Dismisses-IAEA-Rep-n-Undeclared-Change-a-Frdw-Nclear-Faciliy>

Commander: IRGC Navy Deploys Modern Military Equipment

Fars News Agency, February 4, 2023

Commander of the Islamic Revolution Guards Corps (IRGC) Navy Rear Admiral Alireza Tangsiri underlined that his forces enjoy the best military equipment to be fully independent from outside powers. "We do not rely on any superpower as we are in possession of the best military equipment," Admiral Tangsiri said on Friday. He said the IRGC Navy has precision cruise missiles, adding that the IRGC also manufactures speedboats and advanced drones with very high technical capacities but "we cannot disclose their complete features and capabilities given certain considerations". Tangsiri warned enemies that if they one day dare to attack Iran, they will be stunned, stopped and crushed in the face of the true power of the IRGC forces.

<https://www.farsnews.ir/en/news/14011115000286/Cmmander-IRGC-Navy-Deplys-Mdern-Miliary-Eipmen>

Tehran Raps IAEA's Unprofessional, Unacceptable Attitude towards Iran's Nuclear Program

Fars News Agency, February 5, 2023

Head of the Atomic Energy Organization of Iran (AEOI) Mohammad Eslami slammed the International Atomic Energy Agency (IAEA) for publishing a wrong report over alleged undeclared change to uranium enriching equipment at Fordow nuclear site, and described the UN nuclear watchdog's approach in disclosing confidential and unverified information as unprofessional and unacceptable. The nuclear head made the remarks in an interview with the Iranian state TV on Friday after the IAEA's Chief Rafael Grossi in a Wednesday report accused Tehran of making an undeclared change to the interconnection between the two clusters of advanced machines enriching uranium to up to 60% purity at its Fordow plant. He said Iran objects to the political issues

dictated by Grossi and has written a “letter to the agency that an inspector... who has inspected our facilities, has made a mistake and given an incorrect report”.

<https://www.farsnews.ir/en/news/14011116000298/Tehran-Raps-IAEA's-Unprfessional-Unacceptable-Aide-wards-Iran's-Nclear>

Iranian Army Unveils Strategic Underground Air Base

Fars News Agency, February 7, 2023

Iran’s Army on Tuesday unveiled a strategic subterranean base called “Eagle 44” which could be used as a center for military operations of various types of fighter jets, bombers as well as unmanned aerial vehicles (UAVs). Chief of Staff of the Iranian Armed Forces Major General Mohammad Baqeri and Commander of the Iranian Army Major General Abdolrahim Mousavi visited first underground air force base of the Iranian Army, which is capable of accepting and operating various types of warplanes, bombers and drones. The subterranean base will also have the ability to receive and operationally use the new fighters of the Iranian Army Air Force and prepare them for missions.

<https://www.farsnews.ir/en/news/14011118000647/Iranian-Army-Unveils-Sraegic-Undergrnd-Air-Base>

Top Commander: Iranian Army Underground Bases to Host Various Fighters

Fars News Agency, February 8, 2023

Commander of the Iranian Army Major General Abdolrahim Mousavi hailed the country’s remarkable achievements in the defense fields, and said that Iranian Army’s subterranean bases will be equipped with new jets in the near future. The Iranian Army on Tuesday unveiled its first underground Air Force base, called Eagle 44 which could be used as a center for military operations of various types of fighter jets, bombers as well as unmanned aerial vehicles (UAVs). Speaking at the ceremony, Maj. Gen. Mousavi said Eagle 44 is one of the

“combined” bases of the Islamic Republic of Iran Air Force (IRIAF), meaning both manned and unmanned aircraft carry out missions from the tactical center.

<https://www.farsnews.ir/en/news/14011119000457/Ip-Cmmander-Iranian-Army-Undergrnd-Bases-Hs-Varis-Fighers>

Iranian Nuclear Chief Advises IAEA to Act Professionally

Fars News Agency, February 9, 2023

Head of the Atomic Energy Organization of Iran (AEOI) Mohammad Eslami said that Tehran expects the International Atomic Energy Agency (IAEA) to act professionally, and further warned the UN nuclear watchdog to avoid role-playing in the pressure policy of anti JCPOA-parties against his country. “We expect the director general of the International Atomic Energy Agency to maintain professional behavior and not be part of the pressure campaign against our country,” Eslami stated on the sidelines of a cabinet meeting in Tehran on Wednesday. The remarks came after IAEA’s Chief Rafael Grossi in a report accused Tehran of making an undeclared change to the interconnection between the two clusters of advanced machines enriching uranium to up to 60% purity at Fordow nuclear site.

<https://www.farsnews.ir/en/news/14011120000259/Iranian-Nclear-Chief-Advises-IAEA-Ac-Prfessionally>

Official: 90 Countries Seeking to Purchase Iranian Drones

Fars News Agency, February 9, 2023

An advisor to Iran’s Intelligence Ministry underlined the country’s high capability in the production of various types of Unmanned aerial vehicles (UAVs), and said 90 countries are seeking to obtain Tehran-made drones. “Ninety countries seek to buy Iran-made drones, and Westerners and the arrogant countries cannot tolerate this,” an advisor to Iran’s intelligence minister stated on Wednesday while addressing a local ceremony in

Qazvin. Today, Western states, the US, and the Israeli regime cannot stand Iran's "defense might" in the region, he added.

<https://www.farsnews.ir/en/news/1401112000202/Official-90-Cnries-Seeking-Prchase-Iranian-Drnes>

Iran arrests elements behind sabotage at military facility

Tehran Times, February 11, 2023

Iran's Ministry of Intelligence and the Intelligence Organization of the Islamic Revolutionary Guards Corps have jointly announced the busting of elements implicated in an effort to commit an act of sabotage in Isfahan. The two intelligence agencies announced in a joint statement that the detainees are the main elements of a failed attempt to commit an act of sabotage at an industrial facility belonging to the Ministry of Defense. The statement said the arrests in this connection were made this month. The statement also said that Israel is complicated in the act of sabotage.

<https://www.tehrantimes.com/news/481830/Iran-arrests-elements-behind-sabotage-at-military-facility>

Iran Reiterates Commitment to Nuclear Disarmament

Fars News Agency, February 12, 2023

Head of the Atomic Energy Organization of Iran (AEOI) Mohammad Eslami condemned the Western states' unfounded accusations against his country's peaceful nuclear program as mere lie, and once again underlined Tehran's commitment to nuclear disarmament. Eslami stated that Iran's enemies are "spreading misleading information" about Iran's nuclear program and "they are seeking to block Iran's pathway toward progress by making excuses and baseless claims". The AEOI director added that the main issue is the new power which emerges thanks to new technologies and end foreign domination over a nation.

<https://www.farsnews.ir/en/news/14011123000218/Iran-Reieraes-Cmmimen-Nclear-Disarmamen>

Iranian homegrown plane to fly soon

Tehran Times, February 12, 2023

The first flight of an Iranian-built aircraft is scheduled to take place in the next weeks, according to the Civil Aviation Organization of Iran. After Leader of the Islamic Revolution Ayatollah Seyed Ali Khamenei emphasized the necessity to expand the industry, Mohammad Mohammadibakhsh, the CEO of the Civil Aviation Organization, announced on Saturday that the nation is moving forward with the construction of passenger planes. The Ministry of Defense is in charge of producing a local plane and the Civil Aviation Organization is monitoring the process, he said, adding the first phase of manufacturing the new platform of Iran-140 plane has been completed.

<https://www.tehrantimes.com/news/481839/Iranian-homegrown-plane-to-fly-soon>

Senior Commander: Iran's Bavar 373 Missile Defense System Rivals Russia's S-400

Fars News Agency, February 14, 2023

Deputy Chief of the Iranian Army for Coordination Rear Admiral Habibollah Sayyari praised the Air Defense Force's achievements over the past decades, and said that domestically-built Bavar-373 air defense system rivals Russia-made S-400 missile shield. Sayyari stated on Monday that Iranian Armed Forces have many air defense systems which are all homegrown. The senior commander cited Bavar-373 as an exmplae, which, he noted, rivals Russia's S-400. "During the Iraqi imposed war, Iran only had HAWK surface to air missiles and 23mm guns but the country now has a broad range of such arms and it's difficult to choose which weapon for use during war games," he continued.

<https://www.farsnews.ir/en/news/14011125000266/Senir-Cmmander-Iran's-Bavar-33-Missile-Defense-System-Rivals-Rssia's-S>

Pentagon says Washington, allies infuriated at Iranian drones

Tehran Times, February 15, 2023

The U.S. Defense Department has said that Washington along with its regional allies are in fear of Iranian state-of-the-art drones and missiles. The Pentagon reported that Iranian drones and missiles are among the most significant air defense threats facing the U.S. and its partners in the Persian Gulf region. Such a report came shortly after a meeting in Riyadh between a U.S. official and representatives of the (Persian) Gulf Cooperation Council. They acknowledged that Iranian-domestically made drones and missiles are ultramodern, being able to pulverize any air defense system.

<https://www.tehrantimes.com/news/482006/Pentagon-says-Washington-allies-infuriated-at-Iranian-drones>

Official: Iran Turns into Military Equipment Exporter Amid Sanctions

Fars News Agency, February 15, 2023

Head of the Iran Aviation Industries Organization (IAIO) Brigadier General Afshin Khajeh Fard hailed the country's self-sufficiency in the production of various types of military equipment amid sanctions, and said that Tehran is exporting military equipment, including required pieces for manufacturing helicopters, to friendly countries. "Iran enjoys one of the most diverse helicopter fleets in the world, having a variety of Eastern, Western and European helicopters," General Khajeh Fard stated on Wednesday. "Iran is not dependent on foreign countries in this field," Khajeh Fard continued, adding, "Fortunately, we have overcome the sanctions and today we also export and provide engineering services to other friendly and allied countries."

<https://www.farsnews.ir/en/news/14011126000694/Official-Iran-Trns-in-Military-Eipmen-Exprer-Amid-Sancins>

H. Israel

US CENTCOM pulls closer to Israeli military as Mossad tests Iran

Al-Monitor, February 1, 2023

Training exercise represents the tightest collaboration ever, but a deputy commander of CENTCOM tells Al-Monitor the US had no involvement in recent strikes attributed to Israel in Isfahan, Iran and eastern Syria. Last week, for the first time ever, US Air Force F-35s launched from the USS George H.W. Bush flew several hundred miles over the Mediterranean and linked up with Israeli F-35s to simulate a combined attack on surface-to-air missile batteries in the Negev desert. As they neared the target, accompanying F-16s and F-15s peeled away to attack as many as ten fourth-plus-generation aircraft posing as the defenders of an imagined enemy airspace.

<https://www.al-monitor.com/originals/2023/02/us-centcom-pulls-closer-israeli-military-mossad-tests-iran>

IDF enemy simulation: getting into Hezbollah's head

Israel Defense, February 7, 2023

The IDF Nahal Brigade's 931st Battalion recently completed an exercise which simulated a Hezbollah attack, during which the soldiers were split into two groups and pinned against each other. One side played the part of "Hezbollah terrorists," while the remaining soldiers operated as if this were a real-life scenario of encountering the enemy. The soldiers who manned the battalion's observation posts at the training center provided the troops with simulated real-time intelligence, all for the success of the mission: uncovering the enemy as early as possible, and striking it efficiently. The mission was divided into intelligence and operational challenges, as well as different scenarios that are important for the battalion to exercise.

<https://www.israeldefense.co.il/en/node/57160>

Elbit Systems to participate in India's top aerospace and defense exhibition

Israel Defense, February 8, 2023

Elbit Systems announced that it will participate in AeroIndia, India's premier aerospace and defence exhibition in Bengaluru, between February 13th-17th 2023 with both visual and interactive displays of its solutions. Elbit Systems is considered a trusted partner of the Indian Ministry of Defence and the Indian Armed Forces, with a technological legacy of close to 70 years, well known for its groundbreaking military solutions that have supported dramatic changes on the battlefield.

<https://www.israeldefense.co.il/en/node/57187>

IAI to showcase latest defense solutions at Aero India

Israel Defense, February 9, 2023

Israel Aerospace Industries (IAI), Israel's leading aerospace and defense company, will showcase its advanced technologies, industry-leading air-defense systems and ground-combat solutions (in Booths # 5.1 & 5.2, Hall F) at Aero India 2023, India's largest defense exhibition, which will take place February 13-17. IAI is leading a strategic transformation to provide fast direct access to IAI's superior solutions in full support of India's Atmanirbhar Bharat vision of a self-reliant country. IAI will sign several Memorandums of Understanding (MoUs) and joint venture agreements during the exhibition as it deepens its ties with the local defense sector.

<https://www.israeldefense.co.il/en/node/57172>

Israel's Steadicopter joins forces with Emirates Defense Technology

Israel Defense, February 12, 2023

Emirates Defense Technology (EDT) a leading UAE-based integrator for comprehensive defense solutions, and Steadicopter - a Israeli company and leader in the Rotary Unmanned Aerial Systems

(RUAS) industry, are joining forces regarding the supply of Steadicopter's advanced rotary tactical unmanned aerial systems. The two companies will adapt Steadicopter's RUAV products to meet the emerging requirements of various customers within the UAE and other specific market segments. "As EDT continues to serve its customers with innovative, novel, unique, tailor-made solutions, we had scouted Steadicopter and its Eagle family - a platform of solutions which fits synergistically with other solutions manufactured in the region," says Mohamed Bin Jabr Al Suwaidi, Owner & CEO of EDT.

<https://www.israeldefense.co.il/en/node/57228>

Elbit Systems delivers its 600,000 Operational Tactical Radio

Israel Defense, February 13, 2023

Elbit Systems has delivered its 600,000th radio to an operational customer. This E-LynX Software Defined Radio (SDR) was delivered to the Swedish Defence Material Administration (FMV) as part of the Tactical Ground Radio (TGR) program. The 600,000th radio, delivered to the Swedish Armed Forces, is a fifth-generation tactical V/UHF SDR from the E-LynX family that provides advanced and secure communication capabilities for the modern battlefield. It offers immediate and fast communication, the ability to transmit voice, data and video simultaneously over all terrain, and supports the innovative and multi-domain digitization systems.

<https://www.israeldefense.co.il/en/node/57229>

From Israel to Egypt, how Adani Group's downfall could reverberate in Middle East

Al-Monitor, February 13, 2023

On Jan. 24, Hindenburg Research, a small investment firm in New York, accused Gautam Adani, an Indian business conglomerate, of "brazen accounting fraud, stock manipulation and money laundering."

In a detailed report, the US firm claimed the conglomerate's founder, was pulling off the "largest con in corporate history." Calling it "not merely an unwarranted attack on any specific company but a calculated attack on India, the independence, integrity and quality of Indian institutions, and the growth story and ambition of India", the Indian consortium rejected the allegations and threatened legal action. But Hindenburg does not seem perturbed and has stood to profit as Adani shares fall.

<https://www.al-monitor.com/originals/2023/02/israel-egypt-how-adani-groups-downfall-could-reverberate-middle-east>

SMARTSHOOTER to Present multi-purpose SMASH Hopper at IDEX

Israel Defense, February 14, 2023

SMARTSHOOTER, an Israeli designer, developer, and manufacturer of innovative fire control systems that significantly increase small arms' accuracy, lethality, and situational awareness while reducing training costs, will participate at the IDEX exhibition and present its SMASH Hopper.

This multi-purpose light remotely controlled weapon station can be mounted on different manned and unmanned vehicles, on a pole or a tripod, and provide the force a pin-point accurate lethal capability from a safe stand-off distance.

<https://www.israeldefense.co.il/en/node/57244>

HevenDrones launches hydrogen-powered drone for commercial, defense use

Israel Defense, February 15, 2023

HevenDrones, a leader in the development and commercialization of actionable drones, launched today its first hydrogen-powered drone for commercial use, the H2D55. With 5-times greater energy efficiency than

traditional lithium battery-powered drones, the H2D55 is capable of flying for 100 minutes with a payload capacity of 7kg. The launch of HevenDrones' hydrogen product line addresses the challenge of flight endurance and payload capacity associated with lithium battery-powered drones as well as the long term environmental impact linked to lithium mining. Without the need to frequently replace batteries, hydrogen fuel cells will also lower long term ownership costs for organizations implementing drone technology at scale.

<https://www.israeldefense.co.il/en/node/57261>

I. Qatar

India's Petronet seeks more LNG under long-term Qatar deal

Reuters, February 7, 2023

Petronet LNG (PLNG.NS), India's top gas importer, will seek up to 1 million tonnes per annum (mtpa) in additional liquefied natural gas (LNG) supplies when it renews its long-term deal with Qatar, the company's chief executive said on Tuesday.

"We are seeking an additional 0.75 to 1 mtpa on top of existing 8.5 mtpa contact," Chief Executive A.K. Singh told reporters on the sidelines of the Indian Energy Week conference. Petronet, which is currently purchasing LNG from Qatar at \$16 per million British thermal unit (mmbtu), has until the end of this year to renew its deal. India's LNG imports fell for the second straight year in 2022, mainly due to fewer imports by utilities as the country ramped up coal-fired power production at the expense of natural gas. The energy-hungry nation expects deeper penetration of city gas distribution to drive LNG demand in the coming years.

<https://www.reuters.com/business/energy/indias-petronet-lng-seeking-additional-lng-qatar-ceo-says-2023-02-07/>

US, Qatar Reportedly Discuss Talks To Revive Iran Nuclear Deal

Iran International, February 10, 2023

US Special Envoy for Iran Robert Malley met Thursday with the Qatari foreign minister in Washington over efforts to kickstart the stalled talks to revive the 2015 nuclear deal, Qatari sources said. Deputy Prime Minister and Minister of Foreign Affairs Sheikh Mohammed bin Abdulrahman Al Thani and Malley also discussed bilateral relations in addition to a number of issues of common interest. Late in January, Al Thani visited Tehran where he delivered messages from world powers that are party to the Joint Comprehensive Plan of Action, particularly the US which does not have direct contact with the Islamic Republic. "Qatar has been always passing on messages about the return of the JCPOA parties to their commitments. Today, we received JCPOA-related messages from the Qatari side," Iran's foreign minister Hossein Amir-Abdollahian stated.

<https://www.iranintl.com/en/202302106883>

The U.S. and Iran are holding indirect talks on a possible prisoner exchange, with the help of the U.K. and Qatar, sources say

NBC News, February 15, 2023

The Biden administration is holding indirect discussions with Iran on a possible prisoner exchange in a bid to secure the release of American citizens imprisoned in Iran, with Qatar and the United Kingdom playing an intermediary role in the talks, according to four sources familiar with the matter. The negotiations have made progress, but it remains unclear if a final agreement will be reached, the sources said. The push by the White House comes after months of negotiations aimed at reviving a 2015 nuclear agreement have stalled and as the administration has announced new sanctions against Tehran over its delivery of drones to Russia.

<https://www.nbcnews.com/politics/national-security/us-iran-indirect-talks-prisoner-exchange-uk-qatar-rcna70645>

J. Saudi Arabia

GCC's Iran nuclear talks proposal should be taken seriously

Arab News, February 2, 2023

International Atomic Energy Agency Director-General Rafael Grossi last week warned that "every limit that existed in the JCPOA (nuclear deal) has been violated several times" by Iran. The deal has become an "empty shell" and diplomatic activity to revive it is almost nonexistent, he said, adding that: "Nobody has declared it dead, but no obligation is being pursued." One of those violations relates to uranium enrichment. Iran has amassed enough material for "several nuclear weapons," Grossi told a European Parliament subcommittee in Brussels. He pointed out that Iran has 70 kg of uranium enriched to 60 percent purity and 1,000 kg to 20 percent purity, meaning that Iran is only a short distance away from reaching the critical level of 90 percent, when it can be weaponized.

<https://www.arabnews.com/node/2243756>

Saudi, France to boost co-operation in nuclear energy sector

Zawya, February 4, 2023

The MoU encourages co-operation between the two countries in the fields of electricity, renewable energy, energy efficiency, energy storage, smart grids, oil and gas and their derivatives, refining, petrochemicals, and the distribution and marketing sectors

Saudi Arabia has announced the signing of an agreement with French authorities on the peaceful use of nuclear energy and future opportunities in various energy fields, including renewable energy, clean hydrogen and electricity interconnection. The pact was signed by Prince Abdulaziz Bin Salman, Minister of Energy, with the visiting French Minister of Foreign Affairs Catherine Colonna at a special ceremony held in capital Riyadh, reported SPA. The two leaders agreed to work for the establishment of a framework for collaboration in the energy sector. The

MoU encourages co-operation between the two countries in the fields of electricity, renewable energy, energy efficiency, energy storage, smart grids, oil and gas and their derivatives, refining, petrochemicals, and the distribution and marketing sectors.

<https://www.zawya.com/en/business/energy/saudi-france-to-boost-co-operation-in-nuclear-energy-sector-j7ppuh0q>

Nuclear energy offers 'a golden opportunity' to build a clean world

Arab News, February 7, 2023

Being a cost-effective and low-carbon solution, nuclear energy "offers a golden opportunity" to help build a clean world, according to the director general of the World Nuclear Association. Sama Bilbao y Leon was speaking as a keynote speaker at the 44th IAEE International Conference in Riyadh on Tuesday. The top official said nuclear energy offers an opportunity to build a cleaner and more equitable world in which everyone has access to "clean, abundant and affordable round-the-clock energy and high quality of life." "As a low-carbon energy source, nuclear power can play a very important role, decarbonizing other difficult-to-able sectors," she said. The official said nuclear energy is certainly a cost-effective, low-carbon solution and a catalyst for economic development. It is more efficient than other sources when we think of energy transition, she added.

<https://www.arabnews.com/node/2246686/business-economy>

K. Syria

Attia: Syria doesn't recognize OPCW (Investigation and Identification Team) or its reports

Syrian Arab News Agency, February 2, 2023

"Syria does not recognize the OPCW (Investigation and Identification Team), nor its previous and subsequent reports, because it was established based on pressure exerted by the United States, France and Britain for special purposes in clear violation of the

Chemical Weapons Convention," Syria's Permanent Representative to the Organization for the Prohibition of Chemical Weapons (OPCW) in The Hague, Ambassador Milad Attia said. "Syria calls on the technical secretariat of the OPCW to stop its bias towards Western positions and not to issue replica reports of those prepared for it by Western countries and "Israel" against Syria," Ambassador Attia added during a press conference held Thursday at the building of the Foreign and Expatriates Ministry. Attia elaborated "We followed the issuance of the third report of the so-called (Investigation and Identification Team) at the Organization for the Prohibition of Chemical Weapons (OPCW), which accuses Syria of using chemicals in the alleged Douma incident on April 7, 2018."

<http://www.sana.sy/en/?p=298631>

Ambassador Sabbagh: Syria warned that incorrect track of OPCW teams on alleged Douma incident will lead to false conclusions

Syrian Arab News Agency, February 7, 2023

Syria's permanent representative to the UN, Ambassador Bassam Sabbagh, said that Syria has repeatedly warned that the incorrect and unprofessional track adopted by The OPCW Fact-Finding Mission in Syria on Douma alleged incident will lead to false and null conclusions. Sabbagh was regretted that the fact-finding committee had not correct the method of its work despite all the demands addressed to it to commit to the rules included in the Chemical Weapons Convention. "Syria took a strategic decision in 2013 to join the Chemical Weapons Convention and has eliminated all its stockpile in a record time despite difficult conditions the country has been passing through," Sabbagh said at UN Security Council session on "the Chemical File in Syria."

<http://www.sana.sy/en/?p=299466>

L. Turkey

'Time to fly': Türkiye unveils domestic light attack jet

Daily Sabah, February 2, 2023

Türkiye's domestically produced jet training and light attack aircraft, Hürjet, started its engine, Presidency of Defense Industries (SSB) head Ismail Demir said Thursday. He made the related statement on his Twitter account. "Now it's time to fly," he said. "Under the strong leadership of our president, Mr. Recep Tayyip Erdoğan, as the Turkish defense industry, our work continues at full speed in the 100th anniversary of our republic," he also noted.

Turkish Aerospace Industries (TAI), which is developing the aircraft, also shared a statement on the company's official Twitter account that read: "We are happy to fulfill our promise to our nation. HÜRJET started its engine, it's almost time to take its place in the sky." The TAI aims to produce two of the aircraft each month after 2025, according to previous statements by the head of the company.

<https://www.dailysabah.com/business/defense/time-to-fly-turkiye-unveils-domestic-light-attack-jet>

US Congress wants to link F-16 sale to Türkiye to Nordic NATO bid

Daily Sabah, February 3, 2023

bipartisan group of U.S. senators Thursday threatened to block the sale of F-16 fighter jets to Türkiye until Ankara agrees to ratify the NATO membership of Sweden and Finland in another setback for an already prolonged deal. The move is all but sure to vex Türkiye, which has already called for the NATO issue not to be a precondition for sale and urged the Biden administration to persuade Congress to drop its earlier objection. Sweden and Finland applied last year to join the trans-Atlantic defense pact after Russia invaded Ukraine but faced objections from

Türkiye and have since sought to win its support.

<https://www.dailysabah.com/business/defense/us-congress-wants-to-link-f-16-sale-to-turkiye-to-nordic-nato-bid>

Turkish defense industry radar saves lives in quake-hit regions

Daily Sabah, February 10, 2023

The Through the Wall Radar (DAR) developed by STM Defense Technologies Engineering and Trade Inc. – a prominent engineering company in the Turkish defense industry – is playing a crucial role in the ongoing rescue operations following the recent catastrophic earthquakes in Türkiye. The earthquakes, with magnitudes of 7.7 and 7.6 that centered in the Kahramanmaraş province, have devastated 10 provinces in the region, as well as severely affecting neighboring Syria. The Ankara-based company, with domestic facilities, has developed DAR to assist in saving lives amid the rubble in the worst-hit province of Hatay. DAR uses cutting-edge technology to determine the presence of living beings beneath the debris and to provide search and rescue teams with their exact locations. Thanks to the device, over 20 earthquake victims have already been located and rescued.

<https://www.dailysabah.com/business/defense/turkish-defense-industry-radar-saves-lives-in-quake-hit-regions>

Bayraktar UAVs provide uninterrupted support for earthquake relief in Türkiye

Daily Sabah, February 10, 2023

Bayraktar Akıncı and Bayraktar TB2 unmanned combat aerial vehicles (UCAVs) developed by Turkish drone magnate Baykar are aiding earthquake relief efforts in Türkiye's south. In the aftermath of the 7.7 and 7.6 magnitude earthquakes that struck 10 provinces, with the epicenter in the Pazarcık and Elbistan districts of Kahramanmaraş province, the

Bayraktar Akýný UCAVs took off from Panlýurfa and Batman for nonstop mission flights, the Presidency of Defense Industries (SSB) informed. These missions included detection, search and rescue support, and coordination activities in adverse weather conditions. On the first day of the earthquake, conventional planes and helicopters were unable to fly due to adverse weather, storms, snowfall and cloud cover.

<https://www.dailysabah.com/business/defense/bayraktar-uavs-provide-uninterrupted-support-for-earthquake-relief-in-turkiye>

East Asia

M. North Korea

North Korea warns of 'overwhelming nuclear force' to counter U.S. expansion

The Hindu, February 2, 2023

North Korea said on Thursday that it's prepared to counter U.S. military moves with the "most overwhelming nuclear force" as it warned that the expansion of the United States' combined military exercises with rival South Korea is pushing tensions to an "extreme red line." The statement by Pyongyang's Foreign Ministry came in response to comments by U.S. Defense Secretary Lloyd Austin, who said Tuesday in Seoul that the United States would increase its deployment of advanced military assets to the Korean Peninsula, including fighter jets and aircraft carriers, as it strengthens joint training and operational planning with South Korea.

<https://www.thehindu.com/news/international/north-korea-warns-of-overwhelming-nuclear-force-to-counter-us-expansion/article66462074.ece>

N Korea says US drills pushing situation to 'extreme red-line'

Aljazeera, February 2, 2023

North Korea has lambasted South Korea and the United States over their joint military exercises, saying the drills have pushed the situation on the Korean peninsula to an "extreme red line" and have

threatened to turn the region into a "huge war arsenal and a more critical war zone".

The North Korean statement, issued on Thursday, also threatened the "toughest" response and said Pyongyang was not interested in dialogue as long as Washington pursued what it called "hostile" policies. The warning from Pyongyang came days after the US defence secretary, Lloyd Austin, visited Seoul and pledged to increase Washington's deployment of advanced military assets to the Korean Peninsula, including fighter jets and aircraft carriers, as it strengthens joint training and operational planning with South Korea.

<https://www.aljazeera.com/news/2023/2/2/n-korea-says-us-drills-pushing-situation-to-extreme-red-line>

US and South Korea's Joint Military Drills Infuriate North Korea

NDTV, February 2, 2023

South Korea said on Thursday that it had staged joint air drills with the United States, featuring strategic bombers and stealth fighters, prompting Pyongyang to warn that such exercises could "ignite an all-out showdown". The drills on Wednesday showed "the US's will and capabilities to provide strong and credible extended deterrence against North Korea's nuclear and missile threats," the South Korean Defence Ministry said. The exercises, the first by the security allies this year, came a day after US Defense Secretary Lloyd Austin and his South Korean counterpart vowed to boost security cooperation to counter an increasingly belligerent nuclear-armed North Korea. They involved American B-1B long-range heavy bombers and stealth fighters – US Air Force F-22s and South Korean F-35s – flying over the Yellow Sea, the ministry added.

<https://www.ndtv.com/world-news/us-and-south-koreas-joint-military-drills-infuriate-north-korea-3746239>

UN chief fears world 'sleepwalking into wider war' - as North Korea steps up preparedness

Sky News, February 7, 2023

The UN secretary-general has warned the world could be facing further conflict - as North Korea steps up its preparedness. He pointed to the war in Ukraine as having undermined global solidarity and trust, and urged all countries to recommit to the UN Charter, which calls for the peaceful settlement of disputes. After experts set the Doomsday Clock at 90 seconds to midnight - the closest it has ever been to "global catastrophe" - Mr Guterres urged the general assembly's 193 member nations to change their mindset to decision-making and look at "what will happen to all of us tomorrow - and act". As the first anniversary of Russia's invasion of Ukraine approaches, Antonio Guterres said he fears the world is "sleepwalking into a wider war" with its "eyes wide open".

<https://news.sky.com/story/un-chief-fears-world-sleepwalking-into-wider-war-as-north-korea-steps-up-preparedness-12805015>

North Korea shows off largest-ever number of nuclear missiles at nighttime parade

Reuters, February 9, 2023

Nuclear-armed North Korea showcased its missile production muscle during a nighttime parade, state media reported on Thursday, displaying more intercontinental ballistic missiles (ICBMs) than ever before and hinting at a new solid-fuel weapon. The country has forged ahead with its ballistic missile programme, test-launching dozens of advanced missiles last year despite United Nations Security Council resolutions and sanctions. "This time, Kim Jong Un let North Korea's expanding tactical and long-range missile forces speak for themselves," said Leif-Eric Easley, a professor at Ewha University in Seoul. "The message Pyongyang wants to send internationally, demonstrating its capabilities to deter and coerce, will likely come in the form of solid-

fuel missile tests and detonation of a miniaturised nuclear device."

<https://www.reuters.com/world/asia-pacific/north-korea-shows-off-possible-solid-fuel-icbm-nighttime-parade-analysts-2023-02-09/>

N. South Korea

South Korea's KEPCO submits bid to build nuclear plant in Türkiye

Daily Sabah, February 1, 2023

South Korean energy giant has conveyed its preliminary proposal to Ankara for constructing a major nuclear power plant in Türkiye, media reports said on Tuesday. Korea Electric Power Corp. (KEPCO) presented the proposal regarding the construction of four reactors capable of providing 1,400 megawatts (MW) of electricity in the northern province of Sinop, South Korea-based Yonhap news agency said, citing the company. Türkiye has already said it plans to build the nation's second nuclear power plant in Sinop. Deputy Energy and Natural Resources Minister Alparslan Bayraktar last November said Türkiye had started negotiations with Russia's state-owned atomic energy agency Rosatom for the plant. The Russian company also confirmed the talks.

<https://www.dailysabah.com/business/energy/south-koreas-kepco-submits-bid-to-build-nuclear-plant-in-turkiye>

How a New U.S.-South Korea Deal Can Deter the North Korean Nuclear Threat

Council for Foreign Relations, February 3, 2023

The United States and South Korea should pursue an expanded nuclear agreement that supports the production of civilian nuclear power and enhances extended deterrence against the North Korean threat. In recent months, North Korean leader Kim Jong-un has threatened to preemptively use nuclear weapons against South Korea and pledged to

“exponentially” increase his country’s nuclear arsenal, possibilities that have spooked the South Korean public. President Yoon Suk-yeol mentioned in January that South Korea could develop its own nuclear arsenal or request the redeployment of U.S. tactical nuclear weapons to South Korea. A more effective way of blunting Pyongyang’s efforts to drive a wedge between Washington and Seoul would be for the Yoon and Joe Biden administrations to commit to expanding on the original bargain that underpins U.S.-South Korean nuclear cooperation.

<https://www.cfr.org/in-brief/how-new-us-south-korea-deal-can-deter-north-korean-nuclear-threat>

South Korea Planning Ballistic Missile Test Launch on Friday: Report

The Defense Post, February 3, 2023

South Korea announced plans to test-launch a ballistic missile on Friday to bolster its deterrence against growing nuclear and missile threats from the North.

The state-run Agency for Defense Development will launch the Hyunmoo-5 from the Anheung test site in Taean, 150 kilometers (93 miles) southwest of Seoul, *Yonhap News Agency* revealed, citing sources. Seoul released the missile’s first video during Armed Forces Day in October, claiming it could carry the world’s heaviest warhead. The missile is said to be able to carry a warhead of up to nine tons at a speed of up to Mach 10. A senior analyst at the Australian Strategic Policy Institute Malcolm Davis told *South China Morning Post* that the missile could strike as far as 3,000 kilometers (1,864 miles) away if armed with a lighter warhead.

<https://www.thedefensepost.com/2023/02/03/south-korea-missile-test/>

United States, South Korea stage air drills despite North Korean complaints

Reuters, February 3, 2023

The United States and South Korea staged drills for the second time in a week on Friday

with some of their latest warplanes, despite North Korean complaints that the exercises were increasing tensions on the peninsula.

<https://www.reuters.com/world/united-states-south-korea-stage-air-drills-despite-north-korean-complaints-2023-02-03/>

Blinken: US Committed to Improving Allied Defense of South Korea

VOA News, February 3, 2023

U.S. Secretary of State Antony Blinken said after meeting with his South Korean counterpart that the United States is committed to “improving its allied defense” of South Korea and called the alliance between the two nations the “linchpin” of peace in the region. Speaking Friday at a joint news conference in Washington, alongside visiting South Korean Foreign Minister Park Jin, Blinken said the United States reaffirmed its commitment to defending South Korea “using the full range of U.S. capabilities, including nuclear, conventional and missile defense capabilities.” Park said South Korea and the United States are committed to “strengthening extended deterrence” in relation to North Korea. The practice refers to the U.S. military’s efforts to deter threats against its allies.

<https://www.voanews.com/a/blinken-us-committed-to-improving-allied-defense-of-south-korea/6947637.html>

Nuclear Envoys of US, South Korea Downplay Seoul’s Nuclear Intent

VOA News, February 4, 2023

South Korea’s top nuclear envoy said an agreement with the United States to jointly bolster “extended deterrence” against North Korea gives the Yoon administration needed confidence that the alliance will be able to effectively defend against aggression from Pyongyang. The U.S. commitment, laid out in a joint statement by the two countries in mid-September, includes an affirmation that a North Korean nuclear test “would be met

with an overwhelming and decisive response." It adds that the two countries will "continue and strengthen close Alliance consultation regarding U.S. nuclear and missile defense policy." Kim Gunn, South Korea's special representative for Korean Peninsula peace and security affairs, reiterated a recent statement by South Korean President Yoon Suk on the matter during a Friday interview with Washington Talk, a weekly on-air discussion on North Korea by the VOA Korean Service.

<https://www.voanews.com/a/nuclear-envoys-of-us-south-korea-downplay-seoul-s-nuclear-intent/6947817.html>

South Korean partnership to develop SMR-powered ships

World Nuclear News, February 10, 2023

Nine South Korean organisations have signed a memorandum of understanding (MoU) to cooperate on the development and demonstration of ships and offshore systems powered with small modular reactors (SMRs). The partners will also develop marine systems and the production of hydrogen using molten salt reactors (MSRs). The MoU was signed in Gyeongju City Hall on 9 February by representatives from Gyeongju City and North Gyeongsang Province, as well as shipping companies H-Line Shipping, Hyundai Merchant Marine (HMM), Jangeum Merchant Marine (Sinokor) and Wooyang Merchant Marine, plus the Korea Atomic Energy Research Institute (KAERI), Korea Register of Shipping and the Korea Ship & Offshore Plant Research Institute (KRISO).

<https://www.world-nuclear-news.org/Articles/South-Korean-partnership-to-develop-SMR-powered-sh>

O. Japan

China urges Japan to dispose of nuclear-contaminated water safely

China Daily, February 1, 2023

A Chinese Foreign Ministry spokesperson on Wednesday once again urged Japan to respond to the legitimate concerns of all relevant parties and dispose of its nuclear-

contaminated water in a scientific, open, transparent and safe manner. According to media reports, the technical task force of the International Atomic Energy Agency (IAEA) visited Japan from Jan 16 to 20 to review the country's plan to pipe nuclear-contaminated water from the Fukushima Daiichi nuclear power station into the Pacific Ocean, and a report will be published within three months. However, the Japanese government unilaterally announced on Jan 13 that it would discharge the nuclear-contaminated water into the ocean in the spring or summer this year.

<https://global.chinadaily.com.cn/a/202302/01/WS63da4d1da31057c47ebac5e6.html>

Japan's Takahama 4 experiences automatic shutdown

Nuclear Engineering, February 2, 2023

Neutron detectors have triggered an automatic shutdown at unit 4 of Kansai Electric Power Co's Takahama NPP in Japan's Fukui Prefecture. The reactor was automatically stopped after an alert warned of a rapid decrease in the number of neutrons within the unit, according to Kansai and the Nuclear Regulation Authority (NRA). Kansai Electric said there was no indication of the incident had resulted in any environmental contamination. Abnormalities were picked up by at least two of the four neutron detectors installed outside the reactor vessel. NRA said the reactor's cooling function was normal. Kansai Electric said it was the first automatic shutdown of a reactor since the Takahama 3 was halted in 1988 due to a similar warning.

<https://www.neimagazine.com/news/newsjapans-takahama-4-experiences-automatic-shutdown-10564043>

Japan to be more proactive in selecting disposal sites for nuclear waste

The Japan Times, February 3, 2023

The government plans to revise its basic policy on the handling of highly

radioactive waste from nuclear power plants to play a more proactive role in choosing sites for its final disposal. The basic policy, which stipulates the method of selecting where to build a final disposal site and the responsibilities of the government and power suppliers, will be revised for the first time since 2015. As the first step of the selection, the Nuclear Waste Management Organization of Japan (NUMO), conducts a preliminary survey to check geological risks in a certain area, such as the existence of active faults. So far, only two municipalities – the town of Suttsu and the village of Kamoenai, both in Hokkaido – have accepted a survey. A draft of the revised basic policy says that the government will seek understanding and cooperation on conducting a survey from local governments and related organizations in stages.

<https://www.japantimes.co.jp/news/2023/02/03/national/nuclear-waste-disposal-plans/>

Japan NRA delays decision on nuclear reactor operating life

The Japan Times, February 8, 2023

The Nuclear Regulation Authority failed to reach a decision Wednesday on whether to approve the government's plan to extend the operating life of nuclear reactors in the country beyond 60 years. At the day's meeting, four of the five NRA commissioners, including Chairman Shinsuke Yamanaka, supported the extension plan, while the other, Akira Ishiwatari, opposed it. The issue is set to be discussed again at an NRA meeting on Feb. 15. Under the current nuclear reactor regulation law, the maximum operating period for nuclear reactors is set at 40 years in principle and 60 years if approved by the regulator. The government is working on a bill to effectively allow nuclear reactors to operate beyond the 60-year limit by excluding periods when reactors are halted for safety inspections or other reasons.

<https://www.japantimes.co.jp/news/2023/02/08/national/nuclear-reactor-operating-life/>

Cabinet approves change in Japanese nuclear policy

World Nuclear News, February 10, 2023

Since July, an advisory panel - the Green Transformation (GX) Executive Committee - has been considering the implementation of major changes in energy, all industries, and the economy and society in order to achieve the goal of achieving net-zero emissions by 2050. The government's GX implementation meeting was held on 22 December, during which a roadmap for the next ten years was agreed as a "basic policy for the realisation of GX". Under the new policy - which describes nuclear power as "a power source that contributes to energy security and has a high decarbonisation effect" - Japan will maximise the use of existing reactors by restarting as many of them as possible and prolonging the operating life of aging ones beyond the current 60-year limit. The government also said the country will develop advanced reactors to replace those that are decommissioned. Under revised regulations which came into force in July 2013, Japanese reactors have a nominal operating period of 40 years. Extensions may be granted once only and are limited to a maximum of 20 years, contingent on exacting safety requirements.

<https://www.world-nuclear-news.org/Articles/Cabinet-approves-change-in-Japanese-nuclear-policy>

Japan urged to work with intl community over nuclear-contaminated water

Global Times, February 10, 2023

Japan should attend to the serious concerns of the international community about the dumping of contaminated water into the ocean from the Fukushima nuclear power plant, experts said. It comes as Japan seeks understanding from Pacific island nations who sent a delegation to Tokyo this week to voice their concerns.

According to Kyodo News, Japanese Foreign Minister Yoshimasa Hayashi on Wednesday tried to seek understanding from Kitlang Kabua, minister of foreign affairs and trade of the Republic of the Marshall Islands, about Japan's plan to discharge the contaminated water from the Fukushima nuclear power plant into the Pacific.

<https://www.globaltimes.cn/page/202302/1285185.shtml>

Japan formally adopts policy of using nuclear reactors beyond 60 yrs

Kyodo News, February 10, 2023

Japan's Cabinet formally adopted a policy on Friday that will allow for the operation of nuclear reactors beyond their current 60-year limit alongside the building of new units to replace aging ones as part of efforts to cut carbon emissions while ensuring adequate national energy supply.

The government's "green transformation" policy features extensive use of nuclear power along with renewable energy and marks a major policy shift for the country, which suffered a devastating nuclear disaster in 2011. The Cabinet decision follows a meeting in late December, in which the policy was agreed upon. Bills necessary to implement the new policy were submitted to parliament Friday.

<https://english.kyodonews.net/news/2023/02/913e509a7958-cabinet-formally-adopts-policy-of-using-nuclear-reactors-beyond-60-yrs.html>

NRA approves use of Japanese reactors beyond 60 years

World Nuclear News, February 14, 2023

Japan's Nuclear Regulation Authority (NRA) has approved draft legislation to extend the operating life of the country's nuclear power reactors beyond 60 years. It also approved an amendment to the Nuclear Reactor Regulation Law to remove the rule specifying the operational periods of reactors. Under revised regulations that came into force in July 2013, Japanese reactors have a nominal operating period of 40 years. Extensions may be granted once

only and are limited to a maximum of 20 years, contingent on exacting safety requirements. At an extraordinary meeting on 13 February, a majority of the NRA commissioners voted to adopt a new system in which additional operating extensions can be granted every 10 years after 30 years of operation. No maximum limit is specified.

<https://www.world-nuclear-news.org/Articles/NRA-approves-use-of-Japanese-reactors-beyond-60-ye>

P. Australia

Australia's First Nuclear Submarine Could Be a Reality in Less Than 30 Years, Former PACOM Commander Testifies

USNI News, February 7, 2023

Developing a nuclear-powered submarine with Australia could happen in less than 30 years if "we put our shoulders to the task" and commit to a tight timetable, retired Adm. Harry Harris told lawmakers Tuesday. Harris, a former commander of the U.S. Indo-Pacific Command, called Australia the United States' key ally in the Indo-Pacific, citing the so-called AUKUS agreement. Washington's and London's willingness to share the "crown jewel" of nuclear propulsion and other high-technology advances with Canberra demonstrate a determination to counter Chinese ambitions, Harris said during a House Armed Services Committee hearing on China. Harris' timeline matches up with recent comments by Chief of Naval Operations Adm. Michael Gilday, who told a Korean-American security group recently that he didn't expect to see the first Australian-built nuclear submarine until sometime "well into the 2040s."

<https://news.usni.org/2023/02/07/australias-first-nuclear-submarine-could-be-a-reality-in-30-years-former-pacom-commander-testifies>

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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Prepared by :

Mr. Kushal Agrawal

Mr. Niranjan Oak

Mr. Aasi Ansari

Indian Pugwash Society

No.1, Development Enclave,
Rao Tula Ram Marg, Near USI, Delhi-110010
Tel. No (91-11) 2671-7983
Fax No. (91-11)2615-4192
Email: indianpugwashsociety@gmail.com