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A Fortnightly Newsletter from the Indian Pugwash Society

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- World's fourth Hualong One unit attains full power

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- NATO to give Ukraine equipment to defend against biological, chemical, nuclear threats

- Ukrainian Interior Ministry says fire situation near Chernobyl stabilized
- IAEA chief arrives in Ukraine
- IAEA chief arrives at South Ukrainian NPP
- Ukraine's proposals include refusal to join NATO, have nuclear weapons - negotiator
- IAEA chief says agrees on mechanism to ensure safety of Ukraine's nuclear facilities
- Russian officials confirmed withdrawal of troops from Chernobyl - IAEA

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- France's Le Drian says nuclear deal with Iran is near

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- Rheinmetall UK, UVision outline plans for partnership development and opportunities
- UK set to upgrade Tomahawk inventory

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- U.S. issues fresh North Korea sanctions after recent missile launches
- USN selects REMUS 300 UUV as next-generation SUUV programme of record
- US gives green light to US\$95 million missile support deal for Taiwan

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- AEOI Head Declares Iran's Plan to Unveil New N. Achievements
- Lifting bans on IRGC is an 'important' and 'serious' issue: Amir Abdollahian
- Iran slams new US sanctions amid nuclear deal uncertainty
- AEOI Chief: Iran to Build N. Power Plant without Foreign Assistance
- Bushehr plant's progress slow due to financial issues, says Iranian nuclear agency chief

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- Saudi Navy Commander Al-Ghufaili launches HMS Al-Jubail in Spain

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- Germany gets approval for Israel's Arrow 3 missile defense system

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- Turkey, France, Italy to revive steps on SAMP/T missiles: Erdo?an

- Turkey develops new-gen cruise missile with range of 150 km
- F-16 sales to Turkey to serve US, NATO interests: State Department

M. East Asia

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- South Korea's president-elect wants U.S. nuclear bombers, submarines to return

N. Japan

- 'New type' of North Korean ICBM lands in Japan's exclusive economic zone
- With ICBM launch, Japan sees dramatic shift in North Korean missile testing
- Kishida calls nuclear threat 'increasingly real' as nonproliferation goals fade
- Japan's energy crisis fuels momentum towards wider nuclear reactor restarts
- Majority in Japan backs nuclear power for first time since Fukushima

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- N.Korea says new ICBM will curb 'dangerous' U.S.; Washington seeks new sanctions
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- Australia, the U.K. and the U.S. say they will develop hypersonic missiles
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- India's nuclear doctrine is useless. Discard no-first-use, say nukes are for China threat
- Russian invasion should encourage Indonesia to rethink its nuclear plan

A. India

Generation Of Nuclear Power

PIB, March 23, 2022

The target for nuclear power by the turn of the century (year 2100) has not been set yet. At present, the target set is to reach a nuclear power capacity of 22480 MW by 2031, from the 6780 MW at present. In addition to projects presently under construction (8700 MW), the Government has accorded administrative approval and financial sanction for setting up ten indigenous Pressurized Heavy Water Reactors (PHWRs) of 700 MW capacity each in fleet mode. On the progressive completion of projects under construction and accorded sanction, the installed nuclear power capacity is expected to reach 22480 MW by the year 2031 which includes Prototype Fast Breeder Reactor (PFBR)[500 MW], being implemented by BHAVINI.

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=1808681>

Any nuclear accident due to Ukraine conflict not to impact India: Govt

Business Standard, March 23, 2022

The consequence of any possible nuclear disaster due to the Russia-Ukraine conflict is not envisaged to have any radiation impact in India, the Parliament was told on Wednesday. Responding to Trinamool Congress Lok Sabha member Sougata Ray's query as to whether the government has taken precautionary measures to counter the nuclear radiation caused by the nuclear disaster, if any, due to the Russia-Ukraine conflict, Science and Technology Minister Jitendra Singh said: "The consequence of any possible nuclear disaster due to the Russia-Ukraine conflict is not envisaged to have a radiation impact in India. The Indian Environmental Radiation Monitoring Network (IERMON) established across the country continuously monitors the background radiation level to give early indications of any increase in the radiation level."

<https://www.business-standard.com/article/current-affairs/any-nuclear-accident-due-to->

[ukraine-conflict-not-to-impact-india-govt-122032301208_1.html](https://www.pib.gov.in/PressReleasePage.aspx?PRID=122032301208_1.html)

India test-fires nuclear-capable BrahMos supersonic missile

The National News, March 24, 2022

India has successfully test-fired the nuclear-capable surface-to-surface BrahMos supersonic cruise missile from the remote Andaman and Nicobar Islands. India's Defence Research and Development Organisation said the extended range missile was test-fired from a land-based launcher from an island in the eastern Indian Ocean. BrahMos, a nuclear-capable missile, is one of the world's fastest cruise missiles and can be fired from land, sea and air. It came under the spotlight this month after New Delhi said it "accidentally" fired a missile into Pakistan. The successful test launch is seen as a significant step for the Indian defence industry, which is aiming to reduce its arms imports and boost defence exports.

<https://www.thenationalnews.com/world/2022/03/24/india-test-fires-nuclear-capable-brahmos-supersonic-missile/>

Use of Nuclear Energy for Power Generation

PIB, March 24, 2022

The present installed nuclear power capacity in the country is 6780 MW comprising of 22 operational nuclear power reactors. In addition, one reactor, KAPP-3 (700 MW) has also been connected to the grid in January- 2021. "Hon'ble Prime Minister in his statement at COP26 Summit held in Glasgow has stated that India will reach its non-fossil energy capacity to 500 GW by 2030 and India will meet 50 percent of its energy requirements from Renewable Energy by 2030." In this regard, total of 79 no. of hydro schemes with an aggregate capacity of more than 30000 MW (comprising 11 Pumped Storage Schemes of 8700 MW) have been envisaged for capacity addition during the period 2019-2020 to 2029-30. The existing nuclear power capacity of

6780 MW is going to be increased to 22480 MW by the year 2031 on progressive completion of projects under construction and accorded sanction. More nuclear power plants are also planned in future. Similarly a total capacity of 31665 MW of coal based capacity are in the various stages of construction.

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=1809285>

US sanctions on India for buying Russian S-400 missiles unlikely

Business Standard, March 24, 2022

On Tuesday, the US State Department said that, although the US has sanctioned Russia over the last four weeks, including the imposition of defence sanctions, the Biden administration is not about to sanction India anytime soon for buying S-400 air defence missile systems from Russia. At a media briefing in Washington DC, US State Department spokesperson Ned Price also said that India's strong dependency on Russian arms was the outcome of an era in which Washington, and some of its partner countries, were unwilling to have defence and security ties with New Delhi. On Tuesday, Price downplayed the probability of whether CAATSA sanctions would be triggered by India's purchase of the S-400 missile system. "I don't have anything new to update you on when it comes to the applicability of CAATSA. We continue to work with Congress and our Indian partners on these issues."

https://www.business-standard.com/article/current-affairs/us-sanctions-on-india-for-buying-russian-s-400-missiles-unlikely-122032300516_1.html

Top US Senator says India, China and Russia have overtaken US in hypersonic missile tech

The Free Press Journal, March 24, 2022

The US is no longer dominating several advanced technologies, an influential American Senator has observed here, saying that China, India and Russia have advantages on hypersonic missiles. "We're

in a situation where we have technological improvements. We used to dominate technology. That's no longer the case. Hypersonic, clearly, China and India, Russia have advantages on it," Senator Jack Reed, Chairman of the Senate Armed Services Committee said during a nomination hearing on Wednesday. The US is no longer dominating several advanced technologies, an influential American Senator has observed here, saying that China, India and Russia have advantages on hypersonic missiles. "We're in a situation where we have technological improvements. We used to dominate technology. That's no longer the case. Hypersonic, clearly, China and India, Russia have advantages on it," Senator Jack Reed, Chairman of the Senate Armed Services Committee said during a nomination hearing on Wednesday.

<https://www.freepressjournal.in/india/top-us-senator-says-india-china-and-russia-have-overtaken-us-in-hypersonic-missile-tech>

Collaboration for Developing Atomic Energy

PIB, March 24, 2022

India is recognized globally as a nation with advanced nuclear technologies. India has developed comprehensive capabilities in all stages of nuclear fuel cycle namely; mining, uranium production, fuel fabrication, nuclear power production, spent fuel reprocessing and waste management. So far Inter Governmental Agreement (IGA) for co-operation in peaceful uses of nuclear energy have been signed with the following eighteen(18) countries: Argentina, Australia, Bangladesh, Canada, Czech Republic, European Union, France, Japan, Kazakhstan, Mongolia, Namibia, Republic of Korea, Russia, Sri Lanka, United Kingdom, United States of America, Vietnam and Ghana. Currently India has active participation with US, France, Russia, Uzbekistan, Kazakhstan and Canada in the area of Nuclear Energy.

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=1809287>

Accidental missile firing probe points to 'human error' as likely cause

Hindustan Times, March 24, 2022

Human error was the likely cause of the accidental firing of a missile into Pakistan on March 9, and the role of a Group Captain and a few other officers has come under scrutiny in the ongoing Indian Air Force (IAF) probe into the unprecedented incident, senior officials familiar with the development said on Wednesday on condition of anonymity. "The accidental firing took place because of human error. That's what has emerged at this stage of the inquiry. There were possible lapses on the part of a group captain and a few others," said one of the officials cited above.

<https://www.hindustantimes.com/india-news/accidental-missile-firing-probe-points-to-human-error-as-likely-cause-101648058869636.html>

India slams North Korea's launch of ballistic missile, calls for dialogue

Livemint, March 26, 2022

India at the United Nations Security Council (UNSC) on Friday slammed the recent launch of an intercontinental ballistic missile (ICBM) by the Democratic People's Republic of Korea (DPRK) and called for dialogue on issues in the Korean Peninsula, according to news agency ANI report. In its statement by the Permanent Mission of India to the United Nations, it said, "India deplores the launch of an ICBM by the DPRK. This is a violation of the resolutions of the UN Security Council relating to the DPRK. It affects the peace and security of the region and beyond." Addressing a United Nations Security Council meet on non-proliferation and DPRK, Ambassador to India for UN TS Tirumurti said the recent launch is a violation of the resolutions of the UN Security Council. "These linkages have an adverse impact on peace and security in the region, including on India. Support dialogue to resolve the issues in the Korean Peninsula," a statement read.

<https://www.livemint.com/news/world/india-slams-north-korea-s-launch-of-ballistic-missile-calls-for-dialogue-11648259757886.html>

Modi govt gives go-ahead to buy 15 India-made Light Combat Helicopters with air-to-air missiles

The Print, March 30, 2022

The Narendra Modi government Wednesday approved the procurement of 15 indigenous Light Combat Helicopters (LCH) for the Army and the Indian Air Force. Already deployed in Ladakh, many more choppers are expected to be put in action in the coming years. The Cabinet Committee on Security (CCS), which met Wednesday, cleared the procurement of the Limited Series Production variants of the helicopters for Rs 3,887 crore, including infrastructure sanctions. Equipped with a 20 m gun, 70 mm rockets and air-to-air missiles, besides air-to-ground variants, the HAL-manufactured LCH will complement the heavier 22 Apache attack choppers purchased from the US.

<https://theprint.in/defence/modi-govt-gives-go-ahead-to-buy-15-india-made-light-combat-helicopters-with-air-to-air-missiles/895494/>

Funding for LIGO-India Project

PIB, March 30, 2022

Union Minister of State Dr. Jitendra Singh said that Government of India accorded In-principle approval for Laser Interferometer Gravitational wave Observatory (LIGO)-India project at an estimated cost of Rs. 1260 crore. In a written reply to a question in the Lok Sabha today, Dr Jitendra Singh said, subsequent to the In-principle approval, Department of Atomic Energy sanctioned Rs. 75 crore for pre-investment activities. The Minister informed that India partners with the United States of America (USA) under a Memorandum of Understanding signed between Department of Atomic Energy & Department of Science & Technology and National Science Foundation of USA to set up a LIGO Detector in India as part of a Global Network of Gravitational Wave Detectors under the LIGO-India Project.

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=1811536>

India successfully test fire medium range, surface-to-air missile off Odisha's Balasore

The Print, March 30, 2022

The Indian Army successfully test-fired medium-range missiles from Balasore, off the coast of Odisha, on Wednesday. The Defence Research and Development Organisation (DRDO) officials said the Indian Army twice fired the 'Medium Range Surface-to-Air Missile (MRSAM)' air defence system from the integrated test range (ITR) on Wednesday. The missiles were tested against high-speed aerial targets at two different ranges. The missile was test-fired twice on 27 March as well. Afterwards, the DRDO had tweeted: "MRSAM-Army missile system flight tested from ITR Balasore, Odisha at around 1030 hours intercepting a high-speed aerial target at long range. The target was destroyed by the missile in a direct hit." This missile has been jointly developed by the DRDO and Israel Aerospace Industries.

<https://theprint.in/india/india-successfully-test-fire-medium-range-surface-to-air-missile-off-odishas-balasore/894512/>

India to import 100 tonne of uranium to power nuclear power plants in FY23

The Economic Times, March 31, 2022

India will be importing 100 tonne of natural uranium and 133 units of fuel assemblies next fiscal, the government said. Replying to a question in the Lok Sabha on Wednesday, Jitendra Singh, Minister of State for Personnel, Public Grievances; Pensions and Prime Minister's Office said 100 tonne of natural uranium in the form of uranium ore concentrate is scheduled to be imported during 2022-23. He also said 133 numbers of fuel assemblies are scheduled to be imported next fiscal. Singh said the Indian government has entered into an agreement with the Government of Russian Federation for supply of fuel for Russian reactors at Kudankulam, throughout the

operation of power units. India also entered into a uranium Purchase Agreement with Canada, Kazakhstan, Russia and Uzbekistan, Singh said.

<https://economictimes.indiatimes.com/news/india/india-to-import-100-tonne-of-uranium-to-power-nuclear-power-plants-in-fy23/articleshow/90561182.cms>

Built with Israeli know-how & an Indian touch, new MRSAM system is key addition to Army arsenal

The Print, April 1, 2022

The Defence Research and Development Organisation (DRDO) carried out two successful tests of the Army's version of the medium-range surface-to-air missile (MRSAM) at the Integrated Test Range in Chandipur, off the coast of Odisha, on 27 March, paving the way for its induction into the force. The Army's version of the MRSAM has been jointly developed by the DRDO and the Israel Aerospace Industries, and is reflective of growing India-Israel defence collaboration. The Army's version of the MRSAM resembles the Israeli Barak-8 missile in many ways, but there are specific technological tweaks and adaptations to cater to India's specific needs, which reflect the successful indigenisation of this defence technology.

<https://theprint.in/defence/built-with-israeli-know-how-an-indian-touch-new-mrsam-system-is-key-addition-to-army-arsenal/897766/>

Union Minister Dr Jitendra Singh says, Government has accorded 'In-Principle' approval for five new sites for locating nuclear power plants in future

PIB, April 6, 2022

Dr Jitendra Singh said that the Government has accorded 'In-Principle' approval for five new sites for locating nuclear power plants in future. In a written reply to a question in the Lok Sabha today, Dr Jitendra Singh said, the

Government has accorded administrative approval and financial sanction for construction of 10 indigenous 700 MW Pressurized Heavy Water Reactors (PHWRs) to be set up in fleet mode. He said, on progressive completion of the projects under construction and accorded sanction, the nuclear capacity is expected to reach 22480 MW by 2031. The Minister informed that there are presently 22 reactors with a total capacity of 6780 MW in operation and one reactor, KAPP-3 (700 MW) has been connected to the grid on January 10, 2021. In addition, there are 10 reactors (Kudankulam Nuclear Power Plant (KKNPP) 3&4, KKNPP 5&6 - 4x1000 =4000 MW, 5 indigenous PHWR of 700 MW - 3500 MW, 500 MW PFBR) which are various stages of construction, which will add a total capacity of 8000 MW.

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=1814046>

No Technical Issue, Replies India as Philippines Seeks BrahMos Assurance Over 'Accidental Firing' Into Pak

News18, April 6, 2022

There is no technical issue with the BrahMos supersonic cruise missile, India has told Philippines after the archipelago, which has inked a nearly \$375 million deal for the missiles, reportedly sought an explanation on the "accidental firing" of a missile into Pakistan last month. A report in *Indian Express* said Philippines Defence Secretary Delfin Lorenzana had called in Indian ambassador Shambhu S Kumaran who assured the senior minister that there was no technical issue with the missile system that is manufactured by BrahMos Aerospace in India. Kumaran is also reported to have told Lorenzana that an enquiry into the incident is underway and probe details will be shared with relevant authorities.

<https://www.news18.com/news/india/no-technical-issue-replies-india-as-philippines-seeks-brahmos-assurance-over-accidental-firing-into-pak-4946882.html>

Union Minister Dr Jitendra Singh says, Government intends to establish more research centres in the country to support the research of ISRO

PIB, April 6, 2022

Minister informs that ISRO is working with NASA to jointly realise a satellite mission named 'NASA-ISRO Synthetic Aperture Radar (NISAR)' for scientific studies of Earth. Dr Jitendra Singh also informed that Government intends to establish more research centres in the country to support the research of ISRO. He added that existing Space Technology Incubation Centre, Regional Academia Centre for Space will get a grant of Rs. 200 lakhs per year maximum and new proposed cells also will adopt the same guidelines.

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=1814043>

BrahMos deal with Philippines bilateral; will not be impacted by sanctions on Russia: Indian en

The Print, April 6, 2022

India's deal with the Philippines to supply the BrahMos missile is a bilateral transaction and it will not be impacted by the sanctions against Russia, Indian Ambassador to Manila Shambhu Kumaran has said. The Philippines also sought a clarification from India on the BrahMos missile following last month's incident of the accidental firing of an Indian missile that landed in Pakistan, the envoy suggested. When asked about the possible impact of the Western sanctions on Russia on India's deal with the Philippines to supply BrahMos missiles, Kumaran said at an online event on Tuesday that it is a bilateral transaction between Manila and New Delhi. "I think it is very important for us to maintain that this is an India-Philippines transaction. I do not want to downplay the fact that the weapons system was developed and

manufactured by Russia and India and there is a strong element of Russian support in the system," he said.

<https://theprint.in/india/brahmos-deal-with-philippines-bilateral-will-not-be-impacted-by-sanctions-on-russia-indian-envoy/905588/>

B. Russia

Defense Ministry shows video of 8 Kalibr missiles launched at Ukrainian military targets

TASS, March 23, 2022

The Russian Defense Ministry has for the first time showed a video of a combat ship launching eight Kalibr cruise missiles against Ukrainian military infrastructure and a strike carried out by the coastal missile system Bastion. The Kalibr system was developed at and is manufactured by the design bureau Novator in Yekaterinburg. According to information available from open sources, the maximum range of the 3M-14 subsonic missile launched with this system is about 2,000 kilometers. A special Kalibr-NK configuration of the missile was created for surface ships.

https://tass.com/defense/1426147?utm_source=google.com&utm_medium=organic&utm_campaign=google.com&utm_referrer=google.com

Use of nukes possible in case of existential threat to Russia, says Kremlin

TASS, March 23, 2022

The use of nuclear weapons, under Russia's national security concept, is possible only in case of "existential" threat to the country, Russian presidential press secretary Dmitry Peskov said on Tuesday. "Well, we have a concept of domestic security. And well, you can read all the reasons for nuclear arms to be used. So, if it is an existential threat for our country, then it can be used in accordance with our concept. Well, there are a number of other reasons that were mentioned in that text," he said in an interview with CNN when asked if Russia's

use of nuclear arms could be completely excluded.

<https://tass.com/russia/1425967>

Russia Claims It Launched Bastion-P Anti-Ship Missiles Against Ground Targets In Ukraine

The drive, March 23, 2022

The Russian Ministry of Defense has released a video that it claims shows the K-300P Bastion-P coastal defense missile system launching strikes against ground targets in Ukraine. While there has been at least one other recent report of Russian use of the Bastion system to hit ground targets in Ukraine, the latest video, which was taken in occupied Crimea, appears to be the first visual evidence of it in action during this conflict and shows three missiles being launched in quick succession.

<https://www.thedrive.com/the-war-zone/44891/russia-claims-it-launched-bastion-p-anti-ship-missiles-against-ground-targets-in-ukraine>

Understanding the weapons that have drawn the world's attention since Russia's invasion of Ukraine

Washington Post, March 23, 2022

Russian officials claimed Wednesday to have fired long-range naval cruise missiles into Ukraine. If confirmed, that would add to the roster of weapons Russia has used in its invasion — some new or cutting-edge — that have drawn the attention and concern of analysts.

https://www.washingtonpost.com/world/2022/03/23/russia-ukraine-weapons-missiles-nukes-drones/?itid=sf_world_ukraine-russia_explanatory

Putin ally warns of nuclear dystopia due to United States

Reuters, March 23, 2022

One of President Vladimir Putin's closest allies warned the United States on

Wednesday that the world could spiral towards a nuclear dystopia if Washington pressed on with what the Kremlin casts as a long-term plot to destroy Russia. The views of Medvedev, once considered to be one of the least hawkish members of Putin's circle, gives an insight into the thinking within the Kremlin as Moscow faces in the biggest confrontation with the West since the 1962 Cuban Missile Crisis. The United States has repeatedly said that it does not want the collapse of Russia and that its own interests are best served by a prosperous, stable and open Russia.

<https://www.reuters.com/world/putin-ally-says-united-states-is-trying-destroy-russia-2022-03-23/>

Russia calls on IAEA to help in release of Russian nuclear workers from Rovenskaya NPP

TASS, March 24, 2022

Russia's Permanent Mission to the International Organizations in Vienna has submitted a Note Verbale to the International Atomic Energy Agency (IAEA) informing that Russian nuclear specialists are forcibly held at the Rovenskaya nuclear power plant in Ukraine. "On 23 February a shipment of fresh nuclear fuel was delivered to Rovenskaya NPP in accordance with the supply schedule and contractual obligations," the Note Verbale said. "Since then the Russian specialist are forcefully detained on the site of Rovenskaya NPP in the wagon where the shipment was previously held," it added. According to the document, four specialists who accompanied the shipment are being held.

<https://tass.com/world/1426577>

Russia discovers more facts proving US involvement in development of bioweapons in Ukraine

TASS, March 24, 2022

Experts from Russia's Nuclear, Biological and Chemical Protection Troops have discovered new facts proving the direct involvement of the US Department of

Defense in the development of components for biological weapons in Ukraine, Russian Defense Ministry Spokesman Major General Igor Konashenkov said. "The Russian Defense Ministry continues to study documents about the United States' secret military biological activities in Ukraine, which were provided by employees of Ukrainian biolabs. Experts from the Russian NBC Protection Troops have discovered more facts proving that the US Department of Defense was directly involved in the development of components for biological weapons in Ukraine," he pointed out.

<https://tass.com/defense/1426693>

US, allies relocated about 16,000 biological samples from Ukraine abroad – statement

TASS, March 24, 2022

The US and its allies transported about 16,000 biological samples beyond Ukrainian territory within the framework of its military-biological activities, Russian Nuclear, Chemical and Biological Protection Troops head Igor Kirillov announced Thursday, adding that such scale of relocation operation suggests a search for the most dangerous biological agent for this particular region. "The funding of the military biological operation allowed the US and its allies to transport at least 16,000 biological samples beyond the Ukrainian territory. [...] Such large-scale screening of the population's natural immunity was likely carried out in order to find biological agents that are the most dangerous for the population of a particular region," he noted.

<https://tass.com/politics/1426897>

No one in Russia is thinking about using nuclear weapons, Kremlin spokesman says

TASS, March 29, 2022

No one in Russia is considering the idea of using nuclear weapons, Kremlin Spokesman Dmitry Peskov told PBS. The

interviewer asked whether Russian President Vladimir Putin had suggested in his earlier statement that he would use nuclear weapons if a third party got involved in the conflict in Ukraine and Peskov said 'no.' "I don't think so. But he was quite bold in saying 'do not interfere, if you do, we have all the possibilities to prevent that and to punish all those who are going to interfere,'" he specified. When asked if he could rule out the use of nuclear weapons in the conflict on behalf of Russia, the Kremlin spokesman said: "No one is thinking about using... even about the idea of using nuclear weapons."

<https://tass.com/politics/1428619>

Russia expects UN's cooperation in resolution of situation around US bio labs in Ukraine

TASS, March 30, 2022

Russia expects that the UN will facilitate the resolution of the situation around US laboratories in Ukraine, Russian Foreign Ministry spokeswoman Maria Zakharova said during a briefing Tuesday. "We expect that the United Nations Organizations will be able to play the key role in the resolution of the current situation; in particular, the UN Security Council could significantly facilitate the implementation of Articles 5 and 6 of the Biological Weapons Convention, which stipulate that the sides must consult with each other in resolution of all issues regarding the Convention's goals and implementation of its articles, and to cooperate in any investigations of potential violations," she said.

<https://tass.com/politics/1429317>

Russia urges US to return to non-politicized dialogue on nuclear security - ambassador

TASS, March 30, 2022

Moscow calls upon the United States to return to non-politicized, professional dialogue on nuclear security, Russian Ambassador to the US Anatoly Antonov said, answering to a reporter's question. When asked to comment on remarks of

Undersecretary for Arms Control and International Security Affairs Bonnie Jenkins, who claimed Russia was creating nuclear risks in Ukraine, the ambassador replied: "Such statements are a yet another attempt to bring Russophobic rhetoric to international platforms."

<https://tass.com/world/1429395>

Parties to Iranian nuclear deal may find solution soon - Russia's Deputy Foreign Minister

TASS, March 31, 2022

The search for a mutually acceptable compromise on the further implementation of the Joint Comprehensive Plan of Action (JCPOA) on the Iranian nuclear program may take several more days or weeks, Russian Deputy Foreign Minister Sergey Ryabkov said in an interview with RT TV channel. "I think it will still take some days, maybe weeks, before everything is in place, but Russia did its best to ensure the positive outcome of this - in a very open manner, without any hidden agendas," he said.

<https://tass.com/politics/1430035>

US views other countries as testing range for bioweapons – Russian Defense Ministry

TASS, March 31, 2022

The United States views developing countries as a testing range for biological weapons components and medications, Chief of Russia's Nuclear, Biological and Chemical Protection Troops Igor Kirillov said on Thursday. "Disregard for Ukrainian citizens is a good illustration of the United States' rather pragmatic approach to organizing military biological research. Developing countries are viewed as a testing range for biological weapons components and medications," he emphasized. According to Kirillov, corresponding documents make it clear that the United States and Ukraine actually violated their obligations under Article 4 of the Biological and Toxin Weapons Convention and United Nations

Security Council Resolution 1540 dated April 28, 2004.

<https://tass.com/world/1430517>

Activities of five Kiev biolabs terminated during Russia's special military operation

TASS, March 31, 2022

Russia's special military operation in Ukraine made it possible to terminate the activities of five Kiev biolaboratories that worked with pathogens of anthrax, cholera and African swine fever, Chief of Russia's Nuclear, Biological and Chemical Protection Troops Igor Kirillov said on Thursday. "The termination of activities of five Kiev biolaboratories, which worked with pathogens of anthrax, tularemia, brucellosis, cholera, leptospirosis and African swine fever, is an important result of the Russian Armed Forces' special operation," he pointed out. According to Kirillov, part of the pathogen collection was taken to the United States, while the remaining strains were urgently destroyed based on a decree issued by the Ukrainian Health Ministry on February 24.

<https://tass.com/world/1430553>

Rosatom believes IAEA assistance is crucial to ensuring security of Ukraine's NPPs

TASS, April 1, 2022

The chief of Russia's nuclear power corporation Rosatom, Alexey Likhachev, has stressed the importance of providing full information about the current events at Ukraine's nuclear power facilities to the International Atomic Energy Agency. Rosatom will furnish all necessary assistance in this respect, he said after a meeting with IAEA Director-General Rafael Grossi in Kaliningrad on Friday. "It is essential to ensure the IAEA has the full information about the current events and to enable the nuclear power plants' specialists and personnel to do their job in these extremely complicated conditions. We have identified guidelines for cooperation and day-to-day

interaction," Likhachev said. In particular, he stressed the IAEA's highest professionalism.

<https://tass.com/economy/1431045>

Defense Ministry reveals Iskander strike in Kharkov eliminates over 100 nationalists

TASS, April 2, 2022

Russia's Defense Ministry confirmed that on Thursday, March 31, more than 100 nationalists and mercenaries were killed in a strike of the Iskander tactical ballistic missile system, Russian Defense Ministry Spokesman Major-General Igor Konashenkov reported on Saturday. "It has been confirmed that over 100 nationalists and mercenaries from Western countries were eliminated as a result of an Iskander precision strike on the defense headquarters in Kharkov city on Thursday, March 31," Konashenkov said.

<https://tass.com/world/1431533>

Northern Sea Route data processing center to be built at Kola NPP by 2023

TASS, April 4, 2022

The Arktika data processing center will be built on the territory of the Kola nuclear power plant by 2023. It will be a base for digital platforms and services for the Northern Sea Route, for the Russian Federation's Arctic zone, including the Murmansk Region, the power plant's PR and information department said. "The data processing center at the Kola NPP will be a basic infrastructure for new busy digital platforms and services for the Northern Sea Route and the Arctic zone, to provide logistics, 'smart city' services management, tourism support and other major development directions in the region," the release quoted Rosenergoatom's Deputy Director General Sergei Migalin as saying. Rosenergoatom is a part of Rosatom's electric energy division.

<https://tass.com/economy/1431947>

Over \$5 bln poured in US contractors' biological programs since 2005 – Russian top brass

TASS, April 6, 2022

Over \$5 billion have been poured in the military biological programs of US contractors in the past 17 years, Chief of Russia's Nuclear, Biological and Chemical Protection Troops Igor Kirillov said on Wednesday. "The total amount of financing [US] contractors has exceeded five billion dollars since 2005," Kirillov told an Arria formula meeting of the UN Security Council looking into the threats coming from US biolabs round the world. According to him, taking part in these programs are the US Department of Defense, the Agency for International Development, the Open Society Foundation of George Soros and the Centers for Disease Control and Prevention among others.

<https://tass.com/world/1433689>

C. China

AI on its way to replacing humans in hypersonic weapon design: Chinese study

South China Morning Post, March 23, 2022

Chinese researchers have made significant progress in building an artificial intelligence (AI) system that can design new hypersonic weapons by itself, according to the team behind the project. The machine could identify most of the shock waves occurring in wind tunnel tests, even though it was not instructed on what to look for, the researchers said. Without human intervention, the AI machine built a knowledge base of its own to aid the development of new engines for hypersonic missiles or planes that could travel longer distances at much faster speeds, according to its creator. The research team, led by professor Le Jialing with China Aerodynamics Research and Development Centre in Mianyang, Sichuan, published its findings on March 16 in the *Journal of Propulsion Technology*, a peer-reviewed

publication run by China's aerospace defence industry.

<https://www.scmp.com/news/china/science/article/3171533/ai-its-way-replacing-humans-hypersonic-weapon-design-chinese>

China planning another military base in Africa, after Djibouti now eyes Equatorial Guinea

Beijing News, March 23, 2022

China is planning to build a military base in Equatorial Guinea, which once completed, would be China's second base in Africa. China already has a base in Djibouti. The proposed base will not only complement the utility of the Chinese deepwater commercial port in Bata, Equatorial Guinea, that accommodates its warships but will also project Beijing's power directly towards North America and Europe, reported local media.

<https://www.beijingnews.net/news/272412223/china-planning-another-military-base-in-africa-after-djibouti-now-eyes-equatorial-guinea>

Second Fuqing Hualong One enters commercial operation

World Nuclear News, March 25, 2022

Unit 6 of the Fuqing nuclear power plant in China's Fujian province - the second of two demonstration Hualong One (HPR1000) reactors at the site - has been put into commercial operation, China National Nuclear Corporation (CNNC) has announced. Unit 5 became the first Hualong One to enter commercial operation last year. The process of loading the 177 fuel assemblies into the core of Fuqing 6 began on 6 November 2021. The unit achieved first criticality on 11 December and was connected to the grid on 1 January. It reached full power output on 19 February. The 1000 MWe (net) pressurised water reactor completed a demonstration run lasting 168 hours on 25 March and has now entered commercial operation.

<https://www.world-nuclear-news.org/Articles/Second-Fuqing-Hualong-One-enters-commercial-operat>

China calls for restraint regarding nuclear issue on Korean Peninsula

China Daily, March 26, 2022

China on Friday called for restraint on the Korean Peninsula nuclear issue after the test launch of an intercontinental ballistic missile was conducted by the Democratic People's Republic of Korea the previous day. "Under the current circumstances, we call on the parties concerned to stay calm, exercise restraint, stay on the right track of dialogue and consultation, and avoid taking any action that may exacerbate the tensions and lead to miscalculations," China's permanent representative to the United Nations Zhang Jun told the Security Council meeting on the situation of the Korean Peninsula.

<https://www.chinadaily.com.cn/a/202203/26/WS623e5cf6a310fd2b29e536d7.html>

Fuel loading completed at Hongyanhe 6

World Nuclear News, March 28, 2022

The process of loading the 157 fuel assemblies into the core of unit 6 of the Hongyanhe plant in Liaoning province has been completed, China General Nuclear (CGN) announced. The unit - the second of two ACPR-1000 reactors built as Phase II of the plant - is scheduled to begin operations later this year. The loading of the fuel began on 25 March and was completed on 28 March. CGN said the process was carried out under the supervision and approval of the Northeast Nuclear and Radiation Safety Supervision Station of the Ministry of Ecology and Environment. The National Nuclear Safety Administration conducted a comprehensive inspection of Hongyanhe 6 between 14 and 18 February prior to the issuance of an operating licence. "The completion of the first fuel loading marks that the unit has officially entered the stage of nuclear commissioning of the main system, and has taken an important step towards completion and production," the company said.

<https://www.world-nuclear-news.org/Articles/Fuel-loading-completed-at-Hongyanhe-6>

15th round China-India Corps Commander Level Meeting positive and constructive: Defense Spokesperson

China Military Online, March 31, 2022

China and India sides have agreed to properly handle the border issue through negotiation and consultation, firmly opposing interference from a third party, said Senior Colonel Wu Qian, spokesperson for the Chinese Ministry of National Defense (MND) at a regular press conference in Beijing today. Senior Colonel Wu made the remarks when commenting on the words by US Assistant Secretary of Defense for Indo-Pacific Security Affairs Ely Ratner, who said that India is facing a severe situation from the Chinese side along the Line of Actual Control (LAC), to which the US keeps close attention. On March 11, the Chinese and Indian militaries held the 15th round of China-India Corps Commander Level Meeting at the Moldo/Chushul border meeting point on the Indian side, during which the two sides held discussions on continuing to promote the settlement of relevant issues in the area along the Line of Actual Control (LAC) in the Western Sector of the China-India border. Wu commented that the meeting was positive and constructive.

http://english.chinamil.com.cn/view/2022-03/31/content_10145117.htm

China, Pakistan to further promote military cooperation in various fields: Defense Spokesperson

China Military Online, March 31, 2022

The military-to-military relations, serving as the mainstay of the China-Pakistan friendship, have played an important role in the development of bilateral relations for a long time, said Senior Colonel Wu Qian, a spokesperson for China's Ministry of National Defense, at a regular press conference on Thursday. Senior Colonel Wu made the remarks when commenting on the reports that the Pakistani Air Force recently held a ceremony for receiving the Chinese J-10CE fighter jets, and that as

commented by the Pakistani Prime Minister, the China-made aircraft would play an important role in correcting the “security imbalance” in the region. Wu added that the two militaries have achieved fruitful results in fields such as high-level visits, joint training and exercises, anti-epidemic cooperation and equipment technology, constantly enriching the connotation of bilateral strategic cooperation.

http://english.chinamil.com.cn/view/2022-03/31/content_10145115.htm

U.S. Sees Rising Risk in ‘Breathtaking’ China Nuclear Expansion

Bloomberg Quint, April 5, 2022

China’s “breathtaking expansion” of its strategic and nuclear arsenal is a quickly escalating risk for the U.S., the head of U.S. Strategic Command plans to tell lawmakers at a closed-door hearing on Tuesday. China’s first test of an intercontinental ballistic missile-launched hypersonic glide vehicle last July is a “technological achievement with serious implications for strategic stability,” Admiral Charles Richard wrote in prepared testimony posted on the website of the House Defense Appropriations subcommittee. The hypersonic vehicle flew 40,000 km (25,000 miles) for more than 100 minutes, Richard wrote in the testimony – the most detailed U.S. account of the test to date. It was “the greatest distance and longest flight time of any land attack weapon system of any nation to date,” according to the testimony. Richard gave similar testimony to both the House and Senate Armed Services Committees last month.

<https://www.bloombergquint.com/politics/u-sees-rising-risk-in-breathtaking-china-nuclear-expansion>

AUKUS plans hypersonic weapons to confront China as US speeds up NATO, Asian allies’ coordination

Global Times, April 6, 2022

As the US, the UK and Australia announced they would cooperate to develop hypersonic

weapons under the framework of the new AUKUS alliance and the NATO leaders are set - for the first time ever - to discuss China’s influence and “coercive policies” in its next strategic concept, analysts said that the US is making use of the Ukraine crisis to speed up the coordination of NATO and the “Asian version of NATO” to serve its purpose of containing China and keep its global hegemony, which will bring greater harm to both regional and global peace, and risk a regional arms race.

<https://www.globaltimes.cn/page/202204/1257673.shtml>

China urged to fully fund Argentina’s US\$8.3 billion nuclear plant as debt tightens

South China Morning Post, April 6, 2022

A tighter fiscal outlook has led Argentina to press China for full financing of its US\$8.3 billion nuclear plant, after signing an agreement in February for its construction. The South American country is grappling with high debt levels and needs to hit a fiscal balance by 2025 from a 3 per cent deficit last year as part of a recent deal with the International Monetary Fund. A tighter fiscal outlook has led Argentina to press China for full financing of its US\$8.3 billion nuclear plant, after signing an agreement in February for its construction. The South American country is grappling with high debt levels and needs to hit a fiscal balance by 2025 from a 3 per cent deficit last year as part of a recent deal with the International Monetary Fund.

<https://www.scmp.com/news/china/diplomacy/article/3173227/china-urged-fully-fund-argentinas-83b-nuclear-plant-debt>

Renewed US hype of ‘China’s nuclear expansion’ filled with hegemonic intentions

Global Times, April 6, 2022

A top US admiral again hyped China’s “expansion of strategic and nuclear arsenal” on Tuesday, making irresponsible

and speculative remarks on the country's hypersonic weapons tests and construction of missile silos. Chinese experts said that the hype is nothing new and that the US is aiming to maintain its global military hegemony and making excuses for its record-breaking defense budget.

<https://www.globaltimes.cn/page/202204/1257598.shtml>

D. Pakistan

Accidental missile launch by India worrying: Bajwa

The Times of India, April 3, 2022

While pushing for dialogue as the only way to resolve disputes among neighbours, Pakistan army chief Gen Qamar Javed Bajwa said India's accidental launching of a supersonic cruise missile into Pakistan on March 9 was worrying. "We expect India to provide evidence to assure Pakistan and the world that their weapons are safe and secure. India's indifferent attitude in not informing Pakistan immediately about an irrelevant launch of a missile is equally concerning," he said. Bajwa hoped that the international community would take cognisance of the fact that there could have been loss of lives in Pakistan, including "an accidental shooting down of a passenger plane that was flying along the path of the cruise missile".

<https://timesofindia.indiatimes.com/world/pakistan/accidental-missile-launch-by-india-worrying-bajwa/articleshow/90616891.cms>

World's fourth Hualong One unit attains full power

World Nuclear News, April 4, 2022

Unit 3 of the Karachi nuclear power plant in Pakistan - a Chinese-supplied Hualong One reactor - reached 100% capacity for the first time on 31 March. The 1100 MWe pressurised water reactor is currently undergoing power ascension testing prior to entering commercial operation. Construction of Karachi 3, the second of two

Hualong One units to be built near Paradise Point in the province of Sindh, began in May 2016. Hot functional testing of Karachi 3 - which simulate the temperatures and pressures that the reactor systems will be subjected to during normal operation and are carried out before loading nuclear fuel - was completed ahead of schedule on 4 November last year. It achieved first criticality on 21 February and was connected to the grid on 4 March. Various performance and commissioning tests have since been carried out at power levels of 25%, 30%, 50%, 75% and 87% capacity, China National Nuclear Corporation (CNNC) said. Once testing at full capacity is completed, Karachi 3 will perform a 100-hour demonstration run, after which it will enter commercial operation.

<https://www.world-nuclear-news.org/Articles/Worlds-fourth-Hualong-One-unit-attains-full-power>

Europe

E. Ukraine

NATO to give Ukraine equipment to defend against biological, chemical, nuclear threats

TASS, March 24, 2022

NATO will provide Ukraine with equipment to defend against biological, chemical and nuclear weapons and help with cybersecurity, NATO Secretary-General Jens Stoltenberg said on Thursday following the alliance's extraordinary summit in Brussels. "Today, we agreed to do more, including cybersecurity assistance and equipment to help Ukraine protect against biological, chemical, radiological and nuclear threats," he said. "This could include detection, protection, and medical supplies, as well as training for decontamination and crisis management." Stoltenberg asserted that Russia is attempting to create a pretext for employing chemical weapons in Ukraine.

<https://tass.com/world/1426955>

Ukrainian Interior Ministry says fire situation near Chernobyl stabilized

TASS, March 28, 2022

The situation with the spread of natural fires in the Chernobyl nuclear power plant exclusion zone has stabilized, radiation background is normal, Vadim Denisenko, adviser to the Ukrainian Interior Minister, announced on Monday. "Information is coming from various channels that there is allegedly a fire on 10 hectares," the Ukrainian edition Strana quoted him as saying, "Two weeks ago there was indeed a fire there, but the fires managed to be extinguished.

Today we can say that there are no big fires on large areas. The situation with fires in Chernobyl is stable and under control. Radiation background in Kiev and the region is normal".

<https://tass.com/emergencies/1428157>

IAEA chief arrives in Ukraine

TASS, March 29, 2022

Director General of the International Atomic Energy Agency (IAEA) Rafael Grossi has arrived in Ukraine to provide technical assistance to ensure the safety and security of the country's nuclear facilities, according to a statement by the IAEA published on Tuesday. "The Director General of the International Atomic Energy Agency, Rafael Mariano Grossi, is in Ukraine for talks with senior government officials on the IAEA's planned delivery of urgent technical assistance to ensure the safety and security of the country's nuclear facilities and help avert the risk of an accident that could endanger people and the environment," the statement said.

The visit will take place during this week. The official will visit one of Ukrainian nuclear power plants.

<https://tass.com/world/1428799>

IAEA chief arrives at South Ukrainian NPP

TASS, March 30, 2022

Director General of the International Atomic Energy Agency (IAEA) Rafael Grossi reported on Wednesday that he had arrived at the South Ukrainian nuclear power plant to provide technical assistance to ensure the security of Ukraine's nuclear facilities amid Russia's military operation. "I'm at South #Ukraine Nuclear Power Plant to meet Ukrainian gov't officials and staff, and start @IAEAorg [IAEA] technical assistance for safety and security of country's nuclear facilities. Vital to be on the ground to provide effective support to [Ukraine] in these extremely difficult times," he wrote on his Twitter page. According to him, the IAEA's presence in Ukraine "will help prevent the danger of a nuclear accident that could have severe public health and environmental consequences in #Ukraine and beyond."

<https://tass.com/world/1429521>

Ukraine's proposals include refusal to join NATO, have nuclear weapons – negotiator

TASS, March 30, 2022

Ukraine's written proposals, handed to Russia at a meeting in Istanbul, contain Kiev's commitments not to become a NATO member or to possess nuclear weapons, Russian presidential aide Vladimir Medinsky, head of the Russian delegation at the talks, said in a televised interview with Rossiya-24 channel on Wednesday. "Yesterday, for the first time in all previous years, the Kiev authorities declared their readiness to negotiate with Russia. They handed us the principles, written down on paper, of a possible future agreement, which involve refusing to join NATO, securing Ukraine's non-aligned status, refusing from nuclear weapons and other weapons of mass destruction," he said.

<https://tass.com/world/1429779>

IAEA chief says agrees on mechanism to ensure safety of Ukraine's nuclear facilities

TASS, April 1, 2022

The IAEA has agreed separately with Ukraine and Russia on a framework mechanism to guarantee the safety of Ukrainian nuclear facilities with respect to the Russian military operation, International Atomic Energy Agency (IAEA) Director General Rafael Grossi said on Friday in Vienna. "I do have an agreement," Grossi told journalists. "But the difference is that we have agreed separately with Russia and with Ukraine," he added. According to Grossi, the IAEA's assistance in the delivery of technical equipment for monitoring radiation levels in Ukraine has already begun, but the core support set will be provided from next week. As he pointed out, assistance to Ukraine includes several aspects: from the delivery of portable equipment for measuring radiation to the presence of agency experts at Ukrainian nuclear facilities.

<https://tass.com/society/1431065>

Russian officials confirmed withdrawal of troops from Chernobyl – IAEA

TASS, April 2, 2022

During a meeting with International Atomic Energy Agency (IAEA) Director General Rafael Grossi, Russian officials notified the international organization that all Russian troops were withdrawn from the Chernobyl Nuclear Power Plant (NPP) in Ukraine. "Ukraine has informed the IAEA that all Russian forces have left the Chornobyl NPP, and this was confirmed by the Russian officials at today's meeting in Kaliningrad. Ukraine has not yet reported any staff rotation at the Chornobyl NPP since 20-21 March," the IAEA secretariat said. "Director General Grossi intends to head an IAEA assistance and support mission to the Chornobyl NPP as soon as possible. It will be the first in a series of such nuclear safety and security missions to Ukraine," the document says.

<https://tass.com/world/1431393>

F. France

France ups defence and deploys three of its four nuclear submarines

The Connexion, March 25, 2022

France has increased its defence measures by deploying two more of its ballistic missile submarines since the start of March. It is the first time it has had three such vessels at sea at once since the end of the 1980s. It comes as the military successfully test an upgraded nuclear cruise missile. The move is undoubtedly in response to Russia's move to invade Ukraine on February 24. It means the country now has three of its four submarines capable of firing nuclear warheads at sea. This is the first time it has had so many out since the end of the 1980s, newspaper *Le Télégramme* reports. The combined theoretical firepower of these three submarines, each armed with 16 missiles carrying six warheads, is equivalent to almost 2,000 times the Hiroshima bomb. The move to deploy three ballistic missile submarines is generally seen as a dissuasion tactic, rather than an overt act of aggression.

<https://www.connexionfrance.com/article/French-news/France-ups-defence-and-deploys-three-of-its-four-nuclear-submarines>

France claims successful ASMPA nuclear missile test

CGTN, March 24, 2022

French Defense Minister Florence Parly announced that France successfully tested the modernized version of its ASMPA nuclear missile without a military payload on Wednesday. "The missile, developed by MBDA, was fired from a Rafale that took off from Cazaux Air Force Base 120 in southwestern France," according to a ministry statement. The medium-range air-to-ground nuclear missile (ASMPA) was commissioned in 2009 and is set to be replaced around 2035 by a next-generation air-to-ground system (ASN4G).

<https://news.cgtn.com/news/2022-03-24/France-claims-successful-ASMPA-nuclear-missile-test-18EQXBZdpte/index.html>

France's Le Drian says nuclear deal with Iran is near

Tehran Times, 28 March 2022

We are near an agreement," Le Drian said at a news conference in Doha, U.S. News reported. Le Drian's comments came in contrast to a bleaker assessment of the Iran nuclear situation offered by the United States on Sunday. On Sunday, U.S. Special Envoy for Iran Robert Malley said he was not confident that a nuclear deal between world powers and the Islamic Republic was imminent. European Union foreign policy chief Josep Borrell said on Saturday that a nuclear deal with Iran is very close to being signed.

<https://www.tehrantimes.com/news/471218/France-s-Le-Drian-says-nuclear-deal-with-Iran-is-near>

G. United Kingdom

British-made Starstreak missiles are ready to be deployed in Ukraine to take down Putin's jets imminently, says Ben Wallace

Daily Mail, March 26, 2022

British -made anti-aircraft missiles are about to be deployed by Ukraine in the conflict for the first time, threatening to heap further humiliation on Vladimir Putin over his disastrous invasion. Defence Secretary Ben Wallace told The Mail on Sunday that the Starstreak system - a shoulder-mounted missile that travels at more than three times the speed of sound to take down low-flying enemy jets - was ready to be used imminently. The news came as Ukraine's President Volodymyr Zelensky claimed that Putin was scaling back the invasion because he was reeling from 'powerful blows' and had lost more than 16,000 troops.

<https://www.dailymail.co.uk/news/article-10655657/British-Starstreak-missiles-ready-deployed-Ukraine.html>

London refused to increase the number of nuclear warheads because of Ukraine

RBC, 1 April 2022

The UK does not plan to further increase the number of nuclear warheads against the backdrop of events in Ukraine. This was stated by the Deputy Minister of Defense of the United Kingdom, David Williams, reports Sky News. In March last year, the UK authorities published a new defense and foreign policy strategy. It spoke of the intention to increase the state's nuclear potential by 40% by raising the number of nuclear warheads for Trident ballistic missiles from 180 to 260. According to the document, nuclear charges should be placed on four Vanguard-class missile submarines, one of these nuclear submarines will always be on patrol.

<https://www.rbc.ru/politics/01/04/2022/62463b909a79471c754c7be5>

Rheinmetall UK, UVision outline plans for partnership development and opportunities

Janes, April 4, 2022

Rheinmetall UK and UVision representatives have disclosed to *Janes* details of the future of their strategic co-operation agreement, which was signed in October 2021. Speaking at their inaugural Loitering Munition (LM) Symposium in Bristol on 22 March - which was attended by the UK Ministry of Defence (MoD) and the US Department of Defense (DoD) personnel - Simon Valencia, sales director UK & Ireland at Rheinmetall, said that the companies had started working together on undisclosed sales efforts, as well as participation in "several running" European procurement programmes for LMs

<https://www.janes.com/defence-news/air-platforms/latest/rheinmetall-uk-uvision-outline-plans-for-partnership-development-and-opportunities>

UK set to upgrade Tomahawk inventory

Janes, April 6, 2022

The UK is planning to recertify and upgrade its inventory of Tomahawk Block IV cruise missiles to Block V standard under a Foreign Military Sales (FMS) case with the US government. *Janes* has learnt that the MoD plans to sign the FMS case later this year. The contract will last five years, with Raytheon Missiles and Defense taking the prime contractor role on behalf of the US government. A notification released by the US Defense Security Cooperation Agency (DSCA) revealed that the State Department has approved an FMS contract valued at up to USD368.5 million.

<https://www.janes.com/defence-news/naval-weapons/latest/uk-set-to-upgrade-tomahawk-inventory>

H United States

U.S. Has 'No Intention' of Using Chemical Weapons: White House

The Moscow Times, March 25, 2022

The United States has “no intention” of using chemical weapons under any circumstance even if Russia uses such weapons in Ukraine, White House National Security Adviser Jake Sullivan said on Friday. “There will be a severe price if Russia uses chemical weapons. And I won’t go beyond that other than to say the United States has no intention of using chemical weapons, period, under any circumstance,” he told reporters on board Air Force One.

<https://www.themoscowtimes.com/2022/03/25/us-has-no-intention-of-using-chemical-weapons-white-house-a77088>

Meet the nuke the U.S. keeps in Europe, waiting to not be used

Washington Post, March 25, 2022

The bomb’s family name is B61. Over the past half-century, in various modifications, B61s have been sent to Europe to deter Russia and reassure the NATO alliance, and

they remain there for those reasons. Scenarios for their detonation seem far-fetched – but perhaps not as far-fetched as they seemed a month ago. As Russia’s invasion of Ukraine triggers another round of anxiety about World War III, the B61 remains the only U.S. nuclear weapons system based in Europe, a forward-deployed reassurance for NATO at a time when Russian President Vladimir Putin is rattling his own nuclear saber.

<https://www.washingtonpost.com/lifestyle/2022/03/25/nuclear-weapon-b61-russia/>

U.S. issues fresh North Korea sanctions after recent missile launches

Reuters, April 1, 2022

The United States on Friday imposed sanctions on five entities it accused of providing support to North Korea’s development of weapons of mass destruction and ballistic missile programs, increasing pressure on Pyongyang following a recent series of missile launches. The Treasury Department in a statement said the action targets the Ministry of Rocket Industry, which it said is a North Korean weapons of mass destruction research and development organization directly linked to the development of new intercontinental ballistic missiles (ICBMs). It also designated four of the organization’s subsidiaries - Hapjanggang Trading Corporation, Korea Rounsang Trading Corporation, Sungnisan Trading Corporation, and Unchon Trading Corporation.

<https://www.reuters.com/world/us-imposes-north-korea-related-sanctions-treasury-website-2022-04-01/>

USN selects REMUS 300 UUV as next-generation SUUV programme of record

Janes, 01 April 2022

Huntington Ingalls Industries (HII) announced on 30 March that its REMUS 300 unmanned underwater vehicle (UUV)

has been selected by the US Navy as its next-generation small UUV (SUUV) programme of record. HII Unmanned Systems (UxS) received a solicitation from Naval Sea Systems Command (NAVSEA) on 18 March for the procurement of multiple production lots of the SUUV, support equipment, production hardware spares, and engineering support services. The acquisition strategy of the SUUV programme highlights the production and testing of the REMUS 300 UUVs in its initial phase in 2023.

<https://www.janes.com/defence-news/naval-weapons/latest/usn-selects-remus-300-uuv-as-next-generation-suuv-programme-of-record>

US gives green light to US\$95 million missile support deal for Taiwan

South China Morning Post, April 6, 2022

The US State Department has approved a US\$95 million missile support deal with Taiwan, which Taipei hailed as a proof of Washington's rock-solid support in strengthening its defences against mainland China. Observers said the latest approval was designed to assure the island that the US would not back down on its support for Taiwan in the event of a cross-strait war although Washington did not send forces to help Ukraine to fight against Russia's invasion.

<https://www.scmp.com/news/china/military/article/3173269/us-gives-green-light-us95-million-missile-support-deal-taiwan>

West Asia

I. Iran

AEOI Head Declares Iran's Plan to Unveil New N. Achievements

Fars News Agency, March 23, 2022

Head of the Atomic Energy Organization of Iran (AEOI) Mohammad Eslami announced on Wednesday that the country will unveil several achievements in different fields of the nuclear industries on April 9, marking the National Nuclear Technology Day. Eslami hailed capabilities of the Iranian nuclear industry scientists and Iran's entry into club

of powerful countries with nuclear technology, and noted that the issue of Iran's presence among the world's nuclear powers is very strategic and important. Last week, US officials explicitly acknowledged for the first time that nuclear sanctions would have no effect on Iran, he emphasized.

<https://www.farsnews.ir/en/news/14010103000458/AEOI-Head-Declares-Iran's-Plan-Unveil-New-N-Achievements>

Lifting bans on IRGC is an 'important' and 'serious' issue: Amir Abdollahian

Tehran Times, March 27, 2022

Iranian Foreign Minister Hossein Amir Abdollahian said on Saturday that removing sanctions on the Islamic Revolution Guards Corps (IRGC) is an "important" and "serious" issue in negotiations to revive the 2015 nuclear deal, officially known as the Joint Comprehensive Plan of Action (JCPOA). The remarks by Amir Abdollahian came one day before Enrique Mora, the European Union coordinator for the Vienna nuclear talks, held talks with Iran's chief nuclear negotiator Ali Bagheri Kani and possibly some other Iranian officials in Tehran. Lifting sanctions on the IRGC is one of the "important issues of negotiations," the foreign minister told the national TV. He added, "Removing the name of real and legal persons from the 'red list' and from a complex of sanctions and unilateral sanctions that the U.S. has imposed on Iran is one of the serious issues of our recent negotiations in Vienna." By red list the minister means "list of terrorist organizations".

<https://www.tehrantimes.com/news/471193/Lifting-bans-on-IRGC-is-an-important-and-serious-issue-Amir>

Iran slams new US sanctions amid nuclear deal uncertainty

Al-Monitor, March 31, 2022

The spokesperson for Iran's Foreign Ministry, Saeed Khatibzadeh, dismissed

new sanctions announced by the US Treasury against an Iranian national and his four companies connected to Tehran's missile program. "It is yet another indication of the US government's ill intentions toward the Iranian nation," Khatibzadeh said in a statement on March 31. The US Treasury stated on Wednesday that it had levied the punitive measures as it was convinced the firms and its owner had supported Iran in its development of ballistic missiles. Those missiles, US officials said, allegedly are being used by the Islamic Republic in its ambitious regional activities and in pursuit of deeper influence, a policy that Tehran has defiantly defended as "strategic."

<https://www.al-monitor.com/originals/2022/03/iran-slams-new-us-sanctions-amid-nuclear-deal-uncertainty#ixzz7SFhSonh9>

AEOI Chief: Iran to Build N. Power Plant without Foreign Assistance

Fars News Agency, April 6, 2022

Head of the Atomic Energy Organization of Iran (AEOI) Mohammad Eslami announced the country's plans to construct a fully home-grown nuclear power plant in Southwestern Iran. The AEOI plans to build an entirely Iranian-built power plant in Khuzestan province, Eslami said on Tuesday. "We are planning to build a 360-megawatt power plant in Darkhovin. This project will be an all-Iranian made power plant, which we have included in the development plan along with the research reactors required by the organization," he added. Eslami also announced that the comprehensive development document of the Atomic Energy Organization of Iran will be unveiled on April 9. The document has passed the legal approval process and will be unveiled by Iranian President Seyed Ebrahim Rayeesi on April 9, he added.

<https://www.farsnews.ir/en/news/14010117000176/AEOI-Chief-Iran-Bild-N-Pwer-Plan-wih-Freign-Assisance>

Bushehr plant's progress slow due to financial issues, says Iranian nuclear agency chief

TASS, April 6, 2022

Progress on the construction of the second stage of the Bushehr Nuclear Power Plant (NPP) in Iran was minimal over the past two years due to financial difficulties, Director of the Atomic Energy Organization of Iran Mohammad Eslami said on Wednesday. "Russia has constructed Bushehr-1 in accordance with the contract, and in accordance with the contract, the second and the third units are being built. However, the progress in this area was minimal over the past two years due to financial difficulties," he was quoted as saying by the ISNA agency. "The Iranian nuclear industry is owned solely by Iran and no foreign power has a stake in it," the official noted.

<https://tass.com/economy/1433623>

J. Saudi Arabia

Saudi-led coalition sets deadline for Houthi weapons withdrawal

The Jerusalem Post, March 26, 2022

The Saudi-led coalition in Yemen on Saturday set the Iran-aligned group Houthis a three-hour deadline to withdraw weapons from the airport of Sanaa and from two ports on the Red Sea, Saudi-owned Al-Arabiya TV reported. Retaining weapons in the Yemeni capital's airport and the ports of Hodeidah and Saleef would "end their status" as safe regions not to be targeted by coalition air strikes, it said, without saying exactly at what time the deadline would expire. The coalition said earlier on Saturday it was carrying out air strikes on Sanaa and Hodeidah in reaction to Houthi attacks on Saudi oil facilities.

<https://www.jpost.com/middle-east/article-702390>

Saudi Navy Commander Al-Ghufaili launches HMS Al-Jubail in Spain

Saudi Gazette, April 1, 2022

The Royal Saudi Naval Forces (RSNF) and its Commander Lt. Gen. Admiral Fahd bin Abdullah Al-Ghufaili celebrated the ceremonial launching of the warship of "AVANTE 2200" Corvette, which is the first of its type within the Sarawat Corvette Project. The warship was officially named His Majesty's Ship Al-Jubail, as part of its ceremonial launching held in the city of San Fernando, Spain. RSNF Commander raised the flag of the Kingdom of Saudi Arabia on HMS Al-Jubail marking its entry into service with the Royal Saudi Naval Forces.

<https://saudigazette.com.sa/article/618886/SAUDI-ARABIA/Saudi-Navy-Commander-Al-Ghufaili-launches-HMS-Al-Jubail-in-Spain>

K. Israel

Israel and India collaborate to complete missile defense system tests

The Jerusalem Post, April 1, 2022

Israel Aerospace Industries (IAI) and India's Defense Research and Development Organization (DRDO) collaborated to complete missile defense system tests, the IAI announced on Thursday. The tests resulted in the MRSAM Air and Missile Defense System, co-developed by the two organizations, which completed four successful interceptions which were conducted in various scenarios at different ranges and angles. The trials were conducted in India and were operated from Indian Navy ships with DRDO and IAI engineers. The trial included two interceptors that were launched from a portable land-based system and two others from a naval-based system – and the system's radar managed to detect all four.

<https://www.jpost.com/international/article-702931>

Germany gets approval for Israel's Arrow 3 missile defense system

The Jerusalem Post, April 6, 2022

Germany has received approval from Israel and the United States to purchase the Arrow-3 missile defense system, *The Jerusalem Post* has learned. German legislators have in the past pushed for Berlin to buy Israel's Iron Dome system to ward off aerial threats, but on Monday the head of the German Air Force, Lt.-Gen. Ingo Gerhartz, told the *Post* that the Arrow 3 is the most relevant system for the threats facing the European nation. "The Iron Dome is used for short-range threats, and we have quite a capable industry back home, and we will procure systems for that," Gerhartz said. "And for higher interceptors, we have the Patriot weapons system that we will modernize. [But] if it means [threats at a range of] 15,000 km. [9,320 miles] and then it is exo-atmospheric, we don't have anything, and that is why I had a close look at the Arrow 3 and we are really interested in the system."

<https://www.jpost.com/israel-news/article-703266>

L. Turkey

Turkey says idea to send its S-400s to Ukraine 'quite unrealistic'

Daily Sabah, March 24, 2022

Turkey has rejected the idea of sending its Russian-made S-400 missile defense systems to Ukraine to help it fight the invading Russian forces. "Though quite unrealistic today, this idea presents an opportunity to discuss the problems Turkey has experienced lately with the West," Communications Director Fahrettin Altun said Wednesday in an opinion piece for the *Wall Street Journal*. Reports over the recent week floated that the United States informally raised with Turkey the unlikely possibility of transferring the S-400s to Ukraine as it tries to fend off the Russian invasion that began on Feb. 24. Altun also cited an article published last week that suggested that the

transfer would lead to a betterment of the relationship between Washington and Ankara.

<https://www.dailysabah.com/business/defense/turkey-says-idea-to-send-its-s-400s-to-ukraine-quite-unrealistic>

Turkey, France, Italy to revive steps on SAMP/T missiles: Erdoğan

Daily Sabah, March 25, 2022

Turkey, France and Italy have decided to continue exploring reviving the steps for the SAMP/T missile defense system, President Recep Tayyip Erdoğan said Friday. Erdoğan made the comments while speaking to reporters on his way back from Brussels where he attended an extraordinary summit of NATO leaders. The president said he discussed the possibility of buying SAMP/T missile defense systems from the Franco-Italian Eurosam consortium with French President Emmanuel Macron and Italian Prime Minister Mario Draghi at the summit. He reiterated that NATO is the cornerstone of European security and that Turkey is an indispensable ally for ensuring regional security.

<https://www.dailysabah.com/business/defense/turkey-france-italy-to-revive-steps-on-sampt-missiles-erdogan>

Turkey develops new-gen cruise missile with range of 150 km

Daily Sabah, March 31, 2022

The Turkish defense contractor Roketsan Thursday announced it had developed a new generation cruise missile that can be launched from land, sea and air platforms. The cruise missile, named Çakır, will be a new force multiplier for the armed forces with its state-of-the-art features and effective warhead, the company said in a statement. It is still in the design phase, and its first tests are scheduled for later this year, with platform integration to take place in 2023. It will be test-fired from the country's landmark unmanned combat aerial vehicle (UCAV) Akıncı, the most advanced and sophisticated drone built by Turkey.

<https://www.dailysabah.com/business/defense/turkey-develops-new-gen-cruise-missile-with-range-of-150-km>

F-16 sales to Turkey to serve US, NATO interests: State Department

Daily Sabah, April 6, 2022

The Biden administration believes a potential sale of F-16 fighter jets to NATO ally Turkey would be in line with U.S. national security interests and would also serve NATO's long-term unity, the U.S. State Department said in a letter to Congress that fell short of explicitly supporting the deal. The letter comes after Turkey made a request in October to the United States to buy 40 Lockheed Martin-made F-16 fighters and nearly 80 modernization kits for its existing warplanes. President Recep Tayyip Erdoğan said last month that negotiations with the U.S. were progressing positively. Washington has so far refrained from expressing any opinion on the sale, saying it needs to go through the standard arms sales process.

<https://www.dailysabah.com/business/defense/f-16-sales-to-turkey-to-serve-us-nato-interests-state-department>

M. East Asia

Singapore to conduct further studies before using nuclear, geothermal technology

The Straits Times, April 4, 2022

Developments in nuclear energy and geothermal technologies have made them more viable for Singapore, but the Republic will be conducting further studies into their safety and security before they are used here. "Given the technical complexity of nuclear energy technologies, we will need to continue building our ability to better understand and assess their safety, security and environmental implications before we consider them for deployment in Singapore," Minister of State for Trade and Industry Alvin Tan told Parliament on Monday (April 4). He added that the Government is supporting research through the Nuclear Safety Research and Education Programme.

<https://www.straitstimes.com/singapore/politics/singapore-to-conduct-further-studies-before-deploying-nuclear-geothermal-technology>

South Korea's president-elect wants U.S. nuclear bombers, submarines to return

Reuters, April 6, 2022

Advisers to South Korea's president-elect sought redeployment of U.S. strategic assets, such as nuclear bombers and submarines, to the Korean peninsula during talks held on a visit to Washington, one of the advisers said on Wednesday. The team of foreign policy and security aides to incoming president Yoon Suk-yeol met U.S. national security adviser Jake Sullivan as Yoon seeks a more constant security presence to deter threats from North Korea as it steps up weapons tests. "Deploying the strategic assets is an important element of reinforcing the extended deterrence, and the issue naturally came up during the discussions," Park Jin, a four-term lawmaker who led the delegation, told reporters. He added that both sides explored ways to bolster U.S. extended nuclear deterrence at the talks on coordinating efforts against the North Korean threat held on a trip that also aimed to secure an early summit with President Joe Biden.

<https://www.reuters.com/world/asia-pacific/skoreas-president-elect-wants-us-nuclear-bombers-submarines-return-2022-04-06/>

N. Japan

'New type' of North Korean ICBM lands in Japan's exclusive economic zone

The Japan Times, March 24, 2022

North Korea launched an apparent "new type" of intercontinental ballistic missile on Thursday, the Defense Ministry said, firing the weapon into Japan's exclusive economic zone and setting the stage for a fresh showdown over its nuclear weapons program. The launch of the suspected ICBM signified a clear departure from North Korean leader Kim Jong Un's self-imposed moratorium on nuclear and long-range missile tests that had been in place since 2017.

<https://www.japantimes.co.jp/news/2022/03/24/asia-pacific/north-korea-unidentified-projectile/>

With ICBM launch, Japan sees dramatic shift in North Korean missile testing

The Japan Times, March 25, 2022

North Korea confirmed a test of a powerful "new type" of long-range missile, state media reported Friday, with Japan's defense chief calling Thursday's launch a dramatic departure from previous tests. Leader Kim Jong Un hailed the successful launch, saying his country was preparing to buckle down for the "inevitability of (a) long-standing confrontation with the U.S. imperialists."

<https://www.japantimes.co.jp/news/2022/03/25/asia-pacific/north-korea-icbm-launch/>

Kishida calls nuclear threat 'increasingly real' as nonproliferation goals fade

The Japan Times, March 27, 2022

Prime Minister Fumio Kishida has raised the specter of nuclear weapons being used by Russia in its invasion of Ukraine, calling the possibility "increasingly real" during a visit to Hiroshima with U.S. Ambassador to Japan Rahm Emanuel. The remarks by Kishida highlighted growing concern in Tokyo that Russia could potentially use smaller, tactical nuclear weapons in the war in Ukraine, dealing a huge setback for nonproliferation goals and providing a lesson to others who might be considering using force to change the status quo, including in Asia.

<https://www.japantimes.co.jp/news/2022/03/27/national/politics-diplomacy/kishida-japan-nuclear-russia-ukraine/>

Japan's energy crisis fuels momentum towards wider nuclear reactor restarts

The Straits Times, March 27, 2022

A spiralling global energy crisis sparked by Russia's invasion of Ukraine, a severe earthquake that knocked power plants offline, and an unseasonable cold snap led Tokyo to declare an unprecedented

warning on power supplies last week. In response, landmarks such as Tokyo Tower and Tokyo Skytree went dark, while news broadcasters like NHK dimmed their studio lights to conserve energy, as did Haneda Airport.

<https://www.straitstimes.com/asia/east-asia/japans-energy-crisis-fuels-momentum-towards-wider-nuclear-reactor-restarts>

Majority in Japan backs nuclear power for first time since Fukushima

The Japan Times, March 28, 2022

For the first time in more than a decade, a narrow majority in Japan now supports restarting idled nuclear reactors, according to a poll in the country's top business newspaper. The survey result marks the first time since the Fukushima disaster in 2011 that an increasing role for nuclear energy has been favored. It comes amid surging power prices and warnings of electricity shortages in Tokyo.

<https://www.japantimes.co.jp/news/2022/03/28/national/nuke-power-poll/>

O. North Korea

North Korea says tested new ICBM, prepared for long confrontation with U.S.

Reuters, March 26, 2022

North Korea said it tested a new, powerful type of intercontinental ballistic missile on Thursday, marking an end to a self-imposed moratorium on long-range testing in place since 2017 and drawing international condemnation. State media said leader Kim Jong Un directly guided the test of the Hwasong-17, a "new type" of intercontinental ballistic missile that is North Korea's biggest ever. He said it was key to deterring nuclear war. It said the missile flew for 1,090 km (681 miles) to a maximum altitude of 6,248.5 km (3,905 miles) and precisely hit a target in the sea. Kim said North Korea was preparing for long confrontation with U.S. imperialism and its strategic force was ready to check and

contain any military attempt by the United States, North Korean media said.

<https://www.reuters.com/world/asia-pacific/nkorea-fired-unidentified-projectile-off-east-coast-skorea-military-2022-03-24/>

N.Korea says new ICBM will curb 'dangerous' U.S.; Washington seeks new sanctions

Reuters, March 26, 2022

North Korea said on Friday its launch of a big new intercontinental ballistic missile this week was designed to demonstrate the might of its nuclear force and deter any U.S. military moves. The United States responded by saying it would push the U.N. Security Council to "update and strengthen" sanctions on North Korea over its "increasingly dangerous provocations," a move Pyongyang's allies China and Russia are likely to oppose. Thursday's launch was the first full ICBM test by nuclear-armed North Korea since 2017. Flight data indicated the missile flew higher and for a longer period than any of North Korea's previous tests before crashing into the sea west of Japan.

<https://www.reuters.com/world/asia-pacific/nkorea-says-thursday-launch-was-new-type-icbm-hwasong-17-state-media-2022-03-24/>

DPRK vows to hit back if ROK strikes Pyongyang

China Daily, April 6, 2022

A senior official of the Democratic People's Republic of Korea has warned the Republic of Korea of "total destruction and ruin" if it "adopts military confrontation" against Pyongyang, reported the official Korean Central News Agency on Tuesday. Kim Yo-jong, vice-department director of the Central Committee of the Workers' Party of Korea and younger sister of the DPRK's top leader Kim Jong-un, gave the warning in a press statement on Monday concerning a comment made by the ROK's Defense Minister Suh Wook describing preemptive strike capabilities against the DPRK. Kim said the ROK is not her country's principal enemy. "Unless the

ROK army takes any military action against our state, it will not be regarded as a target of our attack," she said. However, she added that "such nonsense itself is a very dangerous and nasty expression".

<https://epaper.chinadaily.com.cn/a/202204/06/WS624cbd0ea3109375516eb1ae.html>

P. Australia

Australia scraps MQ-9B SkyGuardian project

Janes, April 1, 2022

Australia has scrapped its Project Air 7003, a multimillion-dollar programme, which was conceived to strengthen the country's intelligence, surveillance, and reconnaissance (ISR) capabilities across land and maritime environments. The USD1.3 billion programme was on schedule to deliver 12–16 armed, medium-altitude, long-endurance MQ-9B SkyGuardians to Australia. The aircraft were to have been in service by the mid-2020s. On 1 April, Matt Yannopoulos, associate secretary of the Department of Defence (DoD), informed the Australian Senate Foreign Affairs, Defence, and Trade Legislation Committee about the project's cancellation.

<https://www.janes.com/defence-news/industry-headlines/latest/australia-scraps-mq-9b-skyguardian-project>

Australia, the U.K. and the U.S. say they will develop hypersonic missiles

NPR, April 6, 2022

The United States, United Kingdom and Australia announced Tuesday they will work together via the recently created security alliance known as AUKUS to develop hypersonic missiles. The move comes amid growing concern by the U.S. and allies about China's growing military assertiveness in the Pacific. U.S. President Joe Biden, British Prime Minister Boris Johnson and Australian Prime Minister Scott Morrison announced the plan after holding a check-

in on the progress of AUKUS, the Indo-Pacific alliance that was launched by the three countries in September.

<https://www.npr.org/2022/04/06/1091194471/australia-u-k-u-s-hypersonic-missiles>

Australia's hypersonic UAV project to boost advanced materials

Janes, April 6, 2022

The Australian government has awarded a multimillion-dollar grant to a reusable hypersonic unmanned aerial vehicle (UAV) project. The grant is expected to boost the development of high-temperature composites, which the country lacks. The federal government made the announcement of a AUD2.95 million (USD 2.21 million) Cooperative Research Centres Projects (CRC-P) grant for the DART Composite (CMP) airframe on 29 March. This reusable hypersonic platform is being developed by Hypersonix Launch Systems, together with the University of Southern Queensland, LSM Advanced Composites, and New South Wales-based Romar Engineering.

<https://www.janes.com/defence-news/industry-headlines/latest/australias-hypersonic-uav-project-to-boost-advanced-materials>

Q. Opinions

North Korea's Nuclear Opportunism

Sue Mi Terry

Foreign Affairs, March 24, 2022

With the entire world focused on Ukraine, North Korea launched its first intercontinental ballistic missile (ICBM) since 2017 on Thursday. The long-range missile, which is designed to carry nuclear weapons, should be seen as a major escalation by North Korea. U.S. and South Korean officials had warned that such a long-range missile test was coming and the war in Ukraine presented the perfect

opportunity for North Korea to make trouble, knowing that the United States and other powers would be distracted.

<https://www.foreignaffairs.com/articles/united-states/2022-03-24/north-koreas-nuclear-opportunism-Bottom-of-Form>

India's nuclear doctrine is useless. Discard no-first-use, say nukes are for China threat

Bharat Karnad,

The Print, March 25, 2022

If India has to fight China all by itself, how will it do so? Definitely not under the illusion that its conventional forces are qualitatively on par with the Chinese People's Liberation Army (PLA) and can wage a sustained war with it. The PLA can fight to a decision, in the main, because of a large and sophisticated Chinese defence industry that can quickly replenish the stocks of spares and whole weapons systems exhausted or destroyed in battle. It is an advantage that an Indian military equipped with imported armaments and a public sector-dominated defence industry stuck at the licensed production-screwdriver level of technology, does not enjoy. What then? As I have long argued in my books and other writings, nuclear weapons are the only option against an overwhelmingly strong China. It will require seminal changes in the government's attitude to nuclear weapons, the nuclear doctrine, and in the deployment of strategic forces.

<https://theprint.in/opinion/indias-nuclear-doctrine-is-useless-discard-no-first-use-say-nukes-are-for-china-threat/886866/>

Russian invasion should encourage Indonesia to rethink its nuclear plan

The Jakarta Post

March 28, 2022

In 2011, as Indonesia planned to start a nuclear energy program, a giant warning sign crashed in from Japan: the Fukushima nuclear disaster. The disaster was triggered by a gigantic tsunami and it resulted in a broadcast of radioactive pollution over a

stretch of Japan's countryside and across the Pacific Ocean. As Fukushima fades into the past, Indonesia, Southeast Asia's largest economy, wishes to forge ahead with nuclear energy. The government plans to use the first nuclear power plant to supply national electricity by 2040. However, there is another great warning sign about Indonesia's nuclear option, this time coming from Europe. The Russian invasion of Ukraine highlights how nuclear sites are an attractive and easy target for an enemy or invader. Over the past month, Russian troops have attacked then took charge of a number of nuclear plants in Ukraine.

<https://www.thejakartapost.com/opinion/2022/03/28/russian-invasion-should-encourage-indonesia-to-rethink-its-nuclear-plan.html>

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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