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India

India Conducts Successful Night Trial of Nuclear-Capable Prithvi-2 Missile From Odisha Test Range

India.com, October 16, 2020

A night trial of the indigenously developed nuclear-capable missile Prithvi-2 was successfully conducted on Friday as part of a user trial by the Army from a test range in Odisha, defence sources said. The state-of-the-art surface-to-surface missile blasted off around 7.30 pm from launch complex 3 of the Integrated Test Range (ITR) at Chandipur near Balasore and the trial was successful, they said.

The last trial of Prithvi-2, carried out after sunset on September 23 from the same base, was also successful. The trial of the missile, which has a strike range of 350 km, was carried out from a mobile launcher, a Defence Research and Development (DRDO) official said.

<https://www.india.com/news/india/india-conducts-successful-night-trial-of-nuclear-capable-prithvi-2-missile-from-odisha-test-range-4175787/>

BrahMos test-fired: List of missiles India has tested in last two months

Shankhyaneel Sarkar

Hindustan Times, October 18, 2020

India on Sunday tested a naval version of the BrahMos supersonic cruise missile. The missile was fired from the indigenously-built stealth destroyer, INS Chennai. With the successful testing of BrahMos, India has now tested 11 missiles within a period of two months. The test-firing of these missiles comes at a time when India is involved in a bitter row with China along the Line of Actual Control (LAC) in Eastern Ladakh. The standoff also led to clashes in Ladakh's Galwan Valley in June in which 20 Indian soldiers were killed.

India has test-fired a new version of the surface-to-surface supersonic cruise missile BrahMos and anti-radiation missile Rudram-1. It has also test-fired Shaurya which is a laser guided anti-tank guided missile and nuclear capable hypersonic missile.

<https://www.hindustantimes.com/india-news/brahmos-test-fired-list-of-missiles-india-has-tested-in-last-two-months/story-8zDJjBrZkdVpEQ1qHl12eI.html>

Scaling up the Cybersecurity of Nuclear Systems in India

Astha Oriel

Analytics Insight, October 18, 2020

The world is divided to possess nuclear power. Countries like the USA and Iran, are already waging war against each other for nuclear power. Moreover, having an advanced nuclear system is important for the national security. Hence, countries are spending billions of dollars for gaining momentum in their nuclear plans. But as nuclear power is proving to be authoritative, the nuclear system is becoming prone for cyber attacks. Over the past twenty years, five deadly cyberattacks compromised the national security in five countries. Not only affecting the internal security of any country, but cyberattacks has proven perilous for the privacy of the citizens. As new technological innovations are permeating the industry, the incidence of security breaches, and possibility of cyberattacks has heightened. That's why scaling up cybersecurity in nuclear institutes and models, become important.

A cybersecurity breach has several implications. Due to a cyber malware, the confidential documents associated with cyber security can be leaked. It can increase the vulnerabilities of nuclear systems. With a disrupted nuclear system, the adversaries can take advantage in corrupting the communication, and preventing the flow of information. Moreover, cyber attacks are a direct threat to the integrity of any nation.

<https://www.analyticsinsight.net/scaling-cybersecurity-nuclear-systems-india/>

A Cool Bomb: How an Indian mathematician aims to limit nuclear blast impact

Shibu Tripathi

Business Standard, October 19, 2020

Former president Dr A P J Abdul Kalam was once asked: "Can science create a 'Cool Bomb' to defuse or deactivate the deadly atom bomb?" Years later, India now seems to be taking the first steps in that direction, with a new research indicating that dust particles could help minimise the damage caused by a nuclear blast. Ever since the US dropped atom bombs on Japan's Hiroshima and Nagasaki, killing hundreds of thousands to end the World War-II, physicists the world over have been exploring ways to reduce the impact of nuclear bombs. An Indian mathematician seems to have taken a leap in this direction.

Dr Meera Chadha of the Netaji Subhas Institute of Technology in New Delhi has found that the deadly effects of a nuclear blast can be partially mitigated or reduced with the help of dust particles. This mathematical model, first published in The Royal Society Publishing in June and in the Journal of the Physical Society of Japan in August this year, has deduced that the energy released and the damage radius of a nuclear blast decreases with time as dust parameters in the system increase.

https://www.business-standard.com/article/current-affairs/a-cool-bomb-how-an-indian-mathematician-dr-meera-chadha-aims-to-limit-nuclear-blast-impact-120101900345_1.html

Surprise! India Is Leaping Ahead in Clean Energy

Vivek Wadhwa

Foreign Policy, October 22, 2020

No country will contribute more to the rise in global carbon emissions than India. Energy consumption among its 1.4 billion people is rising fast, with 65 percent of the country's electrical power currently generated from coal. The world's filthiest fossil fuel—of which India consumes more than the United States and Japan combined—will “remain ingrained under the fingernails of the nation” because of “politics, economics, and the complications of generating electricity.” So said the Economist in a 2018 briefing.

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<https://foreignpolicy.com/2020/10/22/green-india-energy-climate/>

US says it stands with India in efforts to defend its sovereignty; Two countries Ink key defence pact BECA

Outlook, October 27, 2020

In the midst of China's military belligerence in eastern Ladakh, the US on Tuesday said it stands firmly with India to confront threats to its sovereignty as the two countries vowed to ramp up their overall security ties, and inked the strategic defence pact, BECA, during the third edition of the Indo-US 2+2 dialogue here. During the high-level dialogue, led by External Affairs Minister S Jaishankar and Defence Minister Rajnath Singh from the Indian side and their US counterparts Mike Pompeo and Mark Esper from the American side, the two countries denounced the use of terrorist proxies and asked Pakistan to expeditiously bring to justice the perpetrators of all terror attacks, including 26/11 Mumbai, Uri, and Pathankot.

In a blunt criticism of China, US Secretary of State Pompeo cited killing of 20 Indian Army personnel in the Galwan Valley in eastern Ladakh in a clash with the Chinese military, and asserted that both India and the US are taking steps to strengthen cooperation against all threats and not just those posed by the Chinese Communist Party (CCP). Top government sources said China's "expansionist behaviour" in eastern Ladakh, Indo-Pacific region and in various parts of the world was a major talking point during the meeting with both sides vowing to firmly confront the challenges in the region and beyond as part of their common vision and shared interests.

<https://www.outlookindia.com/newscroll/us-says-it-stands-with-india-in-efforts-to-defend-its-sovereignty-two-countries-ink-key-defence-pact-beca/1965316>

2+2 Dialogue: With The Signing Of BECA, India-U.S. Security Partnership Takes Center Stage

Manish Kumar Jha

Business World, October 28, 2020

In third annual India-U.S. 2+2 Ministerial Dialogue, Defence and Security take the center-stage of the India-U.S. relationship which is now elevated to a Comprehensive Global Strategic Partnership. With BECA, technology barriers have largely been overcome now. It will open to defence and security collaboration and exchanges that we see U. S. conducting with allies like South Korea and Japan in the region

India's Minister of Defence Rajnath Singh and Minister of External Affairs Dr. S. Jaishankar held crucial meetings with U.S. Secretary of State Michael R. Pompeo and Secretary of Defense Dr. Mark T. Esper in New Delhi. Pompeo and Esper also held talks with National Security Advisor Ajit Doval. As reported, they discussed the issues of strategic importance. The meeting took place ahead of the third edition of 2+2 ministerial dialogue. Along, they met Prime Minister Narendra Modi. Besides BECA, U.S. also reaffirmed its continued strong support for India's permanent membership in a reformed UNSC as well as for India's early entry into the Nuclear Suppliers Group (NSG).

In a statement, Ministry of External Affairs (MEA) called the 2+2 dialogue among the most "significant in propelling India-US ties forward". The first edition of the dialogue took place in Delhi in September 2018, the last one was in Washington December 2019.

<http://www.businessworld.in/article/2-2-Dialogue-With-The-Signing-of-BECA-India-U-S-Security-Partnership-Takes-Center-Stage-/28-10-2020-336632/>

11 Interesting Facts About Homi Jehangir Bhabha, Father of India's Nuclear Programme

Ritu Singh

India.com, October 30, 2020

Today is the birthday of the famous nuclear physicist, Homi Jehangir Bhabha, popularly known as the father of Indian Nuclear Programme. The brilliant physicist was the founding director of two institutions – Tata Institute of Fundamental Research (TIFR) and Bhabha Atomic Research Centre, both of which led to immense growth and development in the field of research

<https://www.india.com/viral/11-interesting-facts-about-homi-jehangir-bhabha-father-of-indias-nuclear-programme-4191031/>

India test-fires air launched version of BrahMos supersonic cruise missile

The Hindu, October 31, 2020

In a display of its growing combat prowess, the Indian Air Force on Friday successfully test-fired an air launched version of the BrahMos supersonic cruise missile from a Sukhoi fighter aircraft in the Bay of Bengal, official sources said. The missile hit a sinking ship with deadly accuracy and the test-firing produced desired results, they said. The aircraft, belonging to the Thanjavur-based Tigersharks

squadron, took off from a frontline airbase in Punjab, and it was refuelled mid-air before the missile was released, they said.

The test firing of the missile came in the midst of India's bitter border stand-off with China in eastern Ladakh. The missile was fired after the Su-30 MKI aircraft travelled for over three hours covering a "significantly long distance", the officials said. In May last year, the Indian Air Force for the first time had successfully test fired the aerial version of the BrahMos missile from a Su-30 MKI fighter aircraft. The BrahMos missile provides the IAF a much desired capability to strike from large stand-off ranges on any target at sea or on land with pinpoint accuracy by day or night and in all weather conditions.

<https://www.thehindu.com/news/national/india-test-fires-air-launched-version-of-brahmos-supersonic-cruise-missile/article32986724.ece>

China

Fu Cong reiterates China's stance on nuclear issues

China Military Online, October 16, 2020

Fu Cong, director-general of the Department of Arms Control of the Chinese Ministry of Foreign Affairs, expounded China's stance on issues such as China's policy related to and development of nuclear power and the trilateral China-US-Russia arms control negotiation in an interview with Russian newspaper Kommersant on October 15, 2020.

About China's nuclear power policy

Fu emphasized that China has always been committed to a nuclear policy of no first use of nuclear weapons at any time and under any circumstances, and has always kept its nuclear capabilities at the minimum level required for maintaining its national security. The policy will never change. China is not interested in becoming a nuclear superpower, and will not follow the old path of the United States and the Soviet Union's crazy nuclear arms race during the Cold War. China did not in the past and will not participate in the nuclear arms race in the future.

About nuclear power development

Fu refuted the groundless accusations made by the United States on China's nuclear power buildup and pointed out that China's self-defense minimum nuclear deterrence strategy is a strategic choice based on China's own security needs and the nature of nuclear weapons as the ultimate deterrent. Guesses about the number of China's nuclear weapons is baseless. China's strengthening of the strategic capacity building aims to ensure the safety and reliability of its nuclear arsenal under the new situation. It's expected that the outside world will treat it objectively and correctly. In fact, other nuclear-armed states are also modernizing their nuclear arsenals. The United States, for instance, even expects to spend \$1.2 trillion to upgrade its massive nuclear arsenal.

Fu said that nuclear transparency includes two aspects: transparency in policy and intention and in capacity and quantity. Transparency in capacity and quantity does not necessarily bring about mutual trust. The disclosure of nuclear power by a nuclear-armed country that has about 6,000 nuclear warheads and insists on the first use of nuclear weapons means deterrence rather than transparency. It will never make other countries feel secure. From the perspective of enhancing mutual trust and avoiding misjudgments, transparency in nuclear policy and intention is more realistic. China pursues a nuclear policy of no first use of nuclear weapons and not using or threatening to use nuclear weapons against non-nuclear-weapon states or nuclear-weapon-free zones unconditionally. This transparency is of the most significance. At present, the United States has been upgrading its huge nuclear arsenal, pursuing an offensive nuclear strategy while expanding the use of nuclear weapons, lowering the threshold for the use of nuclear weapons, developing new “usable” nuclear warheads, vigorously developing anti-missile and outer space weapon systems, and threatening to deploy land-based intermediate-range missiles around China. These actions have severely harmed global strategic stability and impacted the survivability of China’s nuclear forces. In this context, China must keep a moderate ambiguity about the scale of its nuclear forces to ensure the effectiveness of its nuclear deterrence.

About the so-called trilateral China-US-Russia arms control negotiation

Fu pointed out that the United States has kept breaking treaties and withdrawing from international organizations, and proposed the so-called trilateral arms control negotiation, all of which is but to find a pretext to free its hands and gain absolute strategic supremacy. Given the huge gap between the nuclear arsenals of China and those of the United States and the Russian Federation, it is unfair, unreasonable, and infeasible to expect China to join in any trilateral arms control negotiation. China will never participate in such a negotiation. If the United States were willing to reduce its nuclear power to the level of China, China would be ready to engage in global nuclear disarmament negotiation. However, this may not happen in the foreseeable future. Fu said that China’s rejection of the so-called trilateral arms control negotiation does not mean that China evades its responsibility for nuclear disarmament or refuses to participate in the global nuclear disarmament process.

China has been actively committed to global nuclear disarmament efforts and made significant contributions to the conclusion of the Comprehensive Nuclear Test Ban Treaty (CTBT), actively supporting the development of the Treaty’s verification mechanism, and always abiding by its commitment to a “moratorium” on nuclear testing. Meanwhile, China has played a key role in activating the dialogue mechanism of the five nuclear-weapon states while actively pushing forward the conclusion of an international legal instrument on preventing the weaponization of and arms race in outer space through negotiations and promoting the provision of security assurances to non-nuclear-weapon states. China is ready to engage in meaningful dialogue on the issues related to strategic stability with all parties under the framework of the United Nations, the Conference on Disarmament and the P5 (five permanent members of the UN Security Council), and is willing to conduct bilateral dialogue on strategic security with all parties based on mutual respect, but we will brook no coercion or blackmail, stressed Fu.

http://english.chinamil.com.cn/view/2020-10/16/content_9919896.htm

China tests swarm of ‘suicide drones’ launched from a truck and helicopters

Minnie Chan

South China Morning Post, October 16, 2020

Insider says the small fixed-wing unmanned aircraft was commissioned under Beijing's military-civilian fusion strategy. He doesn't give details of the aircraft, but they appear to be similar to the country's first tactical attack drone, according to video footage. China has developed a new low-cost "suicide drone" that is despatched in a swarm to attack a target, according to mainland media reports. It was commissioned as part of the government's military-civilian fusion strategy, a People's Liberation Army insider who requested anonymity told the South China Morning Post. The policy seeks to boost military development with civilian and private sector support.

A swarm of the fixed-wing unmanned aerial vehicles was tested last month by the developer, a research institute under state-owned China Electronics Technology Group Corporation, according to a video released by the company. It shows kamikaze drones being launched from a light tactical vehicle and from helicopters. The company has carried out similar tests before. In November 2017 its research institute, the China Academy of Electronics and Information Technology, carried out what is believed to be the biggest such experiment, involving 200 of the small fixed-wing aircraft. In the video, multiple drones are seen being fired from a launcher mounted on the back of a modified version of the PLA's Dongfeng Mengshi light tactical vehicle, as well as at least two from helicopters.

<https://www.scmp.com/news/china/military/article/3105670/china-tests-swarm-suicide-drones-launched-truck-and-helicopters>

China boosts its attack range with launch of mysterious new hypersonic cruise missile, insiders say

Kristin Huang and William Zheng

South China Morning Post, October 19, 2020

Sources close to military and a social media video suggest PLA has weapon with greater speed and range than existing Changjian missiles. That could enable it to more effectively penetrate missile defence systems. A new airborne hypersonic cruise missile aimed at expanding the Chinese air force's attack capabilities has entered service, according to two sources close to the military. The weapon is an upgrade to the Changjian missile series and has greater range and speed than the others, the sources said. That would enable it to more effectively penetrate missile defence systems, they said. A video circulating on social network platforms since Saturday purportedly shows the new missile being carried by a Chinese H-6N bomber as it flies to an unidentified airbase. It resembles the shape of the DF-17, a hypersonic ballistic missile deployed under the People's Liberation Army Rocket Force that is capable of carrying both conventional and nuclear warheads.

Yet despite the similarity, sources close to the military said the new missile was not part of the Dongfeng series, which includes short-, medium- and intermediate-range and intercontinental ballistic missiles. A Beijing-based military source said the missile was an upgraded Changjian,

designed with improved speed and efficiency to penetrate increasingly sophisticated defence systems around the world. "The Changjian-20 has been around for more than a decade. As other countries are racing to develop more and more advanced defence systems and other hypersonic weapons, it was time for the Chinese air force to have an upgraded missile to boost its attack range," the military source said.

<https://www.scmp.com/news/china/military/article/3106144/china-boosts-its-attack-range-launch-mysterious-new-hypersonic>

Treaty banning nuclear weapons to enter into force

Global Times, October 25, 2020

An international treaty banning nuclear weapons has been ratified by a 50th country, the UN said Saturday, allowing the "historic" text to enter into force after 90 days. While nuclear powers have not signed up to the treaty, activists who have pushed for its enactment hold out hope that it will nonetheless prove to be more than symbolic and have a gradual deterrent effect. Honduras became the 50th country to ratify. UN Secretary-General Antonio Guterres called it "the culmination of a worldwide movement to draw attention to the catastrophic humanitarian consequences of any use of nuclear weapons," according to a statement from his spokesman.

"It represents a meaningful commitment towards the total elimination of nuclear weapons, which remains the highest disarmament priority of the United Nations." NGOs also welcomed the news, including the International Campaign to Abolish Nuclear Weapons (ICAN), a coalition that won the 2017 Nobel Peace Prize for its key role in bringing the treaty to fruition. "Honduras just ratified the Treaty as the 50th state, triggering entry into force and making history," ICAN said. Peter Maurer, president of the International Committee of the Red Cross (ICRC), said in a statement: "Today is a victory for humanity, and a promise of a safer future." The 75th anniversary of the nuclear attacks on Nagasaki and Hiroshima, marked in August, saw a wave of countries ratify the treaty. They have included Nigeria, Malaysia, Ireland, Malta and Tuvalu. Thailand, Mexico, South Africa, Bangladesh, New Zealand, Vietnam and the Vatican are among the countries that have already ratified it. It is now to enter into force on January 22, 2021, the UN said. The Treaty on the Prohibition of Nuclear Weapons - which bans the use, development, production, testing, stationing, stockpiling and threat of use of such weapons - was adopted by the UN General Assembly in July 2017 with the approval of 122 countries.

<https://www.globaltimes.cn/content/1204562.shtml>

Pakistan

PNRA broke rules to purchase house for chairman: AGP

Malik Asad

Dawn, October 24, 2020

The Pakistan Nuclear Regulatory Authority could not frame its rules for about two decades since its establishment and recently the authority purchased a house for the PNRA chairman in violation of procurement rules, the auditor general of Pakistan (AGP) disclosed.

The PNRA was established under an ordinance in 2001. It is entrusted with the responsibility of controlling, regulating and supervising all matters related to nuclear safety and radiation protection in the country. It is empowered to develop rules and regulations, issue guides for nuclear safety and radiation protection and develop and execute policies and programmes for the protection of life, health and property against the risk arising from ionising radiation.

The PNRA works under the umbrella of the National Command Authority (NCA). The AGP report for the financial year 2019-20 said that “Section 9(2) of the National Command Authority Act, 2010, states that the authority shall regulate all the matters relating to terms and conditions of the service of the employees in the service of the NCA, including their appointment and removal, promotion, transfer, integrity assessment, reliability, security clearance and other related matters”.

<https://www.dawn.com/news/1586716>

USA

Department of Energy picks two advanced nuclear reactors for demonstration projects

Adrian Cho

Science Mag, October 16, 2020

Hoping to revive the moribund U.S. nuclear power industry, the Department of Energy (DOE) announced this week it will help build two radically new nuclear reactors within 7 years. Funded by DOE's new Advanced Reactor Demonstration Program, the designs include exotic features such as cooling by sodium or helium instead of water in a bid to be safer and more economical than conventional power reactors. DOE officials “were trying to do something new and push the technology forward but also to stay within that 7-year time frame,” says Ashley Finan, a nuclear engineer and director of the National Reactor Innovation Center at Idaho National Laboratory who was not involved in the choice. “I think these two [designs] were judged to be ready for demonstration.”

DOE will split the total cost of building each plant with private industry. Each project receives \$80 million this year and could receive a total of between \$400 million and \$4 billion in funding over the next 5 to 7 years. The agency also intends to make additional, smaller awards this year for less mature ideas, Finan says.

<https://www.sciencemag.org/news/2020/10/department-energy-picks-two-advanced-nuclear-reactors-demonstration-projects>

Trump administration approves \$1.35 billion for small-scale nuclear reactor project

Timothy Gardner

Reuters, October 17, 2020

The U.S. Department of Energy on Friday approved \$1.35 billion over 10 years for the building of the first U.S. small-scale nuclear power project, a boost to a technology struggling with cost overruns and delays, but which depends on congressional appropriations.

The award was announced by the Utah Associated Municipal Power Systems (UAMPS) a consortium of cities, many of which would buy power generated by NuScale Power LLC's project. The DOE has pumped about \$280 million since 2013 into the project involving 12 small reactors, slated to be built at its Idaho National Laboratory site.

<https://in.reuters.com/article/usa-nuclearpower-nuscale/trump-administration-approves-1-35-billion-for-small-scale-nuclear-reactor-project-idUSL1N2H71LZ>

U.S. sees \$18 billion from purchases in nuclear power agreement with Poland

Timothy Gardner

Reuters, October 19, 2020

The United States and Poland have struck a nuclear power agreement in which Poland will likely buy \$18 billion in nuclear technology from U.S. companies, the U.S. energy department said on Monday. The United States has been competing with China and Russia and other countries to supply nuclear power technology to countries hoping to build their first reactors, or boost their programs.

"We are hopeful that the ultimate decisions that are made by Poland ... over a period of time will result in them choosing U.S. technology," U.S. Energy Secretary Dan Brouillette told reporters in a teleconference. Brouillette said the reactors would help lessen Poland's dependence on Russia for energy security. Poland, traditionally a large purchaser of Russia's natural gas, which competes with nuclear power, aims to halt those purchases after 2022. Instead, it will take pipeline deliveries from Norway and liquefied natural gas, from the United States and others.

<https://www.reuters.com/article/us-usa-nuclearpower-poland-idUSKBN274239>

US government backs NuScale projects at home and abroad

World Nuclear News, October 19, 2020

Utah Associated Municipal Power Systems (UAMPS) announced on 16 October that the DOE had approved a USD1.355 billion cost-share award, allocated over 10 years, to a new special purpose entity named the Carbon Free Power Project, LLC. This is an entity wholly-owned by UAMPS for the development and construction of the Carbon Free Power Project (CFPP), a 720 MWe NuScale power plant to be located at the DOE's Idaho National Laboratory site. Electricity from the plant will be distributed to customers of 33 of UAMPS member utilities in five states. Other western utilities are expected to join the project in the future. "This award will serve as a funding vehicle to advance

the CFPP as funds are appropriated by Congress," UAMPS said. "The award demonstrates the importance of the CFPP, which will be the first NuScale small modular nuclear reactor project in the United States. The award also demonstrates DOE's commitment to accelerate the decarbonisation of electrical generation nationwide and globally, and to support stable, carbon-free electrical supply to complement intermittent renewable energy."

The award, UAMPS said, will fund the one-time costs for the first-of-a-kind project, as funds are appropriated by Congress, to reflect what second and subsequent NuScale plants would cost. "This will help ensure that the levelised cost of energy target price of USD55 per MWh can be achieved at a level of risk UAMPS can manage." UAMPS CEO and General Manager Douglas Hunter said: "It is entirely appropriate for DOE to help de-risk this first-of-a-kind, next-generation nuclear project. This is a great example of a partnership with DOE to lower the cost of introduction of transformative advanced nuclear technology that will provide affordable, carbon-free electricity all over the country and the world. This project is much bigger than UAMPS itself."

<https://www.world-nuclear-news.org/Articles/US-government-backs-NuScale-projects-at-home-and-a>

UN arms embargoes on Iran expire despite US objections

Nasser Karimi

AP News, October 19, 2020

A decade-long U.N. arms embargo on Iran that barred it from purchasing foreign weapons like tanks and fighter jets expired Sunday as planned under its nuclear deal with world powers, despite objections from the United States, which insists the ban remains in place. While Iran says it plans no "buying spree," it can now in theory purchase weapons to upgrade military armaments dating back to before its 1979 Islamic Revolution and sell its own locally produced gear abroad.

In practice, however, Iran's economy remains crippled by broad-reaching U.S. sanctions, and other nations may avoid arms deals with Tehran for fear of American financial retaliation. The Trump administration has warned that any sales of weapons to Iran or exports from Iran will be penalized. The Islamic Republic heralded the end of the arms embargo as "a momentous day for the international community ... in defiance of the U.S. regime's effort." The Trump administration, meanwhile, says the expiration is moot since it reimposed all U.N. sanctions on Iran, including the arms embargo, via a clause in the nuclear deal Trump withdrew from in 2018, a claim ignored by the rest of the world.

<https://apnews.com/article/tehran-middle-east-iran-united-nations-united-states-6b6600decc0436b0aa52578fc7bfa374>

US AP1000 reactor passes pre-commissioning test

World Nuclear News, October 20, 2020

Cold functional tests are carried out to confirm whether components and systems important to safety are properly installed and ready to operate in a cold condition. Their main purpose is to verify the leak-tightness of the primary circuit and components - such as the pressure vessels, pipelines and valves of both the nuclear and conventional islands - and to clean the main circulation pipes. As part of the testing, the reactor coolant system was filled with water and pressurised above-normal operating conditions, then lowered to normal design pressure, while comprehensive inspections were conducted to verify the systems meet design standards.

Georgia Power said the completion of cold hydro testing prepares the site for the last major test remaining for unit 3 - hot functional testing - ahead of initial fuel loading. These tests aim to simulate the temperatures and pressures which the reactor's systems will be subjected to during normal operation. "Every milestone achieved at the Vogtle 3 and 4 project represents another major step towards operations of the first new nuclear units in the US in more than 30 years," said Georgia Power Chairman, President and CEO Paul Bowers. "Completion of cold hydro testing not only helps pave the way for initial fuel load, it also moves us closer to bringing online a carbon-free asset that will provide clean energy for our customers, our state and the country for the next 60 to 80 years."

<https://www.world-nuclear-news.org/Articles/US-AP1000-reactor-passes-key-precommissioning-test>

USA supports Polish energy independence with nuclear agreement

World Nuclear News, October 20, 2020

Presidents Donald Trump and Andrzej Duda announced on 24 June that they were working on a deal that would facilitate the development and building of a nuclear power plant in Poland, adding that it would work with the use of American technology bought from a large US company. The US Department of Energy (DOE) said yesterday that the 30-year agreement was the first of its kind and represented "an enduring energy bond" between the two countries.

"The US is committed to working with Poland to advance its national security, its regional security and its democratic sovereignty," Brouillette said. "The Trump Administration believes the key to energy security is energy diversity - a diversity of fuels, sources, and routes. Nuclear will provide a clean and reliable supply of electricity to the people of Poland, as well as enhance their energy diversity and security. The next generation of nuclear energy must be a part of the energy security conversation with our allies in Europe and around the world."

<https://www.world-nuclear-news.org/Articles/USA-supports-Polish-energy-independence-with-nucle>

US DOE extends cooperation with space agency

World Nuclear News, October 21, 2020

A Memorandum of Understanding on expanding more than 50 years of collaboration was signed yesterday by NASA Administrator Jim Bridenstine and Secretary of Energy Dan Brouillette. The

new MoU supersedes one signed by the two organisations in July 1992. Discussed during the Secretary of Energy Advisory Board meeting yesterday, the agreement supports Space Policy Directive-1 and other US national space policies. Under the directive and NASA's Artemis programme, the USA will land the first woman and the next man on the Moon in 2024 and establish sustainable lunar exploration by the end of the decade to prepare for the first human mission to Mars.

The MoU highlights potential areas for collaboration, including: scientific observations of the early universe from the Moon; Gateway activities; high-performance computing, modelling, and simulation; planetary defence from near-Earth objects; sensor and satellite development; space nuclear power and propulsion; space situational awareness; space weather; technology transfer; and more. Future joint activities aim to continue to advance civil space exploration, scientific discovery, and US national space policy. "An executive committee, comprising federal employees, will be co-chaired by the NASA Deputy Administrator and the Deputy Secretary of Energy, and shall meet on a regular basis to guide implementation of this MoU and ensure that issues cutting across organisational lines in either agency are resolved expeditiously," the MoU states.

<https://www.world-nuclear-news.org/Articles/US-DOE-extends-its-cooperation-with-space-agency>

U.S. urges nations to withdraw support for U.N. nuclear weapons ban treaty

CBS News, October 22, 2020

The United States is urging countries that have ratified a U.N. treaty to ban nuclear weapons to withdraw their support as the pact nears the 50 ratifications needed to trigger its entry into force, which supporters say could happen this week. The U.S. letter to signatories, obtained by The Associated Press, says the five original nuclear powers — the U.S., Russia, China, Britain and France — and America's NATO allies "stand unified in our opposition to the potential repercussions" of the treaty. It says the treaty "turns back the clock on verification and disarmament and is dangerous" to the half-century-old Nuclear Nonproliferation Treaty, considered the cornerstone of global nonproliferation efforts.

"Although we recognize your sovereign right to ratify or accede to the Treaty on the Prohibition of Nuclear Weapons (TPNW), we believe that you have made a strategic error and should withdraw your instrument of ratification or accession," the letter says. The treaty requires that all ratifying countries "never under any circumstances ... develop, test, produce, manufacture, otherwise acquire, possess or stockpile nuclear weapons or other nuclear explosive devices." It also bans any transfer or use of nuclear weapons or nuclear explosive devices — and the threat to use such weapons — and requires parties to promote the treaty to other countries.

<https://www.cbsnews.com/news/us-urges-nations-to-withdraw-support-for-un-nuclear-weapons-prohibition-treaty-ap/>

U.S. nuclear plants in S. Carolina, Missouri face the highest quake risks: report

Timothy Gardner

Reuters, October 22, 2020

The U.S. nuclear power reactors facing the highest risks of a meltdown from earthquakes are not in tremor-prone California, but states including South Carolina and Missouri, an analysis of government data published on Thursday said. The chances of an earthquake leading to meltdowns are small, but the results would be grave. A tsunami generated by a 2011 earthquake led to the meltdowns of three reactors at the Fukushima Daiichi nuclear power station in Japan, causing radiation releases and mass evacuations.

The U.S. reactor facing the highest risk is Duke Energy Corp's H.B. Robinson near Hartsville, South Carolina, according to the analysis here by the Union of Concerned Scientists. Robinson faces a one in 7,700 chance annually that a quake would cause a meltdown, said the analysis, based on Duke's estimates submitted to the U.S. Nuclear Regulatory Commission (NRC). That risk is five times higher than for each of PG&E Corp's two Diablo Canyon reactors, the only ones left in California. Those reactors are scheduled to be shut in 2024 and 2025.

<https://in.reuters.com/article/us-usa-nuclearpower-earthquakes-idUSKBN2772B5>

Russians Who Pose Election Threat Have Hacked Nuclear Plants and Power Grid

Nicole Perlroth

The New York Times, October 23, 2020

Cybersecurity officials watched with growing alarm in September as Russian state hackers started prowling around dozens of American state and local government computer systems just two months before the election. The act itself did not worry them so much — officials anticipated that the Russians who interfered in the 2016 election would be back — but the actor did. The group, known to researchers as “Dragonfly” or “Energetic Bear” for its hackings of the energy sector, was not involved in 2016 election hacking. But it has in the past five years breached the power grid, water treatment facilities and even nuclear power plants, including one in Kansas.

<https://www.nytimes.com/2020/10/23/us/politics/energetic-bear-russian-hackers.html>

U.S., India Expected to Sign Military Pact as China Prompts Closer Ties

Rajesh Roy and William Mauldin

The Wall Street Journal, October 25, 2020

The U.S. and India are expected to sign a key military agreement this week, bolstering cooperation in the Pacific and Indian oceans to counter an increasingly assertive China, Indian officials said. The satellite-intelligence pact will be completed during a visit by Secretary of State Mike Pompeo and Defense Secretary Mark Esper to New Delhi, Indian officials said, part of an annual gathering with their Indian counterparts Tuesday.

A senior U.S. defense official didn't confirm the planned signing, but cited significant progress. He also said the pact, known as the Basic Exchange and Cooperation Agreement, or Beca, would “allow

for expanded geospatial-information sharing between our armed forces.” India’s cabinet, which met under Prime Minister Narendra Modi early last week, approved the draft pact, setting the stage for a formal signing, according to two Indian government officials privy to the development.

<https://www.wsj.com/articles/u-s-india-expected-to-sign-military-pact-as-china-prompts-closer-ties-11603623601>

Satellite imagery captures construction underway at Iranian nuclear site

Natasha Turak

CNBC News, October 28, 2020

Construction is underway at the Natanz nuclear facility in Iran, satellite imagery released Wednesday by San Francisco-based Planet Labs reveals, against the backdrop of new sanctions imposed on the country by the U.S. and the steady disintegration of the 2015 nuclear deal. First reported by the Associated Press, the images show a road being built from August onward to the south of the city of Natanz, in Iran’s central western Isfahan province, toward the enrichment facility along with what appears to be construction materials. Analysts interviewed by the wire agency believe the photos capture excavation work and a potential tunnel into the surrounding mountains.

U.N. nuclear watchdog the International Atomic Energy Agency (IAEA) confirmed to the AP that Iran is constructing an “underground advanced centrifuge assembly plant.” It also told the AP that IAEA inspectors were aware of the construction and that Iran had previously informed them of it, which suggests it does not violate the parameters of the 2015 deal. Also known as the JCPOA, the Obama-era deal signed by the U.S., Iran, Russia, China and EU states lifted international sanctions on Iran in 2015 in exchange for curbs to its nuclear program.

<https://www.cnn.com/2020/10/28/satellite-imagery-captures-construction-underway-at-iranian-nuclear-site.html>

Trump administration pushes allies to pressure China over its nuclear program

Anchor Muted Background

Vivian Salama

CNN News, October 29, 2020

The Trump administration is working to pressure NATO allies to collectively crackdown on China's nuclear program as it looks to limit Beijing's growing influence in the global arms race. In a meeting with NATO allies last week President Donald Trump's top envoy for arms control, Marshall Billingslea urged allies to impose stricter arms control regulations on Beijing. The administration has been looking to convince China to enter into a nuclear agreement with the US and Russia, but with days to go until the election, efforts to extend an agreement with Russia have been fast-tracked and are proceeding absent the participation of Beijing which has not shown an interest in taking part in talks in recent times.

Billingslea's efforts are part of a broader push by the Trump administration to assert its view that China -- and not Russia -- presents the biggest threat to American national security, particularly in the wake of the Covid-19 virus, and the economic downturn in the US, which Trump has blamed on Beijing. Billingslea urged allies to impose consequences on China for its nuclear expansion, similar to the consequences China is increasingly facing over its 5G network, believed by the Trump administration and other countries to be a tool for espionage.

<https://edition.cnn.com/2020/10/29/politics/us-china-nuclear-pressure/index.html>

Europe

IAEA endorses Hungarian university programme

World Nuclear News, October 19, 2020

The IAEA's INMA supports universities in establishing and delivering master's degree programmes on technology management for the nuclear sector, including nuclear power programmes, nuclear applications and radiological technologies. It provides guidance for master's programmes that have a specialised focus on the advanced aspects of management and leadership required by the nuclear sector. Aszódi said the IAEA has stringent requirements on INMA programme content and composition, which are assessed during the endorsement process.

"Hungary is a small country in Central Europe. We have one single nuclear power plant but it plays a very important role in electricity supply. We have a quite big - relative to the size of the country - nuclear industry because of that power plant, but we are not component or nuclear power plant suppliers; we are users of nuclear energy," Aszódi told participants in the webinar. "The 238-year-old BME is the biggest technical university in Hungary and for the long-term development of nuclear energy it is essential to train managers who have up-to-date knowledge not only in nuclear sciences, but also have advanced management and leadership skills," he added.

<https://www.world-nuclear-news.org/Articles/IAEA-endorses-Budapest-university-programme>

Poland to seek EU state aid approval for nuclear project

World Nuclear News, October 23, 2020

Earlier this week, Poland and the USA announced a 30-year intergovernmental agreement to cooperate on the development of Poland's civil nuclear power programme. US Energy Secretary Dan Brouillette signed the agreement on 19 October and Naimski said he signed it yesterday. Poland aims to build six new nuclear power units by 2040 as the country transitions to a clean energy economy. In a statement yesterday Naimski said that, within 18 months, leading US companies in the civil nuclear energy sector will carry out preparatory and design work on the construction of nuclear power plants in Poland, which is "one of the main provisions of the Polish-American agreement". Westinghouse, Bechtel and Southern Company will participate in the first stage of the preparation of a design report. In parallel with, and in addition to, this preparatory work, representatives of both governments, together with US financial institutions, will prepare proposals for the financing structure of the Polish nuclear energy programme.

"All work will be coordinated by a joint Polish-American Steering Committee," Naimski said. "Representatives of both governments, but also of financial agencies and institutions, and experts with experience in the implementation of strategic investments in the energy sector will participate in its work over the coming months. The Committee will prepare a final conceptual and executive report, which will form the basis for the Polish government to decide on the choice of technology and a strategic partner in the implementation of the 20-year programme for the construction of nuclear power plants in Poland." "From a multi-annual perspective," he said the agreement defines "the whole spectrum" of cooperation between the two countries, which includes: regulation, research and training; development of supply chains; campaigns to raise public awareness of civil nuclear energy; and, cooperation on projects in the nuclear energy sector elsewhere in Europe.

<https://www.world-nuclear-news.org/Articles/Poland-to-seek-EU-state-aid-approval-for-nuclear-p>

EU Commission will not hinder pro-nuclear countries, says Timmermans

World Nuclear News, October 26, 2020

Fatih Birol, executive director of the International Energy Agency, today reiterated that all clean technologies, including nuclear, will be needed for a low-carbon economic recovery, while Frans Timmermans, executive vice-president of the European Commission, stressed that the Commission "would not stand in the way" of EU Member States that support nuclear power. Timmermans was speaking as Birol's guest in the latest edition of the IEA's Big Ideas speaker series. Birol described Timmermans as the "architect and guardian" of the European Green Deal - the set of policy initiatives, announced at the end of last year, that aims to make Europe climate neutral in 2050. In July, EU leaders agreed on a EUR1.8 trillion (USD2.1 trillion) package to boost the recovery after the COVID-19 crisis, but also to contribute to the advancement of EU societal objectives, starting with the climate transition.

In May, Birol and Timmermans wrote in a joint op-ed that the pandemic had "erupted suddenly, catching many people off guard" and that "the science has long made clear the need for greater and more urgent action" on the major climate and biodiversity challenges the world faces. Earlier this month, in a joint op-ed with Rafael Mariano Grossi, director general of the International Atomic Energy Agency, Birol wrote that the scale of the climate challenge means the world cannot afford to exclude nuclear power - the world's second-biggest source of low-carbon electricity.

<https://www.world-nuclear-news.org/Articles/EU-Commission-will-not-hinder-pro-nuclear-countrie>

CIS nations to form nuclear regulatory association

World Nuclear News, October 28, 2020

The CIS is a regional intergovernmental organisation of nine members, plus two founding non-member, post-Soviet republics in Eurasia. One of its members, Belarus, proposed the new initiative. Belarus is building its first nuclear power plant, in Ostrovets. The Belarusian Energy Ministry said the new association is expected to promote cooperation in the regulation of nuclear and radiation

safety in the CIS, to provide expert support in improving the system of regulation and legislation, and to strengthen ties between organisations that provide scientific and technical support.

"The initiative is very important, especially for the newcomer countries that are implementing their first nuclear programmes," Mikhadyuk said. "There are such associations in Europe and they have proved their worth, including in the international arena. This format of cooperation within the CIS will help us expand the partnership and coordinate the work of the regulators," he added. Olga Lugovskaya, head of the Nuclear and Radiation Safety Department of the Belarusian Emergencies Ministry (Gosatomnadzor), added that the association will provide an opportunity to exchange experience more effectively, including in terms of the development of regulatory requirements in nuclear and radiation safety, the inspections of nuclear power plant sites, and safety tests. Issues regarding regulation of radioactive waste management, training of personnel for regulators and others are also important, she said.

<https://www.world-nuclear-news.org/Articles/CIS-nations-to-form-nuclear-regulatory-association>

Russia

Russia prioritizes unconditional extension of New START — ambassador

TASS News Agency, October 16, 2020

Russia prioritizes the unconditional extension of New START (Strategic Arms Reduction Treaty), Russian Ambassador to Washington Anatoly Antonov said during a session of the US-Russia Business Council. His address was published on the embassy's Facebook. "We need to remember that strategic issues have always been the cornerstone of our relations under any circumstances. We hope that the United States will carry out a policy that does not seek military advantage over Russia. Our primary aim is to extend START Treaty immediately without any preconditions. Such proposal was made by Russian president Vladimir Putin in December, 2019," he said. "In his pre-recorded video address to the 75th anniversary session of the UN General Assembly on September 22, 2020 president Putin reiterated that extension of the Russia-US Strategic Arms Reduction Treaty is the issue of primary importance that should and must be promptly dealt with," the ambassador added.

<https://tass.com/world/1212779>

Russia's latest nuclear-powered icebreaker to undergo major ice trials this year

TASS News Agency, October 19, 2020

The Project 22220 universal nuclear-powered icebreaker Arktika built at the Baltic Shipyard (part of the United Shipbuilding Corporation) is scheduled to undergo major ice trials this year for its acceptance for service, Arktika Delivery Team Captain Oleg Shchapin told TASS on Monday. The icebreaker Arktika completed its transit from St. Petersburg to the registry port of Murmansk on October 12. The icebreaker covered about 4,900 nautical miles within 21 days, including around 1,030 miles sailing through the ice. "The ice tests are still ahead, probably, this year because now the ice trials did not work with an ice of 1.1 - 1.2 meters thick. It was thin and loose and the icebreaker did not get any resistance. We tried to find an ice floe three meters thick but to no avail," Shchapin said. The icebreaker features good controllability, he added.

<https://tass.com/economy/1213923>

Kremlin says it hopes nuclear talks with U.S continue despite rejection of Russian proposal

Reuters, October 19, 2020

The Kremlin said on Monday that Moscow hoped talks with the United States would continue despite Washington rejecting a Russian proposal to unconditionally extend the last treaty limiting the two countries' strategic nuclear weapons. Kremlin spokesman Dmitry Peskov said the demise of the New START accord, which was signed in 2010 and is due to expire in February, would have "harmful" consequences.

<https://in.reuters.com/article/russia-usa-nuclear-kremlin-idINKBN2741C5>

Russia says it hopes to resolve differences on extending nuclear arms pact with U.S.

Reuters, October 21, 2020

Russia said on Wednesday it hoped to resolve its differences with the United States on extending a key nuclear arms control treaty, amid signs that the gap between the two sides is narrowing. Kremlin spokesman Dmitry Peskov said work on extending the new START treaty, which expires in February, was continuing at the level of experts. "We hope that all differences about the issue will be overcome through dialogue," he told reporters. Peskov was speaking a day after the United States welcomed a proposal by Moscow to prolong new START by a year if both sides agreed to freeze their stocks of all nuclear warheads for that period. Signed in 2010, the last U.S.-Russia pact of its kind limits the numbers of strategic nuclear warheads, missiles and bombers each country can deploy.

<https://www.reuters.com/article/us-russia-usa-nuclear-kremlin-idUSKBN2761BZ>

Rosatom Tech extends role as IAEA Collaborating Centre

World Nuclear News, October 22, 2020

The International Atomic Energy Agency (IAEA) has announced that Rosatom Technical Academy (Rosatom Tech) has become the first IAEA Collaborating Centre to extend its work with the Vienna-based agency into three different programmatic areas: nuclear sciences and applications, nuclear security and nuclear energy. Collaborating Centres work with the IAEA in specific technical areas, sharing knowledge and resources in the peaceful uses of nuclear energy to help governments achieve the UN's sustainable development goals. Of the 46 Collaborating Centres offering research, development and training, most work with the IAEA in a single thematic area, while a few engage in two areas of work.

"The IAEA Collaborating Centres Scheme is an effective tool for expanding the practical application of nuclear techniques around the world," said Yuri Seleznev, rector of Rosatom Tech. "Rosatom

Tech is ready to make its contribution and enhance the IAEA support to Member States." Rosatom Tech was designated last year as an IAEA Collaborating Centre in knowledge management and human resources development for nuclear energy and nuclear security. Following an agreement signed during the 64th IAEA General Conference last month, Rosatom Tech will now also focus on conducting Joint Rosatom IAEA schools on non-power nuclear applications and developing associated learning materials, such as handbooks, brochures and e-learning courses.

<https://www.world-nuclear-news.org/Articles/Rosatom-Tech-extends-role-as-IAEA-Collaborating-Ce>

Russia says still not close to agreement with U.S. on nuclear pact – RIA

Reuters, October 23, 2020

Russia's deputy foreign minister said on Friday that Moscow and Washington were still not close to reaching an agreement over the New START arms control treaty, the RIA news agency reported. The two countries' positions on the nuclear pact, which expires in February, appeared to have moved closer when Washington this week welcomed a Russian proposal to extend it if they agreed to freeze their stocks of nuclear warheads.

<https://in.reuters.com/article/russia-usa-nuclear-idINKBN2780WC>

Leningrad II-2 starts grid-connected trial operation

World Nuclear News, October 23, 2020

Unit 2 of the Leningrad II nuclear power plant in Sosnovy Bor, in Western Russia, was connected to the national grid today for the first time. Following this trial operation, the unit will be shut down for an additional equipment inspection by a state commission, Rosatom said, before being put into commercial operation, which is scheduled for 2021. The new unit will replace Leningrad unit 2, which is an RBMK-1000 reactor. Before its connection to the grid, the VVER-1200 reactor - also known as Leningrad NPP unit 6 - underwent the power ascension tests designed to assess the readiness of its main equipment and systems to produce both thermal and electric power, as well as a step-by-step increase in thermal capacity from 1% to 35%. Reaching 35% thermal capacity, the turbine generator was connected to the grid and started generating and transmitting electricity to the country's unified power system.

"There are two important milestones in the power unit start-up process. One is initially bringing the reactor to a critical state at the minimum-controlled power level when it 'awakens'," Rosatom First Deputy Director General for Operations Management Alexander Lokshin said. "The second, which is even more important, is its first connection to the grid, when the power unit begins to perform its function and produce electricity. Today, the country received another 1200-megawatt unit and strengthened its credibility as a leading power in the field of nuclear energy," he added. The new unit was connected to the unified power system and tested at a capacity of 240 MWe, Director General of Rosenergoatom Andrey Petrov said, adding that the next step is trial operation, when the reactor is tested at up to 100% power capacity.

<https://www.world-nuclear-news.org/Articles/Leningrad-II-2-starts-grid-connected-trial-operati>

No plans to unilaterally freeze nuclear warhead stockpile, senior Russian diplomat says

TASS News Agency, October 23, 2020

Russia has no plans to unilaterally freeze its stockpile of nuclear warheads in order to encourage the US to extend the Strategic Arms Reduction Treaty (New START), Russian Deputy Foreign Minister Sergei Ryabkov told TASS. "We are not ready to do it. Why should we?" he said in response to a question. "They [the Americans] are announcing huge programs aimed at advancing their nuclear capabilities and in such a situation, we can't do such a thing," he added. "For reasons that I can't understand, they have forgotten that a treaty is based on compromise and steps to meet each other halfway," the senior Russian diplomat noted. "For some reason, they believe that it is us that will have to make steps to meet them halfway but it's not going to happen," he said.

According to Ryabkov, the parties should agree on the subject of a future treaty and find common ground. "And after that, a verification mechanism can be developed," he stressed. "Otherwise, we have enough resources and opportunities to ensure our own security, which is what the Russian president made it clear today," the Russian deputy foreign minister emphasized. The United States is clearly not willing to extend New START despite all of its bold statements, Ryabkov noted.

<https://tass.com/politics/1215441>

Russia continues dialogue with US on New START extension

TASS News Agency, October 27, 2020

Russia intends to continue maintaining dialogue with the US on the issue of a possible extension of the Measures for the Further Reduction and Limitation of Strategic Offensive Arms (New START treaty), Russian Deputy Foreign Minister Sergei Ryabkov told reporters Tuesday. "Dialogue is always needed. We will suggest continuing this dialogue but the dialogue in looking for a solution rather than exchanging opinions that were repeatedly outlined and on paper as well," he noted. Ryabkov added that the parties "are exchanging some documents behind closed doors." On October 16, Russian President Vladimir Putin offered to extend New START by at least a year without any additional conditions. According to him, it will provide the sides with an opportunity to hold substantial talks. In turn, the Russian Foreign Ministry underscored that Russia is ready to freeze nuclear arsenals for the same time as the treaty extension along with the US if Washington does not put forward any other conditions.

<https://tass.com/defense/1217031>

Russia's Leningrad nuclear power plant Unit 6 connected to grid

New Europe, October 28, 2020

Russian state atomic corporation Rosatom said the Leningrad NPP Unit 6 equipped with the company's flagship Generation III+ VVER-1200 reactor was connected to the grid and reached the power capacity of 240 MW. "Today (October 23), Leningrad NPP Unit 6 was synchronised with the grid for the first time and provided electricity to the Russian unified power system. This is a significant event, both for the power unit itself and for the country. There are two important milestones in the power unit setup process," Rosatom First Deputy Director General for Operations Management Alexander Lokshin said. "One is the first bringing the reactor to a critical state at the minimum-controlled power level when it 'awakens'. The second, which is even more important is the first connection to the grid, when the power unit begins to perform its function and produce electricity. Today, the country received another 1200 MW unit and strengthened its credibility as a leading power in the field of nuclear energy," he added. Rosenergoatom Director General Andrey Petrov said the new power unit was connected to the unified power system and tested at a capacity of 240 MW. "The next step is trial operation, when the reactor is tested at up to 100% power capacity. Each stage is accompanied by numerous equipment checks and dynamic operational tests aimed at stimulating shutdown at various power levels," the director general of the Rosatom NPP operating subsidiary added.

<https://www.neweurope.eu/article/russias-leningrad-nuclear-power-plant-unit-6-connected-to-grid/>

Russia urges NATO to carefully study Putin's INF proposal

TASS News Agency, October 28, 2020

Moscow urges NATO to carefully study Russian President Vladimir Putin's statement on de-escalating tension around the deployment of intermediate-and shorter range missiles and his proposal on mutual inspections of facilities that cause the parties' concern, Russia's Foreign Ministry said in a commentary on Wednesday. "We are urging at least to carefully study and analyze the Russian initiative for the beginning. We are ready to explain our proposals. We are still open for constructive work on minimizing the negative consequences of the collapse of the INF [Intermediate-Range Nuclear Forces] Treaty on the basis of the principles of equal and indivisible security and the respect for the balance of the parties' interests. We expect NATO members, in particular, Germany, to display responsibility," the ministry said.

Putin's statement stipulates practical measures that would help remove the concerns of both Russia and NATO countries, the commentary says. In this regard, Russia's Foreign Ministry called "at least strange" the claims by German Foreign Ministry Spokesman Andrea Sasse that there was nothing new in the Russian initiative.

<https://tass.com/defense/1217579>

Putin decrees development of Arctic with more nuclear icebreakers

World Nuclear News, October 30, 2020

Project 10510, also known through the Russian type size series designations LK-110Ya and LK-120Ya or the project name Leader, will supersede Project 22220 icebreakers as the largest and most powerful in the world. The executive order, which was published on 26 October, also states that

Russia will have 16 rescue and tug-rescue vessels of various capacities, three hydrographic and two pilot ships. With a length of 173.3 metres, a width of 34m and a displacement of 33.5 thousand tonnes, the Project 22220 vessels are currently the world's biggest nuclear-powered icebreakers. One fuel load for a RITM-200 unit is equivalent to 540,000 tonnes of Arctic diesel fuel, it said, with fuel reloads required once every seven years.

The Leader vessels have a capacity of 120 MWe, a speed of 22 knots (in clear water), a displacement of almost 70,000 tonnes, a length of 209m, a width of 47.7m, and a maximum icebreaking potential of 4m. Each carries two reactors of the RITM-400 type; a steam turbine unit with four 37-MW turbine generators, and an electric propulsion system with four propeller motors of 30 MW each. These icebreakers will guide vessels from hydrocarbon deposits in the Yamal and Gydan peninsulas and from the shelf of the Kara Sea to markets in the Asia-Pacific region.

<https://www.world-nuclear-news.org/Articles/Putin-decrees-development-of-Arctic-with-more-nucl>

Military communication channels may serve as safety net if New START expires, says expert

TASS News Agency, October 30, 2020

Military communication channels between Russia and the US, as well as deconfliction mechanisms that proved to be effective in Syria, may become a safety net if talks on extending the Strategic Arms Reduction Treaty (New START) fail, Moscow Carnegie Center Director Dmitry Trenin said at the Ogarkov Readings forum, organized by the Center for Analysis of Strategies and Technologies. According to the expert, it will take a long time to agree a new document because there are many difficulties preventing the parties from reaching an agreement. In such a situation, chances are high that there will be no rules left regulating Russia-US relations in the area of arms control, so deterrence methods will remain the only factor ensuring strategic stability.

"As for nuclear deterrence, the network of communication channels between the top brass of the Russian and US military, deconfliction protocols that we have seen in Syria, and other so-called confidence-building measures, will become a safety net that will make it possible to avoid fatal mistakes," Trenin pointed out. At the same time, in his words, the US will continue to take advantage of its economic power to drag Russian into an arms race. That said, Russia should be guided by the principles of strategic stability and reasonable sufficiency, the expert added.

<https://tass.com/defense/1218345>

West Asia

Iran

NCRI: New bomb-making facility revealed in Iran

Saudi Gazette, October 20, 2020

The National Council of Resistance of Iran (NCRI) held a press conference during which it exposed a new nuclear site in Iran that is involved in the regime's weaponization program. Alireza Jafarzadeh, deputy director of the NCRI-US Representative Office, told the Washington Times: "New information received from sources within the Iranian regime reveals that a new center has been built

to continue its work for the weaponization of the Iranian regime's nuclear program." According to the Washington Times quoting Jafarzadeh, the newest facility is fully operational and is controlled by Iran's shadowy Organization of Defensive Innovation and Research, also known by its Farsi acronym SPND.

SPND's personnel and organizational structure remain intact, and its activities have actually expanded. The NCRI Representative in the US, Soona Samsami, said: "Our revelation today once again proves that fact that the JCPOA did not prevent the mullahs' activities to acquire nuclear weapons and that the regime has even reneged on its commitments stipulated in the JCPOA." The latest revelations show that re-imposing the six UN Security Council resolutions is a necessary and indispensable step toward preventing the regime from acquiring the bomb. Former Secretary of Homeland Security Tom Ridge said: "A trial is currently scheduled to begin in Belgium on [Nov. 27] for a senior sitting Iranian diplomat who was arrested as the mastermind behind what would have been one of the largest-ever terrorist attacks on European soil. "... The Paris terror plot has accordingly given new fuel to appeals for the closure of Iranian embassies throughout the world."

<https://saudigazette.com.sa/article/599362/World/America/NCRI-New-bomb-making-facility-revealed-in-Iran>

Iran's correct policy of not exiting JCPOA has borne fruit, says government

Tehran Times, October 20, 2020

"In recent days, we experienced one of the administration's achievements in the international arena," Rabiei said at a press conference on Tuesday, pointing to the lifting of a 10-year arms embargo on Iran under the Joint Comprehensive Plan of Action (JCPOA). "This achievement, which was reached based on the rightfulness of the Islamic Republic of Iran and the resistance of the Iranian people, was the lifting of the arms embargo on Iran," he added, according to Mehr. Under the historic 2015 nuclear deal, officially known as the Joint Comprehensive Plan of Action (JCPOA), the UN Security Council's ban on trade in conventional weapons against the Islamic Republic ended on Sunday.

"As of today [October 18, 2020], all restrictions on the transfer of arms, related activities and financial services to and from the Islamic Republic of Iran, and all prohibitions regarding the entry into or transit through territories of the United Nations Member States previously imposed on a number of Iranian citizens and military officials, are all automatically terminated," Iran's Foreign Ministry declared in a statement on Sunday. The ban was terminated under the terms of the UN Security Council Resolution 2231 that blessed the JCPOA between the Islamic Republic and six world powers.

<https://www.tehrantimes.com/news/453766/Iran-s-correct-policy-of-not-exiting-JCPOA-has-borne-fruit-says>

Saving JCPOA harder than its 2015 conclusion: Iran's Vaezi

Tehran Times, October 21, 2020

During a meeting with German Ambassador to Tehran Hans-Udo Muzel on Tuesday afternoon, Vaezi said Iran will abide by its obligations under the JCPOA if the other parties also abide by their

obligations. He also referred to Germany's involvement in the nuclear talks, saying the JCPOA has been preserved until this moment due to the help of the remaining parties to the deal and the support of the international community.

The JCPOA, endorsed by the UN Security Council Resolution 2231, was signed between Iran, the United States, Britain, Germany, France, the European Union, Russia, and China on July 14, 2015. However, U.S. President Donald Trump abandoned the deal on May 8, 2018, and returned sanctions and imposed new harsh ones. The sanctions are in line with the "maximum pressure" campaign that Trump imposed on Iran in 2018 after it withdrew from the JCPOA. Meanwhile, in an official statement on Sunday, Iran's Foreign Ministry announced the termination of a UN arms embargo on Iran in defiance of the United States' failed efforts to extend the embargo.

<https://www.tehrantimes.com/news/453822/Saving-JCPOA-harder-than-its-2015-conclusion-Iran-s-Vaezi>

Few new sanctions left to impose on Iran, Russia: Robert O'Brien

Tehran Times, October 26, 2020

"One of the problems that we have faced with both Iran and Russia is that we now have so many sanctions against these countries that we have very little (opportunity) to do anything about it," O'Brien told journalists on Sunday. "But we are looking at all possible deterrent measures that we can apply to these countries, as well as others, including China and some states not yet mentioned, that are trying to influence Americans on the voting issue. This is unacceptable," he said when asked how Washington could answer the question of how Russia and Iran allegedly received some information about the registration of American voters and wanted to influence the elections.

Washington has sanctioned five Iranian groups that it claims attempted to interfere in the November 3 presidential contest between President Donald Trump and Democratic candidate Joe Biden. In a statement on Thursday, the U.S. Treasury announced it designated Iran's Islamic Revolution Guards Corps (IRGC), the IRGC's Quds Force, and the Bayan Rasaneh Gostar Institute "for having directly or indirectly engaged in, sponsored, concealed, or otherwise been complicit in foreign interference" in the upcoming election. It also designated the Iranian Islamic Radio and Television Union and International Union of Virtual Media "for being owned or controlled by" the IRGC's Quds Force, the department said.

<https://www.tehrantimes.com/news/453901/Few-new-sanctions-left-to-impose-on-Iran-Russia-Robert-O-Brien>

Democrats and Republicans just differ in strategy, says former Iranian diplomat

Tehran Times, October 30, 2020

Mousavian says this is also true in Iran, noting there is no difference between principlists and reformists in protecting national interest. "Many in Washington think that principlists are different from reformists and moderates in Iran. I believe that Democrats and Republicans in American and the two political factions in Iran have common ground in guarding their countries' national interests but they have great differences in strategy and tactics for realizing the interests of their countries," Mousavian said in an interview with the Etemad newspaper just a few days before the Americans

will decide whether to reelect Donald Trump or his Democratic rival Joe Biden. Mousavian also believes that Trump remains in the White House, his hawkish associates will try their best to wage a war between the United States and Iran.

On whether Democratic-Republican president will be better for Iran, Mousavian said this question has been raised in Iran every four years since the victory of the 1979 Islamic Revolution of Iran, and, of course, this time around, the nature of that question has become different. Trump illegally and unilaterally withdrew from the 2015 nuclear agreement and slapped the harshest sanctions in history against Iran. This happened that fact that the nuclear pact, officially called the Joint Comprehensive Plan of Action, was endorsed by the UN Security Council Resolution 2231.

<https://www.tehrantimes.com/news/454058/Democrats-and-Republicans-just-differ-in-strategy-says>

East Asia

North Korea

North Korea expected to test new ICBM after US election: experts

Kang Seung-woo

Korea Times, October 16, 2020

As expected, North Korea showcased a new intercontinental ballistic missile (ICBM), presumably a Hwasong-16, and a new submarine-launched ballistic missile (SLBM), the Pukguksong-4, during a military parade for the 75th founding anniversary of its ruling Workers' Party, Oct. 10, leaving government officials and experts in South Korea and the United States scrambling to analyze if and when Pyongyang will test its new weapons systems. Given the upcoming U.S. presidential election, Nov. 3, and Pyongyang's past record of staging a military provocation around the event, speculation has been rising that a missile launch may be impending. However, many experts buy into the idea that the North will refrain from testing its missiles until after the election for various reasons including helping U.S. President Donald Trump's reelection chances. Trump has adopted the top-down approach with North Korean leader Kim Jong-un in apparent hopes of striking a denuclearization agreement in a more swift and comprehensive manner and to this end, Trump has met with Kim on three occasions, becoming the first sitting American commander-in-chief to meet a North Korean leader.

In addition, 25 personal letters have been exchanged between the two leaders, leading Trump to tout the success of a moratorium on long-range missile and nuclear tests — albeit self-imposed by Kim — based on his relationship with the North's leader as the biggest diplomatic achievement of his presidency in the race against former Vice President Joe Biden, who has criticized the incumbent president's unorthodox approach. "North Korea does not want to stand in the way of a Trump victory," Ken Gause, director of the Adversary Analytics Program at CAN, told The Korea Times.

http://www.koreatimes.co.kr/www/nation/2020/10/103_297604.html

North Korea proliferation imminent threat: Bolton

Choi Si-young

Korea Herald, October 20, 2020

North Korea poses a more imminent threat to the US than either Russia or China and the threat continues to grow worse, former US national security adviser John Bolton said . “We have two basic threats. One is Russia the other, China,” Bolton told a webinar hosted by the Atlantic Council, singling out China as the “existential threat” for the US and describing North Korea and Iran as top priority countries with overriding concerns about nuclear proliferation.

Bolton has repeatedly argued that North Korean leader Kim Jong-un would never relinquish his nuclear arsenal voluntarily, and once proposed mobilizing the military to topple the ruling Kim family. The hawkish adviser to President Donald Trump was fired from office in 2019 amid discord with the administration over how to get the nuclear-armed North Korea to dismantle its nuclear weapons program in exchange for sanctions relief. He also warned North Korea, along with Russia, China, and Iran, not to meddle in the US presidential election in November, as they could “pay a much higher cost” than what they aim to gain. Meanwhile, 51 percent of Americans said they believe Pyongyang’s nuclear weapons program is a threat to Washington, according to a poll by the Chicago Council on Global Affairs.

http://www.koreaherald.com/view.php?ud=20201020000764&ACE_SEARCH=1

N. Korean nukes highlight importance of strategic deterrence: US commander

Yonhap

Korea Herald, October 23, 2020

The United States must reinvigorate its discussion on strategic deterrence against continued and growing threats from other countries, including North Korea, the chief of the US Strategic Command said Wednesday. "Given Russia and China's expanding capabilities and increasingly aggressive behavior and those posed by nuclear North Korea and possibly Iran, we must reinvigorate the national conversation on the importance of strategic deterrence," said Adm. Charles Richard, commander of the US Strategic Command, based at Offutt Air Force Base, Nebraska.

His remark came one day after the US defense chief, Secretary Mark Esper, called North Korea one of "rogue states," along with Iran, that pose ongoing threats to the United States. Richard insisted nuclear-armed North Korea, along with China, Russia and Iran, not only endanger the US and its allies but also pull US resources away from other important issues. "I have no choice but to view China as a threat," he said, partly citing China's growing nuclear stockpile. "Then consider Iran's efforts towards regional destabilization, continued support of violent extremism and North Korea's continued pursuit of nuclear weapons and ballistic missile technology. These actions not only endanger our forces and our allies and partners, but also divert our attention and resources away from other efforts that should not be neglected," he told a webinar hosted by the Washington-based Center for Strategic & International Studies. North Korea has maintained a moratorium on nuclear and long-range missile tests since late 2017. However, its leader, Kim Jong-un, has said he no longer feels bound by the self-imposed restrictions.

http://www.koreaherald.com/view.php?ud=20201022000150&ACE_SEARCH=1

N. Korea's pursuit of money makes it 'unique' state actor of cyber attacks: US official

Yonhap

Korea Herald, October 23, 2020

North Korea is one of a few nations that pose a threat to cyber security but stands out as an "unique" country that steals money, a senior official from the US Department of Justice said. John Demers, assistant attorney general for national security, also noted the communist state may be getting support for its illicit cyber activities from China, in terms of know-how and protection. "A lot of it is getting money, getting cash. So on the cyber side very, you know, prominent theft from the bank of Bangladesh through a cyber bank robbery, basically," Demers said.

He was referring to the theft of \$81 million from the Bangladesh central bank in 2016 by a group of North Korean hackers known as Lazarus. He spoke remotely at a webinar hosted by a Washington-based think tank, the Center for Strategic and International Studies (CSIS). Demers noted it was not surprising to see a country like North Korea develop cyber capabilities, which he called a "very asymmetric form of power" that even a small nation state can use effectively. "And so, like we see out of Iran, for instance, the North Koreans have developed that capability. But almost uniquely among the countries that have that capability, as I said, they've used it really to steal banks and money," he said

http://www.koreaherald.com/view.php?ud=20201023000110&ACE_SEARCH=1

Biden says will meet NK leader if he agrees to draw down nuclear capacity

Yonhap

Korea Herald, October 23, 2020

US Democratic presidential candidate Joe Biden said Thursday he would meet with North Korean leader Kim Jong-un only on the condition that the latter agrees to reduce his country's nuclear capabilities. "On the condition that (Kim) would agree that he would be drawing down his nuclear capacity. To get that," Biden said when asked on what preconditions that he would agree to meet the North Korean leader. "The Korean Peninsula should be a nuclear-free zone," he added while speaking in the second and last presidential TV debate with his Republican rival, President Donald Trump.

The former vice president argued Trump and his three meetings with Kim have only legitimized the North Korean dictator. "What has he done? He has legitimized North Korea. He has talked about his good buddy, who's a thug, a thug, and he talks about how we're better off," Biden said. His remarks came shortly after Trump again claimed credit for preventing what he claims to have been an imminent nuclear war with North Korea.

http://www.koreaherald.com/view.php?ud=20201023000425&ACE_SEARCH=1

Repairs under way for flood damage at Yongbyon reactor sites: 38 North

Yonhap

Korea Herald, October 24, 2020

Recent satellite imagery indicates North Korea has begun repairing flood damage to a reservoir overflow dam used to maintain a constant source of water for the cooling systems of its nuclear reactors in Yongbyon, according to 38 North, a US website monitoring the North. In a report posted Thursday (local time), 38 North said between Sept. 22 and Oct. 17, repair work began on the dam in the Kuryong River, which was breached by the flood waters of August. Imagery from Sept. 22 showed a dramatic drop in the water level of the reservoir due to a breach at the east end of the overflow dam, 38 North said.

"Had the reactors been running, this would have prevented sufficient cooling water from being available via the pumps and cistern network," the report added. There have been no signs this year that the 5 MWe reactor and the experimental light water reactor the Yongbyon Nuclear Scientific Research Center have been brought online. Imagery from Oct. 17 also showed a dike-like structure being created just west of the break. It is not clear whether it is being built to improve the reservoir or to divert the water to enable repairs to the damaged section, 38 North said.

http://www.koreaherald.com/view.php?ud=20201024000023&ACE_SEARCH=1

NK highlights China relations on war anniversary

Ahn Sung-mi

Korea Herald, October 25, 2020

North Korea spoke of its strong ties with China and expressed hope of strengthening bilateral relations further as the two countries marked the 70th anniversary of China's participation in the 1950-53 Korean War, the North's official newspaper said. The Rodong Sinmun, the mouthpiece of the country's ruling Workers' Party, ran a special report to honor China for its role in the Korean War, recalling how Chinese troops crossed the border into North Korea on Oct. 19, 1950, to help Pyongyang in its fight against the US-led United Nations and South Korean forces. China decided to commemorate the anniversary on Oct. 25, the day that its military won its first battle. The North's paper stressed that the two countries' "special" relationship had proved its great strength during times of severe crisis.

It added that Pyongyang would further develop North Korea-China relations so that the "world would envy" and advance socialist achievement through friendship and solidarity. North Korean leader Kim Jong-un sent baskets of flowers to China on Friday to pay tribute to the Chinese soldiers who died in the Korean War, according to the Korea Central News Agency. The previous day, he visited a cemetery in the North's South Pyongan Province and paid his respects to the fallen Chinese soldiers who are buried there. Recently Pyongyang has spoken highly of its friendship with its traditional ally China more and more frequently, amid a deadlock in nuclear negotiations with Washington.

http://www.koreaherald.com/view.php?ud=20201025000163&ACE_SEARCH=1

Biden says N. Korea has more 'lethal' missiles because of Trump

Yonhap

Korea Herald, October 26, 2020

US Democratic presidential candidate Joe Biden said Sunday that North Korea now possesses a greater number of missiles that are also more dangerous than before because of US President Donald Trump. He also accused Trump of embracing dictators, such as North Korean leader Kim Jong-un, while undermining the country's relationship with its traditional allies.

"He embraces every dictator in sight, and he pokes his finger in the eye of all our friends," the former vice president said in an interview with US TV network CBS News' "60 Minutes." "And so what's happening now is you have the situation in (North) Korea where they have more lethal missiles, and they have more capacity than they had before," Biden added. His remarks come after the communist state unveiled a new longer-range intercontinental ballistic missile in a military parade staged Oct. 10 to mark the 75th anniversary of the founding of its ruling Workers' Party. Trump has held three

meetings with the North Korean leader between June 2018 and June 2019, and claims his "good relationship" with Kim is what prevented a nuclear war with North Korea.

http://www.koreaherald.com/view.php?ud=20201026000307&ACE_SEARCH=1

End-of-war declaration invites Korean denuclearization: Moon adviser

Choi Si-young

Korea Herald, October 28, 2020

Signing a declaration to end the 1950-53 Korean War is the first step toward denuclearization and peace on the Korean Peninsula, Moon Chung-in, President Moon Jae-in's special security adviser, said. "With the end-of-war declaration as a steppingstone for denuclearization, we must play our part to bring about a peace regime here," security adviser Moon told a forum hosted by the National Unification Advisory Council, a state body offering counsel to the president on inter-Korean affairs.

A peace regime refers to ushering in permanent peace by officially ending the 1950-53 conflict that leaves the two Koreas still technically at war, without a peace treaty, according to the Ministry of Foreign Affairs. Moon's remarks highlighted a growing rift between South Korea and the US on the matter, as US Secretary of State Mike Pompeo said a week earlier that North Korean denuclearization would lead to the end-of-war declaration.

http://www.koreaherald.com/view.php?ud=20201028000924&ACE_SEARCH=1

Biden will be more rigorous on North Korea, experts say

Kim So-hyun

Korea Herald, October 29, 2020

With the US presidential election just days ahead, Democratic candidate Joe Biden has not said much about his policy on the Korean Peninsula. All he has said so far is that the leader of the North Korean regime is a thug, and he will meet with Kim Jong-un only if Pyongyang agrees to draw down its nuclear capacity as a precondition. During the final presidential debate last week, Biden said that when the Chinese asked why the US was moving its missile defense up so close and continuing its military maneuvers with South Korea, he told China, "It's because North Korea is a problem, and we're going to continue to do it so we can control them." Biden said he told the Chinese, "If you want to do something about it, step up and help. If not, it's going to continue."

http://www.koreaherald.com/view.php?ud=20201029000296&ACE_SEARCH=1

Denuclearization will bring prosperity of N. Korea, not end of regime: O'Brien

Yonhap

Korea Herald, October 29, 2020

North Korea's denuclearization would bring prosperity to the communist country, instead of the collapse of its regime as feared by leader Kim Jong-un, the top US security adviser said. National Security Adviser Robert O'Brien said that was the vision President Donald Trump tried to lay out for Kim, for which he insisted the US leader deserved praise. "There is a lot of concern on the North Korean side that if the Kim family gives up their nuclear weapons, it could be the end of the regime,"

the White House adviser said in a webinar hosted by a Washington-based think tank, the Hudson Institute.

"So, when you are asking a counterpart in negotiation to do something that could result in their demise, that's a, you know, that's a very difficult negotiation to have," added O'Brien. The national security adviser was reacting to a question that the Trump administration's failure to completely rid the North of its nuclear weapons may be viewed as its weakness or problem.

http://www.koreaherald.com/view.php?ud=20201029000098&ACE_SEARCH=1

South Korea

Profitability miscalculated in Wolsong-1 early closure: BAI

Ko Jun-tae

Korea Herald, October 20, 2020

Korea Hydro & Nuclear Power underestimated the economic viability of the country's second-oldest nuclear reactor before its earlier than scheduled closure last year, the top audit watchdog said Tuesday. Wolsong-1, a 679-megawatt reactor in Gyeongju, North Gyeongsang Province, was retired from operation in December last year, in what was billed as a milestone in President Moon Jae-in's anti-nuclear initiative. But debates lingered surrounding KHNP's decision, with nuclear proponents saying the political push may have hampered a fair, comprehensive review.

While saying that the future profitability of Wolsong-1 was assessed unreasonably low, the Board of Audit and Inspection said its inspection was limited to the economic aspects of the power plant and was not to be taken as a conclusion on the legitimacy of the shutdown decision, which took into account several other factors such as safety. "Besides the economic factor, other general aspects were considered, including safety and acceptance by the local community," the BAI said in its report Tuesday. "Safety and region-based elements were excluded from the scope of this audit."

http://www.koreaherald.com/view.php?ud=20201020000894&ACE_SEARCH=1#

NK fast narrowing missile technology with S. Korea: defense development agency chief

Yonhap

October 20, 2020

North Korea is developing its missile capabilities at a pace much faster than expected, significantly narrowing the gap in weapons technology with South Korea, the chief of a state-run defense development agency said Tuesday. Nam Sae-kyu, head of the Agency for Defense Development, made the remark during a parliamentary audit session, providing an analysis on the weapons the North unveiled in a recent military parade. "I thought we were some 20 years ahead in terms of solid (propellant) ballistic missile or other missile systems, but after watching (the military parade), I thought the gap has more than halved," the missile expert said.

On Oct. 10, North Korea held the parade to mark the 75th founding anniversary of its ruling Workers' Party, showcasing a new intercontinental ballistic missile (ICBM) and a submarine-launched ballistic missile (SLBM), along with other weapons. "We have done a lot of analysis (on the weapons rolled out during the parade). I felt (North Korea's weapons) are improving more practically compared to five years ago," Nam said. On SLBMs, North Korea appears to have worked on securing better flying stability, the agency chief said, adding that the previous type seemed structurally better in terms of

functions. "North Korea could have changed its design due to problems in flying stability. If the North conducts a test in the near future, this aspect is likely to be tested first," he said. Asked if the North might have made a rapid progress on its missile program by hacking confidential military information from other countries, Nam doubted the possibility, saying the two Koreas' missile systems are "conceptually different" to believe that the North's missiles were developed based on the South's technology.

http://www.koreaherald.com/view.php?ud=20201020000819&ACE_SEARCH=1

N. Korea denuclearization a step toward end-of-war declaration: Pompeo

Choi Si-young

Korea Herald, October 22, 2020

North Korea's denuclearization would ultimately lead to the declaration of an official end to the Korean War, US Secretary of State Mike Pompeo. The two Koreas are still at war, having signed no peace treaty to end the 1950-53 conflict. Pompeo was addressing questions about whether ending the war would be feasible without the North's disarmament. South Korean President Moon Jae-in has repeatedly called for an end-of-war declaration.

The top US diplomat again urged Pyongyang to come back to the nuclear talks, saying this would lead to the declaration President Moon was speaking of. President Moon said early this month that the declaration would mark the first step toward peace on the Korean Peninsula and called on the US and the international community to help achieve it.

http://www.koreaherald.com/view.php?ud=20201022000824&ACE_SEARCH=1

Military says annual defense drill is defensive in nature amid NK criticism

Yonhap

Korea Herald, October 29, 2020

The Joint Chiefs of Staff (JCS) said Thursday an annual military exercise under way across the country is defensive in nature after North Korean propaganda outlets denounced it as an intolerable provocation. South Korea kicked off the Hoguek exercise on Oct. 19, involving the Army, Navy, Air Force and Marine Corps, staging various programs including joint landing drills.

DPRK Today, one of the North's propaganda websites, bristled at the exercise, saying it represents "yet another blunt provocation against us, an intolerable, rash behavior that will exacerbate the already sensitive situation." Uriminzokkiri, another propaganda outlet, ran a similar article last week. "The Hoguek exercise is a defensive drill we carry out in the second half every year that centers on maintaining our military readiness posture and improving joint operations capabilities," JCS spokesperson Col. Kim Jun-rak said during a regular press briefing.

http://www.koreaherald.com/view.php?ud=20201029000504&ACE_SEARCH=1

South Korea expresses 'serious concern' over any Japanese radioactive water dump

Hyonhee Shin

Reuters, October 29, 2020

South Korea expressed alarm on Thursday about the possibility that Japan will dump more than one million tonnes of contaminated water from the tsunami-damaged Fukushima nuclear power plant into the sea. South Korea's "serious concern" about the contaminated water was conveyed when senior officials from the uneasy neighbours met for talks in Seoul for their first time since Japan's new prime minister, Yoshihide Suga, took office last month.

"Director-general Kim highlighted our grave awareness and serious concern about the issue of the Fukushima reactor contaminated water," the South Korean foreign ministry said in a statement, referring to Kim Jung-han, director-general for Asia and Pacific affairs, who led the South Korean team. Media has reported that Japanese authorities have decided to discharge some one million tonnes of radioactive water into the sea nearly a decade after an earthquake triggered a tsunami that slammed into the Fukushima nuclear plant north of Tokyo, causing extensive damage. The Japanese government has said no decision has been made on the disposal of the water from the damaged plant.

<https://uk.reuters.com/article/uk-southkorea-japan-water/south-korea-expresses-serious-concern-over-any-japanese-radioactive-water-dump-idUKKBN27E1M5>

Japan

Fukushima No. 1 nuclear plant wastewater looks headed for ocean

The Asahi Shimbun, October 16, 2020

The government is moving toward the controversial disposal method for contaminated water at the crippled Fukushima No. 1 nuclear power plant of dumping it into the ocean. Fishermen have fiercely opposed this disposal method at the plant, which experienced a triple meltdown in March 2011 following a magnitude-9.0 earthquake and tsunami, over fears of resulting negative publicity hurting their industry. The central government is likely to hold a meeting of relevant Cabinet ministers before the end of October to make a formal decision on the dumping, sources said.

Before being dumped into the ocean, the stored water would be processed a second time and diluted with seawater to lower levels of radioactive materials below legally established standards. It is expected to take about two years to prepare for the dumping process. Water contaminated with radioactive materials continues to be produced at the Fukushima No. 1 plant at a daily rate of about 140 tons. Water used to cool melted spent nuclear fuel mixes in with groundwater that leaks into the reactor building.

<http://www.asahi.com/ajw/articles/13831640>

Japan sticks to nuke fuel cycle despite plutonium stockpile

Mari Yamaguchi

AP News, October 21, 2020

Japan's government said Wednesday it will pursue its nuclear fuel recycling program that would involve extracting plutonium from spent fuel, despite international concerns about the country's already huge plutonium stockpile and lack of prospects for effectively consuming it as nuclear fuel. Chief Cabinet Secretary Katsunobu Kato, at a meeting with the governor of Aomori prefecture, home to Japan's pending nuclear fuel reprocessing plant, reaffirmed that new Prime Minister Yoshihide Suga's government will pursue the country's nuclear energy policy. "The government will firmly promote our nuclear energy policy and fuel cycle programs," Kato said. He said Japan will make effort to reduce volume and toxicity of high-level nuclear waste, and extract plutonium from spent

fuel from a resource conservation point of view. But critics say continuation of spent fuel reprocessing only adds to Japan's already large plutonium stockpile. Japan also lacks a final repository for high-level nuclear waste.

Wednesday's meeting came after the Nuclear Regulation Authority granted a safety approval this past summer for the Rokkasho fuel reprocessing plant, operated by Japan Nuclear Fuel Ltd., located in northern Japan, for a planned launch in 2022. The authority also gave a preliminary permit for the Rokkasho MOX fuel production plant, also planned for completion in 2022. Japan now has 45.5 tons of separated plutonium — 8.9 tons at home, and 36.6 tons in Britain and France, where spent fuel from Japanese nuclear plants has been reprocessed and stored because Japan lacks a plant to produce MOX fuel containing plutonium at home. The amount is enough to make about 6,000 atomic bombs.

Despite security concerns raised by Washington and others, the stockpile is hardly decreasing due to difficulties in achieving a full nuclear fuel recycling program and slow restarts of reactors amid setbacks from the 2011 Fukushima disaster. Japan reprocesses spent fuel, instead of disposing it as waste, to extract plutonium and uranium to make MOX fuel for reuse, while the U.S. discontinued the costly and challenging program. Allowed under international safeguard rules, Japan is the only non-nuclear weapons state that separates plutonium for peaceful purposes, though the same technology can make atomic bombs. Japan has pledged not to possess excess plutonium and to put a cap on the amount of extraction from spent fuel. The Rokkasho plant operator rules out any proliferation risks, citing tight safeguards and close monitoring by the International Atomic Energy Agency.

<https://apnews.com/article/cabinets-recycling-yoshihide-suga-energy-policy-japan-66218c8a44a498a1535380066da466e9>

Priest trained in nuclear physics to lead village hit by 2011 disaster

Eiichiro Sukanuma

The Asahi Shimbun, October 26, 2020

The mayor-designate of this northeastern Japan village rendered uninhabitable by the 2011 Fukushima nuclear disaster is a Buddhist priest with a background in nuclear physics. Makoto Sugioka, 44, said he is determined to lead his generation to find a solution to problems emanating from the catastrophe that still haunts the community. "Radiation fell from the sky with snow. This unprecedented situation, never before observed even in the world of physics, is still continuing," Sugioka told reporters after he won the mayoral election uncontested on Oct. 10. He is set to replace the 73-year-old six-term incumbent on Oct. 27. "My decisions on what we can do next will be based on my basic knowledge of radiation," Sugioka said. The mayor-to-be joins his hands in prayer when he meets people because he also acts as head priest of a Jodo Shinshu sect temple that has served the village for six generations. Born in Tokyo, Sugioka was adopted by his grandfather, who was the head priest of the temple, before he started junior high school.

<http://www.asahi.com/ajw/articles/13841456>

Pressure mounts on Japan to sign treaty to outlaw nuclear weapons

The Asahi Shimbun, October 26, 2020

The Japanese government on Oct. 26 reiterated its longstanding refusal to sign a U.N. treaty aimed at dismantling all nuclear weapons and outlawing their use, citing the nation's continued reliance on the U.S. nuclear umbrella for its defense. "It is different from our approach," Chief Cabinet Secretary Katsunobu Kato said at a news conference, referring to the Treaty on the Prohibition on Nuclear

Weapons, which Japan has not signed despite being the only country to have experienced atomic attacks. “The government’s position not to sign the treaty remains unchanged.”

However, he said Japan shared the treaty’s goal of abolishing all nuclear stockpiles. “It is appropriate for the country to explore ways to advance nuclear disarmament steadily and realistically while taking steps to address threat to Japan’s security, including maintaining and bolstering its deterrence,” Kato added. He declined to give a clear answer when asked about Japan’s possible participation as an observer in a meeting of signatories after the treaty goes into force on Jan. 22. “Japan is in no situation to make a definite comment on the matter, given that few details are available now about how the meeting will be held,” he said. The treaty passed the important benchmark on Oct. 24 with Honduras becoming the 50th country to ratify it, allowing the pact to come into force 90 days after that number was reached. Prime Minister Yoshihide Suga, who took power last month, made clear at the outset that he will stick to the security policy crafted by his predecessor, Shinzo Abe.

The government has cited Japan’s reliance on U.S. nuclear weapons for not joining other non-nuclear powers in signing the treaty. On Oct. 25, Defense Minister Nobuo Kishi voiced his deep-rooted skepticism toward the accord. “It is a treaty that nuclear-armed powers cannot accede to,” he said. “Personally, I cannot help questioning the effectiveness of the treaty.” However, fears persist within the government that the treaty could trigger a divide between the nuclear and non-nuclear powers. While support for the accord is spreading among non-nuclear powers, the nuclear powers are pursuing the deployment of small nuclear weapons as usable arms.

<http://www.asahi.com/ajw/articles/13871993>

Japan will not join UN nuke ban treaty: Govt spokesman

Saudi Gazette, October 26, 2020

Japan has no plans to sign a UN treaty banning nuclear weapons, the government's top spokesman said Monday, explaining that the country has a different approach. Japan’s stance puts it in lockstep with the United States but could be seen as contradicting its anti-nuclear credo. "As the Treaty on the Prohibition of Nuclear Weapons is different from our approach, we will not sign the treaty. There is no change in our stance," Chief Secretary Katsunobu Kato told a news conference. “Although Japan shares the goal of abolishing nuclear weapons, it is appropriate to make steady and realistic efforts to advance nuclear disarmament while dealing appropriately with security threats, including maintaining and strengthening our deterrence,” Kato said.

"We believe, given the increasingly difficult security environment surrounding Japan, it is appropriate to make steady and realistic progress toward nuclear disarmament while maintaining and strengthening our deterrence capabilities to deal with threats," Kato added. "Japan shares the goal of this treaty, the abolition of nuclear weapons... but as we differ in how to approach the issue, we will not become a signatory," he said referring to the treaty. The UN announced on Saturday that the treaty is set to take effect on Jan. 22 after Honduras became the 50th country to ratify the pact.

The global pact, which was approved by the 193-member UN General Assembly in 2017, requires all ratifying countries to “never under any circumstances develop, test, produce, manufacture, otherwise acquire, possess or stockpile nuclear weapons or other nuclear explosive devices.” But the five major nuclear powers China, France, Russia, UK and the US, as well as other nuclear weapon states such as India, Pakistan, North Korea and Israel have not joined the treaty. As the only country to have suffered a nuclear attack, Japan has sought to paint itself as a leader in international efforts for

nuclear disarmament and nonproliferation. But Japan also depends on the US nuclear umbrella to protect it from threats including North Korean missiles, preventing it from endorsing an all-out ban on the production, use and stockpiling of nuclear weapons. Asked if Japan would be willing to participate as an observer, Kato stressed the need for "careful consideration based on Japan's position."

<https://saudigazette.com.sa/article/599569/World/Asia/Japan-will-not-join-UN-nuke-ban-treaty-Govt-spokesman>

Misc/World

Grossi predicts a dozen new nuclear countries by 2030

World Nuclear News, October 19, 2020

A "solid group" of 10-12 countries building nuclear power plants for the first time will emerge in the next decade, International Atomic Energy Agency Director General Rafael Mariano Grossi told OECD Nuclear Energy Agency Director General William Magwood in a WebChat last week. Bangladesh, Belarus, Egypt, Turkey and the UAE are among the nuclear newcomers, while Kenya, Ghana, the Philippines and Uzbekistan are "seriously considering" joining their ranks, Grossi said. The IAEA's Milestones Approach - its guidance for countries that are considering or planning their first nuclear power plant - is "a collection of years and years of experience", he added.

The start-up in August of the UAE's first nuclear power plant has helped provide a reference point and the IAEA is being approached by "more and more" countries, he said. "I think that we will have a solid group of around 10-12 new countries added to the list of those which are at the moment producing nuclear energy," he added.

<https://www.world-nuclear-news.org/Articles/Grossi-predicts-a-dozen-new-nuclear-countries-by-2>

Hotter than the sun: ITER and the pursuit of nuclear fusion

Power Technology, October 19, 2020

There's a running joke that nuclear fusion is always 30 years away. However, it may be achieved sooner as projects begin to make progress. Leading the way is ITER, the world's largest science experiment, which has recently started its machine assembly phase. We take a look at the latest developments at ITER and its influence on the energy industry. Nuclear fusion is considered the Holy Grail of energy generation, providing limitless power with no CO2 emissions. Yet it has proven elusive for generations of scientists. A persistent obstacle is that it takes considerably more energy to create the fusion reactions than the amount produced. But this hasn't stopped multiple nations around the world ploughing in billions of dollars and considerable resources to develop this technology.

The world's highest profile nuclear fusion project is ITER, near Provence, southern France. ITER is a multi-national, multi-billion dollar development. Thirty-five nations have set aside trade wars and diplomatic disputes to pursue a common goal. The partnership includes China, the EU, India, Japan, Russia, South Korea, and the US. Those working on ITER estimate that if everything goes according to plan, an input of 50MW will result in an output of 500MW. This would solve the issue of putting in more energy than you get out and help prove the technology's viability.

<https://www.power-technology.com/features/hotter-than-the-sun-iter-and-the-pursuit-of-nuclear-fusion/>

NATO to set up new space center amid China, Russia concerns

Korea Times, October 20, 2020

To a few of the locals, the top-secret, fenced-off installation on the hill is known as "the radar station." Some folks claim to have seen mysterious Russians in the area. Over the years, rumors have swirled that it might be a base for U.S. nuclear warheads. It's easy to see how the rumors start. The site is visually striking. Four huge white Kevlar balls sit like giant spherical spacecraft in a compound in the middle of open farm country 25 kilometers (16 miles) west of Belgium's capital, Brussels.

But the Kester Satellite Ground Station is both safer and more sophisticated than local lore might suggest. It's central to space communications at NATO — the biggest and most modern of four such stations the military alliance runs. Around 2,000 satellites orbit the earth, over half operated by NATO countries, ensuring everything from mobile phone and banking services to weather forecasts. NATO commanders in places like Afghanistan or Kosovo rely on some of them to navigate, communicate, share intelligence and detect missile launches. This week, the site at Kester is set to fall under a new orbit, when NATO announces that it is creating a space center to help manage satellite communications and key parts of its military operations around the world.

http://www.koreatimes.co.kr/www/world/2020/10/501_297912.html

U.S., Russia Near Deal to Extend Nuclear Treaty and Freeze Warheads for a Year

Michael R. Gordon and Ann M. Simmons

Wall Street Journal. October 20, 2020

The U.S. and Russia are on the verge of an arms-control deal that would freeze the number of nuclear warheads on each side and extend the New START agreement for a year, a senior Trump administration official said Tuesday. "We are very, very close to a deal," the official said. "Now that the Russians have agreed to a warhead freeze, I do not see why we cannot work out the remaining issues in the coming days."

The Trump administration has been pressing Russia to conclude the agreement before the Nov. 3 U.S. election, a development that would provide President Trump with a diplomatic achievement in the final days of his campaign. On Friday, the two sides appeared to be at odds over Russian President Vladimir Putin's proposal that the 2011 New START treaty—which cuts long-range arms and is due to expire in February—be extended unconditionally for a year.

<https://www.wsj.com/articles/u-s-russia-near-deal-to-extend-new-start-treaty-freeze-warheads-for-a-year-11603197012>

Canada agrees to participate in ITER fusion project

World Nuclear News, October 21, 2020

After leaving the Iter project in 2003, Canada has now signed a cooperation agreement with the ITER Organisation for the transfer of Canadian-supplied tritium, and tritium-related equipment and technology. The agreement follows the signing in April 2018 of a Memorandum of Understanding to explore how Canada could participate in the project to construct the International Thermonuclear Experimental Reactor. Canada played an important role in the early years of ITER. In 2001, as the ITER Members were finalising the blueprint of the installation, a group of Canadian industrialists and academics proposed a site for the ITER project in Clarington, Ontario. However, this bid was withdrawn in 2003 and Canada ended its participation in the project. The remaining parties of the Iter project signed an implementation agreement in November 2006 which would see the world's largest fusion reactor built in Cadarache, France.

However, Canada's expertise, especially in tritium-related technologies, made it a natural partner for ITER and, as ITER Organisation Director General Bernard Bigot emphasised prior to the signing of the new agreement, "it was becoming evident that cooperation between the Canadian government and the ITER Organisation should be developed". In April 2018, Canada and the ITER Organisation signed an MoU to explore Canada's participation in the Iter project. At that time the Canadian government noted, "Canada is not currently a member of Iter as it does not contribute financially to the project. However, given Canada's history and expertise in nuclear-fusion-enabling technologies, the MoU between Canada and ITER will help identify the precise domains in which Canadian suppliers could export expertise and technologies on a commercial basis to the Iter project."

<https://www.world-nuclear-news.org/Articles/Canada-agrees-to-participate-in-ITER-fusion-projec>

New nuclear 'the most efficient way' to decarbonise grids, NNWI report finds

World Nuclear News, October 22, 2020

The Failings of Levelised Cost and the Importance of System-level Analysis explains how the narrow focus of LCOE does not reflect all the variables, including whether or not power generation relies on weather conditions, or if specific technologies may have costly or harmful consequences for the energy sector, society, the environment and the economy. "As the world chooses which technologies to back to hasten the replacement of fossil fuels, the report's advice could save billions of pounds for both consumers and taxpayers," NNWI Chairman Tim Yeo said in a statement to accompany publication of the study. "If the energy industry wants to be resilient, cost-effective and decarbonised, we need to ensure that when we talk about power generation technologies, that we are going beyond the LCOE figures and giving the full story," he added.

<https://www.world-nuclear-news.org/Articles/New-nuclear-the-most-efficient-way-to-decarbonise>

UN treaty banning nuclear weapons set to enter into force in January

UN News, October 25, 2020

The UN Secretary-General António Guterres in a statement commended all the countries whose ratification of the accord, approved by 122 nations at the General Assembly in 2017, who have helped bring the ban on weapons this far, singling out the work of civil society groups. Chief among those, the International Campaign to Abolish Nuclear Weapons (ICAN), which was awarded the Nobel Peace Prize in 2017, declared through Executive Director Beatrice Fihn that the coming into

force was “a new chapter for nuclear disarmament. Decades of activism have achieved what many said was impossible: nuclear weapons are banned.”

One survivor of the atomic bombing at Hiroshima, Setsuko Thurlow, told ICAN that she had committed her whole life to abolition: “I have nothing but gratitude for all who have worked for the success of our treaty”, she said. Saturday’s milestone was reached a day after the island nations of Jamaica and Nauru submitted their ratifications meaning that in 90 days, the treaty will become active, banning nuclear weapons just over 75 after they were first used at the end of World War Two.

<https://news.un.org/en/story/2020/10/1076082>

Nuclear-armed States Panic as Nuclear Weapons Prohibition Treaty Becomes International Law

Tariq Rauf

In-depth News, October 26, 2020

On 22 January 2021, the Treaty on the Prohibition on Nuclear Weapons (TPNW) becomes international law in accordance with international legal principles underpinned by the United Nations Charter and the Vienna Convention on the Law of Treaties. Dreading this eventuality, the nuclear-armed States and the “captive nations” in alliances backed by nuclear weapons are panicking and resorting to unhinged arguments against this treaty adopted by 122 of 193 UN Member States on 7 July 2017 – it has been signed by 84 and ratified by 50 States. The TPNW requires signature and ratification by 50 States to “enter into force” and thereby come into operation and become an international legal reality. The number of ratifications now stands at 50, with the deposit of the instrument of ratification with UN Secretary-General by Honduras on 24 October 2020.

The TPNW, thus, will enter into force 90 days after the deposit of the instrument of ratification by the 50th State party to the Treaty and the prohibition of nuclear weapons will become international law under which nuclear weapons shall be regarded as prohibited weapons and their possession shall be considered illegal under international law. Not surprisingly, this assessment regarding the binding international law aspect of the TPNW is challenged by nuclear-armed States and their allied “captive nations” (NATO States, Australia, Japan and South Korea) – but their criticisms and opposition are neither credible nor tenable. The term “captive nations” is used here in the context of their blind and subservient support for US nuclear weapons policies and opposition to the TPNW as well as for inadequate implementation of the nuclear disarmament obligations relating to the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT).

<https://indepthnews.net/index.php/opinion/3940-nuclear-armed-states-panic-as-nuclear-weapons-prohibition-treaty-becomes-international-law>

IAEA webinar addresses space safety

World Nuclear News, October 29, 2020

Nuclear power sources have been used in recent years on missions that have left Earth's atmosphere and, in the past, as power sources in satellites in Earth orbits. The Vienna-based agency last week held a webinar for emergency response experts to address the response to accidents that could occur during the launch, operation and end-of-service mission phases of space nuclear power source applications, which could lead to a radioactive release into the Earth's atmosphere. Unlike most terrestrial nuclear and radiological emergencies, with space activities the exact location of impact

cannot always be predicted. "The IAEA has developed arrangements to share information about any pending nuclear-powered satellite re-entry. Using the data, countries can quickly respond to protect the public and the environment from the radioactivity that might spread as a result of an accident," Frederic Stephani, Incident and Emergency Assessment Officer in the IAEA, said.

In 1978, COSMOS 954 - a reconnaissance satellite powered by a small reactor fuelled with 45 kg of highly-enriched uranium, launched the previous year from the Baikonur cosmodrome in the then-Soviet Union - re-entered the Earth's atmosphere over Canada, scattering radioactive debris over a 600 km footprint in the Northwest Territories. A clean-up operation called Operation Morning Light was jointly led by Canada and the USA, and recovered 80 radioactive items. This incident became a prototype for global emergency preparedness and response arrangements for satellites carrying nuclear power sources, the IAEA said. Global emergency preparedness and response arrangements are in place for satellites carrying nuclear power sources. The Convention on Early Notification of a Nuclear Accident requires that in case of an accident with a satellite or other space object carrying a nuclear power source or radioactive source, the countries that launched the object must notify affected states and the IAEA. The agency's Unified System for Information Exchange in Incidents and Emergencies is a secure 24/7 monitored website which provides a platform for countries to exchange urgent notifications and follow-up information during a nuclear or radiological emergency, while the Joint Radiation Emergency Management Plan of the International Organisations (JPLAN) sets out a framework for the coordinated actions of international organisations during an emergency.

<https://www.world-nuclear-news.org/Articles/IAEA-webinar-addresses-space-safety>

Op-ed

China

What could China do to hit back at a US drone attack?

Minnie Chan

South China Morning Post, October 3, 2020

One option could be to target the base where the American unmanned vehicle came from, a Chinese strategist says. Assessment follows a shift in US drone exercises towards the Pacific. China's most effective response to a multiple US drone attack could be to hit back at the unmanned vehicles' base and destroy the entire fleet, a Chinese military analyst suggested after reports that a recent US drone exercise might have been aimed at China. As one of the hi-tech weapons of modern warfare, drones can be difficult to detect because they are small and operate at low altitudes. So the most effective countermeasure could be to shoot down at least enemy drone, use data from the debris to determine where it came from and then blow up the rest of the fleet at its base, the observer said. That though could lead to a rapid escalation in tensions.

<https://www.scmp.com/news/china/military/article/3103827/what-could-china-do-hit-back-us-drone-attack>

Ambassador Geng Shuang: Ten Facts about US Wrongdoings in Disarmament and International Security

Ministry of Foreign Affairs- Global Times, October 10, 2020

On October 9, the First Committee of the 75th session of the United Nations General Assembly held its general debate. Ambassador Geng Shuang, Deputy Permanent Representative of the People's Republic of China to the United Nations, exercised the right of reply to the accusations leveled by the US representative on China. In exercising China's right of reply, I have just one message: the US is the gravest threat to global strategic security and stability. Why? Here are 10 basic facts.

First, the US is obsessed with military build-up. The US ranks first in military expenditure. It spent more than 700 billion dollars on military in 2019, nearly 40% of the world's total, and more than the next 10 countries combined. Second, the US is returning to cold war mentality. In its National Security Strategy Report and Nuclear Posture Review Report, the US blatantly defined China and Russia as strategic competitors, hyping up external threats, and stirring up confrontation among major countries. Third, the US is pursuing unilateralism. It withdrew from the INF Treaty and the JCPOA, unsigned the ATT, and adopted a negative attitude towards the extension of the New START Treaty, exposing its pure pragmatism on bilateral and multilateral arms control treaties and regimes. Fourth, the US is seeking to free its hands. The US has been upgrading its nuclear arsenals, and lowering the threshold for nuclear weapons use. It has dodged its special responsibility for nuclear disarmament with the pretext of so-called trilateral negotiations, and even had discussions on resuming nuclear test.

Fifth, the US is pushing political maneuvering. The US follows double standards on nuclear non-proliferation, abuses unilateral sanctions, and serves its geopolitical agenda by using the hot-spot issues such as the Iranian nuclear issue and the Korean nuclear issue. Sixth, the US is breaking strategic balance. The US has deployed missile defense systems in the Asia-Pacific and Central and Eastern Europe, and is planning to deploy land-based medium range missiles in the Asia-Pacific and Europe. The purpose is to enhance military presence and seek absolute dominance. Seventh, the US is impeding biological arms control. The US is the only country blocking the relaunch of negotiations for a protocol that includes a verification regime to strengthen the BWC, and obstructing international efforts to verify biological activities. The US is now a stumbling block for multilateral biological arms control. Eighth, the US is delaying the destruction of chemical weapons. As the only CWC State Party still in possession of chemical weapons, the US has extended the deadline for the destruction of chemical weapons for several times, and failed to fulfill its obligations under the Convention. The US has become the biggest obstacle to a world free of chemical weapons. Ninth, the US is relaunching its star wars program. The US has created the Space Force, reestablished the Space Command, and sped up weapon tests and military drills in outer space. These acts threaten outer space security, and seriously contradict peaceful use of outer space. Tenth, the US is building an empire of hacking. The US is engaged in massive cyber attacks and surveillance worldwide through programs such as PRISM, and developing its cyber warfare capacity in an attempt to dominate cyberspace. The ten facts above are merely a glimpse of the US wrongdoings in the field of international security and disarmament. If time permits, I can give more examples. The international community sees the US wrongdoings very clearly.

<https://www.globaltimes.cn/content/1203022.shtml>

Chinese envoy rejects US accusations over COVID-19, disarmament

Global Times, October 10, 2020

A Chinese envoy on Friday rejected US accusations against China over COVID-19 and disarmament at the General Debate of the First Committee of the UN General Assembly. In his statement, a US representative made groundless accusations against China over COVID-19, and claimed that Russia and China are engaged in nuclear build-up. Geng Shuang, China's deputy permanent representative to the United Nations, exercised the right of reply and rejected the accusations.

The US representative spread "political virus" and smeared China over COVID-19, which is totally unacceptable, he said, adding that shrugging off responsibility cannot cover the mistakes the United States has made in combating the pandemic, and cannot fool the international community. China categorically rejects the baseless accusations leveled by the US representative against China's arms control policy. China opposes arms race, upholds multilateralism, implements its obligations under relevant arms control treaties and agreements and supports dialogue and cooperation in the security area. China's positive contribution to international security and disarmament is widely recognized, he said. The United States, however, poses the gravest threat to global strategic security and stability, he said. Multilateral arms control and disarmament concern international peace and security and the well-being of all countries. UN member states, big or small, rich or poor, strong or weak, have a responsibility and obligation to participate in the process on an equal footing. Unilateralism, exceptionalism, and bullying practices will get nowhere, he said. As the strongest military power with the most advanced weaponry in the world, the United States has a special and primary responsibility in arms control and disarmament. "America First" should be converted to "compliance first, dismantlement first, and disarmament first," he said.

<https://www.globaltimes.cn/content/1203021.shtml>

Asking China to participate in "trilateral arms control negotiation" infeasible: Chinese envoy

Global Times, October 13, 2020

A Chinese envoy said on Monday that asking China to participate in the "trilateral arms control negotiation" is unfair, unreasonable and infeasible. Geng Shuang, head of the Chinese delegation and deputy permanent representative of China to the United Nations, rejected the so-called "trilateral arms control negotiation" recently hyped up by the United States, in his statement delivered at the general debate of the First Committee of the 75th session of the UN General Assembly (UNGA). Geng pointed out that recently the United States named China as "the third largest nuclear power on Earth," hyped up "nuclear arms race between the US, Russia and China" and proposed the so-called "trilateral arms control negotiation." "This is just a trick to shift the focus of the international community. The US intention is to find an excuse to shirk its own special and primary responsibility for nuclear disarmament, and seek a pretext to free its hands and gain absolute military supremacy," he said. China has pursued a nuclear strategy of self-defense, always kept its nuclear capabilities at the minimum level required for its national security, and has never and will never take part in any nuclear arms race with any other country, said the envoy. "Given the huge gap between the nuclear arsenals of China and those of the US and the Russian Federation, it is unfair, unreasonable and infeasible to expect China to join in any trilateral arms control negotiation," he added. "China will never participate in such a negotiation and will never accept any coercion or blackmail," Geng added.

The ambassador emphasized that China's rejection of the so-called "trilateral arms control negotiation" does not mean that China evades its own responsibility for nuclear disarmament or refuses to participate in the global nuclear disarmament process. "Ever since the first day of possessing nuclear weapons, China has been advocating the complete prohibition and thorough

destruction of nuclear weapons," he noted. China has declared the policy of "no-first-use" of nuclear weapons at any time and under any circumstances, and unconditionally commits itself not to use or threaten to use nuclear weapons against non-nuclear-weapon states or nuclear-weapon-free zones, said the envoy. "China is the only P5 (five permanent members of the UN Security Council) country who has made such commitments," Geng noted. "China is ready to engage in meaningful dialogue on the issues related to strategic stability with all parties on the basis of mutual respect, and will continue its participation in the arms control process under the framework of the United Nations, the Conference on Disarmament and the P5," the ambassador stressed.

<https://www.globaltimes.cn/content/1203287.shtml>

USA

“Hic Sunt Dracones”: Still Expanding Risks of a US-North Korea Nuclear War

Louis Rene Beres

Jurist, October 21, 2020

Once again, on October 9, 2020, with immodest displays of tangible hardware, North Korea mocked Donald Trump's lingering expectations of "denuclearization." Here, in Pyongyang, President Kim Jong Un smugly revealed a "monster" intercontinental ballistic missile (ICBM). Further highlighted at Kim's extravagant military parade were the Hwasong-15, which is the longest-range missile ever tested by North Korea, and also what appeared to be a newly-refined submarine-launched ballistic missile (SLBM). How did US President Trump respond? The only apparent reaction from Washington was to call this strategic exposure "disappointing." Nary a polite nod about the corresponding legal consequences and implications was offered by the White House.

None of this should come as any surprise. Massive state-of-the-art nuclear weapons remain North Korea's most conspicuous expression of global power and influence. To be sure, Kim will never voluntarily surrender such weapons. Realistically, all focused US efforts to deal with this rapidly growing nuclear threat should center on long-term mutual deterrence. Creating this plausibly stabilizing condition by law and diplomacy will be indispensable. For the United States, prudent decision-making in this unstable theatre of potential nuclear conflict will be necessary. Among other things, President Donald J. Trump should take scrupulous care not to exaggerate or overstate America's military risk-taking calculus. In part, at least, such aptly considered diplomatic caution would stem from the absence of any historically comparable crises.

<https://www.jurist.org/commentary/2020/10/louis-rene-beres-us-north-korea-nuclear-war/>

Even if Biden wins US election, time is running out to save Iran nuclear deal

Patrick Wintour

The Guardian, October 21, 2020

Even if Joe Biden triumphs at the polls, Iran's weakened government may only have a few months to negotiate a revived nuclear deal before facing its own electoral challenge by hardliners who oppose

any engagement with the west. The narrow window has prompted calls for Biden to offer a phased approach to rejoining the Iran nuclear deal abandoned by Donald Trump in 2018, in order to show progress before the Iranian presidential election.

Iran's reformists and centrists remain severely damaged by the failure of the original agreement to deliver economic benefits to ordinary Iranians. Once Trump left the deal, he imposed maximum economic pressure on Tehran, blocking Iran's oil exports, and leaving advocates of engagement with the US struggling to defend their strategy. In a recent interview in Kar Va Kargar the foreign minister Javad Zarif insisted the foreign ministry had not been naive to negotiate with the Americans, but said Trump had "blown up the entire negotiating room".

<https://www.theguardian.com/us-news/2020/oct/21/even-if-biden-wins-us-election-time-is-running-out-to-save-iran-nuclear-deal>

On nuclear arms control, Trump should cooperate with Putin

LA Times, October 28, 2020

As the clock ticks toward the expiration of a major nuclear arms control agreement between the United States and Russia, negotiators have been discussing a deal to extend it. This is one circumstance in which no one should criticize President Trump for attempting to find an accommodation with Vladimir Putin. The New START treaty, signed in 2010, places limits on intercontinental ballistic missiles, nuclear warheads, missile launchers and nuclear-armed bombers. It will expire in February unless the two nations agree to extend it for up to five years.

<https://www.latimes.com/opinion/story/2020-10-28/nuclear-arms-control-trump-should-cooperate-with-putin>

How 'America First' Became America Alone

Tom McTague and Peter Nicholas

The Atlantic, October 29, 2020

It took only three and a half years for Donald Trump to solidify and formalize the United States' comprehensive international isolation. In August, the Trump administration demanded the extension of restrictions against Iran for breaking the terms of a nuclear deal that Trump himself had withdrawn from. All but one of the other members of the United Nations Security Council voted against the move or abstained—including every other permanent member of the body. "America First" had, effectively, become America alone.

The fallout at the UN was just the latest episode in the long-running soap opera over Trump's decision to pull out of the Iranian nuclear agreement. Dismissing the deal as among the worst in history, Trump opted instead for a policy of maximum pressure to force Iran's capitulation. His efforts were part of a wider shift during his presidency toward diplomatic unilateralism, pulling the U.S. out of key international agreements in favor of a return to the raw-power politics that he believed better suited American strength.

<https://www.theatlantic.com/international/archive/2020/10/donald-trump-foreign-policy-america-first/616872/>

5 Steps for the Next President to Head Off a Nuclear Catastrophe

Edmund G. Brown Jr. , Rep. Ro Khanna and William J. Perry

Politico, October 30, 2020

As fires rage across the West and the coronavirus continues its deadly march, President Donald Trump tweets and fulminates but refuses to take charge. He denies climate change; on the pandemic, he leaves to the states his clear responsibility to protect the people of America. Tragically, his incompetence extends beyond Covid-19 and climate change to another existential danger, rarely debated in Washington or covered by the media: the chance of a nuclear blunder.

The Cold War may have ended in 1989, but the United States and Russia together still possess more than 12,000 nuclear weapons, 90 percent of the world's arsenal, nearly 2,000 of which are programmed to launch in minutes at the command of either countries' president. The risk of a real nuclear catastrophe is not a bugbear from a past decade. It is a current threat, and becoming more serious because of Trump's policies—and because the public has largely stopped paying attention. Like passengers on the Titanic, our leaders in Washington don't see what is in front of them.

<https://www.politico.com/news/magazine/2020/10/30/5-steps-for-the-next-president-to-head-off-a-nuclear-catastrophe-433695>

If Joe Biden beats Donald Trump in the US election, what does that mean for North Korea and Kim Jong-un?

Erin Handley

Abc News, October 31, 2020

There's no question who North Korea would prefer to see in the White House: incumbent Donald Trump. His challenger, presidential hopeful Joe Biden, last week called North Korea's young leader Kim Jong-un a "thug" and criticised Mr Trump's handling of the hermit state.

"He's legitimised North Korea, he's talked about his good buddy, who's a thug — a thug — and he talks about how we're better off," Mr Biden said at the final presidential debate. North Korea isn't too impressed with Mr Biden, either. Last year state news outlet KCNA called him a "rabid dog" — misspelling his name "Baiden" in the process — and said such dogs "must be beaten to death with a stick".

<https://www.abc.net.au/news/2020-10-31/us-election-what-would-a-biden-presidency-mean-for-north-korea/12813702>

Russia

Putin's long game strategy on nuclear missiles in Europe may well pay off because Cold War treaties completely ignored China

Scott Ritter

Russian Times, October 28, 2020

In announcing a new variation of his long-held proposal for a moratorium on intermediate-range nuclear forces in Europe, Russia's president seeks to repeat history, turning an anticipated US/NATO "no" into an eventual "yes." In a bold new proposal, Russian President Vladimir Putin has expanded on his existing offer of a moratorium on the deployment of intermediate-range nuclear forces on

European soil by suggesting that Russia and the US/NATO engage in so-called “verification measures” (a euphemism for on-site inspections) “regarding the Aegis Ashore systems equipped with Mk 41 launchers at US and NATO bases in Europe and the 9M729 missiles at Russian military facilities in the Kaliningrad Region.”

Such verification activities would help “confirm the absence from the facilities, encompassed by the agreements, of ground-launched intermediate and shorter range missiles as well as weapons whose parameters and classification have remained a controversy between the two parties (Russia’s missile 9M729).” While it is unlikely either the US or NATO would agree to this proposal, by introducing verification into the negotiation mix, Putin has breathed life into the moribund moratorium concept, keeping alive both the prospects of an INF-free Europe, but also a global INF ban that could see the Intermediate-Range Nuclear Forces (INF) Treaty reborn as a multilateral arms control agreement.

<https://www.rt.com/op-ed/504628-putin-nuclear-missiles-europe/>

West Asia

Iran and its priorities of hostility

Tariq Al-Homayed

Saudi Gazette, October 27, 2020

During the end of the 1970s, the region was faced with two sharp contradictory models: the Egyptian-Israeli peace, and the Khomeinist Revolution creating a “turban” state and transforming politics in the region from the art of possible into a fatwa of halal (permissible) and haram (forbidden.) At that time, the Arabs boycotted Egypt in defense of the Palestinian cause, but they found themselves boxed in with fetters around them as the Khomeini regime unleashed his ambitious political Islam coupled with the Soviet invasion of Afghanistan, and that was labeled then as “jihad.”

At that time, the region was facing an Iranian revolution that claimed to be Islamic, the resurgence of political Islam, the jihad in Afghanistan, the Iraqi-Iranian war, and the trading with the Palestinian cause. It was a distinctive phase, dealing a big blow to political rationality and it continued until the fall of Saddam’s regime, and before that, there was the wave of international terrorism, sponsored by Tehran. But Iran did not fight Israel, in fact, it didn’t even fire a single bullet. On the other hand, Iran invaded our region with militias, unleashing the hateful sectarian virus. Iran encircled the Gulf with unnatural border issues with regard to Iraq and Yemen, and created an outlet for itself along the Mediterranean through Hezbollah’s weapons, and despite all that, Iran has not fired even a single direct bullet at Israel!

But what happened was quite the opposite. Iran was filling the void of every Israeli withdrawal with groups and militias in Lebanon and Gaza, and trying to do in the West Bank too. Despite all this, Iran did not fight Israel, because it does not want to confront the enemy, but it rather used it as an excuse to expand in the region. The reason for this is the Iranian conviction that this expansion would force Israel and the West, as did former President Obama, to negotiate and divide the region. Of course, Iran does not want any Arab-Israeli war, because that weakens its position. Likewise, Iran does not want any Arab-Israeli peace

process, because that amounts to the encirclement of Iran. Hence, it is in its interest to keep the region in a state of no war and no peace that would allow it to go out and outbid the Arab countries. All of the above are glaring facts and not analytical reading. The tumultuous period was followed by the Arab Spring and the Iranian-American nuclear agreement, the straw that broke the camel's back. It led to a strategic shift in a region that was confused about its real enemy, Iran, or Israel?

<https://saudigazette.com.sa/article/599613/Opinion/Voices/Iran-and-its-priorities-of-hostility>

Interviews and reports

United States and Republic of Korea Discuss ongoing Nuclear Security Partnership

Department of Energy, October 16, 2020

The Department of Energy's National Nuclear Security Administration (DOE/NNSA) announced today that Deputy Secretary Mark W. Menezes and Second Vice Minister of Foreign Affairs Lee Tae-ho held a productive introductory meeting on October 16, 2020. Deputy Secretary Menezes and Vice Minister Lee discussed a variety of nonproliferation and nuclear security topics. Of particular note, the Deputy Secretary and Vice Minister agreed that the United States and the Republic of Korea should collaborate to promote joint U.S.-ROK civil nuclear commercial partnerships. .

<https://www.energy.gov/articles/united-states-and-republic-korea-discuss-ongoing-nuclear-security-partnership>

Lifting sanctions is essential part of JCPOA: EU's Stano

Mohammad Mazhari

Tehran Times, October 20, 2020

"The lifting of sanctions is an essential part of the JCPOA agreement," Stano tells the Tehran Times in an exclusive interview. Stano points to EU foreign policy chief Josep Borrell's remarks in a debate in the European Parliament on 7 October in which he said, "Iran had legitimate expectations that the 'nuclear deal' would result in more concrete economic benefits." The following is the text of the interview:

Q: What is the EU's position on U.S. extraterritorial sanctions and unilateral restrictive measures against Iran? What are the implications of U.S. withdrawal from the nuclear deal for the world?

A: The EU considers the extraterritorial application of unilateral restrictive measures unlawful and contrary to international law. We have said many times that we regret the unilateral withdrawal of the U.S. from the JCPOA and the subsequent re-imposition of previously lifted U.S. sanctions. The EU remains fully committed to the full and effective implementation of the JCPOA by all participants. The lifting of sanctions is an essential part of the JCPOA agreement. In this regard, the EU fulfilled its commitments and lifted all its economic and financial sanctions in connection with the Iranian

nuclear program. Furthermore, the EU member states sitting in the UN Security Council prevented the U.S. efforts to use the so-called "snapback" and re-introduce UN sanctions that were lifted as a result of the JCPOA.

Q: Is it enough to just issue statements against U.S. moves against Iran? Officials in Tehran say that Iran needs trade relations on the ground, not just condemnation on the paper.

A: The High Representative of the EU for Foreign Policy Josep Borrell, who acts as the coordinator of the JCPOA, said in the debate of the European parliament last week (on 7 October) that Iran had legitimate expectations that the "nuclear deal" would result in more concrete economic benefits. The EU has taken a series of concrete actions to continue enabling legitimate trade with Iran. The EU updated its Blocking Statute in August 2018 to provide legal protection to European companies that are interested in doing legitimate business with Iran. The EU has also supported the setting up of INSTEX (Instrument in Support of Trade Exchanges) and helped to make it operational. As part of the EU's ongoing efforts, the European Commission just launched two online platforms to support European economic operators, particularly Small and Medium-sized Enterprises (SMEs), to engage in legitimate trade with Iran. This underscores the continued EU commitment to the full and effective implementation of the JCPOA.

<https://www.tehrantimes.com/news/453793/Lifting-sanctions-is-essential-part-of-JCPOA-EU-s-Stano>

Department of Energy and NASA Sign Memorandum of Understanding

Department of Energy, October 20, 2020

Today, U.S. Secretary of Energy Dan Brouillette and NASA Administrator Jim Bridenstine signed a new memorandum of understanding (MOU) furthering the longstanding partnership between the Department of Energy (DOE) and NASA that has enabled 50 years of notable space exploration. The agreement – discussed during the October 2020 Secretary of Energy Advisory Board meeting – supports President Trump's Space Policy Directive-1 and other U.S. national space policies. Under the directive and NASA's Artemis program, America will land the first woman and the next man on the Moon by 2024 and establish sustainable lunar exploration by the end of the decade to prepare for the first human mission to Mars.

"From achieving a better understanding of the Moon, to providing the nuclear fuels to propel Voyager 1 and 2 into space, DOE and NASA have been strong collaborators in our Nation's space mission for decades," said Secretary Brouillette. "This new MOU will continue our esteemed work together as this Administration strives to reach the next generation of space innovations and exploration." "Artemis depends on a coalition of partners across U.S. government, industry, and the world," said NASA Administrator Jim Bridenstine. "The DOE's energy, science, and technology expertise remains crucial to the success of NASA missions. Together, we will mature and ready systems for exploring more of the Moon and venturing humans farther into space, all for humanity's benefit on Earth."

<https://www.energy.gov/articles/department-energy-and-nasa-sign-memorandum-understanding>

Talmudic debates on India's strategic autonomy an artefact of a bygone era, says strategic thinker Dhruva Jaishankar

Sreemoy Talukdar

First post, October 23, 2020

Dhruva Jaishankar hardly needs any introduction. Director of the US Initiative at ORF and a non-resident fellow at the Sydney-based think tank Lowy Institute, Dhruva's research has spanned issues such as India-US relations, India's relations in Asia and the Indo-Pacific, the interaction of technology with politics, and defence and national security. Dhruva is a regular contributor to Indian and international publications offering his insights on Indian foreign policy. A strategic thinker, Dhruva took time out to interact with Firstpost for an interview on recent developments, Indo-US relationship and the possible impact of upcoming US presidential polls in bilateral ties. Do you interpret India's Malabar invitation to Australia as the natural arc of a trajectory that has seen a broader and more cooperative bilateral relationship in recent times (mentioned explicitly in Indian readout), or do you see this decision as India's signalling mechanism to China that may even be open to revision depending on the situation at the border?

I would read Australia's inclusion in the Malabar exercise as part of a natural progression that has taken place since 2000, albeit at an uneven pace. After 1999-2000, India normalised ties with the United States and its regional allies (particularly Japan and Australia). Their 2004-05 tsunami relief effort and the mainstreaming of India's nuclear programme after 2005 were natural accompaniments to the first iteration of the Quad in 2007 and the Malabar 07-02 exercises in which all four countries and Singapore participated. The pace of such intensified cooperation between India, Japan, Australia, and the US changed after 2008, for a number of reasons. Structurally, the global financial crisis played a role, but equally political changes in all four countries in 2008-09 put closer security cooperation on the backburner. The last few years have seen a resumption and an acceleration. One major driver — not the only one — has been clear evidence that China's behaviour as a rising power has been accompanied by territorial revisionism, mercantilism, political interventionism, and an undermining of accepted norms. Additionally, there is a conscious effort at delinking the Quad from any specific policies by China or anyone else, so as not to make it a bargaining chip. Therefore, a wholesale reversion of the trends towards cooperation is unlikely. After all, all four Quad countries had made prior attempts at engaging Beijing only to be rebuffed. Political leaderships will come and go, but there is today a qualitative difference in how the foreign and defence bureaucracies in Australia, India, Japan, and the US perceive China's rise. The natural outcome is a greater appreciation of relations with one another.

<https://www.firstpost.com/india/talmudic-debates-on-indias-strategic-autonomy-an-artefact-of-a-bygone-era-says-strategic-thinker-dhruva-jaishankar-8940741.html>

Chomsky on General Soleimani's killing: 'It's as if Iran decided to murder Mike Pompeo'

Tehran Times, October 23, 2020

“The murder of Soleimnai... is an extraordinarily dangerous act. Nothing like that happened during the Second World War or during the Cold War,” Chomsky said in an interview on Wednesday. “It's as if Iran had decided to murder (U.S. Secretary of State) Mike Pompeo and a major general along

with him at Mexico City International Airport. We take that pretty serious and that is what the murder of Soleimani was,” he added. “Incidentally, it is praised here which is pretty astonishing; it shows how extreme the internal assumption is, that the United States is a rouge state, which has nothing to do with international law or obligations,” Chomsky said. The American professor further highlighted the U.S. withdrawal from the 2015 Iran nuclear deal, saying Trump’s actions on Iran increases Washington-Tehran tensions. The pullout, he said, was a “violation of international law” as the agreement was authorized by the United Nations Security Council, he added, referring to UN Security Council Resolution 2231, Press TV reported.

<https://www.tehrantimes.com/news/453855/Chomsky-on-General-Soleimani-s-killing-It-s-as-if-Iran-decided>

Think Tanks

India-Australia security relations: They’ve only just begun

Dhruva Jaishankar

Observer Research Foundation, October 20, 2020

The Quad – the grouping comprised of Australia, India, Japan, and the United States – held its first stand-alone foreign ministerial meeting this month in Tokyo. In the words of one Australian analyst, the grouping that once faltered and restarted with a crawl now finally stands on its two feet, ready to take some strides. Often lost amid the copious commentary on the Quad, however, is how it has been both a test and a catalyst for improved Australia-India security cooperation.

It’s fashionable to be pessimistic about the India-Australia strategic partnership. Ask most observers of strategic affairs in Canberra and New Delhi, and they’re likely to characterise the relationship as long on promises and short on deliverables. A lot of it has to do with the two countries’ troublesome history. For more than half a century after India’s independence in 1947, India and Australia talked past each other. Antiquated stereotypes have persisted, and ties are still subject to some unrealistic expectations. (“When will India become a driver of the Australian economy like China?” goes one. “Why is India resistant to joining the US alliance network in Asia?” runs another.

<https://www.orfonline.org/research/india-australia-security-relations-theyve-only-just-begun/>

Is India overturning decades of nuclear doctrine?

Harsh V. Pant

Observer Research Foundation, October 24, 2020

In a statement to the Conference on Disarmament on Oct. 14, Indian Ambassador Pankaj Sharma reiterated that—even as tensions with neighboring China heat up—his country remains committed to its doctrine that it will not use its nuclear weapons against an adversary unless first attacked with them.

India's adherence to a no-first-use principle is long-standing. Ever since 1998, when the country went nuclear, New Delhi has rejected the idea of initiating the use of such weapons in any conflict scenario. Nukes, in Indian strategy, are purely retaliatory. And that stance has made good military and diplomatic sense. The relatively small size of India's arsenal ruled out a first strike anyway, and the country's commitment to restraint, meanwhile, built its image as a responsible nuclear stakeholder and helped ease New Delhi's accommodation in the international nuclear order.

<https://www.orfonline.org/research/is-india-overturning-decades-of-nuclear-doctrine/>

Elections, Nukes, and the Future of the South Korea–U.S. Alliance

Toby Dalton and Ain Han

Carnegie, October 26, 2020

The impressive victory of President Moon Jae-in's Democratic Party in South Korea's April 2020 National Assembly elections obscured underlying security policy tensions within South Korea (or the Republic of Korea, ROK). These tensions reflect a deep and long-standing domestic split over how to deal with a nuclear North Korea and, to a lesser extent, concerns about the security alliance with the United States amid rising regional threats. In public opinion polls a consistent majority of South Koreans support acquiring nuclear weapons in some form, and centrist and conservative political parties have adopted official platforms calling on the United States to re-station nuclear weapons on the Korean Peninsula. Looking beyond the November 2020 U.S. election, the stage is set for a potentially disruptive period in ROK-U.S. security relations. If today's tensions build, a worst-case clash of ideas and priorities between Seoul and Washington could rupture the ROK-U.S. alliance and lead South Korea to pursue nuclear weapons. This is not highly likely, but it is imaginable.

<https://carnegieendowment.org/2020/10/26/elections-nukes-and-future-of-south-korea-u.s.-alliance-pub-83044>

As Historic Nuclear Ban Enters into Force, It's Time for the US to Help Put an End to the Nuclear Age

Olivia Alperstein

Common Dreams, October 27, 2020

With all the urgent global crises right now, from climate change to the Covid-19 pandemic, it may seem as though the world is hovering on the edge of destruction. But despite the odds, humanity just took a major step back from the brink. On October 24, the historic U.N. Treaty on the Prohibition of Nuclear Weapons (a.k.a. the nuclear ban), officially received its fiftieth ratification, clearing the threshold to enter into force. Nuclear weapons make the world less, not more, safe, and with this critical milestone, they will now be treated as prohibited weapons of mass destruction.

None of the nuclear-armed nations are parties to this treaty, and although it will carry the force of law, the country with the largest nuclear arsenal in the world, the United States, has not only announced that it won't abide by the treaty but has actively encouraged other nations to withdraw their ratifications. That should come as no surprise. The United States remains the only nation in the

world to have used nuclear weapons in an act of war, and the current administration has shown a frightening willingness to risk future nuclear conflict.

<https://www.commondreams.org/views/2020/10/27/historic-nuclear-ban-enters-force-its-time-us-help-put-end-nuclear-age>

After the Border Clash, Will China-India Competition Go Nuclear?

Toby Dalton, Tong Zhao, and Rukmani Gupta

Carnegie, October 29, 2020

China sees the United States as its primary nuclear rival—the only country that could pose an existential threat. To Chinese strategists, India lacks the will and the military might to pick a fight with Beijing. China has been modernizing its nuclear forces mainly to deter a U.S. nuclear attack. Beijing's improving arsenal is more than large enough to deter a nuclear attack from India, whose nuclear arsenal is dwarfed by China's, much less the United States'. Since they don't see India as a threat, few Chinese analysts focus on the China-India nuclear relationship. Beijing believes that New Delhi developed nuclear weapons in pursuit of deterrence and international prestige, not as a way to threaten China. Chinese leaders are confident that their country's rising power will discourage India from fighting China and are therefore quite optimistic about the future of the bilateral relationship. To them, a nuclear conflict with India has seemed almost unimaginable. Granted, some in India have claimed that China's nuclear weapons forced India to develop nuclear bombs in the first place. China's arsenal, they further argue, justifies India in seeking to improve its nuclear weapons and build more of them. But Chinese experts dismiss these claims as political excuses.

<https://carnegieendowment.org/2020/10/29/after-border-clash-will-china-india-competition-go-nuclear-pub-83072>

The nuclear ban treaty enters force: The dawn of a nuclear order

Ramesh Thakur

Bulletin of Atomic Scientists, October 30, 2020

The vast majority of countries in the world do not have nuclear weapons. Exasperated by the arms control reversals, fed up with slow progress on disarmament that was promised by the Nuclear Non-Proliferation Treaty (NPT), and motivated by humanitarian concerns, they have asserted their agency to take back nuclear legitimacy. The changed legal structure that will begin when the Treaty on the Prohibition of Nuclear Weapons enters force January 22, 2021 will recalibrate the balance of costs and benefits to the net detriment of nuclear possessor states and create a deepening crisis of legitimacy for their status.

It will also add to the domestic difficulties for some umbrella states. Although Japan benefits from US extended nuclear deterrence, a poll by the Japanese public broadcaster NHK last December showed two-thirds support among Japanese for joining the ban treaty, and only 17 percent opposition.

<https://thebulletin.org/2020/10/the-nuclear-ban-treaty-enters-force-the-dawn-of-a-nuclear-order/>

Bargaining With Nuclear Modernization: Does it Work?

Amy F. Woolf

Arms Control Association, October, 2020

The United States and the Soviet Union, later Russia, have negotiated limits on their nuclear forces for more than 50 years. Arms control has provided both nations with insights into emerging threats from the other's forces, allowed informed decisions into the types of weapons and capabilities they could eliminate without risking their security, and maintained transparency and communication with an adversary who could kill millions of their citizens in an afternoon.

Arms control did not stop either nation from advancing its nuclear capabilities. Both replaced aging weapons systems, incorporated new technologies, and enhanced their ability to threaten the nuclear forces of the other nation. Neither saw a contradiction in the parallel efforts of negotiating limits while modernizing forces. To the contrary, many U.S. officials who have participated in the process¹ and analysts who have watched it from the sidelines² argue that the two tracks naturally go together: the United States can best achieve its preferred arms control outcomes if it negotiates from a position of strength and demonstrates that it is willing to bolster its forces if the arms control process fails.

<https://www.armscontrol.org/act/2020-10/features/bargaining-nuclear-modernization-does-work>

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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