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Indian Pugwash Society

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

Tel. No (91-11) 2671-7983

Fax No. (91-11)2615-4192

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- The low-yield nuclear warhead: A dangerous weapon based on bad strategic thinking
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- The US has a backup plan to kill the Iran nuclear deal. It could spark a crisis at the UN.

A. India

India's communication satellite GSAT-30 launched successfully

PIB Delhi, January 17, 2020

India's latest communication satellite GSAT-30 was successfully launched from the Spaceport in French Guiana during the early hours today. The launch vehicle Ariane 5 VA-251 lifted off from Kourou Launch Base, French Guiana at 2:35 am IST carrying India's GSAT-30 and EUTELSAT KONNECT for Eutelsat, as scheduled. After a flight lasting 38 minutes 25 seconds, GSAT-30 separated from the Ariane 5 upper stage in an elliptical Geosynchronous Transfer Orbit.

With a lift-off mass of 3357 kg, GSAT-30 will provide continuity to operational services on some of the in-orbit satellites. GSAT-30 derives its heritage from ISRO's earlier INSAT/GSAT satellite series and will replace INSAT-4A in orbit. "GSAT-30 has a unique configuration of providing flexible frequency segments and flexible coverage. The satellite will provide communication services to Indian mainland and islands through Ku-band and wide coverage covering Gulf countries, a large number of Asian countries and Australia through C-band" ISRO Chairman Dr K Sivan said. Dr. Sivan also said that "GSAT-30 will provide DTH Television Services, connectivity to VSATs for ATM, Stockexchange, Television uplinking and Teleport Services, Digital Satellite News Gathering (DSNG) and e-governance applications. The satellite will also be used for bulk data transfer for a host of emerging telecommunication applications."

https://pib.gov.in/ PressReleseDetail.aspx?PRID=1599635

Dr Jitendra Singh launches Bhuvan Panchayat V 3.0 Web portal Space technology has reached the houses of common man, says Minister

PIB Delhi, January 28, January 2020

The Union Minister of State (I/C) Ministry of Development of North Eastern Region, MoS PMO, Personnel, Public Grievances and

Pensions, Atomic Energy and Space, Dr Jitendra Singh launched the Bhuvan Panchayat V 3.0 web portal in Bengaluru today.

Speaking after inaugurating the National Workshop on "Space Based Information Support for Decentralised Planning Update", the Minister appreciated the ISRO's effort in developing the portal and also said that Space technology has reached the houses of the common man. He further said that the space technology has contributed to ease of living of common man. Space technology has applications in various fields, he said. The Government initiatives have boosted the Indian Space Programme, he added. The Minister added that that the vision of Vikram Sarabhai has been fulfilled.

https://pib.gov.in/ PressReleseDetail.aspx?PRID=1600855

India Can Bring US Back Into Compliance With Iran Nuclear Deal: Iran Finance Minister Javad Zarif

India, January 17, 2020

'India has good relations with the US,' said Iran Foreign Minister Mohammad Javad Zarif on Friday has sought New Delhi's assistance in recoursing the United States for negotiating on withdrawing from the nuclear deal. "India can play a leading role in bringing US back into compliance with the agreement and we'll not reject that possibility," Zarif said, speaking at a public event.

"India is a very dear friend of Iran and has good relations with US, it can encourage US to come back to the table," he added, seeking India's support in building a dialogue with the US to pursue negotiations. The Iran foreign minister's statement comes a day after he outrightly refused any negotiations with the global superpower and described the current political situation in West Asia as dangerous and sad.

https://www.india.com/news/world/india-canbring-us-back-into-compliance-with-iran-nucleardeal-iran-finance-minister-javad-zarif-3913001/

Gaganyaan astronauts to get ISRO's module-specific training in India after Russia session

Sandhya Ramesh, The Print, January 17, 2020

The four astronauts, who have been selected for the Gaganyaan project, will begin their 11-month training in Russia from next week. Union Minister of State (Independent Charge) for Atomic Energy and Space Jitendra Singh has said in a statement the astronauts shall also receive module-specific training in India after that. In India, "they will be trained in crew and service module designed by ISRO, learn to operate it, work around it and do simulations", said the statement.

ISRO has put out a call asking for 10 types of microgravity experiments to be placed inside and outside the crew module. Experiments with bacteria, medical investigations, environmental monitoring, and more are also expected to take place.

https://theprint.in/science/gaganyaan-astronautsto-get-isros-module-specific-training-in-indiaafter-russia-session/350893/

PM congratulates ISRO on GSAT-30 launch

Deccan Herald, January 17, 2020

Prime Minister Narendra Modi on Friday congratulated the Indian Space Research Organisation for the launch of its first satellite in the year 2020, saying it will help in enhancing DTH services, ATM and stock exchange connectivity. "Congratulations to our @isro team for the first satellite launch of 2020. GSAT-30, with its unique configuration will provide DTH Television services, connectivity to ATMs, stock exchanges and e-Governance. Wish many more successful missions to ISRO in the year," the Prime Minister's Office said in a tweet quoting Modi.

India's "high power" communication satellite GSAT-30, aimed at providing highquality television, telecommunications and broadcasting services was launched successfully by Ariane space rocket from French Guiana in the early hours of Friday.

https://www.deccanherald.com/national/pmcongratulates-isro-on-gsat-30-launch-795624.html

India test fires K-4, a 3,500 km nuclear-capable missile meant for Arihant submarine

Snehesh Alex Philip, The Print, January 19, 2020

After repeated delays, India successfully test fired the 3,500 km range K-4 nuclearcapable missile meant for the indigenous Arihant-class submarines. The missile was tested Sunday from a fixed underwater pontoon on the east coast. This is the fourth time the Defence Research and Development Organisation (DRDO) has attempted to test fire the missile since October, but various climatic conditions prevented it.

The K-4 is the most potent missile in India's inventory that can be fired from a submarine, giving the country unprecedented second-strike capability and a huge deterrence power.

https://theprint.in/defence/india-test-fires-k-4-a-3500-km-nuclear-capable-missile-meant-forarihant-submarine/351853/

Adani out of race for mega Navy submarine deal, Ministry of Defence shortlists 2 firms

Snehesh Alex Philip, The Print, January 21, 2020

The Ministry of Defence Tuesday shortlisted two domestic firms for the multi-billion-dollar contract to build six conventional submarines for the Indian Navy. They are Larsen & Toubro and staterun Mazagon Dock Shipbuilders. Adani Group was also in the race, but wasn't considered. The ministry also approved five foreign companies for the mega contract, valued at over Rs 60,000 crore, which is part of a 30-year plan to construct 18 conventional and six nuclear-powered submarines. "Defence Acquisition Council (DAC) headed by Defence Minister Rajnath Singh, in its first meeting of 2020 and after the constitution of Chief of the Defence Staff, approved shortlisting of Indian Strategic Partners (SP) and the potential Original Equipment Manufacturers (OEMs) that would collaborate with SPs to construct six conventional submarines in India," a statement released by the defence ministry said.

https://theprint.in/defence/adani-out-of-race-formega-navy-submarine-deal-ministry-of-defenceshortlists-2-firms/352787/

India Tests K-4 Submarine-Launched Missile, Pushing Its Sea-Based Deterrent Forward

Ankit Panda, The Diplomat, January 21, 2020

On Sunday, India conducted a test launch of the K-4 intermediate-range submarinelaunched ballistic missile (SLBM). The test was overseen by the Defense Research and Development Organization (DRDO), the Indian agency tasked with developing indigenous weapons systems. The test took place in the Bay of Bengal, off the coast of the Indian state of Andhra Pradesh, near Vizag. The test took place between noon and 1 p.m. local time on Sunday, according to Indian reports.

A nuclear-capable missile, the K-4 will eventually arm India's fleet of nuclearpropelled ballistic missile submarines. Currently, a single Indian ballistic missile submarine, INS *Arihant*, is operational. The K-4 is reported to have a range capability of around 3,500 kilometers.

https://thediplomat.com/2020/01/india-tests-k-4submarine-launched-missile-pushing-its-seabased-deterrent-forward/

Kashmir, UN, defence, nuclear pacts — France has always had India's back, no matter what

Nayanima Basu, The Print, January 23, 2020,

From supporting India's stance on the Kashmir issue at the United Nations Security

Council, building its defence ecosystem to batting for the country at critical multilateral forums, Paris has never shied away from promoting New Delhi's interests on the global platform.

While the defence cooperation between both nations is well-known, a lesserknown fact is that it was because the French took the lead that India was able to join three of the four critical nuclear non-proliferation regimes — the Missile Technology Control Regime (MTCR), the Wassenaar Arrangement and now the Australia Group.

https://theprint.in/diplomacy/kashmir-undefence-nuclear-pacts-france-has-always-hadindias-back-no-matter-what/353155/

Imran Khan's remarks on India, Kashmir show frustration: MEA

Elizabeth Roche, Livemint, January 23, 2020

India on Thursday dismissed Pakistan Prime Minister Imran Khan's reported call for global intervention to prevent a showdown between "two nuclear-armed countries", saying that Islamabad's efforts would be better spent in taking verifiable action against terror groups on its territory than trying to "distract" the global community. Indian foreign ministry spokesman Raveesh Kumar said there was "nothing new" in what Khan had said at the World Economic Forum meet in the Swiss resort town of Davos earlier this week.

"His remarks suggest that he is desperate and rapidly losing hope. The global community can now see through their double standards. While they pretend to be victims of terrorism on the one hand, they foster extremists who spread terrorism in India and other countries on the other," Kumar said.

https://www.livemint.com/news/india/imrankhan-s-remarks-on-india-kashmir-show-frustration-mea-11579792378197.html

K4 test and new fighter base boost India's Act East Policy

Atul Aneja and Dinakar Peri, The Hindu, January 23, 2020

India's decision to test the K4 Submarine Launched Ballistic Missile (SLBM) and to establish a new base of Sukhoi-30 fighter jets not far from the Bay of Bengal coast is adding new teeth to its Act East Policy. It is also reinforcing lines of contact with China's Belt and Road Initiative (BRI) – a giant connectivity project on land and sea.

The 3,500-km range K4 missile, which can be launched from Arihant class nuclear submarines, add a new dimension to India's second strike capability – the ability to carry out a retaliatory nuclear attack after absorbing an initial strike by an atomic weapon. The newly acquired heft to carry out a crushing nuclear counterattack with an Intermediate Range Ballistic Missile (IRBM), from a concealed underwater platform, steels India's nuclear deterrent.

https://www.thehindu.com/news/national/k4-testand-new-fighter-base-boost-indias-act-east-policy/ article30634867.ece

Chandrayaan 3: Isro Starts Work on Second Lander Mission to the Moon, Launch Planned in Early 2021

Firstpost, January 27, 2020

Months after the Chandrayaan 2 Vikram moon lander failed to make its intended softlanding, the Indian Space Research Organisation (ISRO) has reportedly begun work on a second attempt, with India's third moon mission, Chandrayaan 3. Top officials at the agency have said that the mission is scheduled for launch as soon as 2021. On 1 January 2020, the ISRO Chairman Sivan told media at a press conference that the government had approved a spacecraft and rover to land on the Moon's south pole latest by early 2021.

"We have started working on our third lunar mission to land an unmanned spacecraft near the Moon's south pole. The project work has gained momentum to launch the lander and rover by early 2021," Sivan said at a space event in Bengaluru. India's first attempt to soft-land at a chosen spot in the lunar South Pole failed on 7 September 2019, when the Vikram lander (and the rover inside it) crash-landed due to a velocity glitch. That said, the mission will feature a lander and rover, but not an orbiter.

https://www.firstpost.com/tech/science/ chandrayaan-3-isro-starts-work-on-secondlander-mission-to-the-moon-launch-planned-inearly-2021-7959961.html

India, Russia discuss cooperation in third countries

World Nuclear News, January 27, 2020

Russia and India are discussing the construction of power plants in Africa as the next stage in their cooperation in nuclear energy, the Indian ambassador to Moscow, Venkatesh Varma, told Russian news agency RIA Novosti last week. They could replicate the Rooppur project in Bangladesh, he reportedly said. Moscow and New Delhi are collaborating in the project to build two VVER-1200 units for Bangladesh the Atomic Energy Commission at Rooppur, on the eastern bank of the river Ganges in Pabna district. Unit 1 is scheduled for commissioning in 2023, the second in 2024.

"Russia already has agreements on this topic with a number of African countries, Ethiopia is one of them, as well as with several countries in the Middle East. These will be Russian projects, but with the participation of India. Negotiations are ongoing at the initial stage, but we hope that this will be a new era of cooperation between Russia and India in the field of nuclear energy. This follows the success of Russian-Indian cooperation in Bangladesh," the diplomat said.

https://www.world-nuclear-news.org/Articles/ India-Russia-discuss-cooperation-in-third-countrie

Nuclear power for India! Stalled reactor project to get back on track ahead of US President Donald Trump's visit

Huma Siddiqui, Financial Express, January 29, 2020

Ahead of the forthcoming visit of the US President Donald Trump next month, top officials of both sides are having several rounds of talks in an effort to resolve issues related to the six US nuclear power plants in India. For over a decade officials from both sides have had several rounds of commercial as well as technology-related negotiations for the US company to build six nuclear reactors. India has planned to triple its nuclear capacity by 2024 in an effort to give up the fossil fuels. If and when the contract between India and the US becomes active it is expected to give a big push to the country's \$150-billion nuclear power programme. Though the dates of President Trump's visit have not been officially announced, it is expected that the visit will be in the second half of February.

A site in Gujarat to build a nuclear power station with a total capacity of 2,500 MW has already been allotted. As has been reported earlier, sites have been identified for GE plants in Andhra Pradesh with an initial capacity of 3,200 MW. Negotiations are stuck with US' Exim Bank for a loan of around \$8-9 billion to part-fund the building of the reactors. In the hope that the problems could be sorted fast, the two sides were negotiating the terms of the loan with Exim Bank.

https://www.financialexpress.com/defence/ nuclear-power-for-india-stalled-reactor-project-toget-back-on-track-ahead-of-us-president-donaldtrumps-visit/1838386/

Chandrayaan-2 stimulated youth's interest in technology: President Kovind

India Today, January 31, 2020

The Indian Space Research Organisation's (Isro) Moon mission Chandrayaan-2, India's second lunar mission, has stimulated a new a new interest in technology among the

country's youth, President Ram Nath Kovind said on Friday. "The objective of India's space programme has always been service to humanity. Due to the tireless work of country's space scientists, Chandrayaan-2 has stimulated a new interest in technology among the country's youth," Ram Nath Kovind told lawmakers during a joint sitting of the Parliament.

"My government has already approved Chandrayaan-3. The Isro is also working expeditiously on the manned spacecraft programme - Gaganyaan, as well as Aditya-1 Mission," Ram Nath Kovind said.

https://www.indiatoday.in/science/story/ chandrayaan2-isro-president-ram-nath-kovindyouth-gaganyaan-aditya1-1642085-2020-01-31

B. China

China regrets Britain, France, Germany's decision to trigger Iran deal dispute mechanism

Global Times, January 15, 2020

China regrets that the UK, France and Germany - known as E3 - have launched the dispute resolution mechanism of the Joint Comprehensive Plan of Action (JCPOA), believing that this will not help solve the problem or ease current tensions, the Chinese Foreign Ministry said Wednesday. "China believes that there is a reason for Iran to reduce the implementation of the comprehensive agreement," Ministry of Foreign Affairs spokesperson Geng Shuang said during a routine press conference in response to a query on China's thoughts on the three countries' pulling the diplomatic trigger on JCPOA. Geng noted that the fundamental reason for Iran's nuclear tensions lie in US' disregard of international law, unilateral withdrawal from the comprehensive agreement and its extreme pressure on Iran, as well as its obstruction of other parties to fulfill the agreement.

China will continue to maintain close communication with relevant parties, actively promote peace talks, foster a political and diplomatic settlement of the Iranian nuclear issue, and make unremitting efforts to safeguard the comprehensive agreement, ease tensions in the Iranian nuclear issue and the Middle East, Geng added. The UK, France and Germany on Tuesday formally accused Iran of withdrawing from the 2015 agreement that limited its nuclear program, taking the first step toward reimposing UN sanctions. Iran announced on January 5 that it would no longer commit to any limits on the restrictions contained in JCPOA, a deal to freeze Iran's nuclear program in return for a progressive lifting of international sanctions, after the US assassinated Iranian general Qassem Soleimani in Baghdad in a drone attack, CNN reported on January 6.

http://www.globaltimes.cn/content/ 1176987.shtml

China's first LEO 5G broadband satellite moves into orbit

Zhang Hongpei, Global Times, January 15, 2020

China's first low-Earth orbit (LEO) 5G broadband satellite was successfully delivered to its preselected orbit via the Kuaizhou-1A launch vehicle on Thursday from the Jiuquan Satellite Launch Center, Northwest China's Gansu Province. The satellite, developed by domestic commercial aerospace company Galaxy Space, is the first in China with data transmission capacity of 10 gigabits per second. It's also the world's first LEO broadband satellite in the Q/V band, an extremely high-frequency band, according to the company.

http://www.globaltimes.cn/content/ 1177150.shtml

Chinese Rocket Force exercise ensures nuclear counterattack capability

Liu Xuanzun, Global Times, January 16, 2020

The Chinese People's Liberation Army (PLA) Rocket Force has conducted a nuclear attack survival exercise where troops in an underground missile facility had to endure extreme conditions and make sure they could still launch nuclear counterattacks. During the undated exercise, a Rocket Force brigade mobilized into the launch bunker at an undisclosed location and completely sealed themselves off from the outside world, as the troops readied for combat, China Central Television (CCTV) reported on Wednesday. The bunker was then struck by a mock hostile nuclear attack as the troops inside, fully dressed in protection suits, carried out contingency plans and operated missiles for upcoming counterattacks, according to the report.

They also simulated a situation where missile fuel leaked after a hostile strike and a troubleshooting team was immediately deployed to repair. Tactics including a fast missile condition check, rapid logistics, bunker defense and hasty launch were also practiced, CCTV reported. While China is one of a few countries in the world that operate nuclear weapons, it has promised no first use, a military expert who asked not to be named told the Global Times on Thursday. It was crucial the force survive an initial hostile strike to launch a counterattack, the expert noted. Such exercises ensure that capability and contribute to China's nuclear deterrence, the expert said.

http://www.globaltimes.cn/content/ 1177156.shtml

China reveals space plan for 2020

China Daily, January 17, 2020

China will smash its record for space launches in 2020. The country is going to send more than 60 spacecraft into orbit via over 40 launches this year, according to a plan released Friday in Beijing. "This year will continue to see intensive launches," said Shang Zhi, director of the Space Department of the China Aerospace Science and Technology Corporation (CASC), at a press conference, where a blue book setting out China's space achievements and future missions was released. According to Shang, there are three major missions, mainly focusing on the completion of the BeiDou-3 Navigation Satellite System, the lunar exploration and the network of Gaofen observation satellites. Two geostationary orbit BeiDou

satellites will be sent into space in the first half of 2020. The Chang'e-5 lunar probe, which is expected to bring moon samples back to Earth, and China's first Mars probe are also planned to be launched this year.

In addition, three new types of carrier rockets, which are the Long March-5B, Long March-7A and Long March-8, will make their maiden flights in 2020.As a new generation of carrier rocket, the Long March-5B has the largest carrying capacity to low-Earth orbit. It will carry the core capsule and experiment capsules of China's space station. The Long March 7A represents the new generation of China's medium-sized high-orbit rocket. The Long March-8 rocket will increase China's lift capacity for launches to sun-synchronous orbits and meet the growing needs of commercial launches. The Long March-5 rockets will be launched three times in 2020, carrying a new generation of manned spacecraft, a Mars probe and a Chang'e-5 probe into space. The CASC will also send a number of satellites for China's civil space infrastructure system and plan a series of commercial launches this year, according to the blue book. China completed 34 space launches in 2019, ranking first in the world.

https://global.chinadaily.com.cn/a/202001/17/ WS5e21c45aa310128217271cd2.html

China makes major breakthrough in space propulsion technology

Global Times, January 19, 2020

China has made a major breakthrough in the development of the Hall-effect thruster (HET), an important space propulsion technology. Researchers from the China Aerospace Science and Technology Corporation (CASC) have developed the country's first HET with an input power of 20 kilowatts that can produce a thrust of one newton, marking a leap for China's HETs from millinewton level to newton level. The applications of HETs include control of the orientation and position of orbiting satellites and use as a main propulsion engine for medium-size robotic space vehicles.

During a test, the thruster showed stable operation, with a specific impulse of 3068

seconds and working efficiency above 70 percent, reaching international advanced level. Such a high-power HET with features of strong thrust, long working life and high reliability will be able to provide highly efficient impetus for the positioning, orbital maneuvering and motion control of large GEO (geostational orbit) satellites, deep space probes and space shuttle vehicles.

http://www.globaltimes.cn/content/ 1177263.shtml

China and Russia's push to develop hypersonic weapons raises fears of arms race with US

Minnie Chan, South China Morning Post, January 19, 2020

China became the first country to announce the deployment of the missiles, but Russia recently announced it had developed a much more advanced version the Avangard. Defence analysts say the weapons are not a game changer for now but could give Moscow extra leverage in negotiations with the US. Recent breakthroughs in the development of hypersonic weapons have heightened fears about a new arms race between China, Russia and the US, with some defence observers calling for new international arms control agreements. The emergence of hypersonic weapons has raised concerns about the "invincible" arms, which cannot be intercepted by any existing defence systems, being used to enhance nuclear powers' capabilities.

A hypersonic weapon is usually defined as one that reaches speeds of at least Mach 5, five times the speed of sound. The US resumed hypersonic missile has development under Donald Trump after his predecessor Barack Obama suspended the programme but is yet to announce the development of its own weapons. Russia and China currently enjoy an advantage in the development of hypersonic technology, based on the number of successful test flights they have conducted, while India and France are close behind, according to a recent report published by the Bulletin of the Atomic Scientists.

"Hypersonics are not likely to substantially change the relationships between China, Russia and the US. The hype around hypersonics, however, will generate enough interest to prompt productive discussions and increased Track I and Track II diplomatic efforts both bilaterally and trilaterally," she said, referring to backchannel diplomacy through nongovernmental contacts.

https://www.scmp.com/news/china/military/ article/3046667/china-and-russias-pushdevelophypersonic-weapons-raises-fears

Three seaborne launches planned for Long March 11 rocket this year

Zhao Lei, China Daily, January 20, 2020

China plans to conduct three seaborne launches using its Long March 11 solidpropellant carrier rocket this year, Jin Xin, the rocket's deputy project manager, said. He told a news conference at China Aerospace Science and Technology Corp in Beijing that the launches will take place in the East China Sea from self-propelled platforms. "We intend to use these missions to further improve our seaborne launch technologies and procedures," he said. "Compared with the first seaborne flight, the coming missions will feature better ships and streamlined tracking and support systems."

https://global.chinadaily.com.cn/a/202001/20/ WS5e2500d4a3101282172721f2.html

C. Pakistan

Pakistan Nuclear Smuggling Activity Caught as US Indicts Five Men for Running Weapons Racket

News 18, January 17, 2020

Five men have been indicted in the United States for allegedly running an international network that purchased US products for Pakistan's nuclear weapons program. "The defendants smuggled US origin goods to entities that have been designated for years as threats to US national security for their ties to Pakistan's weapons programs," assistant attorney general John Demers said in a statement. The five, who live outside the United States and have not been apprehended, were indicted by a grand jury in October, the Justice Department said. The indictment was unsealed on Wednesday and arrest warrants are pending.

https://www.news18.com/news/world/pakistannuclear-smuggling-activity-caught-as-usindicts-five-men-for-running-weapons-racket-2461761.html

Idea of war between two nucleararmed countries can't even be contemplated, says PM Imran

The Daily Times, January 22, 2020

Prime Minister Imran Khan said on Wednesday that one should not even think about a conflict between two nuclear armed states owing to the devastation it would create across the world.

"Whatever is happening in India is disastrous for people in India, specially those living in Occupied Jammu and Kashmir," he said while speaking to the international media on the sidelines of World Economic Forum in Davos on Wednesday.

https://dailytimes.com.pk/544139/idea-of-warbetween-two-nuclear-armed-countries-canteven-be-contemplated-says-pm-imran/

Pakistan expresses concern over India's missile defence system

The News International, January 23, 2020

Pakistan said Thursday that India's acquisition of the S-400 ballistic missile defence system can lead to an unnecessary arms race in the region. In her weekly press briefing, Aisha Farooqui, the spokesperson of the Ministry of Foreign Affairs, said Islamabad had always expressed concern over the induction of the S-400 Air Defense system. Answering a question about India's missile defence system, she said it would harm the regional stability as it would lead to an unnecessary arms race in the region.

She said Pakistan has proposed a discussion on a strategic restraint regime

for South Asia that includes the proposal to avoid the induction of weapons that would contribute towards destabilisation in the region. S-400 missile system to lead to renewed arms race: Pakistan Last year, Pakistan had shared concerns that the S-400 missile defence system would lead to an arms race in the region. "The Indian purchase of S-400 missile system is a part of their efforts to acquire a Ballistic Missile Defence (BMD) System through multiple sources," the Foreign Office of Pakistan said in a statement.

https://www.thenews.com.pk/latest/603053pakistan-expresses-concern-over-indias-missiledefence-system

Pakistan today conducted a successful training launch of surface to surface ballistic missile Ghaznavi, capable of delivering multiple types of warheads upto a range of 290 kilometers.

ISPR, January 23, 2020

Pakistan today conducted a successful training launch of surface to surface ballistic missile Ghaznavi, capable of delivering multiple types of warheads upto a range of 290 kilometers. The training launch was part of Field Training Exercise of Army Strategic Forces Command aimed at rehearsing operational readiness procedures during day and night.

The training launch was witness by Lieutenant General Nadeem Zaki Manj, Director General Strategic Plans Division, Commander Army Strategic Forces Command, Chairman NESCOM, senior officers from Strategic Plans Division, Army Strategic Forces Command, Scientists and Engineers of the strategic organizations. Director General Strategic Plans Division appreciated the operational preparedness of Army Strategic Forces Command for displaying a very high standard of proficiency in handling and operating the weapon system. He also expressed full confidence in the robust Strategic Command and Control System and the capability of Strategic Forces.

https://www.ispr.gov.pk/press-releasedetail.php?id=5592

Indian Nuclear Threats Must Be Taken Seriously: AJK President:

Sumaira FH, Urdu Point, January 30, 2020

Azad Jammu Kashmir President Sardar Masood Khan while describing as an important development the tabling of six resolutions by the Members of European Parliament in support of the demand for holding plebiscite in Jammu and Kashmir as per the UN resolutions Thursday said that now the international community has realized the legitimacy of the struggle of the Kashmiri people for their right to selfdetermination.

He said in a message read out at the concluding session of the Kashmir conference organized in Karachi by Pakistan Institute of International Affairs (PIIA), he said that draft resolutions tabled in the European Parliament (EP) critical of India's Citizenship (Amendment) Act have also strongly condemned the Indian Citizenship Law and the use of force against the protesters who oppose the law, AJK Presidential secretariat said in statement released to the media here Thursday evening.

https://www.urdupoint.com/en/kashmir/indiannuclear-threats-must-be-taken-seriousl-824571.html

D. USA

U.S. allows time to wind down deals hit by fresh Iran sanctions

Reuters, January 16, 2020

The U.S. Treasury Department said on Thursday it will allow for a 90-day period to wind down transactions in certain sectors of Iran's economy hit with fresh U.S. sanctions last week. The period, good through April 9, allows transactions in the construction, mining, manufacturing or textiles sectors of Iran's economy that could be targeted under last week's action to be wound down without exposure to sanctions, the Treasury Department said in an update to its frequently asked questions, or FAQs, on Iran sanctions on its website. Entering into new business that falls under the sanctions imposed on Friday, however, would not be considered winding down and could still be sanctionable, the FAQ said. The United States imposed more sanctions on Iran on Friday in retaliation for its missile attack on U.S. forces in Iraq last week and vowed to tighten the economic screws if Tehran continued "terrorist" acts or pursued a nuclear bomb. The targets of the sanctions included Iran's manufacturing, mining and textile sectors as well as senior Iranian officials who Washington said were involved in the Jan. 8 attack on military bases housing U.S. troops.

https://www.reuters.com/article/us-usa-iransanctions/us-allows-time-to-wind-down-deals-hitby-fresh-iran-sanctions-idUSKBN1ZF24J

Orano achieves industry first in used fuel transfer

World Nuclear News, January 16, 2020

Orano TN has completed the first transfer and storage of used fuel canisters with a higher than usual heat load using its Extended Optimised Storage (EOS) dry storage system. The use of EOS, which is licensed by the US Nuclear Regulatory Commission for heat loads of up to 50 kW per canister, means used fuel can be transferred to secure dry storage after a shorter period of time. On removal from a nuclear reactor, used fuel is transferred to a pool where it is allowed to cool sufficiently to be moved into dry storage or, in some countries, for reprocessing. Typically used fuel will remain in a pool for at least five years before this can take place. Heat load is a measurement of the used fuel's decay heat. Averaging a total heat load per EOS canister of 44.75 kilowatts, the EOS system is the first dry storage system to load and store used nuclear fuel with heat loads well above industry experience to date, which has ranged between 14-34 kW per canister, Orano said.

The transfer of 296 used nuclear fuel assemblies from the wet storage pool at a US reactor to the onsite dry storage Independent Spent Fuel Storage Facility (ISFSI) used eight EOS 37PTH canisters to securely store the used fuel in eight NUHOMS EOS Horizontal Storage Modules (HSM), Orano said. Being able to transfer hotter fuel assemblies and fuel cooled for less time from wet to dry storage benefits operating nuclear facilities by simplifying the management of the pools and continuously reducing the wet-stored inventory of high heat and short-cooled fuel assemblies.

https://www.world-nuclear-news.org/Articles/ High-heat-load-used-fuel-transfer-is-anindustry-f

Trump, EU chief to meet in Davos as U.S tariffs loom over digital tax: sources

Andrea Shalal, Alexandra Alper, Reuters, January 18, 2020

Donald Trump is expected to meet with EU leader Ursula von der Leyen in Davos, Switzerland, next week, three sources said on Friday, as tensions mount between the allies over tariff threats and the U.S. president faces an impeachment trial at home. Just days after Trump scored big victories by inking a partial trade deal with China and passing a revamp of the North American Free Trade Agreement, he will travel to the World Economic Forum where he is expected to discuss deepening trade disputes with the European Commission president.

The White House and the European Commission did not immediately respond to requests for comment. Among the raft of trade issues dividing the allies, Washington's most immediate concern is France's plan to impose a 3% digital services tax, which the U.S. government believes would harm U.S. technology giants like Alphabet Inc's Google and Amazon.com Inc, with a host of other countries poised to follow suit.

https://www.reuters.com/article/us-usa-eu/ trump-eu-chief-to-meet-in-davos-as-u-s-tariffsloom-over-digital-tax-sourcesidUSKBN1ZH01D

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Large-box cask transfers resume at WIPP

World Nuclear News, January 20, 2020

The US Department of Energy's (DOE) Waste Isolation Pilot Plant (WIPP) has received its first large-box cask of transuranic waste since the facility's temporary closure in 2014. Re-entry into service of the TRUPACT-III cask will accelerate the pace of clean-up at DOE sites while reducing worker safety risks. The TRUPACT-III -Transuranic Package Transporter Model 3 cask allows DOE Office of Environmental Management (EM) sites to package and ship large-sized transuranic waste from the defence sector in a single box rather than in several smaller waste boxes. Large transuranic waste includes glove boxes, used motors and large-scale analytical equipment which has been contaminated with small amounts of plutonium and other man-made radioactive elements.

Mark Pearcy, chief operating officer and deputy operations manager of WIPP management and operations contractor, said the large boxes had been added back into the portfolio of waste packages which can safely be shipped to WIPP for disposal after the Implementation of new waste certification requirements and readiness performance. This had been achieved through the teamwork of the Savanah River Site waste generator, the National TRU Program, and WIPP, he said.

https://www.world-nuclear-news.org/Articles/ Large-box-cask-transfers-resume-at-WIPP

U.S. urges China to join nuclear arms talks with Russia

Emma Farge, Reuters, January 21, 2020

The United States urged China on Tuesday to join trilateral nuclear arms talks with Moscow, calling Beijing's secrecy around growing stockpiles a "serious threat to strategic stability". U.S. President Donald Trump said last year he had discussed a new accord on limiting nuclear arms with Russian President Vladimir Putin and hoped to extend that to China in what would be a major deal between the globe's top three atomic powers. But China has so far refused to take part. "We think, given the fact that China's nuclear stockpile is estimated to double over the next ten years, now is the time to have that trilateral discussion," Robert Wood, U.S. disarmament ambassador, told reporters on the opening day of the U.N.-backed Conference on Disarmament in Geneva.

He said that Washington had discussed the potential trilateral talks in a security meeting with Russia last week and had reached an "understanding" about pursuing them. "We cannot afford to wait," he added. Asked how to go about pressuring Beijing to join, Wood said that he hoped Russia, and others, would help. "Hopefully over time and through the influence of others besides the United States, they (China) will come to the table. We think it's imperative for global security that the Chinese do that."

https://www.reuters.com/article/us-usa-trumpputin-china/u-s-urges-china-to-join-nucleararms-talks-with-russia-idUSKBN1ZK24B

US committee hears plea for Green Nuclear Deal

World Nuclear News, January 22, 2020

Environmental advocate Michael Shellenberger has called for the US administration to support the nation's nuclear energy industry in what he calls a Green Nuclear Deal. Speaking to the US House of Representatives Committee on Science, Space, and Technology last week, Shellenberger said people need not be passive victims of climate change and there is much that could be done to reduce the impacts of "climate-driven extremes".

Shellenberger was speaking as an expert witness at the 15 January hearing, An Update on the Climate Crisis: From Science to Solutions. The president of research and policy organisation Environmental Progress, he was one of a panel of five expert witnesses called to testify before the full committee meeting, alongside Pamela McElwee, associate professor of human ecology at Rutgers, The State University of New Jersey; Richard Murray, deputy director and vice president for research at Woods Hole Oceanographic Institution; Heidi Steltzer, professor of environment and sustainability at Fort Lewis College, Colorado; and Taryn Fransen, senior fellow of global climate programme at the World Resources Institute. In his testimony, Shellenberger said "apocalyptic assertions" relating to climate change had contributed to rising levels of anxiety, particularly amongst young people, and worsening political polarisation. Such extreme assertions could be debunked by science, he said, and although climate change may make some natural disasters more frequent and more extreme, humans need not be "passive victims" of environmental change. "Policymakers routinely take action on non-apocalyptic problems," he said, adding that while the risk of crossing unknown "tipping points" rises with higher temperatures, there is much that could be done to reduce the impacts of climate-driven extremes.

https://www.world-nuclear-news.org/Articles/UScommittee-hears-plea-for-Green-Nuclear-Deal

GEH and TerraPower team up for VTR development

World Nuclear News, January 22, 2020

GE Hitachi Nuclear Energy (GEH) and TerraPower are to collaborate on pursuing a public private partnership to design and construct the Versatile Test Reactor (VTR) for the US Department of Energy (DOE). Utility Energy Northwest will support the joint GEH-TerraPower effort, with other parties said to be interested in joining.

Battelle Energy Alliance (BEA) - the managing and operating contractor for the DOE's Idaho National Laboratory (INL) last November issued an Expression of Interest from industry stakeholders interested in forming a partnership for a costsharing arrangement to develop the VTR. GEH and TerraPower have now announced they recently submitted a joint response to the Expression of Interest. Energy Northwest - a consortium of 27 public utility districts and municipalities across Washington state and operator of the state's only operating nuclear power plant, the Columbia Generating Station - will support their effort. Additional companies and investors have expressed interest in being part of this effort and, if brought on board, will be named later, GEH and TerraPower said in a joint statement. "To achieve nuclear energy's full potential, business and government must work together to invest in both testing new materials and demonstrating advanced technologies," said TerraPower CEO Chris Levesque.

https://www.world-nuclear-news.org/Articles/ GEH-and-TerraPower-team-up-for-VTRdevelopment

Oak Ridge prepares for legacy waste processing

World Nuclear News, January 23, 2020

A facility at the US Department of Energy's (DOE) Oak Ridge National Laboratory site in Tennessee is being prepared to process an inventory of legacy high-dose uranium-233 from which materials will be extracted for medical research. Protective shielding and remote mechanical arms are needed to handle the uranium-233 canisters. DOE Office of Environmental Management (EM) contractor Isotek Systems - a subsidiary of Atkins - is carrying out upgrades to existing hot cells at Oak Ridge Building 2026, where the canisters will be processed. The hot cells have radiological contamination from previous DOE research missions, and crews wear protective suits and construct containment tents to prevent the spread of radiological contamination once a hot cell is opened.

Old equipment is being removed to make way for new installations, including a cell portal to make material entry easier, cutting tools to open the uranium-233 storage canisters, pumping systems for chemicals, filtration systems to extract the thorium, and remote manipulators. Rooms will be remodelled to store large tanks of downblended material, and a two-story mixing silo will be constructed outside the facility to provide cement to mix with the downblended material, EM said.

https://www.world-nuclear-news.org/Articles/ Oak-Ridge-prepares-for-legacy-waste-processing

San Onofre dismantlement starts next month

World Nuclear News, January 24, 2020

Dismantlement of the San Onofre Nuclear Generating Station is to begin in February, Southern California Edison (SCE) has announced. This follows the receipt in October of the final permit required for the decommissioning and dismantlement of the plant which closed in 2013. SCE is required by the California State Lands Commission to provide 30 days' notice to residents before the start of deconstruction. It duly mailed its Notice of Deconstruction to residents within a five-mile radius of the plant on 22 January. The notification provides key timeframes for initial dismantlement activity and resources to learn more about overall decommissioning of the site.

"We're going to be a good neighbour throughout the decommissioning process, and that means providing timely, usable information to the community and to the people who use the recreational resources next door to us," Doug Bauder, SCE vice president and chief nuclear officer for San Onofre, said. The company will provide quarterly updates "so folks are aware of the work that is happening on site", he added. The dismantlement process will take eight years and involves the removal of buildings, containment domes and other above-grade structures associated with the two units in compliance with US Nuclear Regulatory Commission requirements, as well as the partial removal of the offshore conduits that brought and discharged ocean cooling water to the plant, and the removal of offshore buoys and anchors, SCE said. Initial work will focus on preparatory activities and site characterisation. This will take place within the plant's boundaries and is expected to have minimal impact on the surrounding recreational areas.

https://www.world-nuclear-news.org/Articles/ February-start-for-San-Onofre-dismantlement

US DOE funds compact particle accelerator development

World Nuclear News, January 28, 2020

The US Department of Energy (DOE) has

announced a plan to provide USD10 million over three years to advance particle accelerator technology for medical, and industrial security, energy, applications, with a focus on the development of novel "compact" accelerator technologies for cancer treatment and other uses. The awards are aimed specifically at helping transform sophisticated accelerator technology used primarily for scientific research into an effective tool of medicine and industry, the DOE said. The initiative includes a new topic focused on the development of novel compact accelerators which range from the size of a tabletop up to several metres, and may help make valuable accelerator technologies less expensive and more widely available.

"Particle accelerators were developed mainly for scientific research, but have come to be indispensable tools of medicine, industry, national security, and many others," Under Secretary for Science Paul Dabbar said. "This research helps to ensure that both government and the private sector benefit from the very latest advances in accelerator technology."

https://www.world-nuclear-news.org/Articles/ US-DOE-funds-compact-particle-acceleratordevelopm

U.S. renews waivers on Iran nuclear work, but sanctions top Iran nuclear official

Humeyra Pamuk, John Irish, Reuters, January 30, 2020

The Trump administration on Thursday said it will allow Russian, Chinese and European companies to continue their work at Iranian nuclear sites, arguing that their presence makes it harder for Tehran to develop nuclear weapons. But the United States also imposed sanctions on Iran's Atomic Energy Organization (AEOI) and its chief, a move the Iranian entity's spokesman described as a sign of Washington's "despair."

The Trump administration, which in 2018 pulled out of the 2015 Iran nuclear deal and reimposed sanctions on Iran, will let

the work go forward by issuing waivers to sanctions that bar non-U.S. firms from dealing with the AEOI. The waivers' renewal for 60 days will allow nonproliferation work to continue at the Arak heavy-water research reactor, the Bushehr nuclear power plant, the Tehran Research Reactor and other nuclear cooperation initiatives.

https://www.reuters.com/article/us-iran-nuclearusa/u-s-renews-waivers-on-iran-nuclear-workbut-sanctions-top-iran-nuclear-officialidUSKBN1ZT1PW

Edging World Closer to Nuclear War, Trump Deploys 'Low Yield' – More 'Usable' – Atomic Warhead on US Submarine

Julia Conley, Common Dreams, January 30, 2020

Anti-nuclear campaigners expressed alarm Thursday as the Federation of American Scientists revealed the U.S. has for the first time deployed a "low-yield" nuclear warhead on a submarine that is currently patrolling the Atlantic Ocean. The USS Tennessee left a port in Georgia last month, and Hans Kristenson of FAS said Wednesday that the submarine is the first U.S. ship to patrol with the W76-2 on board—an occurrence which arms control groups says will make nuclear war more likely.

Tim Wright, treaty coordinator for the International Campaign to Abolish Nuclear Weapons (ICAN), called the news "an alarming development that heightens the risk of nuclear war."

https://www.commondreams.org/news/2020/01/ 30/edging-world-closer-nuclear-war-trumpdeploys-low-yield-more-usable-atomic-warhead

Illinois governor wants clean energy legislation, could push state out of PJM power grid

Reuters, January 30, 2020

Illinois Governor J.B. Pritzker called on the state legislature to pass clean energy legislation in his State of the State address, providing a boost to advocates of the Clean Energy Jobs Act, which could push the state out of the PJM power grid. PJM Interconnection operates the power system in 13 states from Illinois to New Jersey. Analysts at Height Capital Markets in Washington said in a report on Thursday that they expect lawmakers will pass the bill this spring.

PJM uses the capacity market to pay generators to be available for service to ensure the grid has enough resources to meet peak demand. That is different than the grid's energy market, which pays generators for the power they produce. PJM's capacity market has come under fire in several states after the U.S. Federal Energy Regulatory Commission (FERC), which regulates PJM, said in December the capacity market must do a better job of treating all generation sources equally.

https://www.reuters.com/article/us-usa-illinoispjm-nuclearpower/illinois-governor-wantsclean-energy-legislation-could-push-state-outof-pjm-power-grid-idUSKBN1ZT259

GE Hitachi initiates US licensing of BWRX-300

World Nuclear News, January 31, 2020

GE Hitachi Nuclear Energy (GEH) has officially started the regulatory licensing process for its BWRX-300 reactor design. On 30 December, the company submitted the first licensing topical report for the small modular reactor to the US Nuclear Regulatory Commission (NRC). The company expects such reports to serve as a foundation for the development of a Preliminary Safety Analysis Report that could potentially be submitted to the NRC by a utility customer.

The BWRX-300 is a 300 MWe SMR derived from GEH's 1520 MWe Economic Simplified Boiling Water Reactor (ESBWR) design. According to GEH, the BWRX-300 leverages the design and licensing basis of the ESBWR, which received design certification from the NRC in 2014. GEH says that, by leveraging the existing ESBWR design certification, utilising licensed and proven nuclear fuel designs, incorporating proven components and supply chains, and implementing simplification innovations, the BWRX-300 can, become cost competitive with power generation from combined cycle gas plants and renewable energy platforms. "The first licensing topical report was submitted to the NRC at the end of 2019 as part of an aggressive timeline that we set for ourselves," Jon Ball, executive vice president of nuclear products for GEH, said. "As the global demand for carbon-free energy increases, we are seeing significant interest in this groundbreaking SMR technology and are excited about continuing to work toward US licensing," he added.

https://www.world-nuclear-news.org/Articles/GE-Hitachi-initiates-US-licensing-of-BWRX-300

E. Europe

Germany confirms Trump made trade threat to Europe over Iran policy

Patrick Wintour, The Gaurdian, January 16, 2020

Germany's defence minister confirmed a Washington Post story that Donald Trump had threatened Europe with a 25% tariff on European cars unless it toed the line on its Iran policy. The US threatened to impose 25% tariffs on cars to push Europeans to initiate proceedings against Iran for violating the nuclear deal, the German defence minister has confirmed. "This threat exists," said the German defence minister, Annegret Kramp-Karrenbauer, at a press conference in London.

She was asked about an article in the Washington Post that claimed Trump had secretly warned France, Germany and the UK that the US would impose a "25% tariffs on European cars" if they did not activate the mechanism for the settlement of disputes (MRD) of the Iranian international nuclear agreement reached in Vienna in 2015.

https://www.theguardian.com/world/2020/jan/16/ iran-says-it-is-enriching-more-uranium-thanbefore-nuclear-deal

UK's Johnson, France's Macron reiterate commitment to Iran nuclear deal

Tehran Times, January 20, 2020

British Prime Minister Boris Johnson and French President Emmanuel Macron reiterated their commitment on Sunday to the Iran nuclear deal and agreed a longterm framework was needed, Downing Street said on Sunday. "On Iran, the leaders reiterated their commitment to the JCPOA (Joint Comprehensive Plan of Action) and also acknowledged the need to define a longterm framework...," a Downing Street spokeswoman said in a statement after the two met on the sidelines of a Libya summit in Berlin. "They agreed on the importance of de-escalation and of working with international partners to find a diplomatic way through the current tensions."

https://www.tehrantimes.com/news/444347/ UK-s-Johnson-France-s-Macron-reiteratecommitment-to-Iran-nuclear

Macron, meeting Netanyahu, says Iran must not acquire nuclear weapons

John Irish, Reuters, January 22, 2020

President Emmanuel Macron said France was determined Iran would never gain a nuclear weapon but it wanted to avoid any military escalation in the Middle East, after he met with Israeli Prime Minister Benjamin Netanyahu on Wednesday. Macron's twoday trip to Israel and the Palestinian territories is timed to coincide with the 75year anniversary of the liberation of the Auschwitz death camp. He is one of dozens of world leaders due to attend Thursday's World Holocaust Forum at the Yad Vashem Holocaust memorial center in Jerusalem.

Macron started his visit with a morning meeting with Netanyahu at his official residence in Jerusalem, where the two discussed Iran's nuclear program and regional security issues from Libya to Turkey, according to Netanyahu's office.

https://www.reuters.com/article/us-israelfrance-macron-church/macron-meetingnetanyahu-says-iran-must-not-acquire-nuclearweapons-idUSKBN1ZL09J

Denmark urges all JCPOA signatories to honor their obligations

Tehran Times, January 24, 2020

Christina Markus Lassen, political director at the Danish Ministry of Foreign Affairs, on Wednesday voiced her country's concern over the activation of the dispute mechanism in the nuclear deal by the European sides, urging all signatories to the Joint Comprehensive Plan of Action (JCPOA) to adhere to their commitments. In a meeting with senior advisor to the Iranian Parliament Speaker Hossein Amir Abdollahian in Tehran, the Danish diplomat said, "Denmark calls on all sides to return to their obligations and adhere to their undertakings."

She further said that utilizing diplomacy is the only way out of the current critical situation to protect the region against the existing threat of war. Lassen later highlighted Iran's key role and standing in the region, saying, "Continuation of talks and friendly relations with Iran is of great importance in Denmark's foreign policy." Amir Abdollahian, for his part, said that the U.S. unilateral measures have led the world towards severe widespread insecurity. On Monday, Foreign Minister Mohammad Javad Zarif warned that Iran would consider quitting the nuclear Non-Proliferation Treaty (NPT) if the Europeans refer Iran's nuclear case to the UN Security Council. "If they (Europeans) take any action, the issue of quitting the NPT will be raised based on the letter of the President dating May 2018," Zarif said.

https://www.tehrantimes.com/news/444512/ Denmark-urges-all-JCPOA-signatories-to-honortheir-obligations

EU chief, German FM discuss JCPOA

Tehran Times, January 27, 2020

Josep Borrell, the European Union foreign policy chief, and German Foreign Minister Heiko Maas met in Berlin on Monday to discuss the 2015 nuclear deal, officially known as the JCPOA. "Good meeting with my friend German Minister of Foreign Affairs @HeikoMaas this morning in Berlin. Discussed pressing international issues and European foreign policy action: Berlin #Libya conference, #JCPOA and Western Balkans. We will continue to work hand in glove," Borrell tweeted on Monday.

U.S. President Donald Trump unilaterally quit the nuclear deal in May 2018 and introduced the harshest ever sanctions in history on Iran as part of his administration's "maximum pressure" strategy against Iran. In response to this move, on May 8, 2019, Iran announced that its "strategic patience" is over and started to gradually reduce its commitments to the JCPOA at bi-monthly intervals. At the time Iran announced if the European parties to the deal take concrete steps to shield Iran's economy from the U.S. sanctions it will reverse its decision.

https://www.tehrantimes.com/news/444637/ EU-chief-German-FM-discuss-JCPOA

F. Russia

New sea tanker to enter service with Russia's Northern Fleet on January 21

TASS News Agency, January 16, 2020

The new sea tanker Academician Pashin will join the Northern Fleet's logistics and rear support forces in late January, the Fleet's press office reported on Thursday. "On January 21, a solemn ceremony of hoisting the flag of the Navy's auxiliary fleet will take place aboard the new sea tanker Academician Pashin at the Northern Fleet's main base of Severomorsk. This day will become the date of officially accepting the vessel for service in the Northern Fleet," the press office said in a statement.

In 2019, the new sea tanker successfully underwent a full program of trials in the Barents Sea. The heavy nuclear-powered missile cruiser Pyotr Veliky and the frigate Admiral Gorshkov provided assistance during the tanker's trials, the statement says. The Project 23130 medium-sized seagoing supply tanker Academician Pashin was built at the Nevsky Shipyard on order from Russia's Defense Ministry. The tanker is equipped with a diesel single-shaft propulsion unit and a bow thruster and is an Arc4 ice-class vessel. The crew and passenger rooms and the service premises are located in the aft-end living superstructure.

https://tass.com/defense/1109475

Russia's Nuclear-Powered Icebreaker Escorts Up 54% in 2019

The Moscow Times, January 17, 2020

The number of ships escorted by Russian icebreakers along the Northern Sea Route increased by 54% between 2018 and 2019. The increase in ship escorting is caused by an increase in LNG production on the Yamal Peninsula, Rosatomflot, the company managing Russia's fleet of nuclear-powered icebreakers, said.

The 510 vessels that were escorted through the Arctic ice had a total gross tonnage of 30.29 million tons, Rosatomflot says. That is 54% more than it was in 2018 when 331 vessels with a total tonnage of 12,7 million tons were carried out through the area. "It is connected with the full project capacity reached by the LNG production plant in Sabetta port," General Director at Atomflot Mustafa Kashka said. Meanwhile, the total volume of goods shipped on the route in 2019 is still unknown. In mid-November 2019, Rosatom said that goods volumes had reached 26 million tons and that by the end of the year it was expected to reach 30 million tons.

https://www.themoscowtimes.com/2020/01/17/ russias-nuclear-powered-icebreaker-escorts-up-54in-2019-a68942

Lavrov slams E3's statement on Iran nuclear deal as 'dangerous turn'

TASS News Agency, January 17, 2020

Acting Russian Foreign Minister Sergey Lavrov has described the E3's plans to trigger the dispute resolution mechanism on the Iran nuclear deal as "a dangerous turn." He recalled that the Joint Comprehensive Plan of Action agreed on in 2015 was "an integral part of international law approved by the UN Security Council in a resolution, which is binding."

"However, the Americans decided to apply their own rules. They withdrew from the JCPOA [Joint Comprehensive Plan of Action]. They not only stopped honoring their commitments, but also prohibit other countries to trade with Iran. On the other hand, they demand that Iran comply with its obligations under the document, which President Trump described as the worst deal ever," Lavrov told reporters at a news conference on Friday.

https://tass.com/politics/1109951

US and Russia discuss possibility of moving beyond bilateral format on arms control

TASS News Agency, January 17, 2020

Russia and the United States have discussed the possibility of moving beyond a bilateral format on arms control, the US Department of State said in a statement released on Thursday.

At the talks, Russia was represented by Deputy Foreign Minister Sergey Ryabkov, and the US was represented by Assistant Secretary for International Security and Nonproliferation Christopher Ford, who "has been delegated the authorities and functions of the Under Secretary of State for Arms Control and International Security."

The delegations discussed "their respective national strategic policies as a means to reduce misunderstandings and misperceptions on key security issues," the statement said. "The U.S. and Russian delegations discussed nuclear stockpiles and strategy, crisis and arms race stability, and the role and potential future of arms control, including the importance of moving beyond a solely bilateral format," the statement noted.

https://tass.com/world/1109787

Rosatom transfers Tianwan unit 3 to Chinese customer

World Nuclear News, January 20, 2020

Russia and China today signed the final acceptance protocol for the nuclear island of unit 3 of the Tianwan nuclear power plant, which transfers ownership to the Chinese customer for permanent operation. The protocol was signed by Alexey Bannik, vice president of ASE Group, Rosatom's engineering division, and Zhang Yi, deputy general director of Jiangsu Nuclear Power Corporation. The signing ceremony took place during Rosatom Director General Alexey Likhachov's working visit to the Tianwan plant, where he met with the head of the China Atomic Energy Authority, Zhang Kejian.

Likhachov noted that Tianwan units 3 and 4 had been put into commercial operation "in record time". The plant is "a vivid example of the highest skills of Russian and Chinese nuclear scientists, the best confirmation of the synergy of the personal and professional contribution of each employee", he said. Likhachov and Kejian also visited the site allocated for the construction of VVER-1200 units 7 and 8. They said they hoped first concrete of unit 7 would be poured in December, five months ahead of schedule.

https://www.world-nuclear-news.org/Articles/Rosatomtransfers-Tianwan-unit-3-to-Chinese-custom

KHNP awards new uranium enrichment contract to Russia's Tenex

TASS News Agency, January 20, 2020

Tenex, a trading arm of the Russian nuclear corporation Rosatom, won the tender staged by Korea Hydro & Nuclear Power Co., Ltd. (KHNP) on a new uranium enrichment contract, the Russian company says.

The new contract with the term by 2030 is valued at \$500 mln.

The portfolio of Tenex contracts with KHNP has increased to \$2 bln as a result of the new contract award, the company said.

https://tass.com/economy/1110755

NATO initiates dangerous games in space – Lavrov

TASS News Agency, January 21, 2020

NATO's plans to declare space and cyberspace its operational domains undermine the global system of strategic stability, Russia's Acting Foreign Minister Sergey Lavrov said at a meeting of the Russian International Affairs Council on Tuesday. "We can see moves aimed at exacerbating tensions in the area of strategic stability and nuclear weapons," he pointed out. "In addition, NATO is initiating a rather dangerous game, declaring space and cyberspace its operational domains," he added.

According to Lavrov, some in the West "are still guided not even by yesterday's logic but by the logic of the day before yesterday in a bid to reclaim their former global dominance, taking increasingly aggressive actions." "I would like to point to the situation in the field of global strategic stability, which is under attack right now," the Russian top diplomat went on to say. "The Americans have destroyed two of the three landmark treaties – the Anti-Ballistic Missile Treaty and the INF Treaty, while the future of New START, which is the last tool in the strategic stability area, remains unclear," Lavrov noted.

https://tass.com/politics/1111359

Shipbuilders to build five more Project 23130 logistic support tankers for Russian Navy

TASS News Agency, January 21, 2020

The Russian Navy will receive five more Project 23130 logistic support tankers similar to the vessel Academician Pashin that entered service with Russia's Northern Fleet on January 21, Chief of the Auxiliary Fleet Service in the Defense Ministry's Transport Support Department Sergei Yepifanov said on Tuesday. "As for the prospects of these vessels, the Russian defense minister made a decision in 2019 on building five more tankers of this Project," he said at the ceremony of hoisting the flag aboard the tanker Academician Pashin in the northwestern Murmansk Region.

The Russian Navy will receive five more Project 23130 logistic support tankers similar to the vessel Academician Pashin that entered service with Russia's Northern Fleet on January 21, Chief of the Auxiliary Fleet Service in the Defense Ministry's Transport Support Department Sergei Yepifanov said on Tuesday. "As for the prospects of these vessels, the Russian defense minister made a decision in 2019 on building five more tankers of this Project," he said at the ceremony of hoisting the flag aboard the tanker Academician Pashin in the northwestern Murmansk Region.

https://tass.com/defense/1111321

New sea tanker enters service with Russia's Northern Fleet

TASS News Agency, January 21, 2020

The new sea tanker Academician Pashin with improved technical characteristics has entered service with the Northern Fleet's logistics and rear support forces, the Fleet's press office reported on Tuesday. The solemn ceremony of hoisting the flag took place aboard the new sea tanker in Severomorsk with the participation of Fleet Commander Vice-Admiral Alexander Moiseyev.

"Today, a solemn ceremony of hoisting the flag of the Russian Navy's auxiliary fleet took place aboard the medium sea tanker Academician Pashin at the Northern Fleet's main naval base of Severomorsk. Now the tanker has been officially accepted for service with the Northern Fleet," the press office said in a statement.

https://tass.com/defense/1111171

Third Project 22220 serial icebreaker to be laid by July 2020 – Baltic Shipyard

TASS News Agency, January 21, 2020

The third serial icebreaker of Project 22220 is planned to be laid at the Baltic Shipyard in April – June 2020, the company's press

service told TASS on Monday. "Laying of the third [serial] icebreaker of Series 22220 is planned in the second quarter of 2020," the spokesperson said.

Two serial icebreakers of Project 22220 – Sibir and Ural – are currently under construction at the Baltic Shipyard. The lead icebreaker Arktika of this project successfully completed the first stage of sea trials.

https://tass.com/defense/1111017

Russia completes testing of latest fast reactor fuel

World Nuclear News, January 22, 2020

Siberian Chemical Combine (SCC) has completed acceptance tests of its ETVS-22, ETVS-23 and ETVS-24 experimental fuel assemblies with mixed uraniumplutonium (nitride) nuclear fuel for fast neutron reactors. Based in Seversk, SCC is a subsidiary of TVEL, the nuclear fuel manufacturing subsidiary of Russian state nuclear corporation Rosatom. The work is part of Rosatom's 'Proryv', or Breakthrough, project to enable a closed nuclear fuel cycle. This project comprises a fuel production/refabrication module for production of dense uranium plutonium (nitride) fuel for fast reactors; a nuclear power plant with a BREST reactor; and a used fuel retreatment module.

The acceptance committee was chaired by Alexey Glushenkov, chief expert of the AA Bochvar Research Institute of Inorganic Materials, and included representatives from SCC, TVEL, OKBM Afrikantov, Nikiet and Zarubezhatomenergostroy, as well as from the Breakthrough project. They checked the qualitative and quantitative characteristics of the fuel, namely: the quality of welded joints and assembly structures; the absence of surface radioactive and mechanical contamination; and compliance with the working design documentation.

https://www.world-nuclear-news.org/Articles/ Russia-completes-testing-of-latest-fast-reactorfu

Russia expects commission on Iranian nuclear deal to prevent crisis

TASS News Agency, January 24, 2020

Russia hopes that the next meeting of the commission on the implementation of the Joint Comprehensive Plan of Action (JCPOA) on the Iranian nuclear deal scheduled to be held in February will help prevent the crisis around the agreement from escalating, the Russian Foreign Ministry said in a statement on Friday. "As for the next meeting of the JCPOA Joint Commission scheduled for February, we hope that it will help prevent the crisis from escalating further and consolidate the signatories around the common task of salvaging the nuclear deal. We urge the E3 and the EU's JCPOA coordinators to focus precisely on that," the ministry said.

The Russian Foreign Ministry drew attention to a statement made by EU Foreign Policy Chief Josep Borrell, which was published on January 24. In it, he summed up the interim results of working contacts and informal consultations with the JCPOA signatories held after the UK, Germany and France notified him on January 14 that they were triggering the Dispute Resolution Mechanism envisaged by the JCPOA.

https://tass.com/world/1112841

Russia proceeds with tests of new fast reactor fuel

Nuclear Engineering, January 25, 2020

Russia's Siberian Chemical Combine (SCC) in Seversk said on 22 January that it has completed acceptance tests of its ETVS-22, ETVS-23 and ETVS-24 experimental fuel assemblies with mixed uranium-plutonium (nitride) nuclear fuel for fast neutron reactors. SCC is a subsidiary of nuclear fuel company Tvel, part of state nuclear corporation Rosatom. The fuel is being developed within the framework of the (Breakthrough), Proryv project to demonstrate a closed nuclear fuel cycle. This project, based at SCC, comprises a fuel production/refabrication module for production of dense uranium plutonium (nitride) fuel for fast reactors; a nuclear power plant with a lead cooled BREST OD-300 fast reactor; and a used fuel retreatment module.

The acceptance committee was chaired by Alexey Glushenkov, chief expert of the AA Bochvar Research Institute of Inorganic Materials (VNIINM), and included representatives from SCC, Tvel, OKBM Afrikantov, the NN Dollezhal Research & Development Institute of Power Engineering (Nikiet) and Zarubezhatomenergostroy, as well as from Proryv. Zarubezhatomenergostroy, founded in 1973, with 24 subsidiaries in various regions of Russia, is a specialised organisation that provides technical acceptance of nuclear fuel and assesses the compliance of equipment, devices and materials for nuclear power plants, including those abroad. The Committee checked the qualitative and quantitative characteristics of the fuel, including the quality of welded joints and assembly structures; the absence of surface mechanical radioactive and contamination; and compliance with the working design documentation. Rosatom said the experimental fuel was manufactured using technology "as close as possible" to the industrial design, which will be used for the fabrication and refabrication module of the pilot demonstration energy complex under the Proryv project. Four fuel rods equipped with "bevelled tablets" were installed in each fuel assembly.

https://www.neimagazine.com/news/ newsrussia-proceeds-with-tests-of-new-fastreactor-fuel-7653733

Russia-North Korea Trade Up Despite Sanctions, Reports Say

Moscow Times, January 25, 2020

Russia and North Korea ramped up trade in 2019 despite international sanctions, the South Korean news network Arirang reported, citing data from the Geneva-based International Trade Center. Pyongyang has been under UN sanctions since 2006 over its missile and nuclear programs, which the Security Council has unanimously strengthened over the years.

Despite that, North Korea imported more than \$42 million in goods from Russia in January-November 2019, Arirang reported Monday. That's 20% higher than the \$32 million in goods North Korea imported from Russia in 2018, it said. Pyongyang's imports consisted mostly of petroleum products from Russia, followed by animal oil, food and medical products, according to South Korea's Yonhap news agency.

https://www.themoscowtimes.com/2020/01/24/ russia-north-korea-trade-up-a69040

Russian floating nuclear plant supplies 10GWh of electricity to Chukotka

Nuclear Engineering, January 27, 2020

Russia's floating NPP (FNPP), Akademik Lomonosov, now moored at Pevek in the Arctic northeast, has supplied 10GWh of electricity to the Chukotka network since it was connected to the local grid on 19 December, nuclear utility Rosenergoatom reported on 24 January. Currently, the FNPP provides 20% of the needs of the Chaun-Bilibino energy centre. In future it will fully cover the growing electricity needs of Chukotka, becoming a reliable source for the city of Pevek and the more extensive the region.

Vitaly Trutnev, Director of the the Rosenergoatom Directorate for Construction and Operation of Floating Nuclear Thermal Power Plants, said: "In the future, the FNPP will provide electricity to the development of enterprises for the extraction of gold, copper and other mineral resources in the territory of Chukotka." "In addition, the FNPP will become one of the supporting elements of the infrastructure of the Northern Sea Route. The key objective of 2020 is the commissioning of the facility," he added.

https://www.neimagazine.com/news/newsrussianfloating-nuclear-plant-supplies-10gwh-ofelectricity-to-chukotka-7741808

First serial batch of MOX fuel loaded into BN-800

World Nuclear News, January 28, 2020

Unit 4 of the Beloyarsk nuclear power plant in Russia's Sverdlovsk district has been restarted after being loaded with the first serial batch of mixed-oxide (MOX) fuel. By 2021, the BN-800 fast neutron reactor should be operating with a full core of MOX fuel assemblies. Beloyarsk 4 was initially fuelled with a hybrid core containing both uranium and MOX fuels. The uranium fuel assemblies were produced by Elemash, fuel manufacturer TVEL's major fabrication facility in Elekrostal, near Moscow, while the experimental MOX fuel assemblies had been fabricated at the Research Institute of Atomic Reactors in Dimitrovgrad, in the Ulyanovsk region.

Workers have now loaded 18 MOX fuel assemblies - manufactured by the Mining and Chemical Combine (MCC) in Zheleznogorsk, in the Krasnovarsk region - into the reactor's core. The production line - located in a mine 200 metres underground - was built as part of Russia's 'Proryv', or Breakthrough, project to enable a closed nuclear fuel cycle. The ultimate aim is to eliminate production of radioactive waste from nuclear power generation. The facility completed tests on putting together the first nuclear fuel assemblies for the BN-800 reactor in August 2015. Serial batch production of MOX fuel started at MCC in late 2018. The basic technology for manufacturing the MOX fuel pellets was developed by TVEL subsidiary AA Bochvar Research Institute of Inorganic Materials. The fuel pellets are manufactured from a mixture of oxides of depleted uranium accumulated at TVEL facilities and oxides of plutonium extracted during the reprocessing of used nuclear fuel.

https://www.world-nuclear-news.org/Articles/ First-serial-batch-of-MOX-fuel-loaded-into-BN-800

Fortum, Tractebel to assist in Estonian SMR deployment

World Nuclear News, January 28, 2020

Estonia's Fermi Energia has signed Memoranda of Understanding (MoUs) with Finnish power company Fortum and Belgian engineering firm Tractebel to cooperate on studying the deployment of small modular reactors (SMRs) in the Baltic country. Fermi Energia was founded by Estonian energy and nuclear energy professionals to develop deployment of SMRs in Estonia. Under the MoUs with Fortum and Tractebel, cooperation will focus on developing a licensing model suitable for SMRs and a preliminary siting study for a light water SMR. Through the agreements, the companies have agreed to share with each other the results of the studies.

"For us, the greatest value of this collaboration is to start mutual learning through hands-on work with current nuclear power producers," said Fermi Energia board member and co-founder Kalev Kallemets. "The introduction of nuclear energy requires a number of related elements to be thoroughly analysed and further developed so that this form of energy production is competitive with other alternatives. Already in the early stages of working together to find the best solutions, we can be sure that there will be greater mutual understanding at a later stage." Kallemets noted the desynchronisation of the Baltic States - Estonia, Latvia and Lithuania - from Russia's electricity grid and the end of electricity imports from there which is scheduled to be completed by the end of 2025

https://www.world-nuclear-news.org/Articles/ Fortum-Tractebel-to-assist-in-Estonian-SMRdeploym

Roscosmos says first Russian nuclear space tug set for launch in 2030

TASS News Agency, January 28, 2020

A space tug, equipped with a megawatt class nuclear engine is scheduled to be launched in 2030, according to a presentation by Roscosmos First Deputy Director General Yuri Urlichich, displayed at the 44th Korolev Academic Space Conference. "The launch of a nuclearpowered spacecraft, and flight tests (2030)," the presentation reads. After 2030, the nuclear-propelled space vehicle must enter serial production and commercial use, it says.

Before the end of 2030, a testing and experimenting facility must be built, and the future nuclear engine must be perfected on the ground, including conducting resource tests, the presentation revealed.

https://tass.com/science/1113827

Kazatomprom to sell stake in enrichment JV

World Nuclear News, January 31, 2020

Kazatomprom announced today it intends to sell its 50% interest (minus one share) in Uranium Enrichment Centre JSC (UEC) to its partner in the joint venture, TVEL, for RUB6.253 billion (about USD100 million). TVEL is the nuclear fuel manufacturer subsidiary of Russian state nuclear corporation Rosatom. The Kazakh uranium producer said the decision was based on its "value-driven strategy", as well as its review of current uranium enrichment market conditions. UEC is a joint Kazakhstan-Russian enterprise established in 2006 as part of the implementation of the Comprehensive Programme of Kazakhstan-Russia Cooperation in the Peaceful Use of Atomic Energy. It owns 25% (plus one share) of the Ural Electrochemical Integrated Plant JSC in Novouralsk, in the Sverdlovsk region of Russia. UEC was the first company with foreign-ownership to have an interest in a Russian uranium enrichment facility.

Kazatomprom said its interest in UEC was based on "an independent fair market valuation carried out by a major global advisory firm". It plans to retain one share in UEC, which will preserve its rights to access uranium enrichment services under the conditions previously agreed upon with TVEL. Following negotiations with TVEL and approval by Kazatomprom's board of directors, the transaction was approved by Russia's Federal Antimonopoly Service yesterday, and it is now subject to approval by TVEL's board of directors.

https://www.world-nuclear-news.org/Articles/ Kazatomprom-sells-stake-in-enrichment-JV

West Asia

G. Iran

Iran's Rouhani threatens European troops amid nuclear pressure

Arab News, January 15, 2020

Iran's president issued a warning on Wednesday that European forces in the Middle East could be at risk if their nations joined the US pressure campaign against his country and challenged Tehran over breaking the limits of a 2015 nuclear deal. "Today, the American soldier is in danger, tomorrow the European soldier could be in danger," president Hassan Rouhani said at a Cabinet meeting without elaborating.

Meanwhile, Iranian Foreign Minister Mohammad Javad Zarif acknowledged on Wednesday during a summit in New Delhi that Iranians "were lied to" for days following the accidental shoot down of a Ukrainian jetliner that killed 176 people.

https://www.arabnews.com/node/1613676/middle-east

Iran's nuclear enrichment at higher level than before 2015 deal: Rouhani

Arab News, January 16, 2020

Iran is now enriching more uranium than Tehran did before it agreed to a nuclear deal with world powers in 2015, Iranian President Hassan Rouhani said on Thursday in a televised speech. "We are enriching more uranium before the deal was reached ... Pressure has increased on Iran but we continue to progress," Rouhani said. Iran has gradually scaled back its commitments under the nuclear deal in retaliation to Washington's withdrawal from the pact in 2018 and its reimposition of sanctions that have crippled the country's economy.

https://www.arabnews.com/node/1614011/middle-east

E3 think they're living in 19th century: Zarif

Tehran Times, January 17, 2020

Foreign Minister Mohammad Javad Zarif has said that the European Union trio, known as E3, still think they're living in the 19th century when they did whatever they liked. "E3 think they're living in the 19th Century, when they dictated to countries, lied, & got away with it," Zarif tweeted on Wednesday. Zarif again urged the Europeans to fulfil their commitments under the 2015 nuclear deal, officially known as the JCPOA, rather than submitting to the U.S. bullying. "Forget about compensating for US: fulfill your own obligations. EVEN JUST ONE," he said.

The chief diplomat added, "IRAN is NOT the one emptying the accord of its substance—the E3 is." Foreign ministers of France, Germany and the United Kingdom issued a joint statement on Tuesday announcing they have formally triggered the dispute mechanism in the nuclear deal.

https://www.tehrantimes.com/news/444253/E3think-they-re-living-in-19th-century-Zarif

Iran's top leader praises attack on US bases in Iraq

Arab News, January 17, 2020

Supreme Leader Ayatollah Ali Khamenei said in a Friday prayers sermon that Iran's missile strikes on US targets in Iraq showed it had divine support in delivering a "slap on the face" to a world power. Making the main weekly sermon in Tehran for the first time since 2012, with Iran and its clerical rulers under pressure at home and abroad, Khamenei also said that US sanctions imposed in a row over its nuclear program would not make Iran yield.

Thousands had gathered inside a large prayer hall in central Tehran and packed the area and streets outside the building, chanting "Death to America." The sermon was delivered after Iran's rulers faced days of often violent protests after the military admitted to mistakenly shooting down an airliner in the tense hours after the missile strikes, which were in turn launched in retaliation for the US killing on Jan. 3 of a top Iranian commander, close to Khamenei.

https://www.arabnews.com/node/1614481/middleeast

Zarif says Iran will never negotiate a new deal with U.S.

Tehran Times, January 18, 2020

Foreign Minister Mohammad Javad Zarif said on Friday that Iran will never negotiate a new nuclear deal with the United States. "We will never negotiate a new deal," Zarif said in a meeting with All India Association of Industries (AIAI) in Mumbai. The 2015 nuclear deal, officially called the Joint Comprehensive Plan of Action, is endorsed by the UN Security Council Resolution 2231. Under the accord Iran agreed to put limits on its nuclear activities in exchange for the termination of economic and financial sanctions. However, U.S. President Donald Trump ditched the deal in May 2018 and slapped the harshest ever sanctions in history against Iran in line with his administration's "maximum pressure" strategy against Iran.

"Resolution of the United Nations' Security Council on Iran's nuclear program is 159 pages which may be the longest resolution of the United Nations. However, India can play a role if the United States returns to the JCPOA," Zarif said when asked about the possibility of India's mediation to reduce Iran-U.S. tension. Former U.S. Secretary of State John Kerry told CBS News in an interview published on January 12 that the JCPOA is the "strongest" and "most transparent" agreement on the planet. "Britain, China, Russia are all still trying to keep the agreement in place because they recognize it's the strongest, most transparent, most accountable nuclear agreement on the planet," he said. In a highprofile speech on Friday, Leader of the Islamic Revolution Ayatollah Ali Khamenei ruled out the possibility of talks with the U.S., saying dialogue with the enemy is mixed with chicanery and deceit.

https://www.tehrantimes.com/news/444297/Zarifsays-Iran-will-never-negotiate-a-new-deal-with-U-S

Iran may review cooperation with IAEA if EU pressure mounts: TV

Parisa Hafezi, Reuters, January 19, 2020

Iran will review its cooperation with the United Nations' nuclear watchdog should it face "unjust" measures, Iranian parliament speaker Ali Larijani said, after EU powers last week triggered a dispute mechanism under Tehran's 2015 nuclear deal. The move by France, Britain and Germany amounts to formally accusing Iran of violating the terms of the deal and could lead eventually to reimposing U.N. sanctions that were lifted under the pact. "We state openly that if the European powers, for any reason, adopt an unfair approach in using the dispute mechanism, we will seriously reconsider our cooperation with the International Atomic Energy Agency," state TV quoted Larijani as saying.

https://www.reuters.com/article/us-iran-nucleariaea/iran-may-review-cooperation-with-iaea-if-eupressure-mounts-tv-idUSKBN1ZI09N

Iran says it is preparing for satellite launch

Arab News, January 19, 2020

Iran said Sunday that two newly constructed satellites have passed prelaunch tests and will be transported to the nation's space center for eventual launch, without elaborating. Telecommunications Minister Mohammad Javad Azari Jahromi tweeted about the development, calling it an "important research step." Iran has not said when it will launch the satellites, but often coordinates its launches with national holidays. It will celebrate the 41st anniversary of the Islamic Revolution next month.

Iran's largely state-run media say the 90kilogram (200-pound) Zafar satellites each have four high-resolution color cameras and will monitor and transmit data on natural resources as well as agricultural and environmental developments.Iran says its satellite program, like its nuclear activities, is aimed at scientific research and other civilian applications. The US and other Western countries have long been suspicious of the program because the same technology can be used to develop longrange missiles. Iran tried and failed to launch two satellites into orbit in January and February last year.

https://www.arabnews.com/node/1615201/middleeast

Iran says it will quit global nuclear treaty if case goes to U.N.

Babak Dehghanpisheh, Reuters, January 20, 2020

Iran said on Monday it could quit the global nuclear Non-Proliferation Treaty (NPT) if European countries refer it to the U.N. Security Council over a nuclear agreement, a move that would overturn diplomacy in its confrontation with the West.

The 1968 NPT has been the foundation of global nuclear arms control since the Cold War, including a 2015 deal Iran signed with world powers that offered it access to global trade in return for accepting curbs to its atomic program. The fate of the 2015 pact has been in doubt since U.S. President Donald Trump pulled the United States out of it and reimposed sanctions. Iran has responded by scaling back its commitments, although it says it wants the pact to survive.

https://www.reuters.com/article/us-iran-nuclear/ iran-says-it-will-quit-global-nuclear-treaty-ifcase-goes-to-u-n-idUSKBN1ZJ0ML

Zarif says quitting NPT to be raised if Europeans refer Iran to UN Security Council

Tehran Times, January 20, 2020

Foreign Minister Mohammad Javad Zarif warned on Monday that Iran will raise the issue of quitting the nuclear Non-Proliferation Treaty (NPT) if the Europeans refer Iran's nuclear case to the UN Security Council. "If they (Europeans) take any action, the issue of quitting the NPT will be raised based on the letter of the President dating May 2018," Zarif told ICANA. France, Germany and the United Kingdom, the three European states signatory to the JCPOA, issued a joint statement on January 14, announcing they have formally triggered the dispute mechanism which could bring the issue before the UN Security Council. "Steps in reducing the [JCPOA] commitments have already been taken. However, Iran will quit the NPT if the Europeans continue their behavior or send Iran's case to the Security Council," Zarif stated. Zarif went on to say that the Foreign Ministry is legally pursuing the triggering of dispute mechanism by Europeans. "The Islamic Republic of Iran officially started the dispute mechanism in May 2018 after the United States' withdrawal from the JCPOA.

Three letters were sent to Mrs. Mogherini [then European Union foreign policy chief] on May 10, 2018, August 26, 2018 and November 2018 in which it was announced officially that Iran has started the dispute mechanism." He added, "In the letter which was sent in November 2018, we said that Iran has started the dispute mechanism and therefore, we have no choice but to reduce commitments to the JCPOA." "After the aforementioned letter, the Islamic Republic of Iran gave the European Union seven months and then started to reduce the ICPOA commitments in May 2019," the foreign minister explained. Zarif noted that Iran will reverse its decision once the Europeans return to their commitments.

https://www.tehrantimes.com/news/444356/ Zarif-says-quitting-NPT-to-be-raised-if-Europeans-refer-Iran

Iran has not ruled out talks to end nuclear dispute

Arab News, January 20, 2020

Iran said on Monday that it had not closed the "door to negotiations" in efforts to resolve a dispute over its nuclear agreement with world powers that has escalated steadily since the United States withdrew from the deal in 2018. Foreign Ministry spokesman Abbas Mousavi said any further move by Tehran to scale back its commitments to the deal would depend on actions by other parties, after European states triggered a mechanism that could lead to the reimposition of UN sanctions. Iran has gradually stepped back from its obligations to the 2015 deal, under which Tehran secured sanctions relief in return for limiting its nuclear work, after Washington quit the agreement and then imposed stringent U.S. sanctions.

https://www.arabnews.com/node/1615581/middleeast

Iran threatens to quit global nuclear treaty and build a bomb

Arab News, January 20, 2020

Iran threatened on Monday to withdraw from the nuclear Non-Proliferation Treaty (NPT), paving the way for construction of a nuclear bomb. The threat is Iran's latest gambit to save the Joint Comprehensive Plan of Action (JCPOA), the 2015 deal to curb Tehran's nuclear program in return for an easing of sanctions. US President Donald Trump withdrew from the JCPOA in May 2018, and reimposed sanctions. In response, Iran began enriching uranium in breach of the agreement, in an attempt to put pressure on European states to save the deal.

That tactic backfired last week when Britain, France and Germany declared Iran to be in violation of the JCPOA, and triggered a dispute mechanism under which the issue will be referred to the UN Security Council, with full UN sanctions reimposed within 60 days. "If the Europeans continue their improper behavior or send Iran's file to the Security Council, we will withdraw from the NPT," Iranian Foreign Minister Javad Zarif said on Monday.

https://www.arabnews.com/node/1615751/middle-east

Iran MP offers reward for killing Trump, U.S. calls it 'ridiculous'

Parisa Hafezi, Reuters, January 21, 2020

An Iranian lawmaker offered a \$3 million reward to anyone who killed U.S. President Donald Trump and said Iran could avoid threats if it had nuclear arms, ISNA news agency reported on Tuesday amid Tehran's latest standoff with Washington. U.S. disarmament ambassador Robert Wood dismissed the reward as "ridiculous", telling reporters in Geneva it showed the "terrorist underpinnings" of Iran's establishment.

Tensions have escalated since Trump in 2018 pulled the United States out of a multilateral 2015 agreement meant to contain Iran's nuclear programme, saying it was flawed, then reimposed heavy U.S. sanctions on Tehran. The standoff erupted into tit-for-tat military strikes earlier this month. "On behalf of the people of Kerman province, we will pay a \$3 million reward in cash to whoever kills Trump," lawmaker Ahmad Hamzeh told the 290seat parliament, ISNA reported.

https://uk.reuters.com/article/uk-iran-usatrump/iran-mp-offers-reward-for-killing-trumpu-s-calls-it-ridiculous-idUKKBN1ZK0ZI

By triggering dispute mechanism, Europe proves its incapability: Salehi

Tehran Times, January 22, 2020

Ali Akbar Salehi, director of the Atomic Energy Organization of Iran, has said that the Europeans' action in triggering the dispute mechanism in the 2015 nuclear deal proves their "incapability" and "indiscretion". France, Germany and the United Kingdom, three parties to the nuclear deal, issued a joint statement on January 14, announcing they have formally triggered the dispute mechanism that may lead to the snapback of UN sanctions against Iran.

"Statement of Germany, France, and Britain on triggering the dispute mechanism proves their lack of wisdom and incapability in the face of the United States' demands," Salehi told IRNA in an interview published on Wednesday. U.S. President Donald Trump unilaterally quit the nuclear deal in May 2018 and introduced the harshest ever sanctions in history on Iran as part of his administration's "maximum pressure" strategy against Iran.

https://www.tehrantimes.com/news/444456/Bytriggering-dispute-mechanism-Europe-provesits-incapability

Iran tells Europe not to follow U.S. by undermining nuclear pact

Parisa Hafezi, Babak Dehghanpisheh, Reuters, January 22, 2020

Iran's president told European powers on Wednesday not to copy the United States by undermining Tehran's strained nuclear pact with world powers, and said Tehran would not seek nuclear weapons whether or not the deal survived.

Britain, France and Germany launched a dispute mechanism in the 2015 nuclear deal this month, accusing Iran of violating the deal that has become increasingly frayed since Washington pulled out in 2018 and then reimposed sanctions on Tehran. The dispute mechanism could ultimately lead to the case being referred to the U.N. Security Council to restore U.N. sanctions. Iranian officials have threatened a range of steps if this should happen, including quitting the 2015 deal or even withdrawing from the 1968 Non-Proliferation Treaty (NPT), basis for global nuclear arms control since the Cold War.

https://www.reuters.com/article/us-iran-nuclear/ iran-tells-europe-not-to-follow-u-s-by-undermining-nuclear-pact-idUSKBN1ZL1TR

No talks over NPT withdrawal in cabinet: Iran

Tehran Times, January 22, 2020

Mahmoud Vaezi, President Hassan Rouhani's chief of staff, said on Wednesday that there has not been any debate in the cabinet about leaving the nuclear Non-Proliferation Treaty (NPT). "In the government, we did not have any talks over approval of Iran's withdrawal from the NPT. Naturally, the issue is among the government's authorities," Vaezi told reporters after the cabinet meeting. He further said, "President Rouhani, in a letter to the 4+1 countries (Russian, China, Britain, France plus Germany) in April, announce that Iran is interested in remaining in the JCPOA (the Joint Comprehensive Plan of Action) and is prepared to fulfill its obligations under the deal provided that other sides adhere to their commitment under the pact too."

"The president, in the letter, had announced that if the U.S. or any other signatories of the pact try to send Iran's case to the United Nations Security Council, Iran will embark on making tougher decisions, including withdrawal from the NPT," Vaezi went on to say. On Monday, Foreign Minister Mohammad Javad Zarif warned that Iran may quit the NPT if the Europeans refer Iran's nuclear case to the UN Security Council. "If they (Europeans) take any action, the issue of quitting the NPT will be raised based on the letter of the President dating May 2018," Zarif said.

https://www.tehrantimes.com/news/444457/Notalks-over-NPT-withdrawal-in-cabinet-Iran

Iranian diplomat says maximum pressure will spread unilateralism

Tehran Times, January 24, 2020

Bahram Qassemi, Iran's ambassador to France, said on Thursday that intensification of the United States' maximum pressure against Iran will just spread unilateralism. "Those who help the United States intensify maximum pressure against Iran are moving on the path of spreading unilateralism and destabilizing the region," IRNA quoted him as saying in a tweet.

He said in another tweet, "Europe which claimed of supporting the JCPOA [the 2015 nuclear deal] never fulfilled its economic commitments." He described the INSTEX - the Instrument in support of Trade Exchanges – as an "empty box" and "leverage of propaganda". "Now, they are talking about an action which will lead to collapse of the JCPOA. This is the same result which the United States wants," he said. He was pointing to Europe's triggering the dispute mechanism.

https://www.tehrantimes.com/news/444503/ Iranian-diplomat-says-maximum-pressure-willspread-unilateralism

Trump administration officials to brief senators on Iran next week

Reuters, January 24, 2020

Top officials from the U.S. State Department will conduct a classified briefing next week on Iran policy for members of the Senate Foreign Relations Committee, the committee said on Friday, amid a push for legislation to restrict President Donald Trump's ability to wage war on Iran.

Trump's special representative for Iran, Brian Hook, will lead the Tuesday briefing. Secretary of State Mike Pompeo, who leaves on Wednesday for an international trip to Ukraine and other countries, is not participating. Senate leaders had said they expected to vote as soon as this week on an Iran war powers resolution, but there had been no word on when that vote might take place.

https://www.reuters.com/article/us-usa-irancongress/trump-administration-officials-to-briefsenators-on-iran-next-week-idUSKBN1ZN253

EU's Borrell extends timeline for dispute mechanism on Iran deal

Tehran Times, January 24, 2020

The EU's foreign policy chief Josep Borrell said on Friday he had extended the time available to discuss ways to save the 2015 nuclear deal with Iran under a dispute mechanism triggered by France, Germany and Britain. "There is agreement that more time is needed due to the complexity of the issues involved. The timeline is therefore extended," Borrell said in a statement.

On Jan. 14 Borrell was notified by Paris, London and Berlin that they had triggered the dispute mechanism, in theory starting a 15-day process to resolve issues with Iran. However, in practice it is not clear when the 15-day period should start because Iran has not formally recognised the consultation process, officials have said. Borrell said the joint commission that regulates the Iran nuclear deal will meet in February but did not give a date.

https://www.tehrantimes.com/news/444505/EU-s-Borrell-extends-timeline-for-dispute-mechanismon-Iran-deal

Fars news goes offline 'due to U.S. sanctions'

Tehran Times, January 25, 2020

The website of the Fars news agency has gone offline worldwide due to U.S. sanctions, the agency announced on Friday night. In a post on its Twitter account, Fars said access to its .com domain had been blocked upon the U.S. Treasury's order. Internet users trying to access farsnews.com also found only a blank screen, along with a message stating "farsnews.com's server IP address could not be found." The news agency said it had received an email from its server company, which "explicitly said that the blockage is due to an order by the Treasury's Office of Foreign Assets Control (OFAC) and its inclusion in the list of Specially Designated Nationals (SDN)." However, Fars can still be accessed through its .ir domain.

Previously, Google, YouTube, Facebook, Instagram and Twitter targeted Iranian accounts, including those belonging to broadcasters. In December 2019, Google blocked access to Press TV and Hispan TV's official YouTube accounts without any prior notice. Ever since Donald Trump become the president of the United States in 2017, Washington has ramped up anti-Iran measures. Trump adopted a "maximum pressure" policy against Iran later on, after withdrawing from the historic 2015 Iran nuclear deal in May 2018.

https://www.tehrantimes.com/news/444549/ Fars-news-goes-offline-due-to-U-S-sanctions

'NPT withdrawal plan' now on MPs' agenda

Tehran Times, January 28, 2020

Presiding Board of the Iranian Parliament, on Tuesday, received a proposed plan on Iran's withdrawal from the Non-Proliferation of Nuclear Weapons Treaty (NPT). On the same day, the Parliament received a plan on 'banning production, maintenance and use of nuclear weapon', as well. In addition, the MPs received a plan on 'inflecting punishment on those countries cooperating with the US on imposing anti-Iranian sanctions'.

After Britain, France, and Germany, collectively known as the E3, formally triggered a dispute settlement mechanism featured in the JCPOA, a step that could lead to the restoration of UN sanctions against the Islamic Republic, Iran warned that Tehran would leave the Non-Proliferation Treaty (NPT) if EU took Iran's nuclear case to UN Security Council. "The European's statement is in no way legal. If the Europeans take another step, Iran will consider leaving the NPT according to a letter by the Iranian president in May 2019," Foreign Minister Mohammad Javad Zarif had said. According to the EU's foreign policy chief, the European Union will discuss ways to preserve the 2015 nuclear deal (JCPOA) and the possibility of triggering a dispute mechanism featured in it.

https://www.tehrantimes.com/news/444651/NPTwithdrawal-plan-now-on-MPs-agenda

H. Saudi Arabia

Saudi Arabia a 'pioneer' in energy transformation, minister tells Davos

Frank Kane, Arab News, January 22, 2020

Saudi Energy Minister Prince Abdulaziz bin Salman mounted a strong defense of the Kingdom's record on climate change and clean energy production at a special event during the annual meeting of the World Economic Forum in Davos. On a panel titled, "The Future of Fossil Fuels," with other energy industry leaders, the prince told delegates that Saudi Arabia was a "pioneer" in many areas of clean energy production and usage, and that it had taken big steps toward diversifying its energy mix.

"My job is to promote Saudi Arabia, of course, but on this issue I'm proud to do so, because we are doing it all," he said, before outlining "clean energy" policies in detail. "We have developed the idea of the circular carbon economy, and we are pioneers of carbon sequestration at Aramco, as well as measures on upstream and downstream efficiency. We have the lowest carbon cost in production and extraction. "We have reduced domestic consumption and the energy intensity of our economy by many percentage points. We are converting cars to be more efficient, as well as other gadgets, to be more efficient than any in the world. And we manufacture them too," he added.

https://www.arabnews.com/node/1618046/ saudi-arabia

Saudi Arabia's envoy to UK: We need to do a better job of showing who we are

Arab News, January 25, 2020

Saudi Arabia needs "to do a better job" of "showing the world who we really are," its ambassador to Britain said. "In Saudi we do not always represent ourselves very well because we are a reticent people and our culture does not push us to talking about ourselves," Prince Khalid bin Bandar bin Sultan told the Daily Telegraph. He made his comments in light of recent allegations that Saudi Crown Prince Mohammed bin Salman was involved in hacking the phone of Amazon CEO Jeff Bezos.

"It is very easy for people to throw these unsubstantiated allegations against Saudi Arabia because they know that it is very difficult for Riyadh to defend itself when it does not have proper access to the details," the ambassador said. "We need to see the evidence before we make any response, because the evidence made public so far is circumstantial at best." Prince Khalid, who was appointed last year, encouraged people to visit his country before forming an opinion of it.

https://www.arabnews.com/node/1616771/ business-economy

I. Iraq

Iraqi FM: U.S. pullout from Iran nuclear deal destabilizes region

Tehran Times, January 18, 2020

Iraqi Foreign Minister Mohammad Ali Al Hakim, in a news conference with his Jordanian counterpart Ayman Al Safadi in Baghdad, has said that Washington's unilateral withdrawal from the Joint Comprehensive Plan of Action (JCPOA) has been the cause of recent tensions in the region. U.S. President Donald Trump quit the nuclear deal in May 2018 and introduced the harshest ever sanctions in history on Iran as part of his administration's "maximum pressure" campaign against Tehran. Under the JCPOA, Iran promised to put limits on its nuclear activities in exchange for the termination of economic and financial sanctions.

"We must take steps in line with preventing alien forces' presence in the region," he added, Azad University News Agency (ANA) reported on Saturday. Al Hakim further said that any escalation of tensions in the region will pave the way for the terrorist groups to reequip and reemerge. Al Safadi, for his part, said, "I have a message of Jordanian King Abdulla II for Baghdad. The message concentrates on Iraq's independency and de-escalation of tensions."

https://www.tehrantimes.com/news/444292/Iraqi-FM-U-S-pullout-from-Iran-nuclear-deal-destabilizes-region

U.S. seeks Iraqi nod to bring in air defenses after Iran attack

Reuters, January 30, 2020

The United States is trying to secure permission from Iraq to take Patriot missile defenses into the country to better defend U.S. forces after Iran's Jan. 8 missile attack, which wounded 50 American troops, Defense Secretary Mark Esper said on Thursday. The United States did not have Patriot air defenses deployed to al-Asad air base in Iraq, where at least 11 of Iran's ballistic missiles struck, killing no one but triggering massive blasts that caused traumatic brain injury among U.S. forces. "We need the permission of the Iraqis," Esper told a news conference. He said securing their permission was one factor slowing the repositioning of the air defenses. He said the U.S. military was still deciding on more tactical issues, such as where best to place the defenses. Tehran had been expected to retaliate against the United States over the killing of a top Iranian general, likely using ballistic missiles.

But in the days prior to the Iranian strikes, the Pentagon had expected Tehran more likely to target U.S. positions in countries other than Iraq, since Tehran counts influential allies in Baghdad. The United States had moved Patriot batteries last year to Saudi Arabia, for example. Thanks to U.S. intelligence, the Pentagon gained hours of warning time that allowed it to move troops to bunkers that were strong enough to prevent loss of life or limb when the Iranian missiles struck, U.S. officials say. The bunkers were not designed to prevent the traumatic brain injuries from the massive blasts. The injuries so far have been categorized as "mild."

https://www.reuters.com/article/us-mideastcrisis-iran-usa-iraq/u-s-seeks-iraqi-nod-to-bringin-air-defenses-after-iran-attackidUSKBN1ZT2DI

J. Turkey

Turkey, Japan scrap partnership in Sinop nuclear plant in Turkey's north

Hurriyat Daily News, January 20, 2020

Turkey is reassessing its major partner for the country's second nuclear plant in the Black Sea province of Sinop, Energy Minister Fatih Dönmez said on Jan. 19. In an interview with state-run Anadolu Agency, Dönmez said that the time schedule and pricing of the nuclear power plant in Sinop fell short of the ministry's expectations after the results of feasibility studies, carried out by Japanese Mitsubishi Heavy Industries, Ltd., came out. "We agreed with the Japanese side to not continue our cooperation regarding this matter," Dönmez said.

The minister added that Turkey can hold talks with other suppliers for the construction of the nuclear plant. The project was agreed on by the Japanese and Turkish governments in 2013. A consortium led by Mitsubishi Heavy Industries had been conducting a feasibility study until March for the construction of a 4,500-megawatt plant in Sinop.

https://www.hurriyetdailynews.com/turkey-japanscrap-partnership-in-sinop-nuclear-plant-inturkeys-north-151212

Welded reactor cover completed for Turkey's first nuclear plant: Akkuyu NPP

Daily Sabah, January 23, 2020

The welding of the reactor cover on the first unit of the Akkuyu Nuclear Power Plant (NPP) has been completed, the reactor's manufacturer Atomenergomash announced on Wednesday. Atommash, the Volgodonsk branch of AEM-technology, which operates alongside Russian state atomic energy corporation Rosatom's machine-building division of Atomenergomash, has completed the welding of the reactor cover for Turkey's first nuclear plant, according to the statement.

The welding of the circumferential joint at temperatures ranging between 179 and 200 degrees Celsius was carried out over the course of 17 days, Akkuyu NPP's reactor equipment and turbine island manufacturer confirmed. Later, the reactor's welded joint will undergo heat treatment at 600 degrees Celsius for three days to relieve residual welding stresses and to ensure optimal resilience, according to the company.

https://www.dailysabah.com/energy/2020/01/23/ welded-reactor-cover-completed-for-turkeys-firstnuclear-plant-akkuyu-npp

'Armenian nuclear plant poses threat to Turkey'

Yeni Safak, January 31, 2020

A nuclear power plant in neighboring Armenia poses a threat to Turkey, said a Turkish opposition party on Friday. "The Metsamor Nuclear Power Plant jeopardizes the lives of people in this region," Habib Eksik, a Peoples' Democratic Party (HDP) lawmaker from the eastern Igdir province, told journalists in parliament. He said the plant is in close proximity to Igdir and has many flaws in its design. "The plant has been constructed with primitive technology and it lacks adequate security measures," said Eksik. Metsamor, first launched in 1976, is just 16 kilometers (10 miles) from Turkey's eastern border with Armenia, and produces about 40% of the country's electricity.

https://www.yenisafak.com/en/news/armeniannuclear-plant-poses-threat-to-turkey-3510952

K. Israel

Report: Israel, Russia agree in principle on Issachar pardon, finalizing details

Michael Bachner, The Times of Israel, January 20, 2020

Iran's foreign minister threatens to quit the Non-Proliferation Treaty (NPT), a key international agreement to curb nuclear arms, if the matter of Tehran's ongoing violations of the atomic deal is sent to the United Nations Security Council, Iranian media reports. "If the Europeans continue their improper behavior or send Iran's file to the Security Council, we will withdraw from the NPT," Mohammad Javad Zarif is quoted as saying by the IRNA news agency, according to Reuters.

Russian President Vladimir Putin submits a package of constitutional amendments to parliament less than a week after announcing a surprise plan to reform the political system. The bill on the amendments, available on the website of the lower house State Duma, proposes changes including the transfer of some power away from the presidency. The reform has indicated Putin is working to carve out a new governing position for himself after his current six-year term ends in 2024, although it remains unclear what specific path he will take to stay in charge. Under the current law, Putin must step down when his current term ends.

https://www.timesofisrael.com/liveblog-january-20-2020/

Energy minister: Israel stopped 'very serious' cyber attack on power plant

Eytan Halon, Jerusalem Post, January 29, 2020

Israel detected and prevented a "very serious cyberattack" on one of the country's power plants, Energy Minister Yuval Steinitz said on Wednesday.

Addressing the Cybertech Global Tel Aviv 2020 conference, Steinitz said the attempted attack was detected "a few months ago," and represented one of only a few serious cyberattacks on Israeli energy facilities to date.

https://www.jpost.com/Israel-News/Energyminister-Israel-prevented-cyber-attack-on-powerplant-615802

East Asia

L. North Korea

North Korea's Kim taps toughtalking military veteran as foreign minister

Hyonhee Shin, Reuters, January 20, 2020

North Korea's new foreign minister is a former defense commander with little diplomatic experience, spotlighting leader Kim Jong Un's reliance on party and military loyalists at a sensitive time amid stalled U.S. talks, analysts in Seoul said on Monday. Last week, North Korea told countries with embassies in Pyongyang that Ri Son Gwon, a senior military officer and official of the ruling Workers' Party, had been appointed foreign minister, a diplomatic source in Seoul told Reuters.

He replaces Ri Yong Ho, a career diplomat with years of experience negotiating with Washington, but who often took a backseat to other officials during the last two years of diplomacy.

https://www.reuters.com/article/us-northkoreapolitics/north-koreas-kim-taps-tough-talkingmilitary-veteran-as-foreign-ministeridUSKBN1ZJ0RE

North Korea signals tougher stance against US

Kang Seung-woo, Korea Times, January 20, 2020

The unexpected replacement of North Korea's top diplomat indicates that Pyongyang is picking up where it left off more than two years ago, or a new anti-U.S. hardline policy, according to diplomatic observers, Monday. The replacement is also unlikely to help improve inter-Korean ties, experts said. According to media reports, the North has appointed Ri Son-gwon, chairman of the Committee for the Peaceful Reunification of the Country, as its foreign minister, sacking Ri Yong-ho, a career diplomat, apparently over the stalled nuclear talks with the U.S., despite three meetings between their leaders. The new foreign minister had been the North's key official for relations with South Korea.

The regime has yet to confirm the appointment; while the South Korean unification ministry said it was also trying to confirm the reports.

http://www.koreatimes.co.kr/www/nation/2020/ 01/103_282217.html

North Korea says may seek 'new path' of weapons build-up

Space Daily, January 21, 2020

Pyongyang on Tuesday warned that it could seek a "new path" and accelerate its weapons programme, after Washington imposed fresh sanctions on North Korean companies amid stalled nuclear talks. North Korean representative Ju Yong Chol told the Conference on Disarmament in Geneva that his country's efforts to improve relations with Washington had been met with hostility. "Although the US is talking about the resumption of dialogue, it has no intention at all from the beginning to drop its hostile policy towards the DPRK (Democratic Republic of Korea)," he said.

"The DPRK will steadily develop strategic weapons essential and prerequisite for national security until the US abandons its hostile policy and lasting and durable peace... is in place on the Korean peninsula," he said. He said the scope of the build up would depend on the "future attitude" of the US. Pyongyang has previously fired missiles capable of reaching the entire US mainland, and has carried out six nuclear tests, the last of them 16 times more powerful than the Hiroshima blast, according to the highest estimates.

http://www.spacedaily.com/reports/ North_Korea_says_may_seek_new_path_of_weapons_buildup_999.html

North Korea abandons nuclear freeze pledge, blames 'brutal' U.S. sanctions

Stephanie Nebehay, Reuters, January 21, 2020

North Korea said on Tuesday it was no longer bound by commitments to halt nuclear and missile testing, blaming the United States' failure to meet a year-end deadline for nuclear talks and "brutal and inhumane" U.S. sanctions. North Korean leader Kim Jong Un set an end-December deadline for denuclearization talks with the United States and White House national security adviser Robert O'Brien said at the time the United States had opened channels of communication. O'Brien said then he hoped Kim would follow through on denuclearization commitments he made at summits with U.S. President Donald Trump.

https://www.reuters.com/article/us-northkoreanuclear-usa/north-korea-abandons-nuclear-freezepledge-blames-brutal-u-s-sanctionsidUSKBN1ZK1FX

North Korea to make Munich Security Conference debut in 2020

Korea Herald, January 23, 2020

North Korea will send a delegation to the Munich Security Conference for the first time in the 56-year history of the top diplomatic gathering, organizers said Thursday. An MSC spokesperson confirmed that North Korean vice foreign minister Kim Son-gyong would attend next month's event. The announcement comes a month after Pyongyang declared it was abandoning moratoriums on nuclear and intercontinental ballistic missile tests. The self-imposed ban on tests had been the centerpiece of two years of nuclear diplomacy between the US and North Korea, including three meetings between the two countries' leaders Donald Trump and Kim Jong-un.

Also expected to attend the Munich talks this year are US Secretary of State Mike Pompeo, Defense Secretary Mark Esper and the leader of the House of Representatives Nancy Pelosi. The Iranian foreign minister Mohammad Javad Zarif is likewise expected to attend.

http://www.koreaherald.com/ view.php?ud=20200123000664&ACE_SEARCH=1

North Korea to make Munich Security Conference debut in 2020

Korea Herald, January 27, 2020

North Korea will send a delegation to the Munich Security Conference for the first time in the 56-year history of the top diplomatic gathering, organizers said Thursday. An MSC spokesperson confirmed that North Korean vice foreign minister Kim Son-gyong would attend next month's event. The announcement comes a month after Pyongyang declared it was abandoning moratoriums on nuclear and intercontinental ballistic missile tests.

The self-imposed ban on tests had been the centerpiece of two years of nuclear diplomacy between the US and North Korea, including three meetings between the two countries' leaders Donald Trump and Kim Jong-un. Also expected to attend the Munich talks this year are US Secretary of State Mike Pompeo, Defense Secretary Mark Esper and the leader of the House of Representatives Nancy Pelosi. The Iranian foreign minister Mohammad Javad Zarif is likewise expected to attend.

http://www.koreaherald.com/ view.php?ud=20200127000104&ACE_SEARCH=1

North Korea urges citizens to 'break through barriers' as nuclear standoff continues

Josh Smith, Reuters, January 27, 2020

While a North Korean deadline for the United States to soften its stand on denuclearization talks passed uneventfully over the New Year, state media and propaganda efforts have been focusing on the prospect of a long confrontation with the United States. Optimism that two years of contacts between leader Kim Jong Un and U.S. President Donald Trump would usher in a new age, and related hopes for economic improvement after decades of deprivation, appear to have faded.

Instead, the government has been hard at work in recent weeks using state media, propaganda posters, and performances to warn the public of a bumpy road ahead under U.S. and international pressure. The propaganda effort has included calls for North Koreans to "break through barriers" and strengthen the country.

https://www.reuters.com/article/us-northkoreapropaganda-analysis/north-korea-urges-citizensto-break-through-barriers-as-nuclear-standoffcontinues-idUSKBN1ZQ0A9

US defense official expresses support for peace declaration with N. Korea

Yonhap, Korea Herald, January 29, 2020

A senior US defense official on Tuesday voiced support for a peace declaration between the United States and North Korea. saying such an agreement would be beneficial to Washington if it can be negotiated. John Rood, under secretary of defense for policy, was commenting on the possibility the administration of US President Donald Trump could offer a peace declaration as part of a denuclearization deal with the North. In particular, he was asked by Rep. Ro Khanna (D-CA) of the House Armed Services Committee if the US could first agree to a peace declaration before negotiating the details of North Korea's denuclearization.

"From the Defense Department perspective ... if something like that could be negotiated with the North Koreans we would see that as being a beneficial thing," Rood told a committee hearing, noting that it is up to the State Department to decide on the sequencing of the steps. "The armistice was not intended to survive decade after decade after decade, and so if something like that could be negotiated with the North Koreans, I think that'd be in our interest," he said.

http://www.koreaherald.com/ view.php?ud=20200129000054&ACE_SEARCH=1

Satellite imagery suggests security patrols at NK nuclear test site

Yonhap, Korea Herald, January 30, 2020

North Korea's decommissioned nuclear test site in Punggye-ri shows signs of routine security patrols, a US monitor said Wednesday. In commercial satellite imagery from Jan. 17, footpaths and vehicle tracks were visible in the snow around the portal areas and at the main administrative support area, 38 North said on its website. The imagery also showed snow-cleared roads leading from the security barracks area to the command center, it said.

"There are no indications of renewed excavation, construction or other activity that would suggest the North is trying to reopen the complex," 38 North added. "Instead, track activity is more likely related to security patrols of the area."

http://www.koreaherald.com/ view.php?ud=20200130000078&ACE_SEARCH=1

North Korea's Kim offers condolences to China's Xi about virus outbreak: KCNA

Reuters, January 31, 2020

North Korean leader Kim Jong Un sent a letter to Chinese President Xi Jinping offering condolences about the coronavirus outbreak in China, North Korean state news agency KCNA reported on Saturday. Kim "expressed the conviction that the party, government and people of China would surely emerge victorious in the campaign to combat the disease" under Xi's guidance, KCNA said. China is the closest ally that isolated North Korea has. The country has canceled most flights to China, imposed mandatory quarantine on all arrivals from China, and heavily restricted border crossings following the outbreak.

https://www.reuters.com/article/us-china-healthnorthkorea/north-koreas-kim-offers-condolences-tochinas-xi-about-virus-outbreak-kcnaidUSKBN1ZV3LL

M. South Korea

US envoy surprised that NKorea didn't give 'Christmas gift'

Hyung-jin Kim, AP News, January 16, 2020

The U.S. ambassador to South Korea said Thursday he was surprised and pleased that North Korea did not give the U.S. an unwelcome "Christmas gift" because of stalled nuclear disarmament talks, and that President Donald Trump is still confident it will denuclearize. North Korea had warned that its "Christmas gift" to the U.S. would depend on what action Washington took in the talks, leading to concerns that it might conduct a major weapons test.

It hasn't conducted any such test, although the U.S. didn't meet a year-end deadline set by leader Kim Jong Un to make concessions.

"You can say that I personally was surprised. But I'm glad also ... there was no Christmas gift," Ambassador Harry Harris told reporters in Seoul. "Washington was ready for any eventuality, and we were all glad that there was no ICBM test or nuclear test."He said both Trump and South Korean President Moon Jae-in "are keeping the door open to negotiations and hoping Kim Jong Un will walk through that door." "So the ball is in his court," he said.

https://apnews.com/ 10de37c16afd94bb66db6b09a297c0d7

S. Korea, US agree to closely coordinate on inter-Korean projects: nuclear envoy

Yonhap, Korea herald, January 17, 2020

South Korea and the United States agreed Thursday to coordinate closely on possible inter-Korean projects amid stalled nuclear talks between Washington and Pyongyang, Seoul's chief nuclear envoy said Thursday. Lee Do-hoon, special representative for Korean Peninsula peace and security affairs, made the remark to reporters after holding talks with his US counterpart, Deputy Secretary of State Stephen Biegun, in Washington.

The pair met after President Moon Jae-in expressed a desire earlier this week to implement inter-Korean projects as a way to facilitate denuclearization negotiations between the North and the U.S. Most of the projects, including efforts to reconnect railways and roads between the Koreas, have stalled due to United Nations sanctions on Pyongyang.

http://www.koreaherald.com/ view.php?ud=20200117000041&ACE_SEARCH=1

Inter-Korean cooperation will occur within framework of denuclearization: official

Yonhap, Korea Herald, January 18, 2020

South Korea's push for inter-Korean cooperation will be done in a way that can facilitate the denuclearization negotiations between the United States and North Korea, a senior presidential official said Saturday. The official made the remark one day after the office of President Moon Jae-in openly reproached US Ambassador Harry Harris for his remarks on Moon's plans to resume inter-Korean cooperation, calling them "very inappropriate." Amid concerns about the allies' friction over a possible mismatch in the progress of inter-Korean cooperation and denuclearization, the presidential official said the cooperation will "not be pushed in a way that undermines the bargaining power of either side."

http://www.koreaherald.com/ view.php?ud=20200118000027&ACE_SEARCH=1

S. Korea to jack up spending on energy R&D in 2020

Yonhap, Korea Herald, January 20, 2020

South Korea said Monday it will spend more on research and development in the energy segment this year as the country targets clean and sustainable economic growth. South Korea will spend 916.3 billion won (\$789 million), a 19-percent rise from last year, on such projects, according to the Ministry of Trade, Industry and Energy. Most of the money will be allocated to projects related to South Korea's green energy drive.

Last year, Seoul unveiled its initiative to create a hydrogen economy, seeking to utilize the resource as a major source of energy for power generation, vehicles and other daily uses while reducing reliance on fossil fuels and nuclear power. The ministry said it will spend 43.1 billion won on developing technologies to further promote hydrogen-related policies.

http://www.koreaherald.com/ view.php?ud=20200120000379&ACE_SEARCH=1

Moon stresses military reform, innovation

Choi He-suk, Korea Herald, January 21, 2020

The military will focus on strengthening its ability to respond to nuclear weapons and other weapons of mass destruction in 2020, and on applying cutting-edge technologies to its defense systems, the Ministry of National Defense said. The plans were revealed in an annual briefing session for President Moon Jae-in at the Gyeryongdae complex – an Army, Navy and Air Force headquarters near Daejeon. At the briefing, Moon stressed the importance of defense, pointing to the increased defense budget under his administration. "Our ultimate goal of peace and prosperity on the Korean Peninsula is possible with the backing of a strong defense," Moon said.

During Moon's term, the country's defense budget has increased at an annual average of 7.6 percent. It exceeded the 50 trillion won (\$42.9 billion) mark for the first time this year. Moon also called on the military to carry out its plans for the transfer of wartime operational control, saying South Korea should secure the capabilities it needs to play the leading role in its own defense. Moon also called on the military to follow through on its defense reform plans, and to secure the ability to respond to nontraditional threats. The president also emphasized the need to apply new technologies to defense, saying advances in defense technology would also benefit the economy. Regarding the application of new technologies to defense, the ministry has compiled a list of technologies and capabilities it would concentrate on developing. They include artificial intelligence, robotics and virtual reality. The ministry also said it would push to reform defense industry regulations to enable new technologies to be applied more quickly.

http://www.koreaherald.com/ view.php?ud=20200121000753&ACE_SEARCH=1

US to continue 'patient' diplomacy with N. Korea: official

Yonhap, Korea Herald, January 23, 2020

The United States will continue "patient" diplomacy with North Korea to make clear that the regime needs to return to denuclearization talks, a senior State Department official said. The official spoke to reporters on condition of anonymity to discuss last week's meetings involving the top diplomats of South Korea, the US and Japan. His remark suggests Washington is not willing to offer concessions to get Pyongyang back to the negotiation table.

"On North Korea — slow, patient, steady diplomacy," the official said when asked about plans for future engagement with the North. "We're going to stick with this plan. It's working. We'll coordinate with allies and partners in the region to continue to make sure that that pressure is steady and insist that UN Security Council resolutions are enforced. That will continue to make clear to the North that they need to come out and negotiate and talk."

http://www.koreaherald.com/

view.php?ud=20200123000153&ACE_SEARCH=1

Furlough threat hangs over US military bases in S. Korea

Bloomberg, January 23, 2020

The US is warning it will send furlough notices within weeks to almost 9,000 South Korean workers at US bases if the two countries don't reach agreement on President Donald Trump's demand for Seoul to increase dramatically what it pays for American troops. Trump's push for South Korea to contribute much more has put the alliance under strain at a time when North Korean leader Kim Jong-un's regime has said it would no longer be bound by its previous promise to halt testing of nuclear weapons and long-range ballistic missiles.

The two sides remained deadlocked, though US officials have indicated they've backed off Trump's initial demand that President Moon Jae-in's administration pay about \$5 billion a year for US forces stationed there, more than five times the \$900 million in a stopgap one-year agreement that expired on Dec. 31.

https://www.bloomberg.com/news/articles/2020-01-22/furlough-threat-hangs-over-u-s-military-bases-in-south-korea

Moon says no progress in nuclear talks with North Korea in 2019 'regrettable'

Korea Times, January 24, 2020

President Moon Jae-in said Friday lack of progress in denuclearization talks between North Korea and the United States was the most regrettable thing for him last year, along with a slower-than-expected improvement in the living conditions of South Koreans. He especially mentioned the no-deal Hanoi summit between U.S. President Donald Trump and the North's leader Kim Jong-un during a phone interview with an SBS radio program. "If there had been some headway in the North Korea-U.S. dialogue, (we) could have advanced peace on the Korean Peninsula and South-North cooperation," he said.

http://www.koreatimes.co.kr/www/nation/2020/ 01/113_282435.html

S. Korean envoy departs for Europe for talks on denuclearization, peace efforts

Yonhap, Korea Herald, January 29, 2020

South Korea's chief nuclear envoy, Lee Dohoon, embarked on a trip to Europe on Wednesday for talks with senior officials there over ongoing efforts for denuclearization and a lasting peace on the Korean Peninsula, Seoul officials said. Lee's trip to Belgium and Germany came as Seoul has been striving to secure global support for its push to bolster inter-Korean cooperation projects, such as individual tours to the communist state, and move forward stalled nuclear negotiations between Washington and Pyongyang.

During his stay in Brussels on Wednesday and Thursday, Lee will visit the EU headquarters to meet members of the EU Political and Security Committee and hold talks with Helga Schmid, the secretary general of the European External Action Service. From Thursday through Saturday, he will be in Berlin for talks with Niels Annen, minister of state at Germany's Federal Foreign Office, and other officials. To incentivize Pyongyang to return to the denuclearization track, Seoul has been enhance trying to inter-Korean cooperation through such projects as linking roads and railways across the border and turning the Demilitarized Zone into an international peace zone.

http://www.koreaherald.com/ view.php?ud=20200129000694&ACE_SEARCH=1

N. Japan

Costs for managing Japan's nuclear plants to total 13 trillion yen

Kyodo News, January 15, 2020

The total costs to implement governmentmandated safety measures, maintain facilities and decommission commercially operated nuclear power plants in Japan will reach around 13.46 trillion yen (\$123 billion), a Kyodo News tally showed Wednesday. The amount, which could balloon further and eventually lead to higher electricity fees, was calculated based on financial documents from 11 power companies that own 57 nuclear reactors at 19 plants, as well as interviews with the utilities.

https://english.kyodonews.net/news/2020/01/ 8722fafaff9b-costs-for-managing-japans-nuclearplants-to-total-13-trillion-yen.html

Residents win appeal to halt Ikata reactor over safety fears

The Asahi Shimbun, January 17, 2020

The high court here Jan. 17 ordered a halt to operations of the No. 3 reactor at the Ikata nuclear power plant in Ehime Prefecture due to fears it is located near an active fault. The temporary injunction issued by the Hiroshima High Court does not allow for operations of the reactor to resume unless the Supreme Court hands down a ruling reversing it. The No. 3 reactor at the plant, which is located in Ikata in the prefecture and operated by Shikoku Electric Power Co., is currently offline for regular inspections.

Three residents living on an island in the Seto Inland Sea within a roughly 50-kilometer radius of the plant had filed a request for a temporary injunction, but the Iwakuni branch of the Yamaguchi District Court rejected it in March 2019. The plaintiffs then appealed the decision to the Hiroshima High Court.

http://www.asahi.com/ajw/articles/13043094

Japan's Shikoku Electric says to delay nuclear reactor restart after court order

Reuters, January 17, 2020

Japanese utility Shikoku Electric Power Co said on Friday it had been ordered by a Hiroshima court to suspend operations of its only operable nuclear reactor, the No.3 unit at its Ikata plant in western Japan. The reactor had been shut for regular maintenance work since late December and was likely to restart within a couple of months, but must now remain idled pending an appeal. The Hiroshima High Court decision overturned a ruling by a branch of Yamaguchi District Court last year, saying Shikoku Electric had given insufficient explanation why the plant would remain safe, and not pose a danger to residents in the event of volcanic eruptions or earthquakes.

https://www.reuters.com/article/us-japannuclear/japans-shikoku-electric-says-to-delaynuclear-reactor-restart-after-court-orderidUSKBN1ZG0LH

Japan nuclear plant host town mayor received money from construction firm

Mainichi Japan, January 23, 2020

The mayor of a southwestern Japan town hosting a nuclear power plant has admitted to receiving 1 million yen (\$9,100) in cash from a construction company in 2018, in apparent violation of the political funds law. Shintaro Wakiyama, the mayor of Genkai in Saga Prefecture, told Kyodo News he recently returned the money received days after he was elected in July 2018 from a then executive of Shiohama Industry Corp., which is known to have had close ties with a man at the heart of a gift scandal involving Kansai Electric Power Co. The mayor told a press conference Thursday afternoon that he will consider whether to resign after consulting with his support group.

https://mainichi.jp/english/articles/20200123/ p2g/00m/0na/057000c

Kansai Electric begins extracting MOX fuel from nuclear plant

Ippei Yaoita, The Asahi Shimbun, January 27, 2020

Kansai Electric Power Co. started removing spent mixed-oxide (MOX) fuel from the No. 3 reactor at its Takahama nuclear power plant here on Jan. 27, but a disposal method has yet to be determined. It is the first time Kansai Electric has removed spent MOX fuel from any of its reactors. Shikoku Electric Power Co. began the first such MOX fuel-removal operation at the No. 3 reactor of its Ikata nuclear power plant in Ehime Prefecture earlier this month. The Takahama plant's No. 3 reactor has been undergoing a regular safety inspection since Jan. 6. Eighty-one of the reactor's 157 fuel assemblies will be removed, including 8 MOX assemblies.

The process is expected to be completed by Jan. 29. The MOX fuel will be kept in a pool at the nuclear plant along with uranium fuel rods. The reactor currently has 28 MOX fuel assemblies. The 8 units being removed were introduced in December 2010. The remaining 20 units will continue to be used for commercial operations of pluthermal power generation that started in January 2011. The Takahama plant's No. 3 and No. 4 reactors, the Ikata plant's No. 3 reactor and the Genkai nuclear power plant's No. 3 reactor in Saga Prefecture, operated by Kyushu Electric Power Co., currently use MOX fuel for pluthermal power generation. Kansai Electric also plans to use its Oi nuclear power plant in Fukui Prefecture for the project. However, the utilities and the central government, which is pushing pluthermal power generation, have not specified sites or methods for the disposal of spent MOX fuel.

http://www.asahi.com/ajw/articles/ AJ202001270035.html

Kepco to halt two nuclear reactors after missing counterterrorism deadline

Japan Times, January 29, 2020

Kansai Electric Power Co. said Wednesday it would suspend operations at two nuclear reactors after missing a deadline set by the industry regulator to build counterterrorism facilities.

Under stricter rules implemented after the 2011 Fukushima disaster, utilities are now required to build emergency off-site control rooms to serve as backup bases that can keep nuclear reactors cooled and prevent meltdowns in the event of a terrorist attack.

The suspension of reactors Nos. 3 and 4 at Kansai Electric's Takahama plant in Fukui Prefecture – for about five months from https://www.japantimes.co.jp/news/2020/01/29/ national/kepco-halt-reactors-counterterrorismfacility-construction-deadline/#.XjqpJ1QzbIU

O. Misc

U.N. sanctions experts warn - stay away from North Korea cryptocurrency conference

Michelle Nichols, Reuters, January 15, 2020

United Nations sanctions experts are warning people not to attend a cryptocurrency conference in North Korea in February, flagging it as a likely sanctions violation, according to a confidential report due to be submitted to the U.N. Security Council later this month. The warning comes after the independent U.N. experts told the council in August that North Korea generated an estimated \$2 billion for its weapons of mass destruction programs using "widespread increasingly sophisticated" and cyberattacks to steal from banks and cryptocurrency exchanges.

North Korea has been under U.N. sanctions since 2006 over its nuclear and ballistic missile programs. The 15-member Security Council has unanimously strengthened those measures over the years, prompting Pyongyang to look for alternative ways to make money.

https://www.reuters.com/article/us-northkoreasanctions-un-exclusive/exclusive-u-n-sanctions-experts-warn-stay-away-from-north-koreacryptocurrency-conference-idUSKBN1ZE015

US sends nuke-detecting plane to air base in Japan

Yonhap, Korea Herald, January 17, 2020

The United States has deployed a WC-135W radiation detection plane to one of its air bases in Japan, an aviation tracker said Thursday, a move seen as aimed at beefing up surveillance of North Korea. The WC-135W Constant Phoenix arrived at Kadena Air Base in Japan's Okinawa, Aircraft Spots said in a Twitter post, without elaborating on the exact time of the arrival. Nicknamed the "nuke sniffer," the WC-135W played a key role in detecting radioactive leaks after the Chernobyl nuclear disaster in the Soviet Union in 1986. It is unclear whether the purpose of the deployment was for a simple stopover or for an operation. An RC-135S Cobra Ball surveillance aircraft is also known to have been deployed at Kadena Air Base.

http://www.koreaherald.com/ view.php?ud=20200117000223&ACE_SEARCH=1

Why nuclear doomsday threat is not waning

Tom Plate Korea Times, January 20, 2020

Without becoming too defensive about America at this rocky passage in its political history (well, it is difficult to defend), I nonetheless will offer something of a defense, since almost no one else wants to try, but maybe someone ought to. So we start with this: Whether the current American president's actions and policies are indefensible or not is not the point. At worst, President Donald Trump is in office for another term but then [–] he's out. Does any other superpower offer such a term-limited peace of mind? Even so, America is not one person any more than China is one person or even one party.

To be sure, even if the best comes to pass a one-term Trump presidency a lot of bad could happen in the year ahead. That's why many Americans are not letting up. Our civil society sector is anything but brain dead and is supported politically as well as financially by many Americans who are well aware of our flaws and the limitations of our government no matter what political party or which politican is at the top. The average educated American respects more than one secular or political god. I worship several myself, and this week one of them will step into the spotlight for a famous

annual ritual that reminds us of both the enduring value of our civil society organizations and the kinds of issues they fearlessly take on.

http://www.koreatimes.co.kr/www/opinion/ 2020/01/137_282198.html

Love without borders, or nuclear threats?

Ahn Sung, Korea Herald, January 20, 2020

A chaebol heiress accidentally crashes in North Korea while paragliding. She is rescued by a North Korean military officer who ends up protecting her and risking his life to send her back home to Seoul. Despite the differences in accent, lifestyle, culture, upbringing and ideology, they fall in love. This is the premise of "Crash Landing on You," the latest hit drama from tvN. With a top-notch cast led by actress Son Ye-jin and actor Hyun Bin, the rom-com, which premiered Dec. 14, is the talk of the town for its vivid depiction of the reclusive nation that has been shrouded behind a veil for decades. Life north of the border has been a source of inspiration for many creative minds in the South.

http://www.koreaherald.com/ view.php?ud=20200120000655&ACE_SEARCH=1

The NPT – nuclear development for the few

Gonzalo Collado De Giovannini, United World, January 22, 2020

The NPT (Nuclear Non-Proliferation Treaty) is one of the most famous and "successful" treaties. It emerged from negotiations between the Soviet Union and the United States in 1967. It was adopted in 1968 within the framework of the United Nations. It was supported by 95 countries, with 21 abstaining and 4 votes against. In this way, the NPT came into force in 1970, seeking a commitment from the signatory countries not to contribute to the expansion of nuclear weapons in the rest of the world.

The main articles of the NPT can be summarized as follows

1-Prohibiting nuclear states from transferring nuclear weapons, devices, technology or control of them to non-nuclear countries, as well as prohibiting the encouragement and assistance in accessing them.

2- Each non-nuclear state, in turn, commits itself not to receive, control or help in developing or manufacturing nuclear weapons.

3- Commitment of all parties to facilitate access and exchange of peaceful nuclear development technology to non-nuclear countries.

4- Insistence on the inalienable right of all to develop energy for peaceful purposes nuclear.

5- Commitment by nuclear states to start negotiations for the reduction of their nuclear arsenals.

https://uwidata.com/7318-the-npt-nucleardevelopment-for-the-few/

Canada Nuclear Waste Storage Plan Near Lake Huron Faces Vote

Bloomberg Environment, January 31, 2020

U.S. lawmakers from the Great Lakes region are weighing in on the fate of two major Canadian nuclear waste facilities, which could hinge on a vote in a First Nation community in western Ontario on Friday. The 4,500-member Saugeen Ojibway Nation, based on Lake Huron's Bruce Peninsula, is voting on whether to support construction of Ontario Power Generation Inc.'s C\$2.4 billion (\$1.8 billion) deep geological repository for low- and intermediate-level nuclear waste near the shore of Lake Huron. But several U.S. members of Congress oppose it, claiming it could endanger drinking water for millions.

Ontario Power Generation pledged not to move ahead if the First Nation community votes against the repository. The Nuclear Waste Management Organization, which could build a much larger C\$23 billion repository for more radioactive spent nuclear fuel in the same region, won't proceed in the area if it doesn't have a partnership with the nation. The vote on Friday doesn't deal with its proposal directly. The two projects together represent the bulk of Canada's long-term plan to store nuclear waste. Canada has 2.9 million bundles of highly radioactive used nuclear fuel, according to 2015 data, and around 100,000 cubic meters of low and intermediate nuclear waste, according to 2016 figures, the most recent available.

https://news.bloombergenvironment.com/ environment-and-energy/canada-nuclear-wastestorage-plan-near-lake-huron-faces-vote

Iran's revenge might be to go nuclear

Dr. Dania Koleilat Khatib, Arab News, January 29, 2020

By posting the words, "No thanks" on Twitter, US President Donald Trump replied to Iranian Foreign Minister Mohammed Javad Zarif's latest overture. In an interview with German newspaper Der Spiegel last week, Zarif said that Iran was ready to resume talks with the US if the latter lifted its sanctions on Tehran. He added that it was the US that had left the negotiating table, not Iran. However, Zarif's approach is a bit strange. This was also the previous proposal of Iran, and the US rejected it. Was it expecting a change in the position of the US or was it just a distraction?

https://www.arabnews.com/node/1620031

P. Op-Ed

India

Inside India's Large and Deadly Nuclear Weapons Program

Michael Peck, National Interest Blog, January 17, 2020

India is surrounded by countries it has fought wars with, especially Pakistan and China. To protect itself, New Delhi has a robust nuclear program- even though it is very dangerous. India has 130 to 140 nuclear warheads—and more are coming, according to a new report. "India is estimated to have produced enough military plutonium for 150 to 200 nuclear warheads, but has likely produced only 130 to 140," according to Hans Kristensen and Matt Korda of the Nuclear Information Project at the Federation of American Scientists. "Nonetheless, additional plutonium will be required to produce warheads for missiles now under development, and India is reportedly building several new plutonium production facilities."

https://nationalinterest.org/blog/buzz/inside-indiaslarge-and-deadly-nuclear-weapons-program-115256

India Stands Up New Su-30MKI Squadron

Franz-Stefan Gady, The Diplomat, January 20, 2020

The Indian Air Force (IAF) stood up its first permanent Su-30MKI squadron, 222 Squadron also known as the 'Tigersharks', in Thanjavur, Tamil Nadu in southern Indian on January 20, according to local media reports. The commissioning ceremony of the new IAF unit was attended by India's new Chief of Defense Staff, General Bipin Rawat, and IAF chief, Air Chief Marshal RKS Bhadauria.

The squadron will initially consist of four to six Sukhoi Su-30MKI fighters and is slated to reach its full complement of 18 aircraft by early 2021. Eight of the squadron's 18 Su-30MKIs are set to be armed with the airlaunched BrahMos-A supersonic cruise missile. The BrahMos-A is expected to be cleared for operational service with the IAF later this year. Following a successful test launch of the missile in December 2019, the IAF announced that the integration of the BrahMos-A on the SU-30MKI had been completed.

https://thediplomat.com/2020/01/india-stands-upnew-su-30mki-squadron/

Explained: What is Vyommitra's space job?

Johnson T A, The Indian Express, January 25, 2020

On Wednesday, Vyommitra, a "halfhumanoid" being developed by the Indian Space Research Organisation (ISRO), announced herself in Bengaluru. She is the prototype for a half-humanoid that will eventually fly to space on an unmanned mission later this year, aiming to lay the ground for ISRO's manned mission Gaganyaan in 2022. ISRO plans to send a human into space for the first time by 2022. It is racing against time to develop a crew module and rocket systems that will ensure the safe travel and return of the Indian astronaut. Other countries that have successfully launched humans into space did so after having used animals for conducting tests of their rockets and crew recovery systems, while ISRO will use the humanoid to test the efficacy of its GSLV Mk III rocket to transport a human to space and back. The humanoid is under development at a robotics laboratory at the Vikram Sarabhai Space Centre.

The Vyommitra humanoid, which will test the ground for the human spaceflight, will be a very basic version of a TARS-type, artificial-intelligence-and-robotics system. The activities that Vyommitra will be able to perform, once fully developed for the unmanned flight, will include procedures to use equipment on board the spacecraft's crew module such as safety mechanisms and switches, as well as receiving and acting on commands sent from ground stations. Attaining launch and orbital postures, responding to the environment, generating warnings, replacing carbon dioxide canisters, operating switches, monitoring of the crew module, receiving voice commands, responding via speech (bilingual) are the functions listed for the humanoid.

https://indianexpress.com/article/explained/ vyommitra-space-job-half-humanoid-isro-6234069/

China

US should repent over its foiled plot against Huawei

Global Times, January 29, 2020

The British government announced on Tuesday that Chinese tech giant Huawei would be allowed to take a role in UK 5G

Generally, it is a major setback for attempts by the US to prevent the use of Huawei technology among its allies. The UK is the most prominent ally of the US in Europe. Washington has done its utmost to persuade the UK not to use Huawei equipment in the construction of its 5G networks. The US has warned that it could damage the special relationship between the two nations, that it may no longer share intelligence with the UK and that it may even affect trade talks between the two countries. However, the UK ultimately decided to adopt Huawei technology, while comforting the US by saying it will "adopt the technology with restrictions."

http://www.globaltimes.cn/content/1177923.shtml

US Space Force can't be taken lightly

Yang Chengjun, Global Times, January 25, 2020

The creation of the US Space Force as the sixth branch of the US armed forces has caused concerns around the world. US President Donald Trump signed into law in late 2019 the National Defense Authorization Act for Fiscal Year 2020, which approved \$40 million for Space Force operations and maintenance. It is estimated that about \$13 billion would be spent in the first five years since 2020 to establish the Space Force.

However, to weaponize space is a violation of UN resolutions. The UN General Assembly set up the Committee on the Peaceful Uses of Outer Space in 1959 to govern the exploration and use of space for the benefit of all humanity. In addition, according to the Outer Space Treaty, which was approved in the General Assembly and entered into force on October 10, 1967, the States Parties to the treaty, including the US, recognized "the common interest of all mankind in the progress of the exploration http://www.globaltimes.cn/content/ 1177832.shtml

Pakistan

Pakistan Has a Truly Deadly and Scary Nuclear Weapons Program

Kyle Mizokami, National Interest Online, January 18, 2020

Pakistan and India have a dangerous rivalry that could one day lead to nuclear war. Islamabad has its own formidable nuclear arsenal and has threatened to use it.

Sandwiched between Iran, China, India and Afghanistan, Pakistan lives in a complicated neighborhood with a variety of security issues. One of the nine known states known to have nuclear weapons, Pakistan's nuclear arsenal and doctrine are continually evolving to match perceived threats. A nuclear power for decades, Pakistan is now attempting to construct a nuclear triad of its own, making its nuclear arsenal resilient and capable of devastating retaliatory strikes.

https://nationalinterest.org/blog/buzz/pakistanhas-truly-deadly-and-scary-nuclear-weaponsprogram-115226

India's Evolving Nuclear Posture: Implications for Pakistan

Iqra Shahnaz, Modern Diplomacy, January 27, 2020

It's been twenty one years to the emergence of India, as an explicit nuclear weapon state (NWS), yet India needs to express the details about the core elements of its nuclear posture or nuclear doctrine like the policy of NFU, policy of minimum credible nuclear deterrence, massive retaliation and assured survivability of its retaliatory forces. India has ambitious plans for the acquisition of robust triad of nuclear forces, which includes the landbased ballistic missiles, fighter bomber aircrafts, and submarine launched ballistic missiles (SLBMs). India is rapidly building up its nuclear and strategic capabilities, which is a part of its grand strategy of attaining the status of regional and global power. However, India is also strengthening its nuclear force by the introduction of new generation of short-range ballistic missiles which are nuclear capable in nature along with building up its naval nuclear force. These advancements are a threat to the nuclear threshold of Pakistan and will generate the probability of accidental nuclear escalation between the major states of South Asian region, India and Pakistan. Consequently, these advancements will have severe repercussions for the region.

https://moderndiplomacy.eu/2020/01/27/indiasevolving-nuclear-posture-implications-forpakistan/

USA

How America Planned to Use Its Nimitz-Class Aircraft Carriers Against Russia

Kyle Mizokami, National Interest Blog, January 16, 2020

America's nuclear-powered supercarriers are still formidable to this day. Although they never fought the Soviet Union, Washington's navy has continued to provide the mainstay of U.S. power projection.

The most successful U.S. Navy carriers of the postwar era all belong to a class named in honor of World War II's most successful admiral, Chester W. Nimitz. The class's lead ship, commissioned in 1975, bears the fleet admiral's name. The Nimitz-class aircraft carriers were, at the time, the largest warships ever constructed. Although superseded by the new Ford class, the ten Nimitz carriers will continue to form the bulk of the Navy's carrier force for the next twenty to thirty years. Many project a half a century or more.

The Nimitz-class carriers have participated in nearly every crisis and conflict the United States has been involved in over the past forty-two years. Nimitz was involved in the failed attempt to rescue U.S. embassy personnel from Tehran in 1980, and a year later, two F-14s from Nimitz shot down two Su-22 Fitters of the Libyan Air Force during the Gulf of Sidra incident in 1981. During the Cold War, Nimitz-class carriers conducted numerous exercises with regional allies, such as NATO and Japan, designed to counter the Soviet Union in wartime. The Nimitz-class carriers are a monumental achievement – an enormous, highly complex and yet highly successful ship design. The ships will carry on the Nimitz name through the 2050s, with the entire class serving a whopping eighty consecutive years. That sort of performance – and longevity – is only possible with a highly professional, competent Navy and shipbuilding team.

https://nationalinterest.org/blog/buzz/howamerica-planned-use-its-nimitz-class-aircraftcarriers-against-russia-114476

Why and How Russia Is Jamming American Fighter Jets Near Iran

David Axe, National Interest Blog, January 17, 2020

All powers like to use proxy conflicts to test out new weapons and Russia is no different. Moscow is seeing how well its jamming equipment fares against America's planes. Russian forces have been jamming GPS systems in the Middle East. The electronic-warfare campaign could affect U.S. forces gathering in the region in advance of potential strikes on Iran. "Since last spring, pilots flying through the Middle East, specifically around Syria, have noted that their GPS systems have displayed the wrong location or stopped working entirely," The Times of Israel reported in late June 2019.

The signal that has been disrupting satellite navigation for planes flying through Israeli airspace in recent weeks originates inside a Russian air base inside Syria, according to data collected by a U.S.-based researcher. This interference to the Global Positioning System reception does not appear to be specifically directed at Israel, but rather the Jewish state is likely collateral damage in an effort by Moscow both to protect its troops from drone attacks and to assert its dominance in the field of electronic warfare, Todd Humphreys, a professor at the University of Texas, told The Times of Israel.

https://nationalinterest.org/blog/buzz/why-andhow-russia-jamming-american-fighter-jets-neariran-115021

The United States Must Contain North Korea

Harry J. Kazianis, National Interest Blog, January 19, 2020

With war too catastrophic to consider, and the status quo untenable, containment and diplomacy is the only solution to the Korean Crisis. When we consider the possibility of a military operation against North Korea, it is helpful to take a step back and consider from Pyongyang's perspective how it might respond. North Korean leader Kim Jong-un may not wish to counter such a strike by using the full range of his military options, fearing such an attack could unleash his worst fear: regime change.

For example, Kim could order an attack on South Korea's vast civilian nuclear infrastructure, unleashing deadly plumes of radioactive fallout. Seoul operates twentyfour nuclear power plants that could all come under various forms of North Korean attack, though they are relatively far from the North. With many of these facilities lumped together, Pyongyang could fire a salvo of missiles at these plants, creating an immediate humanitarian crisis.

https://nationalinterest.org/blog/buzz/unitedstates-must-contain-north-korea-114551

Iran-US conflict: Worst is over, but core issues remain unresolved

Achal Malhotra, Wion, January 22, 2020

The assassination of Iran's General Qasem Soleimani by the US and Iran's retaliation by missile attacks on the US bases in Iraq early January brought the US and Iran on the brink of war. The subsequent decisions of the two countries to show restraint and step back has helped de-escalation, and thereby, defused the situation for the time being. The core issues which form the cause of the US-Iran conflict, however, remain on the table and are far from resolved. From the US and Europe's perspective, Iran must give up its plans to develop nuclear weapons and also its interference through proxy wars in Iraq, Yemen, Syria etc. Iran on its part is determined to drive the USA out of the region.

As far as the nuclear issue is concerned, Iran, it may be recalled, had it agreed to put a cap on its nuclear ambitions by signing the Iran Nuclear deal, officially described as Joint Comprehensive Plan of Action (JCPOA) in 2015 with US, Russia, China, France, UK, Germany and EU. President Donald Trump's decision to walk out of the deal (May 2018) and reimpose severe and crippling sanctions on Iran did not meet the approval of the other countries which are party to the deal, and they remained interested in salvaging the deal somehow. In the wake of the recent crisis triggered by the USA, The Atomic Energy Organisation of Iran was reported to have declared that from now on, "Iran's nuclear program no longer faces any operating restrictions," but also added that "If the sanctions are lifted and Iran benefits from its interests, the Islamic Republic of Iran is ready to return to its obligations". The announcement came after Tehran's alleged gradual escalation of its nuclear programme in recent months.

https://www.wionews.com/opinions-blogs/iranus-conflict-worst-is-over-but-core-issuesremain-unresolved-275946

Want to stop climate change? Embrace the nuclear option

Bret Kugelmass, USA Today, January 22, 2020

As a technology entrepreneur, when I am approached by startup founders for fundraising advice, I ask: "What would the world look like if you got everything you're asking for?" It's a test to see whether they are setting out to solve the right problem or whether they are choosing their preferred course of action and justifying retrospectively. Climate change researchers fail this test. Every single time. A giant disconnect exists between the science branch and policy branch of the climate change community, obscured by a strong tribal bond that unites us against "deniers." But if climate advocates get what we say we want, our own hypocrisy would soon be made painfully apparent. The accepted policy rhetoric is that if we get to net-zero global emissions, we would "solve" climate change — when, in fact, this belies scientific reality.

https://www.usatoday.com/story/opinion/2020/01/ 22/climate-change-solution-nuclear-energy-ourbest-hope-column/2821183001/

How America's B-1 Bomber Is Basically a Flying Missile Carrier

Kyle Mizokami National Interest Blog, January 23, 2020

The B-1 might not long be a part of the nuclear triad, but it still packs a punch. Together with the B-52, the B-1 is an important strategic bomber. Like many warplanes since the end of the Cold War, the B-1B bomber's role in American airpower has changed to embrace new missions. Unlike other planes, the B-1's mission changed even before the first aircraft took off. What started as a high-altitude, high-speed nuclear-penetration bomber has evolved into today's all-purpose nonnuclear attack aircraft, a jack-of-all-trades with a huge carrying capacity for bombs and air-to-ground missiles.

The intervening years, which had introduced new Soviet weapons including the MiG-25 Foxbat supersonic interceptor and the S-300 surface-to-air missile system (known as the SA-10 "Grumble" to NATO), made it clear that a high speed dash into Soviet airspace was no longer viable. In order to remain relevant, the B-1A would have to be redesigned into a stealthy, lowaltitude penetrator. The B-1A morphed into the B-1B, which included, among other things, an 85 percent reduction in radar cross-section, an increase in defensive avionics and a one-third increase in maximum takeoff weight, to 477,000 pounds. The bomber could travel 7,455 miles unrefueled. As a consequence of abandoning the high-speed mission and embracing stealth, maximum speed fell to Mach 1.25.

https://nationalinterest.org/blog/buzz/howamericas-b-1-bomber-basically-flying-missilecarrier-116351

Why the Navy's Decision to Build the First Supercarrier Was Such as Big Deal

Kyle Mizokami, National Interest Blog, January 23, 2020

Once the large, nuclear-powered USS *Enterprise* showed that such carriers were possible, Washington ordered more. Before long, the Navy would come to always rely on supercarriers. The first nuclear-powered aircraft carrier ever built carries one of the most famous names in flattop history: *Enterprise*. Designed as the nucleus of a nuclear-powered task force that could travel indefinitely without fuel replenishment, the USS *Enterprise* set the standard for all U.S. aircraft carriers to the present day.

Enterprise was deactivated on December 1, 2012. For the last five years it has been gradually prepared for disposal, stripped of military equipment and its reactors powered down. down. The ship will be formally decommissioned on February 3, 2017, in a private ceremony at the Newport News Shipyard in Virginia. Enterprise proved the viability of nuclear power for aircraft carriers, but in hindsight that was the most forgettable of its achievements. it circled the globe three times, conducted twenty-five overseas cruises and completed an astonishing four hundred thousand aircraft landings in its lifetime. It flew combat missions from Vietnam to Afghanistan, and over its lifetime tens of thousands – if not hundreds of thousands-of sailors served as part of its crew.

https://nationalinterest.org/blog/buzz/whynavys-decision-build-first-supercarrier-wassuch-big-deal-116381

Europe

Europe Gives More Time to Nuclear Diplomacy

Financial Tribune, January 24, 2020

European powers will not move to reimpose international sanctions on Iran, which will in effect kill the 2015 nuclear deal, as long as Tehran restrains expansion of its nuclear work, European diplomats said. In a statement on Friday, EU foreign policy chief, Josep Borrell, confirmed that the parties to the deal, known as the Joint Comprehensive Plan of Action, have extended the process to provide more time to find a diplomatic solution. "I have ... undertaken extensive bilateral and collective consultations. All JCPOA participants reconfirmed their determination to preserve the agreement which is in the interest of all," the top EU diplomat said, EEAS reported. "Notwithstanding differences on modalities, there is agreement that more time is needed due to the complexity of the issues involved. The timeline is therefore extended."

France, Britain and Germany last week triggered a dispute-settlement mechanism in the nuclear accord that could lead the European Union and the United Nations to reimpose sanctions on Iran within 60 days. The 2015 deal, which sought to constrain Iran's nuclear capabilities in return for sanctions relief, had suspended such sanctions. European leaders have officially called for Iran to reverse the cuts in its commitment to the nuclear deal it has made in recent months. But European diplomats do not expect Iran to reverse course and privately say they are prepared to tolerate those steps and keep discussions going with Iran for the foreseeable future. They are preparing to extend discussions well beyond the 60-day period, the Wall Street Journal reported.

https://financialtribune.com/articles/national/ 101867/europe-gives-more-time-to-nucleardiplomacy

Europe's Goals To Activate Snapback Mechanism: Buy Time Or Take Case To Security Council?

Tehran Times, January 31, 2020

Britain, Germany and France recently issued a statement in Brussels on trigger mechanism what is known as the "snapback" mechanism. In the snap-back mechanism, legally, the dispute resolution sessions will be requested, and after that, the UN sanctions will eventually be returned by referring to UN Security Council, if the Europeans are not convinced. Under this mechanism, the UNSC take a vote on continue lifting Iran's sanctions, and if U.S., French or British veto the resolution and does not ratify it within thirty days, then all sanctions will be automatically returned against Iran. Accordingly, no country, including Russia and China, will have a veto, not be able to help Iran in this case.

It was on this basis that Russia had stated that this process should not be initiated and that an agreement had to be reached with the Iranian Foreign Ministers in the Brigham Commission. So Russia opposes Snapback launch, calls for joint commission on conflict resolution with Iran. If no agreement is reached between the parties of nuclear deal, the six resolutions under Chapter VII of the United Nations Charter, including Resolution 1929, will be returned against Iran. If sanctions are returned, Iran must immediately suspend uranium enrichment, and ships headed for Iran can be inspected, which will make the current economic situation even more difficult in Iran.

https://www.tehrantimes.com/news/444685/ Europe-s-Goals-To-Activate-Snapback-Mechanism-Buy-Time-Or-Take

Russia

Is Russia's Submarine Force Dying?

David Axe, National Interest Blog, January 20, 2020

The Russian navy's submarine force, arguably the fleet's most important component, is about to shrink. Potentially a lot. There are 62 submarines of all classes in commission with the Russian navy. Fifty-five are front-line vessels and the rest are test and research vessels. There are 10 nuclearpowered ballistic-missile submarines, nine nuclear cruise-missile submarines, 14 nuclear attack submarines and 22 conventional attack submarines.

"There are surely already question marks over a number of vessels," Ballantyne added, especially the seven Delta-class ballisticmissile boats, or boomers. Just three of Russia's boomers — the first three of 10 planned Borei-class vessels — are younger than 30 years old.

https://nationalinterest.org/blog/buzz/russiassubmarine-force-dying-115406

How Russia's Kilo-Class Submarines Are a Huge Threat to American Aircraft Carriers

Kyle Mizokami, National Interest Blog, January 21, 2020

Kilo-class subs are powerful and cheaper than nuclear-powered vessels to produce. Moscow has them train for a wide variety of missions in case Russia ever fought NATO. Unlike the United States Navy, which went all-in on nuclear power, Russia maintains fleets of both diesel and nuclearpowered submarines. A land power encompassing much of Eurasia, Russian submarines are based much closer to "the action" than American submarines are. While Russia maintains nuclear submarines for distant ocean patrols, its fleet of diesel submarines is more than adequate for conflicts in Europe, the Middle East and the Russian near abroad.

The ships are powered by two diesel generators and an electric drive, giving them enough power to make ten knots at the surface and seventeen knots underwater. They are not fast submarines. They have a range of six thousand to 7,500 nautical miles, meaning that from the Russian Northern Fleet headquarters they can patrol for one thousand nautical miles and then go on to Cuba.

https://nationalinterest.org/blog/buzz/how-russiaskilo-class-submarines-are-huge-threat-americanaircraft-carriers-115531

Sailing These Russian Nuclear Submarines Was Basically A Suicide Mission

Sebastien Roblin, National Interest Blog, January 22, 2020

November-class submarined The expanded Soviet influence, but at a cost. The United States launched the first nuclear-powered submarine, the USS Nautilus, in 1954, revolutionizing undersea warfare. The Nautilus's reactor allowed it operate underwater for months at a time, compared to the hours or days afforded conventional submarines. The following year, the Soviet Union began building its own nuclear submarine, the Project 627-known as the November class by NATO. The result was a boat with a few advantages compared to its American competition, but that also exhibited a disturbing tendency to catastrophic accidents that would prove characteristic of the burgeoning Soviet submarine fleet during the Cold War.

K-3 rapidly demonstrated the extraordinary endurance of nuclear submarines, embarking upon two-month long cruises while submerged. In 1962, it became the first Soviet vessel to travel to the North Pole, while a sister ship, K-133, was the first submarine to traverse the Drake Strait submerged in a twenty-one-thousand-mile cruise that lasted fifty-two days.

https://nationalinterest.org/blog/buzz/sailingthese-russian-nuclear-submarines-was-basicallysuicide-mission-115661

How We Know Russia Is Probably (Not) Secretly Testing Nuclear Weapons Underground

David Axe, National Interest Blog, January 22, 2020

Despite some accusations, the evidence looks like Moscow is probably not doing secret nuclear tests. If Moscow was, it would be in violation of a treaty. A senior U.S. intelligence official on May 29, 2019 accused Russia of secretly conducting nuclear tests in violation of an international treaty and the country's own moratorium on such tests. But there's no hard evidence of these alleged tests, one arms-control group pointed out.

"The United States believes that Russia probably is not adhering to its nuclear testing moratorium in a manner consistent with the 'zero-yield' standard" outlined in the 1996 Comprehensive Test Ban Treaty," Lt. Gen. Robert Ashley, Jr., director of the Defense Intelligence Agency, said at an event at the Hudson Institute in Washington, D.C.

https://nationalinterest.org/blog/buzz/how-weknow-russia-probably-not-secretly-testingnuclear-weapons-underground-116121

These 5 Submarines Could Destroy The World In 30 Minutes

National Interest Blog, January 29, 2020

In some cases—as in the case of the Ohioclass submarine during the height of the Cold War—even a single vessel could reduce as many as 288 city-sized targets into radioactive ash in less than 30 minutes.

While they have thankfully never been used during a shooting war, nuclear-powered submarines carrying nuclear-tipped missiles are the most deadly weapons mankind has ever devised. In some cases—as in the case of the Ohio-class submarine during the height of the Cold War—even a single vessel could reduce as many as 288 city-sized targets into radioactive ash in less than 30 minutes. Indeed, these vessel and their payloads could end human civilization in less time than it takes to order a pizza if a third world war were to break out.

https://nationalinterest.org/blog/buzz/these-5-submarines-could-destroy-world-30-minutes-117891

West Asia

Iran

Iranian regime under pressure from three sides

Dr. Majid Rafizadeh, Arab News, January 16, 2020

The Islamic Republic is, for the first time since its establishment, simultaneously

encountering what I would call three concentric circles of pressure. These forces are influencing and reinforcing each other, maximizing the level of pressure that the regime is under. If these three forces of pressure persist, the theocratic establishment will find it extremely difficult to survive.

The first circle of pressure the regime is facing is domestic. The Iranian people's dissatisfaction with their rulers has reached an unprecedented level. The discontent toward the regime is both political and economic. Many Iranians are extremely frustrated with the lies and widespread corruption at the top, and how the nation's wealth is being squandered to satisfy the ruling mullahs' revolutionary and geopolitical ambitions. There exists no rule of law to hold the gilded circle of the regime's leaders accountable.

https://www.arabnews.com/node/1614091

How close is Iran to producing a nuclear bomb?

Francois Murphy, Arshad Mohammed, Reuters, January 17, 2020

The central achievement of the Iran nuclear deal - keeping Tehran at arm's length from nuclear weapons - is eroding. The 2015 accord's many restrictions on Iran's atomic activities were built around one objective: to extend the "breakout time" Tehran would need to produce enough fissile material for one atomic bomb - if it decided to do so - to at least a year from around 2-3 months.

Iran maintains that it has never sought nuclear weapons and never would. It has long said it has enriched for civilian purposes including future nuclear energy and research projects. Tehran began breaching the deal's curbs last year in a step-by-step response to President Donald Trump's withdrawal of the United States from the deal in May 2018 and the reimposition of U.S. sanctions that have throttled Iran's vital oil exports. Those breaches have shortened the breakout time slightly, though Iran is far from sprinting ahead as fast as it could, reports by the U.N. nuclear watchdog policing the deal show. But the breaches have been enough to prompt the European signatories to the deal to trigger its dispute resolution mechanism, raising the prospect of the global, United Nations sanctions that were lifted under the deal being reinstated.

https://www.reuters.com/article/us-iran-nuclearexplainer/explainer-how-close-is-iran-to-producing-a-nuclear-bomb-idUSKBN1ZG22P

'Europe must take a separate path from U.S.'

Tehran Times, January 19, 2020

Mohsen Pakayeen, Iran's former ambassador to Azerbaijan, has said that Europe must take a separate path from the United States. "Europe must make efforts not to destroy the Iranian people's trust," he told ISNA in an interview published on Sunday. He also said, "In recent days, the Europeans have taken unacceptable moves. They have threatened to trigger the dispute mechanism and take Iran's case to the [UN] Security Council. This behavior shows that Europe seeks to follow the United States' policies." Foreign Minister Mohammad Javad Zarif said on January 13 that France, Germany, and the UK have bowed to "the U.S. diktat" for 20 months.

It is 20 months that the Trump administration has quit the nuclear deal and introduced sanctions against Iran while Europeans standing idle by. "For 20 months, the E3-following UK appeasement policyhas bowed to US diktat," he tweeted. Zarif said this policy "hasn't gotten it anywhereand it never will." The chief diplomat added that the three European countries can save the 2015 nuclear deal "but not by appeasing the bully & pressuring the complying party." France, Germany and the United Kingdom issued a joint statement on Tuesday announcing they have formally triggered the dispute mechanism.

https://www.tehrantimes.com/news/444342/ Europe-must-take-a-separate-path-from-U-S

Iran's one strike may have changed Mideast forever

Martin Love, Tehran Times, January 24, 2020

The JCPOA certainly seems to be comatose and dying. Don't blame Iran. Blame the U.S. first and then the E-3: Germany, France and the U.K. Can it be stated more plainly? No. One should have no problem with Iran's reactions to shoddy treatment except that this is exactly what Sheldon Adelson, the casino magnate billionaire who has literally bought Trump and his gangsters and much of the Republican Party, has wanted, along with Netanyahu and the rest of the Zionists: that the JCPOA die and even that Iran might withdraw from the NPT and at least superficially, if not, in fact, seem to be pursuing nuclear weapons.

(On the other hand, it's not nuclear weapons that probably invokes the ire of the bloody Western "establishment" (led by the U.S.) so much as it is the fact that Iran has mastered the technology of nuclear energy and how to obtain its fuel from raw uranium.) But why did they, the Trump gang and supporters, want this the demise of the JCPOA? This is the haunting question because the desire never made sense. How much easier it is, though, to attack independent Iran if, falsely or not, propaganda can be blasted that claims the Islamic Republic is, finally, aiming to build a nuclear weapon given the sanctions it has sustained in the past year and a half plus and the slow demise of the JCPOA and lately Soleimani's criminal assassination?

https://www.tehrantimes.com/news/444481/Irans-one-strike-may-have-changed-Mideast-forever

Turkey

The Rift Between Turkey and America Has Paved the Way for Russia's Rebound

Dimitri Alexander Simes, National Interest Blog, January 20, 2020

While the United States and Iran edged to the brink of war in Iraq, Russian president

Vladimir Putin met with Turkish president Recep Tayyip Erdogan in Istanbul on January 8 to launch the long-awaited TurkStream gas pipeline and announce a new Libya ceasefire deal. This latest meeting between Putin and Erdogan comes amidst rising tensions between Ankara and Washington, two longtime NATO allies. The United States has angrily protested Turkey's decision to purchase the S-400 air defense system from Russia and its military operation in northeastern Syria. For its part, the Erdogan administration has threatened to close two major American military bases in Turkey if Congress adopts a muchanticipated sanctions package targeting Ankara.

What does the growing rift between the United States and Turkey mean for Russia? Can Moscow and Ankara transform their burgeoning cooperation into a fully-fledgedpartnership or will their disagreements over Syria and Libya prove to be too much? The National Interest spoke to Turkish and Russian experts to get their perspectives on these questions.

https://nationalinterest.org/feature/rift-betweenturkey-and-america-has-paved-way-russiasrebound-114916

The Turkish-Qatari Axis Challenges Washington

Aykan Erdemir Varsha Koduvayur, National Interest Blog, January 22, 2020

Sectarian violence has spread across the Middle East, with Sunni and Shiite populations engulfed by the blood-letting. But to make matters worse, the Sunni world has recently cleaved into two competing axes pitting a new Turkish-Qatari alliance against a bloc led by Saudi Arabia and the United Arab Emirates (UAE). Across the region, from Iraq to Libya, these opposing Sunni factions are now contesting each other's influence, adding another layer of complexity to an already volatile region. As these axes now seek to project their power and influence while diminishing that of their rivals, the stability of the region could become collateral damage in this battle for primacy.

Turkey's cross-border operation into northeast Syria in October 2019 is the latest example of how these bitter rivalries play out. Qatar was one of the few actors, alongside Hamas and Pakistan, that supported the internationally condemned campaign. Similarly, when Saudi Arabia, Bahrain, Egypt and the UAE severed diplomatic ties with Qatar, enacting a land, sea, and air blockade in June 2017, Turkey offered a lifeline, sending cargo planes with food and other goods. While both Turkey and Qatar are ostensibly U.S. allies and host key American bases, they are now working in tandem to promote a destabilizing Islamist agenda across the Middle East.

https://nationalinterest.org/blog/middle-eastwatch/turkish-qatari-axis-challengeswashington-116251

Ties binding Turkey and Russia more diverse than ever

Ivan Starodubtsev, Daily Sabah, January 28, 2020

On Jan. 8, Russian President Vladimir Putin made a working visit to Istanbul. Formally, the center of the visit was the participation of the Russian and Turkish presidents at the opening ceremony of the Turkish Stream pipeline. But in practice, Putin and Recep Tayyip Erdoðan launched Russian-Turkish relations, not only in the energy sector but in general. The two leaders have opened a new page in bilateral cooperation that will have an impact on the state of affairs in the region. In order to better understand the significance of the Istanbul meeting, let us briefly turn to the milestones of Russian-Turkish dialogue in the 21st century.

Assuming a conditional division into decades, let us note that the main result of the first decade of the 21st century in Russian-Turkish relations was the scrapping of patterns and stereotypes. Erdoðan visited Moscow for the first time immediately after the victory of the Justice and Development Party (AK Party) in the general parliamentary elections in Turkey on Dec. 23-24, 2002. President Putin also visited Ankara on Dec. 5-6, 2004. This was the first official visit by a leader of Russia (as the successor of the USSR) in more than three decades.

https://www.dailysabah.com/op-ed/2020/01/28/ ties-binding-turkey-and-russia-more-diverse-thanever

Israel

Netanyahu calls for sanctions against International Criminal Court

Amos Harel, Haaretz, January 16, 2020

The bottom line of the Israel Defense Forces' intelligence assessment for 2020 isn't significantly different than it was the previous two years. The likelihood of anyone intentionally starting a war against Israel remains low (in recent years, Military Intelligence has freed itself of the taboo created by the 1973 Yom Kippur War and is willing to say that explicitly). But MI sees a medium to high probability of an unplanned slide into war due to escalating reciprocal strikes.

Second, its ability to make predictions is particularly limited regarding how the people will act in neighboring countries and their economic plight. This was illustrated, for example, by recent fluctuations in the protests in Iran, and by the fact that earlier predictions of an economic collapse in Syria proved false, as, to some extent, did similar predictions about Iran.

https://www.haaretz.com/middle-east-news/iran/ .premium-israeli-army-sees-chance-to-escalateattacks-against-iran-and-its-allies-1.8402081

Trump Is Failing to Protect Israel Against Iran

Chuck Freilich, Haaretz, January 21, 2020

The beginning of the final and critical year of President Donald Trump's first term, during which we will find out whether he is reelected to a second, is a fitting time to assess his achievements in the Middle East to date.

As is appropriate, however, to the general

Trumpian approach of governance by chaos, it is difficult to assess his record in terms of coherent policy. Instead of wellfounded strategy, what we have is a series of isolated acts, some successful, others not, often largely a matter of impulse.

https://www.haaretz.com/middle-east-news/ iran/.premium-trump-s-chaotic-cowardlyfailure-to-protect-israel-against-iran-1.8413029

East Asia

North Korea

Taking 'new path'

Korea Times, January 20, 2020

North Korea reportedly names hard-liner as top diplomat. North Korea is likely to shift further away from dialogue and return to brinkmanship in the face of the U.S.'s firm policy of maintaining pressure and sanctions against Pyongyang. Media reports about the North's appointment of a hard-liner as its top diplomat are raising concerns that it may withdraw from stalled talks with both Seoul and Washington.

The Ministry of Unification said it was trying to confirm press reports that the North recently named Ri Son-gwon, chairman of the Committee for the Peaceful Reunification of the Country, as foreign minister. The North reportedly notified foreign envoys based in its capital of the appointment. Ri's appointment, if confirmed, could signal a tougher stance the North's denuclearization on negotiations with the U.S., and inter-Korean dialogue. There was the possibility that North Korean leader Kim Jong-un might have held the current diplomatic team responsible for failing to extract concessions, including sanctions relief, from the U.S.

http://www.koreatimes.co.kr/www/opinion/ 2020/01/137_282218.html

Test in March on N. Korea

Tong Kim, Korea Times, January 29, 2020

North Korea is staying the hardline course: refusing calls for talks without U.S.

acceptance of its demands and waging an all-out self-reliance campaign for a "headon" fight against sanctions, while developing nuclear weapons. This head-on policy was opted for by Kim Jong-un during an expanded Central Committee meeting of the Workers' Party of Korea held at the end of December.

Kim has appointed Ri Son-gwon, a hardliner with no diplomatic experience, as his new foreign minister, replacing Ri Yongho, a veteran diplomat. This shift does not signal a change in Pyongyang's policy; it reflects Kim's determination toward a selfreliant economy and a strong strategic deterrent. In the North, a foreign minister rarely makes critical policy decisions. Kim does.

http://www.koreatimes.co.kr/www/opinion/2020/ 01/137_282586.html

South Korea

Joseon era of 19th century vs. 21st century Korea

Kim Seong-kon, Korea Herald, January 21, 2020

Many analysts and historians point out that the current political situation of South Korea resembles that of the Joseon era in the late 19th century. To say the least, it would be embarrassing and disheartening if 21st century Korea still could not overcome the traumatic situation it experienced in the late 19th century. Nevertheless, we may be able to obtain some insights and hindsight from the comparison.

In the late 19th century, Joseon, which changed its name to Korea later, was helplessly lost in a vortex of international politics among the three menacing empires, China, Japan and Russia. In response to ruthless foreign aggressions, the rulers of Joseon simply shut the door to the outside world and, therefore, were ignorant of radical changes taking place in the international community at the time. Instead of actively dealing with the external crisis that seriously threatened the kingdom, the rulers of Joseon were engaged in internal factional scuffles. As a result, the Joseon era was hopelessly going down both internally and externally and finally lost her sovereignty.Experts argue that 21st century South Korea is now facing a similar situation. The main difference is that now China is rising instead of Japan, and South Korea has to deal with a nuclear-armed North Korea. The United States, too, has entered the picture as an ally to South Korea and Japan. Once again, South Korea has to choose from those countries. If our political leaders choose a wrong nation for help or as an ally as they did in the late 19th century, our country will go down inexorably once again.

We are witnessing the omen already. As soon as South Korea's relationship with Japan began to deteriorate, which also might have affected the South Korea-US alliance, Chinese and Russian military aircrafts flew over our territory presumably to test our reactions. North Korea is once again threatening us with nuclear weapons. China, too, has been pressing South Korea not to allow the US army to deploy THAAD, while imposing sanctions on business and tourism. Now the US is demanding a significantly increased budget for the deployment of its troops in South Korea. To make matters worse, South Korea's relationship with Japan is the worst it has been in decades. In order not to repeat the same mistakes we foolishly made in the late 19th century, we should overcome tribalism and ultranationalism, know the outside world and have allies that will come and rescue us in times of crisis. In that sense, we should value the Korea-US Defense Treaty that would surely protect South Korea from our hostile neighboring countries' aggressions. We should know that the US government signed the Defense Treaty with only three parties: South Korea, Japan, and NATO. Without this treaty, South Korea will be extremely vulnerable to threats from the outside.

http://www.koreaherald.com/ view.php?ud=20200120000862&ACE_SEARCH=1

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Test in March on N. Korea

Tong Kim, Korea Times, January 29, 2020

North Korea is staying the hardline course: refusing calls for talks without U.S. acceptance of its demands and waging an all-out self-reliance campaign for a "headon" fight against sanctions, while developing nuclear weapons. This head-on policy was opted for by Kim Jong-un during an expanded Central Committee meeting of the Workers' Party of Korea held at the end of December. Kim has appointed Ri Son-gwon, a hardliner with no diplomatic experience, as his new foreign minister, replacing Ri Yong-ho, a veteran diplomat. This shift does not signal a change in Pyongyang's policy; it reflects Kim's determination toward a selfreliant economy and a strong strategic deterrent. In the North, a foreign minister rarely makes critical policy decisions. Kim does. The KCNA reported, "He also made public the foreign policy stand of the DPRK government." But no details were provided. It is likely that Ri reiterated the policy line that Kim outlined before: a self-reliant economy based on a strong strategic deterrent.

Pyongyang's envoy also echoed Kim Jongun's statement that "North Korea was no longer bound by commitments to halt nuclear and missile testing," because of the U.S. sanctions and military drills in violation of the agreement at Singapore in the summer of 2018. In Washington, Trump is too busy watching his impeachment trial by the Senate. But, his national security team including State, Defense, and NSC are consistently calling on the North to return to talks, while showing no indication of making concession on sanctions. Kim's selfreliance campaign may not succeed in enabling continued development of his nuclear arsenal and assuring economic development. Yet, Kim is determined not to beg for sanctions relief in exchange for his nuclear weapons. This position may be part of his overall strategy. He said he is prepared for a protracted strategic game. And it is not unimaginable that the timing for that test will be around March less than two month from now, when the U.S. and South Korea

will decide what they are going to do with their joint annual military exercises.

http://www.koreatimes.co.kr/www/nation/2020/ 01/113_282569.html

Japan

Japan planning to release over a million tonnes of radioactive water into sea from Fukushima power plant

Harry Cockburn, January 31, 2020

Massive amounts of radioactive water being stored at Japan's Fukushima power plant could be released into the sea under plans provisionally accepted by the country's government. Tokyo Electric has collected nearly 1.2 million tonnes of contaminated water from cooling pipes used to keep fuel cores from melting since the plant was devastated by the earthquake and tsunami which hit eastern Japan in 2011. The water, containing 62 radioactive elements, is stored in huge tanks on the site of the now disabled power plant, but Tokyo Electric has said it will run out of room to store the water by 2022.

The water has been treated and Tokyo Electric said it is able to remove all radioactive particles from the water to levels not harmful to humans, except tritium, an isotope of hydrogen which is more difficult to separate from water. A panel of experts working for Japan's economy and industry ministry concluded that letting the water run into the sea was the best option after looking at other proposals. The only other viable option considered was to let the water evaporate.

https://www.independent.co.uk/environment/ japan-nuclear-waste-fukushima-power-stationtsunami-water-sea-olympics-a9312246.html

Q. Think Tanks

Memo to Mr. Trump: This nuclear treaty with Russia will make you a winner!

John Krzyzaniak, Bulletin of Atomic Scientist, January 22, 2020

You have the historic opportunity to make the greatest deal with Russia, and all it requires is a big beautiful signature. You want a cap on nuclear weapons, and the New START treaty is just that. But the treaty will expire in 2021 unless you act to save it. Here are five reasons why you should extend the New START treaty in 2020.

1. It will help you get reelected. Polls show that at least 66 percent of Trump voters in every single state support treaty extension.

2. It will save the United States billions of dollars. If the treaty expires, the United States will have to spend more money gathering information about Russia's nuclear weapons.

https://thebulletin.org/2020/01/memo-to-mrtrump-nuclear-treaty-russia/

Don't gut the US-South Korea alliance

Michael E. O'Hanlon, Brookings, January 23, 2020

For over a dozen years, the United States and South Korea have been planning to transform their military command structure known as Combined Forces Command – a remarkably integrated and effective system constructed during decades of alliance cooperation. It is the most tightly woven system of integrated command and control the United States possesses anywhere in the world. Throughout the armed forces of the two nations, South Koreans would command Americans, and vice versa, at all sorts of levels of tactical operations. In the unthinkable event of war against North Korea, ultimately more than one million South Korean soldiers as well as several hundred thousand Americans would fight together in defense of South Korea and the broader region. Separate American

commands in Japan and the broader Pacific region, and a U.N.-sponsored command, would provide support and reinforcements as well as protection for threatened regional interests such as the nation of Japan and the U.S. island of Guam.

The current plan, being assiduously prepared by American and South Korean personnel together at the Combined Forces Command headquarters, would replace the American military officer who runs the overall alliance in times of war – currently General "Abe" Abrams of the U.S. Army – with a South Korean four-star officer instead. Such a move would mess with these painstakingly-created structures to no apparent benefit and much evident risk, at a moment when the alliance is vulnerable not only to North Korean attack but to domestic political trends within both South Korea and the United States. It is a bad idea. If it ain't broke, as the saying goes, don't fix it.

https://www.brookings.edu/blog/order-fromchaos/2020/01/23/dont-gut-the-us-south-koreaalliance/

Bosnia and Herzegovina Veterinary Labs Equipped to Diagnose Animal Diseases Using Nuclear-Derived Techniques

Elodie Broussard, International Atomic Energy Agency, January 23, 2020

Bosnia and Herzegovina veterinary authorities are better equipped to protect livestock from several animal diseases spreading in Southeastern Europe, thanks to the support of the IAEA in partnership with the Food and Agriculture Organization of the United Nations (FAO). This is an important step for food security in the country and for the export of animal products and food to the European Union market, local officials have said. "Early detection of transboundary animal diseases such as Blue Tongue disease (BT), lumpy skin disease (LSD) and Brucellosis is key to prevent their spread and impact on the economy," said Ivancho Naletoski, Animal

Health Officer at the Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture.

Brucellosis has been present on the Balkan peninsula over centuries as an endemic disease of livestock, while BT and LSD have emerged recently. They continuously threaten the lives of farmers, producers, exporters and their families. Brucellosis is transmitted among animals through direct and indirect contact, while BT and LSD are transmitted by blood-sucking insects such as mosquitoes, ticks and fleas. All can have a significant effect on animal health and production, as well as on the economic output and international trade of a country.

https://www.iaea.org/newscenter/news/bosniaand-herzegovina-veterinary-labs-equipped-todiagnose-animal-diseases-using-nuclear-derivedtechniques

Physicists mobilize to reduce the nuclear threat. Again.

Stewart Prager, Steve Fetter, Alexander Glaser, Zia Mian and Frank von Hippel,

Bulletin of Atomic Scientist, January 24, 2020

We live in an increasingly dangerous nuclear world, a time at least as perilous as the worst years of the Cold War. The Bulletin of Atomic Scientists' Doomsday Clock offers a clear representation of existential risk. In 1953, when first the United States and then the Soviet Union began testing thermonuclear weapons, the Bulletin Science and Security Board set the clock at two minutes to midnight. Over the intervening six decades the nuclear threat fell and rose, and fell again, but few would dispute that in recent years the alarm has been sounding for those who would hear it. Today, the Science and Security Board set the Doomsday Clock at 100 seconds to midnight-closer than it has ever been to catastrophe-warning that "any belief that the threat of nuclear war has been vanquished is a mirage."

There is an urgent need to bring together expert voices and informed, mobilized public pressure that once proved so important as a source of demands and options to reduce nuclear threats. The

physics community can be an influential advocate for this goal. With support from the American Physical Society (APS), physicists from a collection of universities have recently begun a project to recruit and organize physicists to take on this challenge. The Physicists Coalition for Nuclear Threat Reduction plans, through grassroots efforts, to establish a network of citizen-scientists committed to nuclear threat reduction. The participation of women, minority, and next-generation physicists – all currently underrepresented in nuclear policy debates, but whose voices must be part of such a new effort – will be a key ingredient.

https://thebulletin.org/2020/01/physicistsmobilize-to-reduce-the-nuclear-threat-again/

New START: The Future of U.S.-Russia Nuclear Arms Control

Brian L. Sittlow, CFR, January 28, 2020

February 5, 2020, marks one year left on the U.S.-Russia New Strategic Arms Reduction Treaty, known as New START. Washington and Moscow face three choices: to develop a new treaty, extend the terms of the existing treaty for five more years, or go treaty-less on strategic nuclear arms. In the current foreign policy environment, achieving a new strategic arms treaty with Russia in the next twelve months is very unlikely. To avert the abandonment of New START, an extension appears to be the easy choice.

A five-year extension would provide the United States and Russia with breathing space for future negotiations, project a sense of stability in a volatile world, and support U.S. plans to modernize its land-, air-, and sea-based nuclear systems, often referred to as the nuclear triad. Most importantly, it would maintain the current nuclear deterrence posture, a core national security priority.

https://www.cfr.org/in-brief/new-start-futureus-russia-nuclear-arms-control

The low-yield nuclear warhead: A dangerous weapon based on bad strategic thinking

Andrew Facini, Bulletin of Atomic Scientist, January 28, 2020

In the unintuitive world of nuclear weapons strategy, it's often difficult to identify which decisions can serve to decrease the risk of a devastating nuclear conflict and which might instead increase it. Such complexity stems from the very foundation of the field: Nuclear weapons are widely seen as bombs built never to be used. Historically, granular-even seemingly mundanedecisions about force structure, research efforts, or communicated strategy have confounded planners, sometimes causing the opposite of the intended effect. Such is the risk carried by one strategy change that has earned top billing under the Trump administration: the deployment of a new "low-yield" nuclear weapon on US submarines.

Low-yield, high risk. The Trump administration first announced its plans for a new low-yield nuclear warhead in its February 2018 Nuclear Posture Review, a public report meant to communicate and clarify various American nuclear weapons policies. The Nuclear Posture Review presented the lower-strength warhead as necessary for the "preservation of credible deterrence against regional aggression." In other words, the United States was seeking a new, intermediate option for an imagined scenario in which Russia, after starting a conventional war in Europe, might be tempted to use smaller nuclear weapons first in order to win the conflict. In such a scenario, US thinking goes, the threat of US retaliation with full-strength bombs would not be believable and would not be enough to deter Russia from pursuing such a course in the first place. The way to deter a limited nuclear strike by Russia was for the United States to have a readily available option for retaliating with a limited, proportional strike of its own.

https://thebulletin.org/2020/01/the-low-yieldnuclear-warhead-a-dangerous-weapon-based-onbad-strategic-thinking/

Why U.S.-Iran Conflict Suits Russia

Dmitry Shlapentokh, Institute of Modern Russia, January 29, 2020

The recent history of Russia's relationship with Iran is instructive when it comes to understanding Moscow's approach to the current tensions with the United States. The collapse of the Soviet Union left Russia isolated and powerless, despite its cache nuclear weapons. Ideological of paradigms perished as well-many of them with a centuries-long legacy. One of them, Slavophilism, wellwas incorporated into the late Soviet era's geopolitical construction that included Eastern Europe, mostly populated by Slavic people, who were considered, according to 19th-century Slavophilic thinkers, Russia's geopolitical friends. Following the dissolution of the USSR, many of these Slavic nations turned against Russia. Westernism, another 19thcentury paradigm, did not fit well into a post-Soviet Russia either. While Moscow did its best to demonstrate friendliness, the West rejected Russia as an equal partner. Eventually, a new geopolitical paradigm -Eurasianism-found the spotlight. Its origins go back to Russian émigrés who had fled the Soviet regime after the Civil War (1917-1920). Eurasianists claimed that Russia belongs neither to the Slavic World, nor to the West; that it is a civilization in its own right, evolving from the "symbiosis" between Slavic (mostly Orthodox) and Turkic (mostly Muslim) ethnic groups. Eurasianism was barely known in the Soviet period (prominent historian and ethnographer Lev Gumilev, known as the "last Eurasianist," developed his version of the doctrine largely independent of the émigré community). Only after the collapse of the Soviet Union did the Eurasianism paradigm gain popularity, which was, in a way, a response to the post-Soviet Russia's geopolitical needs.

Indeed, while Eurasianists discarded the notion that Russia is an Asian country, they stressed that Russia's allies are not in Europe, but mostly in Asia. And it was Iran, an international pariah at the time, a country largely ignored by the early 19th-century Eurasianists, that emerged as a useful partner. In 1994, Moscow engaged in building the Bushehr nuclear plant, Iran's first commercial nuclear reactor, and started selling Iran sophisticated weapons. Tehran welcomed Russia's interest in close cooperation. Alexander Dugin, one of Russia's influential intellectuals, saw the Moscow-Tehran axis as a "Eurasian" counterbalance to what he perceived as a "hostile" America.

https://imrussia.org/en/analysis/3070-why-u-siran-conflict-suits-russia

Russia Is Updating Their Nuclear Weapons: What Does That Mean for the Rest of Us?

Rose Gottemoeller, Carnegie, January 29, 2020

In the big strategic game, the Russians and Americans have the same reason for modernizing their nuclear forces: they want to maintain parity. If the two sides have the same number of nuclear warheads deployed, then they will not be tempted to shoot at each other. They also have a reason to avoid an arms race that would entail constantly seeking more nuclear weapons to try to achieve superiority-however temporary. As expensive as nuclear weapons and their delivery vehicles are, parity has kept the costs down by holding the arms race in check. In the past few years, President Vladimir Putin does seem to be after nuclear weapons for another reasonto show that Russia is still a great power to be reckoned with. He has been trumpeting new and exotic systems that are unique, like the nuclear weapon delivery system known as the Burevestnik nuclear-propelled cruise missile.

These exotic systems have more of a political function than a strategic or security one. Their role is to signal Russia's continuing scientific and military prowess at a time when the country does not otherwise have much on offer. Devilishly expensive and sometimes dangerous to operate, they are unlikely to be deployed in big numbers, as a 2019 fatal testing accident of the Burevestnik shows. If U.S.-Russian arms control remains in place, such systems definitely will not be deployed in big numbers, because they would displace proven and highly reliable intercontinental ballistic missiles in the Russian force structure.

https://carnegieendowment.org/2020/01/29/ russia-is-updating-their-nuclear-weapons-whatdoes-that-mean-for-rest-of-us-pub-80895

The US has a backup plan to kill the Iran nuclear deal. It could spark a crisis at the UN.

Julia Masterson, Samuel M. Hickey, Bulletin of Atomic Scientist, January 30, 2020

Early in January, the European members of the 2015 nuclear deal with Iran made a risky move by triggering the deal's dispute resolution mechanism. Though it was a desperate attempt to save the agreement, it could, if not managed carefully, result in the reimposition of United Nations Security Council sanctions on Iran – effectively collapsing any remnants of the deal.

The potential reimposition of sweeping multilateral sanctions – a near-automatic consequence of Security Council referral – looms over the current political crisis. Of course, the Europeans may have no appetite to let things get that far. But irrespective of its current status in the nuclear deal, the United States may be able to outmaneuver the Europeans and trigger multilateral sanctions on Iran unilaterally.

https://thebulletin.org/2020/01/us-backup-planto-kill-iran-nuclear-deal-spark-crisis-at-un/

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

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Prepared by:

Ms Diya Deep Singh Ms Raj Rajeshwari Singh

Indian Pugwash Society

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