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Convenor

Amb. Sujan R. Chinoy

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A. India

ISRO to launch earth observation satellite on February 14

T.K. Rohit

The Hindu, February 07, 2022

After a rather muted 2021, the Indian Space Research Organisation (ISRO) is all set for its first launch of 2022 next week. ISRO plans to place, into orbit, an Earth Observation Satellite (EOS - 04) on board the PSLV C-52 on February 14. This will be the first launch for ISRO under the new chairman, S. Somanath. This will be ISRO's first launch of 2022; the radar-imaging satellite is designed to provide high-quality images under all weather conditions.

https://www.thehindu.com/news/national/tamilnadu/isro-to-launch-earth-observation-satelliteon-february-14/article38400805.ece

Explained | The BrahMos deal and India's defence exports

Dinakar Peri

The Hindu, February 08, 2022

On January 28, Philippines signed a \$374.96 million deal with BrahMos Aerospace Pvt. Ltd. for the supply of shore based anti-ship variant of the BrahMos supersonic cruise missile. This is the first export order for the missile which is a joint product between India and Russia.

https://www.thehindu.com/news/national/thebrahmos-deal-and-indias-defence-exports/ article38395523.ece

All eyes on Quad discussions as Ministers meet in Melbourne

Suhasini Haidar

The Hindu, February 10, 2022

Tensions between Russia and NATO countries and Russia-China ties that have been strengthened during the Beijing Olympics will serve as the backdrop for 'Quad Ministerial' talks among External Affairs Minister S. Jaishankar and Foreign Ministers of Australia, Japan and the United States being held in Melbourne. The fourth ministerial, that follows the first inperson summit of Quad leaders in Washington last year, is expected to review progress in the three key areas of cooperation identified by them: Covid -19, climate change and critical and emerging technologies, as well as ensuring a "rulesbased" global order.

The US and Japan are also keen to discuss rising tensions with North Korea that has conducted at least seven missile launches in January and leader Kim Jong Un has threatened to resume nuclear and longrange missile testing, an outcome that would take the peninsula to the brink, warn officials.

https://www.thehindu.com/news/national/alleyes-on-quad-discussions-as-ministers-meet-inmelbourne/article38408615.ece

Navy's largest exercise Milan to bring together over 35 countries

Dinakar Peri

The Hindu, February 12, 2022

Exercise Milan is scheduled to be held from February 25 to March 4 for which 46 countries have been invited. The Navy is set to hold the 12th President's Fleet Review (PFR) on February 21 at Visakhapatnam and few days from that it will host the largest multilateral exercise in this region, Milan 2022, which will see participation of all major Navies including Quad countries, Russia and from West Asia.

https://www.thehindu.com/news/national/ navys-largest-exercise-milan-to-bring-togetherover-35-countries/article38414936.ece

IIST has a role in ISRO's first launch of the year

Tiki Rajwi

The Hindu, February 12, 2022

INSPIRESat-1 one of the three satellites to be launched aboard PSLV C-52. The

Indian Space Research Organisation's (ISRO) first launch of the year, scheduled for Valentine's Day from Sriharikota, will be a thrilling moment for the Indian Institute of Space Science and Technology (IIST) at Valiamala here. The Polar Satellite Launch Vehicle C-52 (PSLV C-52/EOS-04) mission will have on board three satellites, and one of them is a small student satellite weighing just 8.1 Kg.

https://www.thehindu.com/news/national/kerala/ iist-has-a-role-in-isros-first-launch-of-the-year/ article38418892.ece

Hyderabad firm plays key role in ISRO's PSLV launch

The Hindu, February 14, 2022

ATL has been associated with ISRO for manufacturing various electronics and mechanical sub-systems

Indian Space Research Organisation (ISRO)'s latest Polar Satellite Launch Vehicle (PSLV C-52)'s successful mission into space once again saw a critical role played by the city-based Ananth Technologies Limited (ATL) in carrying out the 'sub-assemblies of various flight systems, integration, and checkouts'.

https://www.thehindu.com/news/national/ telangana/hyderabad-based-atl-plays-key-role-inisros-successful-pslv-launch/article65048368.ece

INSPIRESat-1 satellite healthy: IIST

The Hindu, February 14, 2022

The first signals from INSPIRESat-1, the student satellite launched aboard the Polar Satellite Launch Vehicle C-52 (PSLV C-52/EOS-04) mission, indicate that the satellite is 'healthy' and in orbit as planned, officials of the Indian Institute of Space Science and Technology (IIST) here said. It would study ionosphere dynamics and sun's coronal heating processes.

https://www.thehindu.com/news/national/kerala/ inspiresat-1-satellite-healthy-iist/ article65049546.ece

ISRO successfully puts three satellites into orbit on board the PSLV C-52

T.K. Rohit

The Hindu, February 15, 2022

ISRO's first launch of 2022 and under the new Chairman S. Somanath went off without a glitch, placing all the three satellites into their intended orbit with precision. Thick orange fumes from the Indian Space Research Organisation's PSLV C-52 briefly lit up the pre-dawn dark sky and Pulicat Lake as it soared into the skies with the silence of the morning broken by the booming noise of the launch vehicle that carried three satellites on board.

https://www.thehindu.com/news/national/ tamil-nadu/isro-successfully-puts-threesatellites-into-orbit-on-board-the-pslv-c-52/ article65047972.ece

Zooming in on the potential of India's geospatial sector

Bharat Lohani and Rajesh Mathur

The Hindu, February 15, 2022

The date, February 15, 2021 will be regarded as a watershed moment when new guidelines took effect to completely de-regulate the geospatial sector for Indians. As we celebrate the first anniversary of this moment, it is time to look back and assess its impact and identify the bottlenecks so that the full potential is realised. But the main hurdles are the lack of awareness among potential users and inadequate skilled manpower.

https://www.thehindu.com/opinion/op-ed/ geospatial-sector-in-india-and-possibilities/ article65048521.ece

India to prepare digital maps of all villages

The Hindu, February 15, 2022

India plans to prepare digital maps of all its 6,00,000 villages and pan-India 3D maps will be prepared for 100 cities, Unio Science Minister Jitendra Singh said on Tuesday at an event to mark a year of the updated geospatial policy guidelines. An ongoing scheme, piloted by the Ministry of Panchayati Raj, called SVAMITVA (Survey of Villages and Mapping with Improvised Technology in Village Areas) was launched by Prime Minister Narendra Modi in April 2020. The updated guidelines help private companies to prepare a variety of maps without needing approvals from a host of ministries and make it easier to use drones and develop applications via location mapping.

The "trinity of geospatial Systems, drone Policy and unlocked Space Sector will be the hallmark of India's future economic progress," Dr. Singh said in a statement. The complete geospatial policy would be announced "soon" as the liberalisation of guidelines had yielded very positive outcomes within a year's time. The Geographical Information based system mapping would also be useful in forest management, disaster management, electrical utilities, land records, water distribution, and property taxation, he added. Dr. Singh estimated the size of the Indian Geospatial market in 2020 to be ¹ 23,345 Crore including 1 10,595 crore of export which was likely to grow to ¹ 36,300 crore by 2025.

https://www.thehindu.com/news/national/indiato-prepare-digital-maps-of-all-villages/ article65052804.ece

Vizag getting ready for Presidential Fleet Review on February 21

Sumit Bhattacharjee

The Hindu, February 15, 2022

About 50 floating assets, including a couple of submarines, and close to 50 aircraft will be participating in the Presidential Fleet Review (PRF) scheduled to be organised on February 21 in Visakhapatnam. President Ram Nath Kovind, who is the Supreme Commander of the Armed Forces, will be reaching the city on February 20. He will review the fleet at the anchorage on February 21 from 9.30 a.m. onwards. https://www.thehindu.com/news/cities/ Visakhapatnam/vizag-getting-ready-forpresidential-fleet-review-on-february-21/ article65052364.ece

Over 1000 companies expected at Defexpo 2020 in Gujarat

Dinakar Peri

The Hindu, February 16, 2022

Defexpo 2022, to be held in Gujarat for the first time, is expected to see the participation of more than 1000 companies, including over 100 foreign companies from 55 plus countries that have sent confirmations so far, defence officials said. The 12th edition of DefExpo is scheduled from March 10 to 13 in Gandhinagar. "Spread over 1 lakh sq m., this year's defexpo will the largest since its inception in 1996. Over 900 exhibitors have so far confirmed participation, including over 100 foreign companies," a defence official said. "Confirmations and registrations have gone up since relaxation of the restrictions following the decline in COVID-19 cases." Over 50 defence ministers or Service chief-led delegations are expected at the show and officials said they expected confirmations to pick up in the next couple of weeks. Along with initiatives such as IDEX meant to boost start-ups, venture capitalists were being invited to the expo to identify prospective projects for investment, the official stated. Micro, Small and Medium Enterprises (MSME) have been offered 50% discount and 63 companies from Gujarat were participating under the Gujarat pavilion.

https://www.thehindu.com/news/national/over-1000-companies-expected-at-defexpo-2020-ingujarat/article65055983.ece

Successful PSLV C-52 mission brings cheer to private aerospace firm

Tiki Rajwi

The Hindu, February 16, 2022

The successful launch of the Polar Satellite Launch Vehicle C-52 (PSLV C-52/EOS-04) mission by the Indian Space Research Organisation (ISRO) on Monday has brought cheer to Ananth Technologies Ltd (ATL), a Hyderabad-based aerospace firm that has units in Thiruvananthapuram and Bengaluru. Under contract with the Vikram Sarabhai Space Centre (VSSC), ATL realised the sub-assemblies of various flight systems and stages of the PSLV C-52, including the integration and check-out, at its Thiruvananthapuram unit, the company said in a statement.

https://www.thehindu.com/news/national/kerala/ successful-pslv-c-52-mission-brings-cheer-toprivate-aerospace-firm/article65056153.ece

B. Russia

Sanctions waivers to help US, Iran return to compliance with JCPOA -Russian envoy

TASS, February 05, 2022

The United States' move to restore the sanctions waivers that allow Iran to receive assistance from other countries for the peaceful use of nuclear energy will expedite the return of Washington and Tehran to compliance with the Joint Comprehensive Plan of Action (JCPOA), Russia's Permanent Envoy to International Organizations in Vienna Mikhail Ulyanov stated.

https://tass.com/politics/1398517

Russia links U.S. nuclear arms talks to security demands – report

Reuters, February 07, 2022

The fate of nuclear arms controls talks between Russia and the United States will to a large extent depend on how the negotiations on Moscow's security demands progress, a senior Russian diplomat was quoted. Having amassed over 100,000 troops near the border with its pro-Western neighbour Ukraine, Russia wants the United States and NATO to pledge that Kyiv will not be allowed to join the military bloc. Washington has so far refused to provide such guarantees. Vladimir Yermakov, head of nuclear non-proliferation and controls at Russia's foreign ministry, told the RIA news agency that the urgent security guarantees discussions have taken priority over strategic arms controls talks.

https://www.reuters.com/world/europe/russialinks-us-nuclear-arms-talks-security-demandsreport-2022-02-07/

Viktor Chernomyrdin icebreaker to be upgraded to serve passengers

TASS, February 07, 2022

The world's biggest and most powerful non-nuclear icebreaker Viktor Chernomyrdin will be used as a passenger vessel for Arctic cruises. The icebreaker will take onboard up to 93 passengers at a time, press service of the sea port authority, Rosmorport, stated. The upgrade is due to be completed before April 1, according to the state purchases' web portal. The contract's cost is 4.2 million rubles (\$55,000). The contractor will install on the icebreaker additional lights, upgraded safety systems, and will do some other works, after which the Viktor Chernomyrdin will obtain the official class of a passenger vessel.

The Project 22600 icebreaker was built at the Admiralty Shipyard from December, 2012. It is the world's only project of a newgeneration innovative diesel-electric icebreaker with the propulsion power of 25 megawatts, of the Icebreaker8 class. The icebreaker's speed in clean water may be up to 17.8 knots, it may break ice of up to 2 meters at the speed of 2 knots. The vessel may work in various parts of the Arctic and Antarctic. The icebreaker may work amid the ice of up to 3 meters thick.

https://tass.com/economy/1398999

Talks on Iran nuclear deal 'seem to be at the final stage' — Russian envoy

TASS, February 07, 2022

The Vienna talks on the return to the Joint Comprehensive Plan of Action (JCPOA) on Iran's nuclear program are getting to the final stage, Russian Permanent Representative to International Organizations in Vienna and head of the Russian delegation at the consultations on reviving the JCPOA Mikhail Ulyanov said.

https://tass.com/world/1399003

Moscow aims to finish talks on Iranian nuclear deal by end of February – envoy

TASS, February 08, 2022

Moscow seeks to complete talks on the return to the Joint Comprehensive Plan of Action (JCPOA) on Iran's nuclear program in February this year, Russia's Permanent Envoy to International Organizations in Vienna Mikhail Ulyanov said. Ulyanov noted that Moscow categorically rejected the establishment of "artificial deadlines" for the completion of negotiations, but believes that they should not be delayed. "In terms of the Russian Federation, we are strongly against setting artificial deadlines. At the same time, we agree that negotiations should not drag on and if desired, they can be finished by the end of this month. This is real in the presence of political will and readiness of the parties to show reasonable flexibility," he added. According to Ulyanov, a final document on the restoration of the Iran nuclear deal has already been drafted.

https://tass.com/politics/1399261

Russian diplomat warns against steps that can undermine talks on Iran nuclear deal

TASS, February 08, 2022

Russia's Permanent Representative to the Vienna-based international organizations Mikhail Ulyanov has warned against reckless steps that can undermine the negotiating process on the restoration of the Joint Comprehensive Plan of Action (JCPOA) on the Iranian nuclear program. "There is always a probability that someone may make reckless steps that would simply undermine the Vienna talks. Such a possibility cannot be ruled out completely," he said in an interview with the Kommersant daily. "But such a situation will speak about the utter irresponsibility of the one who ventures such steps. At the current advanced stage of the talks - a very advanced stage - it is absolutely inadmissible to create excessive tensions, to put a positive outcome at risk."

https://tass.com/politics/1399249

Putin says he and Macron have close positions on Iran nuclear deal

TASS, February 08, 2022

President Vladimir Putin said after talks with his visiting French counterpart, Emmanuel Macron, that their positions on the situation around the Iran nuclear deal are very close. "We discussed the situation around the Iran nuclear deal and the restoration of the Joint Comprehensive Plan of Action (JCPOA) that was adopted in 2015 and approved by United Nations Security Council resolution 2231. We share the opinion that it is necessary to continue diplomatic efforts and encourage compromise solutions in the interests of saving this major document," he said. "We agreed that our positions on this matter are very close or, as diplomats say, coincide," he added.

According to the Russian leader, other current international and regional problems were touched upon during the talks with Macron. "We discussed the situation around Nagorno-Karabakh and noted the positive role of Russian peacekeepers, who ensure the ceasefire and help normalize peaceful life," Putin said, adding that they confirmed the major role of the OSCE Minsk Group cochairs, including it the resolution of pressing humanitarian and socioeconomic problems of the region. He also said that Macron informed him about the results of his recent videoconference with the Armenian and Azerbaijani leaders, and the European Council president.

https://tass.com/politics/1399383

Russia's new nuclear-powered sub to enter shipbuilders' trials in White Sea in June

TASS, February 08, 2022

The Project 885M (Yasen-M) second serialbuilt multi-purpose nuclear-powered submarine K-571 Krasnoyarsk currently under construction at the Sevmash Shipyard in Severodvinsk in Russia's northwest will take to the White Sea for shipbuilders' sea trials in early June, a source in the domestic defense industry told.

"The nuclear-powered submarine cruiser Krasnoyarsk will enter shipbuilders' sea trials in the first days of June 2022. In the White Sea, the shipbuilders will check the operation of its onboard equipment in field conditions and inspect compliance of its seaworthiness and performance characteristics with the designed parameters," the source said. The vessel (factory No. 163) is undergoing start-up and adjustment works, which will soon transform into dockside trials, he said. After the shipbuilders' sea trials, the nuclearpowered submarine Krasnoyarsk will enter state trials to check its armament systems. At the end of this year, the nuclear-powered submarine cruiser is set to enter service with the Russian Pacific Fleet, the source specified.

https://tass.com/defense/1399565

Possible deployment of nuclear weapons in Belarus raised by French leader – Kremlin

TASS, February 08, 2022

French President Emmanuel Macron initiated the discussion on the possible deployment of Moscow's nuclear weapons in Belarus during the talks with Russian leader Vladimir Putin, Kremlin Spokesman Dmitry Peskov said. Peskov stated that it was President Macron who put forward this issue at a meeting on February 7. At the same time, the Kremlin spokesman emphasized that he had nothing to add to the issues raised at the press conference.

Earlier, following the talks with the Russian head of state, the French leader said that he

expressed some concerns over the new draft of the Belarusian constitution and President Alexander Lukashenko's words about nuclear weapons, noting that he received assurances from Putin regarding this issue. Belarusian Foreign Minister Vladimir Makei said that the country was ready to deploy nuclear weapons in case of a threat from NATO. Lukashenko has previously noted that Minsk would propose Moscow to take such steps if the alliance deployed nuclear weapons in Poland.

https://tass.com/politics/1399669

Rosatom's IT integrator to work on Northern Sea Route digital services platform

TASS, February 08, 2022

Rosatom entered an agreement on the Northern Sea Route's digital services platform with the Grinatom company, Rosatom's IT integrator, press service of the nuclear fleet authority, Atomflot, said. "The platform's implementation will mean the use of various digital services to synchronize the fleet's logistics and dispatcher services," Atomflot said. "The system will serve up to 1,500 unique users, which will have access to various digital services."

According to Rosatom's Director on information technologies Evgeny Abakumov, the digital services platform will be a major IT solution on the way towards the Russian Arctic's digital transformation. "The platform will manage many parameters referring to logistics of vessels; the digital services must be highly accessible and their reliable work must be ensured round-the-clock," the press service quoted him as saying. Rosatom, a state-run corporation, has been appointed responsible for the new platform; it is also the infrastructure operator of the Northern Sea Route. The corporation has been granted the right to make suggestions regarding the state policy in NSR's development and sustainable work. Additionally, Rosatom will coordinate navigation terms for

precise and safe sailing in the Northern Sea Route waters.

https://tass.com/economy/1399693

Eco-friendly gas alternatives can be implemented in Russian regions

TASS, February 08, 2022

Russian President Vladimir Putin tasked the government to present proposals on implementation of alternative eco-friendly energy sources in regions where natural gas cannot be used by September 1, 2022, according to the presidential assignment. "Proposals to be submitted on measures aimed at widening use of alternative ecofriendly energy sources (subject to their cost efficiency) instead of natural gas transported with the use of the United Gas Supply System in Russian Federation constituencies determined in accordance with subparagraph a) of this paragraph," the document says. The Cabinet should also find funding sources for all these solutions. Currently, in addition to pipeline gas, liquefied natural gas, nuclear energy, hydropower, wind and solar energy are viewed as eco-friendly energy sources in Russia.

https://tass.com/economy/1399755

Russian, Iranian top diplomats discuss situation around Iran nuclear deal

TASS, February 08, 2022

The situation around the Joint Comprehensive Plan of Action (JCPOA) on the Iranian nuclear program in the context of the Vienna talks was the focus of a telephone conversation between Russian and Iranian Foreign Ministers, Sergey Lavrov and Hossein Amir-Abdollahian, the Russian foreign ministry said. According to the ministry, the top diplomats also exchanged views on the results of Iranian President Ebrahim Raisi's recent visit to Russia and called for the further expansion of cooperation in all areas "on the basis of the leaders' agreements."

Position in favor of launching Nord Stream 2 prevailing in Germany – ambassador

TASS, February 09, 2022

The prevailing position in Germany is in favor of commissioning the Nord Stream 2 gas pipeline, Russian Ambassador to Berlin Sergey Nechayev said on February 08. According to the diplomat, Russian gas satisfy a larger part of the German economy's demand in the post-pandemic period. Nord Stream 2 is to be registered as an independent operator for the launch of the pipeline's operation. Germany's Federal Network Agency suspended the procedures certification due to organizational and legal matters on November 16, 2021. The regulator noted that the certification procedure would remain suspended until the operator's main assets and human resources were transferred to the ownership of its German subsidiary. Nord Stream 2 AG established a German subsidiary, Gas for Europe GmbH, on January 26, 2022. The company will operate the German section of the pipeline.

https://tass.com/world/1399959

Iran to continue consultations with Russia regarding Western sanctions — top diplomat

TASS, February 09, 2022

Tehran will continue consultations with Russia on having Western sanctions against the Islamic Republic lifted as part of a nuclear deal, Iran's Foreign Minister Hossein Amir Abdollahian said during Tuesday's phone conversation with his Russian counterpart Sergey Lavrov.

https://tass.com/world/1399995

Russia analyzing US proposals on security, information keeps coming, says senior diplomat

TASS, February 09, 2022

Russia continues analyzing the US reaction to security guarantees and

https://tass.com/world/1399811

information keeps coming in, Russian Deputy Foreign Minister Sergey Ryabkov said. "We are now focused on completing an analysis of the [US] reaction and information continues to arrive. We also perceive as a reaction the performance staged by Western countries and some of their sycophants within the OSCE framework in Vienna yesterday. The events demonstrated the OSCE's total lack of professionalism for dealing with serious issues formulated in our documents and addressed to the US and NATO," the senior Russian diplomat said. Instead of its claims to Russia, the West should give a serious reply to Moscow's security demands, Ryabkov pointed out.

https://tass.com/politics/1400301

Arktika nuclear icebreaker leads vessels from Chukotka to Arkhangelsk

TASS, February 10, 2022

The Arktika nuclear-powered icebreaker and the Kapitan Dranitsyn icebreaker escorted two ships from the Pevek port (Chukotka) to Arkhangelsk, the regional government told TASS. The ships had delivered to the peninsula 14,000 tonnes of general cargo, construction materials and food products for the region. In early autumn, a logistics crisis delayed delivery terms - cargo from the Suez Canal was redirected to the Trans-Siberian Railway. The delayed containers for Chukotka, Kamchatka, Sakhalin and the Magadan Region piled up in the Primorsky Region. The Arktika universal nuclear-powered icebreaker is the lead vessel of Project 22220. The project's icebreakers are the most powerful icebreakers in the world.

https://tass.com/economy/1400999

Russia, UK see chances to resume Iranian nuclear deal, Lavrov says

TASS, February 10, 2022

Russia and the UK agree that a long journey is required in order to implement the existing chances for the revival of Iran's nuclear deal, Russian Foreign Minister Sergey Lavrov said at a joint press conference following his talks with his British counterpart Liz Truss. "On the Iranian subject, we are of the same opinion that there are chances to fully resume the implementation of the Joint Comprehensive Plan of Action in the near future, but a long journey is still ahead," he noted.

https://tass.com/world/1401009

Moscow can't accept collective EU, NATO response to message on indivisibility of security

TASS, February 11, 2022

Russia cannot accept the collective response of the EU and NATO to Russian Foreign Minister Sergey Lavrov's message on the indivisibility of security, Foreign Ministry Spokeswoman Maria Zakharova stated. Zakharova noted that the responses of NATO Secretary General Jens Stoltenberg and Vice-President of the European Commission Josep Borrell did not contain a substantive reaction to the question. "Let's recall that Lavrov's message was addressed to the foreign ministers of 37 European and North American states. And it emphasized specifically that we were expecting a comprehensive response in a national capacity," she said.

https://tass.com/politics/1401777

No response to Russia's key security demands — Russian defense minister

TASS, February 11, 2022

Russian Defense Minister Sergey Shoigu drew attention of his British counterpart, Ben Wallace, to the lack of response from the United States and NATO to Russia's key security demands, the Russian defense ministry said on February 11 after their talks. On December 17, 2021, the Russian foreign ministry released a draft agreement on security guarantees between Russia and the United States, and a draft agreement on ensuring the security of Russia and NATO member states. The proposed measures include guarantees that NATO will not advance eastward, including the accession of Ukraine and other countries into the alliance, as well as nondeployment of serious offensive weapons, including nuclear ones. The sides have had several rounds of consultations in various formats but no agreements have yet been announced.

https://tass.com/defense/1401919

Talks on restoration of Iran nuclear deal moving ahead — Russian diplomat

TASS, February 12, 2022

The Vienna talks on the restoration of the Joint Comprehensive Plan of Action (JCPOA) on the Iranian nuclear program are moving ahead, Russia's Permanent Representative to the Vienna-based international organizations and the head of the Russian delegation Mikhail Ulyanov said on February 11. Earlier, the Russian diplomat said that the talks have entered the final stretch. The eighth round of talks kicked off on December 27, 2021. It is expected to be the last one as the negotiators are set to finish the work by early February.

https://tass.com/politics/1402017

"Appropriate means" used against US submarine in Russian waters defense ministry

TASS, February 12, 2022

A nuclear-powered submarine belonging to the US Navy defied the warnings to leave Russia's territorial waters and departed after "appropriate means" had been used, the Russian Defense Ministry said. "Under the guiding documents on protection of the state border of the Russian Federation in the underwater environment, the crew of the Pacific Fleet's frigate Marshal Shaposhnikov used appropriate means. The US submarine used a self-propelled simulator to split the target image on radar and acoustic control means into two parts and retreated from Russian territorial waters at a maximum speed," the ministry said.

Russia hands note to US military attache over submarine incident near Kuril Islands

TASS, February 12, 2022

Russia has handed a note to US military attache in connection with the US nuclearpowered submarine's incident in Russia's waters near the Kuril Islands, the Defense Ministry said. The representative of the US Department of Defense was informed that the US submarine's actions are assessed as a blatant violation of international law. The US Navy vessel's provocative actions posed a threat to Russia's national security. The Russian Defense Ministry urges the US to take steps to rule out such situations in the future. The ministry reserves the right to employ all measures in its territorial waters to ensure Russia's security.

https://tass.com/defense/1402297

US submarine did not enter Russian territorial waters, the Pentagon says

TASS, February 13, 2022

The US Department of Defense presented its version in connection with the incident with the US nuclear-powered submarine near the Kuril Chain, according to which submarine was moving the in international waters. "There is no truth to the Russian claims of our operations in their territorial waters," US Navy Captain Kyle Raines, the US Indo-Pacific Command spokesman, told TASS. "I will not comment on the precise location of our submarines but we do fly, sail, and operate safely in international waters," he noted. According to the Russian Defense Ministry, the US Navy's Virginia-class submarine was detected on February 12, 2022 at 10.40 am (Moscow Time) in the area of the Pacific Fleet's drills near the Urup Island of the Kuril Chain. The submarine ignored the demand to leave Russia's territorial waters and left only after the appropriate means were used.

https://tass.com/world/1402443

https://tass.com/defense/1402259

Shoigu says US submarine went more than 4 km into Russian waters

TASS, February 14, 2022

A US submarine went more than 4 km into Russian waters and efforts to drive it away took about three hours, Russian Defense Minister Sergey Shoigu said at a meeting with the country's President Vladimir Putin. "A Pacific Fleet group discovered during exercises near the Kuril Islands a submarine, most likely from the US," Shoigu said. "As a result of efforts that took almost three hours the sub was driven away from the Russian waters where it was more than 4 km inside, quite a lot for the islands." "As a result of special efforts, which were repeated three times, the sub was driven away from the Russian waters," he added.

https://tass.com/defense/1403043

Russia ready to participate in new nuclear power plants in construction in Brazil – Putin

TASS, February 16, 2022

Russia is ready to take part in building new power units of nuclear power plants in Brazil, President Vladimir Putin said at the press conference after bilateral talks. "Rosatom is exporting fuel for Brazilian nuclear power plants and radio isotopes for medical purposes. Our corporation is at the same time ready to take part in construction of new power units on the territory of Brazil, including small capacity nuclear power plants in onshore and offshore versions, where it has accumulated unique experience and has technologies without global peers," the Russian leader said.

https://tass.com/economy/1404599

Any missile launch may be perceived as nuclear strike amid tensions — security official

TASS, February 16, 2022

Any missile launch may be perceived as a potential nuclear strike amid persisting tensions, Deputy Secretary of Russia's Security Council Mikhail Popov said in an interview with the Rossiyskaya Gazeta daily on Wednesday. "Hardly anyone, except specialists, comes to realize that modern systems spot launches of missiles quite quickly but cannot identify whether these missiles carry nuclear weapons. That is why, any missile launch may be perceived as a nuclear strike amid the tense military and political situation," the security official cautioned.

https://tass.com/defense/1404657

Putin, Bolsonaro call for action to avoid space arms race

TASS, February 16, 2022

Russian President Vladimir Putin and his Brazilian counterpart Jair Bolsonaro have reaffirmed that joint efforts are needed to avoid an arms race in outer space, according to their joint statement, which was posted on the Russian president's website after the two leaders' talks in the Kremlin. "The heads of state have reaffirmed the need to maintain the peaceful use of outer space and to safeguard sustainable space activities. The presidents have also reaffirmed the need for joint action to avoid an arms race in space," the statement says.

https://tass.com/politics/1404667

Russian diplomat: it's time to make final decisions at Vienna talks on JCPOA

TASS, February 16, 2022

The Vienna talks on the restoration of the Joint Comprehensive Plan of Action (JCPOA) on the Iranian nuclear program have reached a point when it is time to make final decisions, Russia's Permanent Representative to the Vienna-based international organizations Mikhail Ulyanov, who leads the Russian delegation to the Vienna talks, said. "I agree. It is high time to make final decisions at the Vienna Talks on JCPOA," he wrote on his Twitter account, commenting on Iranian Deputy Foreign Minister and head of the Iranian delegation Ali Bagheri's tweet that the parties to the talks are closer to an agreement on the nuclear deal than ever before. Earlier, Ulyanov said that the talks have reached the final stretch.

https://tass.com/world/1404763

Shipbuilders to deliver most powerful surface ship to Russian Navy after upgrade

TASS, February 17, 2022

The Project 11442M heavy nuclear-powered missile cruiser Admiral Nakhimov set to become the Russian Navy's most powerful surface ship after its repairs and upgrade at the Sevmash Shipyard is being prepared for its handover," the Shipyard's press office reported. "The Sevmash Shipyard has begun setting up and training the delivery team for the Project 11442M ship. The crew will comprise workers, builders, adjustment and test engineers, designers, technologists and specialists of other professions. Overall, the delivery team will comprise over 1,000 people," the press office said. After all the works are concluded, the warship will deploy to the sea where the delivery team and the crew will check the vessel in all the modes of its operation, it added.

https://tass.com/defense/1405191

US gives no response to Russia's proposal to return nuclear weapons to its soil – MFA

TASS, February 17, 2022

The United States has provided no response to Russia's proposal to bring back nuclear weapons to its soil and refrain from further deploying them outside its territory, the Russian Foreign Ministry said in a statement posted on its website, outlining Russia's response to the US reply on security guarantees. "In its document, the United States did not respond to such an element of the package of our proposed measures as returning nuclear weapons deployed outside its territory to its national soil and refraining from further deploying them outside its national territory, and confined itself to mentioning the need to address the problem of non-strategic nuclear weapons on the platform of a strategic dialogue, without taking into account the specifics of their location and other factors affecting the security of the parties," the document reads.

https://tass.com/politics/1405451

Russia to conduct strategic deterrence force drills under Putin's direction on February 19

TASS, February 18, 2022

The Russian Armed Forces will conduct scheduled strategic deterrence force drills on February 19 under the direction of Russia's President Vladimir Putin, the Defense Ministry reported. "On February 19, 2022, a scheduled exercise of the strategic deterrence force will take place under the direction of Supreme Commander-in-Chief Vladimir Putin, during which ballistic and cruise missiles will be launched," the ministry said in a statement. As the Russian Defense Ministry emphasized, "the strategic deterrence force drills have been planned in advance to inspect the preparedness of military command centers, launch combat teams, the crews of combat ships and strategic missile carriers for accomplishing assigned missions and the reliability of the strategic nuclear and conventional forces' weapons."

https://tass.com/defense/1405793

Putin to oversee strategic drills on February 19 from situation control center — Kremlin

TASS, February 18, 2022

Russian President Vladimir Putin will oversee strategic deterrence force drills scheduled for February 19 from the situation control center, Kremlin Spokesman Dmitry Peskov said. "Putin will most likely be in the situation control center. Such drills and training launches, naturally, can't be held without the head of state. You know about the famous nuclear suitcase, the red button, and so on," Peskov told reporters. The details of how President Putin will participate in the drills do not belong to the public domain, the Kremlin spokesman pointed out. The presence of Belarusian President Alexander Lukashenko at the drills will depend on their joint decision with Putin, Peskov elaborated. "If they decide to be there together, this means that they will be there together. But again, this will depend on a decision by the heads of state," the Kremlin spokesman explained.

https://tass.com/defense/1405845

Putin to attend military drills together with Lukashenko on February 19

TASS, February 18, 2022

Russian President Vladimir Putin said on Friday he would participate in military cooperation measures together with his counterpart Belarusian Alexander Lukashenko on February 19. "Of course, we will talk about the regional situation and assess how military cooperation is developing," the head of the Russian state said at a meeting with Lukashenko in the Kremlin, suggesting the agenda. "Now an active phase of military drills is in progress and tomorrow we will participate in one of serious measures in this series of military cooperation," Putin said.

https://tass.com/defense/1405955

Russian envoy sees 'real chance' to agree on Iran nuclear deal in February

TASS, February 18, 2022

The Vienna talks to restore the Joint Comprehensive Plan of Action for the Iranian nuclear program are in the homestretch and chances are high that an agreement could be reached before the end of this month, Russia's Permanent Representative to the Vienna-based international organizations Mikhail Ulyanov, who leads the Russian delegation to the Vienna talks. "The Vienna talks are in the homestretch," he said. "There's a real chance to arrive at a result, which has been sought during the many months of this work, and agree to restore the JCPOA." Earlier, Iran's Deputy Foreign Minister Ali Bagheri said on Twitter that the talks are closer than ever to reaching an agreement on the nuclear deal. Ulyanov responded, also on Twitter, that it was time to make final decisions.

https://tass.com/politics/1405981

All missiles hit targets during Russia's strategic drills directed by Putin – Kremlin

TASS, February 19, 2022

All the ballistic and cruise missiles launched during Russia's strategic deterrence force drills held under the direction of Supreme Commander-in-Chief of the Russian Armed Forces President Vladimir Putin of Russia successfully hit the designated targets, the Kremlin's press office reported on its website. "Under the direction of Supreme Commander-in-Chief of the Armed Forces Vladimir Putin, launches of ballistic and cruise missiles were conducted during a scheduled exercise of the strategic deterrence forces," the statement says.

https://tass.com/defense/1406409

Russia needs iron-clad security guarantees — Russia's deputy envoy to UN

TASS, February 20, 2022

Only firm legal guarantees will suit Russia in concluding European security agreements, Russia's deputy ambassador to the UN, Dmitry Polyansky, said. "Only iron-clad legally binding guarantees this time," Polyansky tweeted. The diplomat attached to his post a reference to a story in Der Spiegel magazine confirming that the Western countries had really promised the Soviet Union's leadership in 1991 not to expand NATO to the east. The story was written on the basis of archive documents discovered by US political scientist, Joshua Shifrinson, of Boston Univeristy.

https://tass.com/world/1406471

US, NATO must respond on Russia's security guarantees demands substantively – Putin

TASS, February 20, 2022

The United States and NATO must give a concrete and substantive response to Russia's proposals on security guarantees, Russian President Vladimir Putin said during a telephone conversation with his French counterpart. Emmanuel Macron, Putin "once again stressed the necessity for the United States and NATO to take Russia's demands on ensuring security guarantees seriously and to respond to them in a concrete and substantive manner," the Kremlin said after their phone call. Russia referred its proposals on security guarantees to the United States and NATO in December 2021. The proposed measures include guarantees that NATO will not advance eastward, including the accession of Ukraine and other countries into the alliance, as well as non-deployment of serious offensive weapons, including nuclear ones. Russia also demands the NATO military infrastructure be retreated to the 1997 borders.

https://tass.com/russia/1406687

C. China

Has China taken a step towards a US-style pre-emptive strike policy?

Minnie Chan

South China Morning Post, February 06, 2022

China's shift towards joint operations in space, cyberspace and nuclear technology point to a "proactive defence" strategy that could include a pre-emptive strike, according to a new international study. This more aggressive strategy could destabilise regional security as China gains strength but its similarities with the approaches taken by the United States and Russia could help the three powers better understand each other, and eventually encourage conflict prevention and crisis management talks, according to a report by the Stockholm International Peace Research Institute (SIPRI). "Changes to China's postures and technologies indicate that its concept and practice of 'active defence' may be converging with more forward-leaning and even pre-emptive 'proactive defence'," the report said.

https://www.scmp.com/news/china/military/ article/3165984/has-china-taken-step-towardsus-style-pre-emptive-strike-policy

Why China's J-20 Mighty Dragon may lack the firepower to use laser weapons

Kristin Huang

South China Morning Post, February 06, 2022

China's ambitions to arm its most advanced fighter jet with hi-tech weapons, such as lasers or particle beams, may be frustrated by its underpowered engines, according to military analysts. An increasing number of countries are researching cutting-edge directed-energy weapons (DEW), including the United States which is looking into their use to target hypersonic missiles and gliders. The J-20, which is central to the country's plans for military modernisation, would be an obvious choice to be armed with these weapons - which can attack a variety of targets from long-range using highly focused energy such as lasers, microwaves, particle beams, and sound beams.

https://www.scmp.com/news/china/military/ article/3165856/why-chinas-j-20-mightydragon-may-lack-firepower-use-laser

US-China tech war: Beijing calls the America Competes Act a product of Cold War mentality

Yaling Jiang

South China Morning Post, February 08, 2022

Following the passage of a US bill that stands to intensify a technology rivalry with China by trying to boost American competitiveness, state media and officials across the Pacific criticised the document as evidence of Washington's "Cold War mentality". The America Competes Act of 2022, a 3,000-page bill passed by the House of Representatives on Friday, earmarks US\$52 billion in funding for semiconductors, US\$45 billion to strengthen supply chains of critical goods, and US\$160 billion for scientific research and innovation. It also includes a long list of motions addressing concerns over alleged human rights abuses in Xinjiang, a crackdown on democracy in Hong Kong and heightened tensions over Taiwan. The act will be reconciled with a similar bill called the US Innovation and Competition Act that was passed in the Senate last June. That bill allotted US\$250 billion in funding for similar causes. Once reconciled, the final bill will go to President Joe Biden, who is expected to sign it into law.

https://www.scmp.com/tech/tech-war/article/ 3166151/us-china-tech-war-beijing-calls-americacompetes-act-product-cold-war

Chinese navy puts fleets through combat-readiness paces

Kristin Huang

South China Morning Post, February 11, 2022

The Chinese military embarked on three sets of simultaneous maritime exercises this week just days after the United States and Japan held a massive joint naval exercise in the western Pacific. In the East China Sea, China's Eastern Theatre Command carried out combat exercises to improve air defences and manoeuvrability and put main guns to the live-fire test, state broadcaster CCTV reported. The drill involved three destroyers including the Type 052D Xiamen, which is much more advanced than its predecessors.

https://www.scmp.com/news/china/military/ article/3166690/chinese-navy-puts-fleets-throughcombat-readiness-paces

US holding fire on rail gun development but China takes aim with planned tests

Stephen Chen

South China Morning Post, February 11, 2022

China is to step up its testing of rail guns to an unprecedented level, according to a military researcher, as the US gives up on the futuristic weapon after decades of research. A rail gun is a kinetic energy weapon that can fire a projectile at seven times the speed of sound with electromagnetic force and hit a target over 200km (125 miles) away – more than 10 times the typical range of a cannon. The technology faces a major challenge: the fast-moving projectile and high-voltage electric current could cause irreparable wear on the rail or inner wall, reducing the gun's lifespan and accuracy.

https://www.scmp.com/news/china/military/ article/3166582/us-holding-fire-rail-gundevelopment-china-takes-aim-planned

Was it Beijing testing Taiwan's defences with unidentified Matsu island flyover?

Minnie Chan

South China Morning Post, February 11, 2022

Beijing could be trying to test Taiwan's selfdefence counter-strike capabilities, Taiwanese military analysts said, after an unidentified aircraft recently flew over a Taipei-controlled island off mainland China's southeastern coast. Residents of Tungyin, a frontline islet under Taiwan's Matsu islands cluster, said they spotted an unidentified aircraft flying overhead at 2.45pm on February 5, while video footage from the watchtower monitor showed an aircraft crossing the skies and flying out towards the east. The military commanding centre of Tungyin confirmed that "a fixed-wing twin-propeller aircraft [had] briefly entered the airspace and soon left". It said air-defence troops stationed on the island "had closely monitored the process throughout", but failed to give details on what type of aircraft it was, its take-off and landing points, or what kinds of action had been taken to deal with the intrusion.

https://www.scmp.com/news/china/military/ article/3166762/was-it-beijing-testing-taiwansdefences-unidentified-matsu

Chinese military plays game of drones from Himalayas to South China Sea

Minnie Chan

South China Morning Post, February 12, 2022

Drones are playing a growing role in China's military operations, from the Himalayan border areas to the depths of the seas off its eastern and southern coasts, as the People's Liberation Army embeds the technology in nearly every sphere of operations. Recent satellite images, as well as media and academic reports, have confirmed a significant stepping up in the deployment of drones, developed for an array of uses, in joint combat operations and strategies. Chinese state media have showed a range of drones undergoing high-altitude testing in the Himalayas, with a focus on studying joint operation tactics with different troops on the ground, intelligence collection and delivery of supplies.

https://www.scmp.com/news/china/military/ article/3166475/chinese-military-plays-gamedrones-himalayas-south-china-sea

Facebook video of 'new Chinese submarine' gets experts' tongues wagging

Minnie Chan

South China Morning Post, February 13, 2022

A submarine shown in a video posted on social media could be a new, smaller Chinese class prioritising stealth and low cost, and used to counter drones, experts said. Video footage posted on Facebook in a group called "Comments on the PLA" appeared to show an unknown type of Chinese submarine surfacing in a reservoir. It appeared to be undergoing early-stage trials, because the footage, posted by a user called Liu Chengliang, showed two white stripes printed on the sail, as is commonly seen on new Chinese submarines during early tests.

https://www.scmp.com/news/china/military/ article/3166756/facebook-video-new-chinesesubmarine-gets-experts-tongues

Mainland Chinese Y-12 plane sent to test Taiwan's frontline response, island's defence ministry says

Minnie Chan

South China Morning Post, February 15, 2022

Taiwan's defence ministry confirmed that a small civilian aircraft from mainland China flew close to a Taipei-controlled islet earlier this month in what the ministry said was a test of the self-ruled island's defences. Taiwanese air force chief of staff Huang Chih-wei said in Taipei that a Y-12 mainland transport plane flew very close to Dongyin, a frontline islet in Taiwan's Matsu island cluster, on February 5. Dongyin is just 16km (10 miles) from the mainland city of Fuzhou and hosts major missile and radar complexes, including the Tien Kung, or Sky Bow, and Hsiung Feng anti-aircraft missiles. The confirmation came 10 days after Dongyin residents told local media they had spotted an aircraft.

https://www.scmp.com/news/china/military/ article/3167152/mainland-chinese-y-12-planesent-test-taiwans-frontline

Chinese scientists say a cheap, lightweight foam could improve hypersonic weapons

Stephen Chen

South China Morning Post, February 17, 2022

Chinese scientists say they may have found a coating material to improve the performance of future hypersonic weapons: carbon foam. The team at the China Aerodynamics Research and Development Centre said their testing – carried out in a wind tunnel – suggested the material could reduce the impact of shock waves by more than 20 per cent. And they said it could improve a weapon's aerodynamic stability by up to two orders of magnitude at the hypersonic speed of Mach 6.

https://www.scmp.com/news/china/science/ article/3167292/chinese-scientists-say-cheaplightweight-foam-could-improve

Guangdong holds live-fire drill in archipelago amid crackdowns on trafficking and Covid-19

Minnie Chan

South China Morning Post, February 17, 2022

The southern Chinese province of Guangdong has staged a live-fire drill in waters off the Pearl River Estuary, according to the maritime authority. The China Maritime Safety Administration's Guangdong bureau announced the exercise in a notice, saying it would take place between 9am and 6pm on February 17 in the southern Wanshan archipelago, about 100km (62 miles) off Hong Kong. The 80 sq km drill zone is the regular training area for the Guangdong coastguard, according to earlier reports. No details of the drill were disclosed, but observers said it was likely to have involved the coastguard.

https://www.scmp.com/news/china/military/ article/3167442/southern-chinese-province-holdslive-fire-drill-archipelago

China's military 'gets final say on weapons' with new combatreadiness rules

Minnie Chan

South China Morning Post, February 19, 2022

China has unveiled new rules to ensure the People's Liberation Army has a direct say on the design, testing and assessment of weapons systems, according to military experts. The changes, announced last weekend and endorsed by Central Military Commission chairman Xi Jinping, are part of a bigger, years-long push to overhaul the armed forces and create a modern, combatready military. "The main purpose of the regulations is to let the PLA make the final decision, because they are the weapon consumers," said Zhou Chenming, a researcher from the Yuan Wang military science and technology think tank in Beijing.

https://www.scmp.com/news/china/military/ article/3167605/chinas-military-gets-final-sayweapons-new-combat-readiness

How does converting a Chinese navy ship into a coastguard vessel aid Beijing's maritime mission?

Kristin Huang

South China Morning Post, February 20, 2022

Converting naval corvettes into China Coast Guard ships could boost the power of the enforcement agency and tackle sensitive maritime issues in a more flexible way, according to a Chinese journal. "China's maritime law enforcement environment has become increasingly serious as foreign countries led by the United States complicated issues regarding the Diaoyu Islands and sensitive South China Sea islands," said an article published this month in the latest edition of the Chinese magazine Naval and Merchant Ships.

https://www.scmp.com/news/china/military/ article/3167602/how-does-converting-chinesenavy-ship-coastguard-vessel-aid

Taiwan reveals plans for live-fire drills at islets near Chinese mainland

Lawrence Chung

South China Morning Post, February 20, 2022

Taiwan will stage a series of live-fire drills next month at several islets under its control, including two close to the Chinese mainland, to test the combat readiness of its forces there. The drills come amid growing concerns that cross-strait conflict could become imminent if the mainland's People's Liberation Army (PLA) were to seize one of the islets to force self-ruled Taiwan to the table for reunification talks. According to notices issued by the island's armed forces to alert ships and planes not to approach the live-fire sites, Taiwan's artillery, missile and other troops stationed in Dongyin, Quemoy (also known as Kinmen) and Penghu (also called the Pescadores) will stage the exercises on March 16 and 17.

https://www.scmp.com/news/china/military/ article/3167686/taiwan-reveals-plans-live-firedrills-islets-near-chinese

D. Pakistan

Fuel cost for power production more than doubles

The Dawn, February 20, 2022

The cost of fuel for electricity generation in January increased 101.5 per cent to Rs12.22 per unit on a year-on-year basis, according to data released by the National Electric Power Regulatory Authority. The increase in the fuel cost, which is one of the three components of the final rate that power producers charge their government-backed buyer, was 48.3pc on a month-on-month basis. The sharp increase was because of a rise in furnace oil, high-speed diesel (HSD), coal and re-gasified liquefied natural gas (RLNG)-based cost of generation, according to Tahir Abbas, head of research at Arif Habib Ltd. The four of the 11 fuel sources contributed 61.1pc to the generation mix versus a collective share of 55.7pc a year ago. Total power generation stood at 8,797 gigawatt hours (11,824 megawatts) in January, up 8.9pc from the same month of last year. On a month-on-month basis, however, power generation registered a slight drop of 0.3pc. The largest contributor to the power mix in January was coal (33.2pc), up 9.4 percentage points from the preceding month. Both nuclear and gas were the second largest contributors to the power mix with a share of 14.4pc each. Their respective shares were 17.5pc and 13.8pc, respectively, in December 2021.

HSD-based plants produced 592GWh of electricity last month, up almost 1,200pc from a year ago. The jump in HSD-generated units is in response to a 31.7pc dip in RLNGbased production as gas prices surged in international markets. In addition, production from hydel-based plants also dropped almost 52pc in January on a yearon-year basis. Nuclear power witnessed the second highest yearly jump (48.3pc) in terms of units generated in January following the commissioning of a 1,100MW plant in May 2021. The country recorded its highest-ever power generation of 136,572GWh in the last calendar year, up 10.6pc from 2020. As for the last fiscal year, electricity generation went up 7pc while the economy grew 5.4pc.

https://www.dawn.com/news/1676074/fuelcost-for-power-production-more-than-doubles

E. Europe

Iran nuclear talks will resume on Tuesday, EU confirms

Reuters, February 08, 2022

Indirect talks in Vienna between Iran and the United States on reviving the 2015 Iran nuclear deal will resume on Tuesday, the European Union, which is coordinating the talks, confirmed on Monday. "Following a short break, the 8th round of negotiations in Vienna in the framework of the Joint Comprehensive Plan of Action (JCPOA) will resume tomorrow, on Tuesday 8 February," the EU said in a statement. Envoys headed home 10 days ago to ask their bosses to help resolve the thorniest remaining issues.

https://www.reuters.com/world/iran-nucleartalks-will-resume-tuesday-eu-confirms-2022-02-07/

Talks to salvage Iran nuclear deal resume quietly in Vienna

Francois Murphy Reuters, February 08, 2022

Indirect talks between Iran and the United States on salvaging Tehran's 2015 nuclear deal with world powers resumed on Tuesday after a 10-day break, but envoys gave little away as to whether they were closer to resolving various thorny issues. Delegates say the talks have made limited progress since they resumed in November after a five-month hiatus prompted by the election of hardline Iranian President Ebrahim Raisi. Negotiations accelerated last month but a number of vital issues remain unresolved and Western powers say little time remains before Iran's nuclear advances make the 2015 deal restricting them redundant. Envoys went home 10 days ago seeking decisions from their political bosses to hurry things along. As officials from Iran, the United States, Russia, China, France, Germany, Britain and the European Union began meeting

in various formats on Tuesday, it was not immediately clear how much progress had been enabled by any political decisions.

https://www.reuters.com/world/middle-east/talkssalvage-iran-nuclear-deal-resume-quietly-vienna-2022-02-08/

European scientists set nuclear fusion energy record

Reuters, February 10, 2022

European scientists on Wednesday announced fresh progress in the drive to make nuclear fusion a practical, safe and clean energy source, saying an experiment at a site in England set a record for the amount of fusion energy produced, more than doubling the previous mark. Researchers said they achieved 59 megajoules of sustained fusion energy - the same process that powers stars including the sun - at a facility in Culham, near Oxford. Ian Chapman, the head of the UK Atomic Energy Authority, described it as a landmark event that moves researchers closer to conquering one of the biggest challenges in science. It exceeded the previous mark of just under 22 megajoules of total energy achieved in 1997, they said. Scientists have cautioned that years of work are still needed, and the level of energy achieved so far is modest. The energy produced in the latest experiment, for instance, was enough to boil about 60 kettles of water.

https://www.reuters.com/lifestyle/science/ european-scientists-set-nuclear-fusion-energyrecord-2022-02-09/

Sweden needs 2 GW more power imports amid outage at largest reactor

Reuters, February 11, 2022

weden must import 2 gigawatt (GW) of extra electricity, more than the consumption of its capital Stockholm, to balance an unforeseen outage at its largest nuclear power plant from Feb. 19, grid operator Svenska kraftnaet (Svk) said. Earlier this week, plant operator Uniper said it will take the Oskarshamn 3 reactor offline between Feb. 19 and Feb. 27 to address a secondary fuel failure. The reactor, situated in south-eastern Sweden, has a capacity of 1.4 GW, which roughly equates to Stockholm's demand of 1.5 GW, Svk said. The unplanned stoppage of the plant will not only cut supply in southern Sweden but also limited internal power flows from north to south, increasing the overall need for power imports from abroad, it added. Svk said it did not foresee a capacity crunch if the weather stayed relatively mild, as it has been so far this winter.

https://www.reuters.com/business/energy/ sweden-needs-2-gw-more-power-imports-amidoutage-largest-reactor-2022-02-11/

Slovakia receives counterproposal to nuclear energy tax from utility SE

Reuters, February 15, 2022

Slovakia's dominant utility has submitted a counterproposal to plans for a tax on "excess profit" on nuclear power output due to be discussed in Parliament this week, the Economy Ministry said. The government last week approved the plans - aimed at easing the impact of surging energy bills and prepared without the standard round of consultations - and wants the extraordinary tax in place from March. Slovenske Elektrarne (SE), majority-owned by Italy's Enel and Czech billionaire Daniel Kretinsky's EPH, operates the country's nuclear power stations and has warned the tax would lead to losses and even bankruptcy. The government has rejected those claims, and the bill heads to Parliament, where the ruling coalition holds a majority. A vote is likely this week. The Economy Ministry said that it had received a counterproposal from SE investors "which should help ensure affordable energy for households", but it did not provide any other details.

https://www.reuters.com/business/energy/ slovakia-receives-counterproposal-nuclearenergy-tax-utility-se-2022-02-14/

EU lays out \$6.8 billion satellite communication plan in space race

Foo Yun Chee

Reuters, February 15, 2022

The European Commission on Tuesday set out a 6 billion-euro (\$6.8 billion) satellite communications plan, part of a push to cut the European Union's dependence on foreign companies and protect key communications services and surveillance data against any outside interference. The move comes amid growing concerns over Russian and Chinese military advances in outer space and a surge in satellite launches. Commercial operators such a Elon Musk's SpaceX and its Starlink network that aims to launch tens of thousands of satellites to supply global space-based wifi have also contributed to a fast-growing satellite population and resulting debris.

https://www.reuters.com/business/media-telecom/ eu-lays-out-68-bln-satellite-communication-planspace-race-2022-02-15/

F. France

France's Macron to detail nuclear energy roadmap this week

Reuters, February 08, 2022

French President Emmanuel Macron will announce later this week the number of new nuclear reactors France will build and how the country will pay for it, his finance minister said. Macron said in November that France would build its first new nuclear reactors in decades to reduce its dependence on foreign countries for energy. He gave no details at the time, but his government has been expected to announce the construction of up to six new pressurised-water reactors. "Tens of billions of euros will be required if we want to have energy without CO2 emissions and if we want to build new nuclear plants," Finance Minister Bruno Le Maire told a conference organised by German media. "The French president will give all the figures this week, he will announce the number of reactors and how we will pay for that," Le Maire said. Separately, Energy Minister Barbara Pompili

said on Franceinfo radio that Macron was expected to detail the relaunch of the nuclear industry during a visit on Thursday to the eastern city of Belfort.

https://www.reuters.com/business/energy/ frances-macron-detail-nuclear-energy-roadmapthis-week-minister-2022-02-08/

EDF's shares fall after French firm cuts nuclear output forecast

Reuters, February 08, 2022

EDF (EDF.PA) shares fell on Tuesday after the troubled French state-controlled power group made fresh cuts to its nuclear output projections, which drove up prices for European gas, power and carbon. EDF, which announced its, has faced pressure from government steps to tackle higher energy bills. It has also been plagued by delays over new reactors and been forced to shut reactors to deal with corrosion and other safety issues. It slashed its nuclear output forecast for 2022 to 295-315 terawatt-hours from a previously expected 300-330 terawatt-hours, saying this was related to nuclear safety controls. EDF's shares, which have lost almost 40% since December, fell as much 3.5% on Tuesday, recovering some ground to trade 2% lower later on. read more. Analysts said falling nuclear power was encouraging the use of more fossil fuel-powered plants, driving up the price of carbon emissions permits which are closing in on 100 euros (\$114) per tonne for the first time.

"The high carbon price impacts power prices directly since there are no alternatives for coal and gas generation in the short term, in periods where nuclear and renewables cannot cover demand, coal and gas are effectively setting power prices," Rystad Energy analyst Fabian Rønningen said. Jefferies analysts said extra energy EDF would have to buy would cost the equivalent of 8% of its market capitalisation.

https://www.reuters.com/business/energy/edfwill-provide-government-with-first-reportnuclear-problems-march-minsiter-2022-02-08/

EDF confirms deal to take over French nuclear turbine unit from GE

Reuters, February 10, 2022

EDF (EDF.PA) confirmed it would buy a France-based nuclear turbine unit from General Electric as the state-owned utility seeks to bundle nuclear activities deemed as strategic in France's new push for multibillion investments into new reactors. The announcement, confirming earlier remarks by French ministers, came hours before French President Emmanuel Macron is due to give a speech that is keenly awaited by France's nuclear industry, setting out France's nuclear ambitions for the next decades. EDF said it had an exclusive agreement with GE to acquire part of GE's Steam Power's nuclear power activities, bringing together nuclear steam turbine technology and service expertise. EDF's move to buy the unit, given an estimated value of around \$1 billion by media reports and which had been owned by Alstom until 2015, has been described as "logical" by French government officials as France seeks to gear up its domestic nuclear capacities.

https://www.reuters.com/business/edf-confirmsdeal-take-over-french-nuclear-turbine-unit-ge-2022-02-10/

France seals \$8.1 billion deal with Indonesia to sell 42 Rafale jets

Tassilo Hummel and Stanley Widianto

Reuters, February 10, 2022

ndonesia will order 42 Rafale fighter jets in a \$8.1 billion deal, France's defence ministry said on Thursday, as part of a series of agreements also including submarine development and ammunition, making Jakarta the biggest French arms client in the region. The deal comes as Paris, which views itself as a global maritime power, seeks to expand geopolitical ties in the Indo-Pacific after the United States, Britain and Australia created a new strategic alliance last year called AUKUS.

https://www.reuters.com/business/aerospacedefense/indonesia-orders-42-rafale-jets-frenchdefence-minister-says-2022-02-10/

Macron bets on nuclear in carbonneutrality push, announces new reactors

Richard Lough and Benjamin Mallet

Reuters, February 10, 2022

France will build at least six new nuclear reactors in the decades to come. President Emmanuel Macron said, placing nuclear power at the heart of his country's drive for carbon neutrality by 2050. Macron said the new plants would be built and operated by state-controlled energy provider EDF (EDF.PA) and that tens of billions of euros in public financing would be mobilized to finance the projects and safeguard EDF's finances. Promising to accelerate the development of solar and offshore wind power Macron also said he wanted to extend the lifespan of older nuclear plants in the world's most nuclearintensive country to more than 50 years from more than 40 years currently for certain reactors, provided it was safe.

https://www.reuters.com/business/energy/ macron-bets-nuclear-carbon-neutrality-pushannounces-new-reactors-2022-02-10/

French Finance Minister: EDF's problems will disappear after latest nuclear investments

Reuters, February 11, 2022

French Finance Minister Bruno Le Maire told that he was sure that EDF's (EDF.PA) difficulties would "disappear" after France announced plans to build at least six new nuclear reactors in the decades to come. President Emmanuel Macron said that the new plants would be built and operated by state-controlled energy provider EDF and that tens of billions of euros in public financing would be mobilized to finance the projects and safeguard EDF's finances.

https://www.reuters.com/business/energy/ french-finance-minister-edfs-problems-willdisappear-after-latest-nuclear-2022-02-11/ French power company EDF to hire over 3,000 staff this year in nuclear push

Reuters, February 11, 2022

State-owned utility EDF (EDF.PA) said it would hire more than 3,000 staff this year as France prepares to build at least six nextgeneration EPR2 reactors and extend the lives of existing sites. The company is aiming to recruit 1,600 engineers and the same number of technicians by the end of the year, it said in an e-mail to Reuters, confirming earlier media reports. The move comes a day after President Emmanuel Macron unveiled a new energy strategy that puts nuclear power at the heart of a drive for carbon neutrality by 2050, with public funds of billions of euros to be mobilised.

https://www.reuters.com/business/energy/edf-hireover-3000-staff-this-year-nuclear-push-franceinfo-2022-02-11/

EDF cuts 2023 French nuclear output estimate

Benjamin Mallet and Tassilo Hummel

Reuters, February 11, 2022

State-controlled French power company EDF (EDF.PA) said on Friday it was making another cut in planned nuclear output because maintenance work will take more of its reactors offline. EDF's shares fell 2.8% in early trading while the French 2023 baseload power price rose 4.4% following the announcement, the latest in a series of technical setbacks linked to a problem engineers spotted with corrosion of highpressure pipework inside some reactors. An EDF spokesman told Reuters that as part of a programme to address that problem, checks would be carried out on all EDF's reactors. They would need to be off-line for the checks, but this could be done concurrently other with planned maintenance outages, limiting the impact, the spokesman said. The new cut in estimated nuclear output related to projections for 2023, which the company said it was scaling back from 340-370 terawatt hours (TWh) to 300-330 TWh.

https://www.reuters.com/business/energy/power-

group-edf-cuts-2023-french-nuclear-outputestimate-2022-02-11/

Overheating connection takes France's Bugey 3 nuclear reactor offline

Reuters, February 11, 2022

France's Bugey 3 nuclear reactor is expected to be back in operation on Feb. 16 after going offline following the detection of an overheating connection to a high-voltage line in a non-nuclear part of the facility, power group EDF (EDF.PA) said. The 900 megawatt (MW) reactor in eastern France, which was taken offline on Thursday evening, was previously expected to restart on February 11. Statutory outages can sometimes last several days longer than the initial expected restart date. The service team was mobilised for repairs to bring the reactor back online as soon as possible, EDF said, adding that the disruption did not affect plant safety. France depends on nuclear power for about 75% of its generation. At present, about 75.8% of installed capacity is available, with about 15.1 gigawatts (GW) now offline because of corrosion assessment, maintenance or other issues. The 1.5 GW Chooz 1 reactor outage date was also extended to the end of this year from the expected restart date of Feb. 11. Chooz 1 was taken offline in December after corrosion was detected in some pipes at the plant.

https://www.reuters.com/business/energy/ overheating-connection-takes-bugey-3-nuclearreactor-offline-2022-02-11/

France says Macron and China's Xi agreed to step up efforts on Iran nuclear deal

Reuters, February 16, 2022

French President Emmanuel Macron and China's President Xi Jinping both agreed on the need to step up their joint efforts to reach a nuclear deal with Iran, said a statement from Macron's office on Wednesday. The secretary of Iran's Supreme National Security Council had said earlier on Twitter on Wednesday that the 2015 nuclear deal between Iran and world powers had become an "empty shell." Iran and major world powers are currently in Vienna to revive the nuclear deal that former-U.S. President Donald Trump left in 2018 by imposing crippling sanctions on Iran's economy.

https://www.reuters.com/world/france-saysmacron-chinas-xi-agreed-step-up-efforts-irannuclear-deal-2022-02-16/

Decision on Iran nuclear deal days away, ball in Tehran's court - France

John Irish

Reuters, February 17, 2022

France said a decision on salvaging Iran's 2015 nuclear deal with world powers was just days away and that it was now up to Tehran to make the political choice while Tehran called on Western powers to be "realistic." Indirect talks between Iran and the United States on reviving the tattered agreement resumed last week after a 10-day hiatus and officials from the other parties to the accord - Britain, China, France, Germany and Russia - have shuttled between the two sides as they seek to close gaps. Western diplomats previously indicated they hoped to have a breakthrough by now, but tough issues remain unresolved. Iran has rejected any deadline imposed by Western powers. "We have reached tipping point now. It's not a matter of weeks; it's a matter of days," French Foreign Minister Jean-Yves Le Drian told parliament, adding that the Western powers, Russia and China were in accord on the outlines of the accord.

https://www.reuters.com/world/middle-east/ decision-iran-nuclear-deal-days-away-balltehrans-court-france-2022-02-16/

G. U.K.

UK's Truss tells Iran: Now is the time for final decisions on nuclear deal

Reuters, February 14, 2022

British foreign minister Liz Truss spoke with her Iranian counterpart Hossein Amirabdollahian on Monday and told him it was time for final decisions in talks to revive a 2015 nuclear deal, the foreign office said. Truss also reiterated her determination to secure the release of detained British nationals. The foreign office said the government was committed to paying a historical debt owed to Iran and was exploring payment options as a matter of urgency.

https://www.reuters.com/world/uk/uks-trusstells-iran-now-is-time-final-decisions-nucleardeal-2022-02-15/

H. Germany

Germany to transfer hydrogen technology to Africa -govt official

Reuters, February 17, 2022

The German government is planning to transfer hydrogen production technology to African countries amid its efforts to quit coal and nuclear energy, a German government official said on Wednesday. Germany will have to import 40-60% of the hydrogen it needs for its energy transformation plans, the official said ahead of a meeting between the African Union and the European Union scheduled to take place in Brussels.

https://www.reuters.com/business/energy/ germany-transfer-hydrogen-technology-africagovt-official-2022-02-16/

I. USA

California urged to keep nuclear plant open to meet climate goals

Timothy Gardner

Reuters, February 05, 2022

Nearly 80 scientists and academics, including a former U.S. energy secretary, on February 03 urged Governor Gavin Newsom to delay closure of California's remaining nuclear plant to comply with state laws on fighting global warming. "The threat of climate change is too real and too pressing to leap before we look," said a letter to Newsom from Steven Chu, a former U.S. energy secretary, and the others. "Considering our climate crisis, closing the plant is not only irresponsible, the consequences could be catastrophic."

https://www.reuters.com/world/us/californiaurged-keep-nuclear-plant-open-meet-climategoals-2022-02-03/

U.S. restores sanctions waiver to Iran with nuclear talks in final phase

Humeyra Pamuk

Reuters, February 05, 2022

President Joe Biden's administration restored sanctions waivers to Iran to allow international nuclear cooperation projects, as indirect American-Iranian talks on reviving the 2015 international nuclear deal with Tehran enter the final stretch. The waivers had allowed Russian, Chinese and European companies to carry out nonproliferation work to effectively make it harder for Iranian nuclear sites to be used for weapons development. The waivers were rescinded by the United States in 2019 and 2020 under former President Donald Trump, who pulled out of the nuclear agreement. The indirect talks are aimed at having the United States return to the agreement and Iran resume compliance. The agreement was reached under former President Barack Obama, and Biden has pledged to try to bring the United States back to it. The State Department has sent a report signed by Secretary of State Antony Blinken to Congress explaining that restoring the waivers will help the talks in Vienna on returning to the deal reached between Iran and a group of countries including China, France, Germany, Russia, Britain and the United States. The agreement is formally called the Joint Comprehensive Plan of Action (JCPOA).

https://www.reuters.com/world/middle-east/bidenadministration-restores-sanctions-waiver-irantalks-final-phase-2022-02-04/

U.S. envoy says returning to Vienna in hope of reviving Iran nuclear pact

Reuters, February 07, 2022

U.S. Special Envoy for Iran Robert Malley on Sunday said he would soon return to Vienna for the next round of talks on returning to the 2015 Iran nuclear deal, insisting it could still be revived. The Biden administration has been trying to revive the deal, which lifted sanctions against Tehran in exchange for restrictions on its nuclear activities until former President Donald Trump pulled Washington out in 2018. Iran later breached many of the deal's nuclear restrictions and kept pushing well beyond them.

https://www.reuters.com/world/middle-east/usenvoy-says-returning-vienna-hope-revivingiran-nuclear-pact-2022-02-07/

U.S., Japan, South Korea to discuss North Korea following recent missile launches

Reuters, February 07, 2022

The U.S. special representative for North Korea will meet with Japanese and South Korean officials later this week, the U.S. State Department said, following a series of ballistic missile tests U.S. officials said Pyongyang launched last month. U.S. Ambassador Sung Kim will travel to Honolulu from Feb. 10-15 to host a trilateral meeting "to discuss a broad range of issues, including the complete denuclearization of the Korean Peninsula," the department said in a statement.

https://www.reuters.com/world/asia-pacific/usenvoy-north-korea-meet-with-japanese-skoreanofficials-statement-2022-02-06/

U.S. urges N.Korea to focus on needs of its people, not missiles

Michelle Nichols

Reuters, February 08, 2022

The United States called on North Korea to defund its nuclear and ballistic missile programs and prioritize the needs of its own people, as Russia and China blamed sanctions for worsening the humanitarian situation in the hermit Asian state. Russia put sanctions under the spotlight at the U.N. Security Council as part of its presidency of the 15-member body during February. However, Russia's U.N. Ambassador Vassily Nebenzia could not chair the meeting because he tested positive for COVID-19, diplomats said.

https://www.reuters.com/world/asia-pacific/usurges-nkorea-focus-needs-its-people-not-missiles-2022-02-07/

U.S. think tank identifies North Korea base likely intended for ICBMs

Reuters, February 08, 2022

A Washington think tank says it has identified a military base close to North Korea's border with China that is likely intended for stationing of intercontinental ballistic missiles. The Center for Strategic and International Studies based its report on Jan. 21 satellite images of the base at Hoejungni, in North Korea's Chagang province about 25 km (16 miles) from the border with China and 280 km (175 miles) northeast of Pyongyang. "The Hoejung-ni missile operating base will, according to informed sources, likely house a regiment-sized unit equipped with intercontinental ballistic missiles," the report said. "Should operational ICBMs not become available in the near term, it is likely that intermediate range ballistic missiles (IRBMs) will be deployed," the report added, noting that North Korea tested a Hwasong-12 IRBM from Chagang province last month.

https://www.reuters.com/world/asia-pacific/usthink-tank-identifies-north-korea-base-likelyintended-icbms-2022-02-07/

Counterfeit parts found in U.S. nuclear plants -inspector general

Timothy Gardner

Reuters, February 11, 2022

Counterfeit parts have been discovered in U.S. nuclear plants, potentially increasing the risk of a safety failure, the inspector general of the federal nuclear industry regulator said in a report released. The report is a blow to a U.S nuclear industry that has shrunk in recent years due to competition from renewable power and plants that burn natural gas and lingering public concerns following high-profile mishaps including a 2011 tsunami at Japan's Fukushima plant. "Counterfeit parts are safety and security concerns that could have serious consequences in critical power plant equipment required to perform a safety function," the report from the inspector general's office of the Nuclear Regulatory Commission (NRC) said. The report, which looked into concerns that the counterfeit parts are present in most, if not all power plants, sampled a plant in each of the NRC four regions and found data showing fake parts were used in a plant in the U.S. Midwest.

https://www.reuters.com/business/energy/ counterfeit-parts-present-many-us-nuclearpower-plants-inspector-general-2022-02-10/

U.S. energy department advances \$6 bln nuclear plant program

Timothy Gardner

Reuters, February 12, 2022

The U.S. Department of Energy said it is seeking input from utilities, communities and advocates as it develops its new program to boost struggling nuclear power plants with \$6 billion in credits. The bipartisan infrastructure bill passed last year tasked the DOE with creating the Civil Nuclear Credit Program to distribute the credits to nuclear plants. Nuclear power generates power virtually free of emissions blamed for climate change, but the industry has lost 12 reactors since 2013 amid competition from renewable energy and plants that burn plentiful natural gas. In addition, safety costs have soared after the 2011 tsunami at Japan's Fukushima plant.

https://www.reuters.com/world/us/us-energydepartment-advances-6-bln-nuclear-plantprogram-2022-02-11/

U.S. in 'very final stages' of Iran nuclear talks, State Dept. says

Reuters, February 17, 2022

The United States is in "the midst of the very final stages" of indirect talks with Iran aimed at salvaging a 2015 deal limiting Tehran's nuclear activities, State Department spokesperson Ned Price said. "This is really the decisive period during which we'll be able to determine whether a mutual return to compliance with the JCPOA is in the offing, or if it's not," Price – using an abbreviation for the Joint Comprehensive Plan of Action, the 2015 deal with world powers.

https://www.reuters.com/world/us-very-finalstages-iran-nuclear-talks-state-dept-says-2022-02-16/

West Asia

J. Iran

Iran's Shamkhani says it has a right to continue nuclear research

Reuters, February 05, 2022

Iran's top security official Ali Shamkhani said that it has a right to continue nuclear research and development that cannot be curbed by any agreement. "Iran's legal right to continue research and development and maintain its peaceful nuclear capabilities and achievements, side by side with its security ... cannot be curbed by any agreement," Shamkhani, secretary of Iran's Supreme National Security Council, stated.

https://www.reuters.com/world/middle-east/iransshamkhani-says-it-has-right-continue-nuclearresearch-2022-02-05/

Iran says U.S. should provide guarantees for revival of 2015 nuclear deal

Reuters, February 05, 2022

Iran's foreign minister said on February 05 that a U.S. move to restore sanctions waivers to Tehran was not enough and Washington should provide guarantees for the revival of the 2015 nuclear deal with major powers. Washington on February 04 restored the waivers to allow international nuclear cooperation projects, as indirect U.S.-Iranian talks on reviving the nuclear deal enter the final stretch in Vienna.

https://www.reuters.com/world/middle-east/iransays-us-should-provide-guarantees-revival-2015nuclear-deal-2022-02-05/

Iran says success of nuclear talks hinges on removal of sanctions

Parisa Hafezi

Reuters, February 07, 2022

Iran said that Washington had to make a "political decision" regarding lifting sanctions on the Islamic Republic as Tehran's demand for their full removal to revive a 2015 nuclear deal with world powers was non-negotiable. After eight rounds of indirect talks between Tehran and Washington since April, differences remain about the speed and scope of lifting sanctions on Tehran, including Iran's demand for a U.S. guarantee of no further punitive steps, and how and when to restore curbs on Iran's atomic work.

https://www.reuters.com/world/middle-east/ iran-says-removal-us-sanctions-is-its-red-linerevival-2015-deal-2022-02-07/

Iran unveils long-range missile as Vienna nuclear talks resume

Parisa Hafezi

Reuters, February 09, 2022

Iran unveiled a new domestically-made missile with a range of 1,450 kilometers on Wednesday, state TV reported, a day after Tehran and Washington resumed indirect talks to salvage a 2015 nuclear deal. Iran, which has one of the biggest missile programmes in the Middle East, says its ballistic missiles have a range of up to 2,000 km (1,200 miles) and are capable of reaching its arch-foe Israel and U.S. bases in the region. State TV displayed the new surface-to-surface "Kheibar Shekan" (Kheibar buster) missile, which refers to an ancient Jewish oasis called Kheibar in the Arabian Peninsula's Hijaz region that was overrun by Muslim warriors in the 7th century. "This longrange missile is domestically manufactured by the Revolutionary Guards (IRGC) ... It has high accuracy and is propelled by solid fuel and is capable of penetrating missile shields," Iranian state media reported.

https://www.reuters.com/world/middle-east/ iran-unveils-missile-with-range-1450kmtasnim-2022-02-09/

As nuclear talks resume, Iran's oil exports increase

Alex Lawler

Reuters, February 11, 2022

Iranian oil exports have risen to more than 1 million barrels per day for the first time in almost three years, based on estimates from companies that track the flows, reflecting increased shipments to China. Tehran's oil exports have been limited since former U.S. President Donald Trump in 2018 exited a 2015 nuclear accord and reimposed sanctions aimed at curbing oil exports and the associated revenue to Iran's government. Iran has kept some exports flowing despite sanctions as intermediaries find ways to disguise the origin of the imports. Tanker tracking companies say China is the destination of most of those shipments. President Joe Biden's administration has discussed the imports with China but has not imposed sanctions on Chinese individuals and companies. Beijing has urged the United States to lift the sanctions on Iran, which China opposes.

https://www.reuters.com/business/energy/nucleartalks-resume-irans-oil-exports-increase-2022-02-10/

Iranian president says Tehran 'never has hope' in Vienna nuclear talks

Reuters, February 11, 2022

Hardline Iranian President Ebrahim Raisi said Tehran "never" pins hope on ongoing talks in Vienna aimed at reviving the country's 2015 nuclear agreement with world powers. Iran and the United States resumed indirect talks in the Austrian capital on Tuesday after a 10-day break, but envoys gave little away as to whether they were closer to resolving various thorny issues. "We put our hopes on the east, west, north, south of our country and never have any hope in Vienna and New York," Raisi said in a televised speech commemorating the 43rd anniversary of Iran's Islamic Revolution. Raisi, whose election last June led to a five-month hiatus in the talks, said Iran would rely on its domestic economic potential rather than expect support from overseas and from the nuclear talks with world powers. U.S. President Joe Biden's administration publicly pressured Iran on Wednesday to revive the agreement quickly, saying that it will be impossible to return to the accord if a deal is not struck within weeks.

https://www.reuters.com/world/middle-east/ irans-president-raisi-says-tehran-never-hashope-vienna-talks-2022-02-11/

Nuclear talks harder as West 'pretends' to take initiative -Iran official

Reuters, February 14, 2022

A senior Iranian security official said that progress in talks to salvage Iran's 2015 nuclear deal was becoming "more difficult" as Western powers only "pretended" to come up with initiatives. The indirect talks in Austria between Iran and the United States resumed last week after a 10-day break. Delegates have said the talks have made limited progress since they resumed in November after a fivemonth hiatus prompted by the election of hardline Iranian President Ebrahim Raisi. "The work of Iranian negotiators towards progress is becoming more difficult every moment ... while Western parties 'pretend' to come up with initiatives to avoid their commitments," Ali Shamkhani, secretary of Iran's Supreme National Security Council, said.

https://www.reuters.com/world/middle-east/ nuclear-talks-more-difficult-west-pretends-takeinitiative-iran-official-2022-02-13/

2015 nuclear deal has become an "empty shell", Iran's top security official says

Reuters, February 16, 2022

The 2015 nuclear deal between Iran and world powers has become an "empty shell", the secretary of Iran's Supreme National Security Council said. "The United States and Europe failed to meet their obligations under the JCPOA. The deal has now become an empty shell for Iran in the economic sphere and the lifting of sanctions. There will be no negotiations beyond the nuclear deal with a noncompliant America and a passive Europe," Shamkhani said. Iran and major powers are currently in Vienna to revive the nuclear deal that former-U.S. President Donald Trump left in 2018 by imposing crippling sanctions on Iran's economy. Iranian Foreign Minister Hossein Amirabdollahian said during a call with EU's Borrell that "a lack of serious will on the part of the West to reach a good and credible agreement in Vienna has led to unnecessary prolongation of the talks"

https://www.reuters.com/world/middle-east/iranstop-security-official-says-2015-nuclear-deal-is-anempty-shell-twitter-2022-02-16/

Iran's top nuclear negotiator Bagheri says 'we are closer than ever to an agreement'

Reuters, February 17, 2022

Iran's top nuclear negotiator, Ali Bagheri Kani said that "after weeks of intensive talks, we are closer than ever to an agreement; nothing is agreed until everything is agreed, though." France said a decision on salvaging Iran's 2015 nuclear deal with world powers was just days away and it was now up to Tehran to make the political choice. Indirect talks between Iran and the United States on reviving the tattered agreement resumed last week after a 10-day hiatus.

https://www.reuters.com/world/middle-east/iranstop-nuclear-negotiator-bagheri-says-we-are-closerthan-ever-an-agreement-2022-02-16/

Iran not seeking nuclear weapons, needs atomic energy, says Khamenei

Reuters, February 17, 2022

Iran's supreme leader said that it will further develop peaceful nuclear capacity to preserve independence, amid negotiations with world powers to revive a 2015 nuclear pact. Indirect talks between Tehran and Washington have been held in Vienna since April amid fears about Tehran's nuclear advances, seen by Western powers as irreversible unless agreement is struck soon. Other parties to the deal, which then U.S. President Donald Trump pulled out of in 2018, have been shuttling between Iran and the United Sates. Several sources, including Iranian officials, told Reuters that the next couple of days would be crucial in determining whether gaps could be closed. "We will sooner or later need peaceful nuclear energy. If we do not pursue it ... our independence will be harmed," Iran's highest authority, Ayatollah Ali Khamenei, said in a televised speech, supporting Tehran's hardline negotiating team in Vienna.

https://www.reuters.com/world/middle-east/ iran-not-seeking-nuclear-weapons-needsatomic-energy-says-khamenei-2022-02-17/

K. Israel

Israeli cyber security firm ThetaRay seals first Emirati contract

Alexander Cornwell

Reuters, February 14, 2022

Israel technology firm ThetaRay will license a financial crime detection tool that monitors transactions for correspondent banking to Emirati bank Mashreq (MASB.DU), the companies said. It is ThetaRay's first direct licensing agreement with a bank from the United Arab Emirates, Chief Executive Mark Gazit said, declining to disclose the annual fee. The Israeli-developed tool uses artificial intelligence to identify financial cyber threats like money laundering or fraud so users can take action against suspicious transactions.

https://www.reuters.com/business/finance/uaebank-mashreq-use-israeli-financial-crimedetection-tool-2022-02-14/

Israel carries out missile strike over south of Syria's Damascus defense ministry

Reuters, February 17, 2022

Israel carried out on February 16 a strike using several surface-to-surface missiles from the Israeli-occupied Golan Heights targeting points south of Damascus, Syria's capital, which resulted in some material damage, the Syrian defense ministry said on Facebook citing a military source.

https://www.reuters.com/world/middle-east/israelcarries-out-missile-strike-over-south-syriasdamascus-defense-ministry-2022-02-16/

L. Saudi Arabia

Saudi Arabia, Cyprus Discuss Joint Cooperation, Combating Terrorism

Ashraq Al- Awsat, February 14, 2022

Cyprus' President Nicos Anastasiades held talks in Nicosia with Saudi Foreign Minister Prince Faisal bin Farhan bin Abdullah. Discussions focused on cooperation between their countries and ways to develop it in all fields. They stressed the need to intensify international efforts to prevent Iran from acquiring nuclear weapons and to transform the Middle East into a region that is free of weapons of mass destruction.

https://english.aawsat.com/home/article/3473936/ saudi-arabia-cyprus-discuss-joint-cooperationcombating-terrorism

Saudi Arabia backs U.S. efforts to stop Iran getting nuclear weapons – SPA

Reuters, February 15, 2022

Saudi Arabia's government expressed its support for "U.S. efforts to prevent Iran from acquiring a nuclear weapon," state news agency SPA reported. The government also thanked the U.S. for supporting the kingdom defending its territory against attacks by Yemen's Iran-aligned Houthi group, SPA said, citing a statement issued after a cabinet meeting. Talks on a new nuclear accord with Iran are underway in Vienna amid growing Western fears about Tehran's accelerating nuclear advances, seen by Western powers as irreversible unless a deal is struck soon.

https://www.reuters.com/world/middle-east/saudiarabia-backs-us-efforts-stop-iran-getting-nuclearweapons-spa-2022-02-15/

Saudi Arabia, Croatia Stress Need to Clear Middle East of Mass Destruction Weapons

Ashraq Al- Awsat, February 17, 2022

Croatian Prime Minister Andrej Plenkovic met with Saudi Foreign Minister Prince Faisal bin Farhan bin Abdullah in Zagreb. During the meeting, they reviewed cooperation between the two countries and addressed ways to boost and develop bilateral ties in all fields. They also discussed opportunities to transfer mutual relations to broader horizons in light of Vision 2030. The meeting touched on mechanisms for developing bilateral work and coordination at all levels and regional and international developments. Both sides stressed the need to strengthen international efforts to prevent Iran from acquiring nuclear weapons and freeing the Middle East from weapons of mass destruction (WMD), aiming to enhance international peace and security.

https://english.aawsat.com/home/article/ 3480206/saudi-arabia-croatia-stress-need-clearmiddle-east-mass-destruction-weapons

M. East Asia

Taiwan to relax Japan nuclear disaster-related food import ban

Yimou Lee, Ben Blanchard

Reuters, February 07, 2022

Taiwan said it would relax a ban on food imports from Japan put in place after the 2011 Fukushima nuclear disaster, hoping to ease entry to a trans-Pacific trade pact and deepen ties at a time when both governments are worried by China. Japan, like most countries, has no formal diplomatic relations with Chinese-claimed Taiwan, but the two have moved closer as Beijing ramps up its military activity near both Taiwan and Japan. Writing on her Facebook page about the Cabinet decision to relax the ban, President Tsai Ing-wen said Taiwan had to "go global and stand in the world" by joining bodies like the Comprehensive and Progressive

Agreement for Trans-Pacific Partnership (CPTPP).

The World Health Organization said in 2016 that the Japanese authorities had monitored food contamination closely and implemented protective measures to prevent sale and distribution of contaminated food in Japan and outside of Japan after the Fukushima tsunami and nuclear disaster. Japan has said many nations such as the United States and Australia had lifted or eased Fukushima-related restrictions, and Fukushima food including rice is being exported to markets like Thailand. Taiwan banned imports of food products from five prefectures in Japan following a meltdown at the Fukushima nuclear plant that was triggered by a huge earthquake and tsunami.

https://www.reuters.com/article/taiwan-japanidINL1N2UJ039

Taiwan weapons maker alleges contractor tried to supply 'fake products made in China' for its missile defence systems

Lawrence Chung

South China Morning Post, February 10, 2022

Taiwan's top weapons maker has alleged that a local contractor attempted to supply it with substandard components, sourced from mainland China, for the island's missile defence systems. The National Chung-shan Institute of Science and Technology on Thursday said it had discovered the siliconcontrolled rectifiers (SCRs) – which it described as "counterfeit products made in China" – while inspecting a delivery last year. They should have been US-made components, according to the contract.

https://www.scmp.com/news/china/military/ article/3166557/taiwan-weapons-maker-allegescontractor-tried-supply-fake

Taiwan: PLA anti-submarine helicopter spotted entering island's air defence zone for first time

Amber Wang

South China Morning Post, February 18, 2022

A People's Liberation Army Ka-28 antisubmarine helicopter was spotted entering Taiwan's air defence zone this week for the first time, according to the island's defence ministry. The helicopter, which can track and destroy submarines, was taking part in war readiness exercises against the island, a mainland expert said. The ministry said three PLA aircraft – a Y-8 electronic intelligence aircraft, a Y-8 electronic warfare aircraft and a Ka-28 anti-submarine warfare helicopter – entered Taiwan's southwest air defence identification zone.

https://www.scmp.com/news/china/military/ article/3167596/taiwan-pla-anti-submarinehelicopter-spotted-entering-islands

N. North Korea

EXCLUSIVE North Korea grows nuclear, missiles programs, profits from cyberattacks -U.N. report

Michelle Nichols

Reuters, February 07, 2022

North Korea continued to develop its nuclear and ballistic missile programs during the past year and cyberattacks on cryptocurrency exchanges were an important revenue source for Pyongyang, according to an excerpt of a confidential United Nations report. The annual report by independent sanctions monitors was submitted on Friday evening to the U.N. Security Council North Korea sanctions committee. "Although no nuclear tests or launches of ICBMs (intercontinental ballistic missiles) were reported, DPRK continued to develop its capability for production of nuclear fissile materials," the experts wrote. North Korea is formally known as the Democratic People's Republic of Korea (DPRK). It has long-been banned from conducting nuclear tests and ballistic missile launches by the U.N. Security Council.

https://www.reuters.com/world/asia-pacific/ exclusive-nkorea-grows-nuclear-missiles-programs-profits-cyberattacks-un-report-2022-02-05/

N.Korea boasts of 'shaking the world' by testing missiles that can strike U.S.

Josh Smith

Reuters, February 09, 2022

North Korea boasted on Tuesday that it is one of only a handful of countries in the world to field nuclear weapons and advanced missiles and the only one standing up to the United States by "shaking the world" with missile tests. International tension has been rising over a recent series of North Korean ballistic missile tests, actions long banned by the U.N. Security Council. January was a record month of such tests, with at least seven launches, including a new type of "hypersonic missile" able to manoeuvre at high speed. Also among the tests was the first firing since 2017 of a Hwasong-12 intermediate-range ballistic missile, capable of striking U.S. territories in the Pacific Ocean.

A statement from North Korea's Foreign Ministry said a series of tests since New Year represented "remarkable achievements" that strengthened North Korea's "war deterrence." It also cited the Hwasong-15, the longest-range intercontinental ballistic missile (ICBM) ever launched by North Korea, which hasn't been fired since its first test in 2017, and is believed to have the range to deliver a nuclear warhead anywhere in the United States. "In today's world where many countries waste time dealing with the United States with submission and blind obedience, there's only our country on this planet that can shake the world by firing a missile with the U.S. mainland in its range," it said.

https://www.reuters.com/world/asia-pacific/ nkorea-boasts-shaking-world-by-testingmissiles-that-can-strike-us-2022-02-08/

New N. Korea nuclear, ICBM testing would trigger instant crisis, S.Korea's Moon says

Josh Smith

Reuters, February 10, 2022

A resumption of North Korea's nuclear weapon or long-range missile tests would "instantly" send the peninsula back into crisis, outgoing South Korean President Moon Jae-in said this week, calling for measures to prevent that from happening. A record month of North Korean missile testing in January highlighted failures of Moon's efforts to engineer a breakthrough as his term ends in May, and North Korean leader Kim Jong Un has suggested he could order new nuclear tests or intercontinental ballistic missile (ICBM) launches for the first time since 2017. "If North Korea's series of missile launches goes as far as scrapping a moratorium on long-range missile tests, the Korean Peninsula may instantly fall back into the state of crisis we faced five years ago," Moon said in a written interview with media in Seoul scheduled for publication on Thursday. "Preventing such a crisis through persistent dialogue and diplomacy will be the task that political leaders in the countries concerned must fulfil together," he added.

https://www.reuters.com/world/asia-pacific/ new-n-korea-nuclear-icbm-testing-wouldtrigger-instant-crisis-skoreas-moon-says-2022-02-10/

Small quakes reported near North Korea nuclear site amid talk of resumed testing

Josh Smith

Reuters, February 15, 2022

A series of small earthquakes has struck near North Korea's shuttered nuclear test site, South Korea has said, highlighting the area's geological instability as Pyongyang hints it could resume testing for the first time since 2017. At least four earthquakes, all of which occurred naturally, have hit the region in the past five days, according to the Korea Meteorological Administration (KMA) in Seoul. The latest was a 2.5 magnitude quake on February 15 morning, which was centred about 36 km (22 miles) from the Punggye-ri Nuclear Test Site. A pair of 2.3 magnitude earthquakes were reported in the area on February 14 and another at 3.1 magnitude on February 11. Punggye-ri in northeast North Korea is the country's only known facility for conducting nuclear tests. The last known weapons test was conducted in Sept. 2017, when North Korea detonated its sixth and largest nuclear bomb, which it claimed was a thermonuclear weapon.

https://www.reuters.com/world/asia-pacific/smallquakes-reported-near-nkorea-nuclear-site-amidtalk-resumed-testing-2022-02-15/

O. Japan

Japan halts shipment of black rockfish caught off Fukushima over radiation

Reuters, February 08, 2022

Japan's health ministry said it had ordered the suspension of shipments of black rockfish caught off Fukushima prefecture after radiation exceeding an upper limit was detected in a catch late last month. The development comes on the heels of an announcement by Taiwan that it would relax a ban on food imports from Japan put in place after the 2011 Fukushima nuclear disaster. The suspension means the targeted fish would not be shipped, regardless of the destination, a ministry official said.

https://www.reuters.com/world/asia-pacific/japanhalts-shipment-black-rockfish-caught-offfukushima-over-radiation-2022-02-08/

Tritium checks to strengthen ahead of Fukushima water release

Tsuyoshi Kawamura

Asahi Shimbun, February 10, 2022

To alleviate negative publicity, the government plans to quadruple the number of tritium-monitoring points in the ocean ahead of planned release of water accumulating at the crippled Fukushima No. 1 nuclear power plant. Tokyo Electric Power Co. intends to discharge millions of tons of the treated water into the ocean from spring 2023. Fishermen and others have opposed the plan, saying the water release will reignite false rumors about radioactive seafood caught in the area. On Feb. 9, the government agreed to intensify monitoring starting in spring to provide a comparative base for tritium levels in the water ahead of the actual release of the water from the Fukushima plant. A panel of experts under the Environment Ministry gave the green light for the increased monitoring. The new measure will be included in a revised general monitoring plan the government will compile before the end of March. The new plan will also be explained to officials of the International Atomic Energy Agency who will begin their evaluation of the domestic situation on Feb. 14.

https://www.asahi.com/ajw/articles/14545364

Student petitions city assembly to ask Japan to join nuke ban treaty

Roppei Suda

Asahi Shimbun, February 11, 2022

University student Hideyuki Aoki has no connection to Hiroshima or Nagasaki, nor does he have a relative who suffered through the atomic bombing of either city near the end of World War II. But the Waseda University senior still sympathized when he heard a lecture on campus by an organization seeking to ban

nuclear weapons. "The abolition of nuclear weapons is not a problem just for atomic bomb survivors and atomic-bombed cities," Aoki, 22, said he thought at the time. "It is a problem that everyone has to face." So, Aoki embarked on a solo effort to file a petition with the assembly of his home city of Kazo, Saitama Prefecture, asking it to call on the central government to join an international convention that bans the possession and use of nuclear arms. The Treaty on the Prohibition of Nuclear Weapons, the pact in question, celebrated the first anniversary going into force on Jan. 22. The Kazo assembly did not adopt the petition. However, Aoki said that he believes that the experience he gained was worth the effort. He said he plans to continue calling on Japan to join the nuclear ban treaty even after he graduates from university and heads out into the real world this spring.

https://www.asahi.com/ajw/articles/14531610

EDITORIAL: Touting nuclear power as 'green' energy is a non-starter for Japan

Asahi Shimbun, February 11, 2022

The European Commission, the executive branch of the EU, has recognized nuclear power as an energy source that can contribute to curbing global warming under certain conditions. But member countries are divided over the wisdom of expanding the use of nuclear power. The move in Europe should not be used as an impetus for promoting nuclear power generation in Japan, where conditions differ from those in Europe. The European Commission has added power generation using nuclear energy and natural gas to the list of environmentally sustainable economic activities, known as the EU Taxonomy. While member countries are free to decide which energy sources to use, the commission expects that inclusion on the list will help attract investment in nuclear and natural gas projects.

In addition to Germany, which is moving to phase out nuclear power, four members

including Austria had expressed objections to the proposal to attach a "green" label to nuclear power. But France, which depends on nuclear energy for the bulk of its overall electricity output, and many other members welcomed the proposal, making it likely to be adopted. Qualifying under the EU Taxonomy requires "no significant harm" to such environmental objectives as the sustainable use and protection of water, the protection and restoration of biodiversity and ecosystems as well as pollution prevention and control. To be qualified as sustainable economic activities, nuclear plants must have a specific plan for a high-level radioactive nuclear waste disposal site.

https://www.asahi.com/ajw/articles/14546281

Japan welcomes IAEA's inquiry into Fukushima water release

Reuters, February 14, 2022

The Japanese government welcomes the International Atomic Energy Agency's review on the safety of releasing contaminated water from the crippled Fukushima nuclear plant into the sea, Chief Cabinet Secretary Hirokazu Matsuno said. A group of experts from the organisation is in Japan to evaluate the safety as well as the radiation effects on humans and the sea of discharging the treated water, Matsuno said. "The Japanese government will fully cooperate with the IAEA to ensure that Japan's efforts are properly evaluated," the top government spokesperson said. Japan said last year it would discharge more than 1 million tonnes of contaminated water in stages after treatment and dilution, starting around spring 2023.The announcement provoked concerns from local fishermen and objections from neighbouring China and South Korea.

https://www.reuters.com/world/asia-pacific/ japan-welcomes-iaeas-inquiry-into-fukushimawater-release-2022-02-14/

Japan's Eneos to consider resuming Iran oil imports if nuclear deal is revived -chair

Reuters, February 17, 2022

Japan's biggest oil refiner Eneos Holdings Inc (5020.T) will consider resuming oil imports from Iran if an agreement to revive a 2015 nuclear deal is reached, though the company has not begun such preparations yet, its chairman said. It will take about twoto-three months to resume oil imports from Iran if and after such an agreement on the nuclear deal is made as the refiner will need to make various arrangements such as insurance and shipping, Eneos Chairman Tsutomu Sugimori told reporters.

https://www.reuters.com/business/energy/japanseneos-consider-resuming-iran-oil-imports-ifnuclear-deal-is-revived-chair-2022-02-17/

P. South Korea

'Nuclear energy is green'

The Korea Times, February 06, 2022

The European Commission has made a final proposal that includes nuclear energy in its taxonomy. The EU taxonomy is a classification system establishing a list of environmentally sustainable economic activities and providing financial companies with investment guidelines. The decision comes in contrast to the Korean government's exclusion of nuclear energy from its own taxonomy last year, raising concerns that the country is running counter to global trends. The European Commission pushed ahead with its proposal despite opposition from member nations including Germany, Austria, Luxembourg, Spain and Denmark. That's because commission leaders, alarmed by the ongoing energy crisis, think atomic power generation is inevitable to attain carbon neutrality. Moves to return to nuclear power have been spreading in other countries as well. Last year, U.S. President Joe Biden signed an executive order that specified nuclear power as a carbon pollution-free electricity. China, the world's largest carbon emitter, has also

decided to build 150 nuclear power stations, with the goal of reaching carbon neutrality by 2060.

http://www.koreatimes.co.kr/www/opinion/ 2022/02/137_323361.html

Korea's nuclear phase-out policy losing further ground

Lee Kyung-min

The Korea Times, February 06, 2022

Korea should take into account a recent move by the European Commission (EC) to recognize nuclear and natural gas as green energy sources, a private state think tank, highlighting the need to renounce the nuclear phase-out policy spearheaded by the Moon Jae-in administration. The Korea Economic Research Institute's (KERI) recommendation fans criticisms that Korea has been railroading the antinuclear policy for years, with the issue increasingly being reduced to a tool for political attacks at the expense of energy security. Chief among the factors anchoring the critical voices is soaring energy costs, tied closely to living expenses surging due to rising inflation brought on by pandemic-induced liquidity. Few say the carbon-neutrality initiative will be feasible without nuclear power, an affordable, stable source of energy, as evidenced by the leaders of the EC seeking to embrace the much-demonized power source for the time being. The move gained rapid traction due to the energy crisis triggered by an unstable supply of renewables and natural gas this winter. The think tank said Korea should revise the K-Taxonomy, the Korean version of the European Union Taxonomy, a set of guidelines for green, sustainable investments to meet climate goals including reduction of greenhouse gas emissions.

http://www.koreatimes.co.kr/www/tech/2022/ 02/129_323375.html

Lee, Yoon unveil different waste management pledges

Ko Dong-hwan

The Korea Times, February 12, 2022

On Feb. 3, when the four leading candidates in the March 9 presidential election debated on TV for the first time, Yoon Suk-yeol of the People Power Party (PPP) had his guard down when his rival, Lee Jae-myung of the Democratic Party of Korea (DPK), asked him to explain what "RE100" and "EU Taxonomy" meant as they were debating about their environmental pledges. Yoon, confounded, stuttered for several seconds and admitted he didn't know what the terms meant. They are used internationally when discussing how future industries must rely on renewable energy sources instead of fossil fuels in order to prevent climate change.

Yoon and Lee are leading the nation's polls neck-and-neck with around 35-percent support each as of Thursday, and people are expecting one of them to become the country's next president. The next seven years or so are considered a critical juncture for the people across the world to make lastditch efforts to reduce global carbon emissions in order to mitigate the climate crisis' catastrophic consequences. Ecoconscious Koreans are concerned about the candidates' pledges and whether they will indeed put such pledges into practice if elected. Some people are concerned about Yoon's apparent aloofness to pressing climate and environmental issues, while local environmental activists strongly condemn his backing of "K-nuclear power," along with his pledge to build more nuclear power plants in Korea.

http://www.koreatimes.co.kr/www/nation/2022/ 02/113_323761.html

Reliance on atomic power

The Korea Times, February 17, 2022

Korea's nuclear power plant utilization rate has jumped by more than 33 percentage points compared to four years ago. According to Korea Hydro & Nuclear Power on Tuesday, the nation's utilization rate of atomic power stations stood at 89.4 percent last month, far higher than the 56.2 percent in January 2018. That shows how the Moon Jae-in administration's nuclear phaseout policy has increased the country's reliance on atomic energy instead of decreasing it. According to Korea Electric Power Corp. statistics, the share of nuclear power in Korea's total electricity generation also rose to 29 percent last year from 25.8 percent in 2018. This increase resulted from the government's switch to advance the operations of overhauled nuclear power plants, due to rising fuel prices amid the global energy shock last summer. More fundamentally, however, it reveals the problems with the government's policy to replace nuclear power with renewable energies, such as solar and wind power.

http://www.koreatimes.co.kr/www/opinion/ 2022/02/137_324070.html

Denuclearization of Korean Peninsula remains top priority for US: Kritenbrink

The Korea Times, February 18, 2022

The complete denuclearization of the Korean Peninsula is a top priority for the United States and its regional allies, a senior U.S. official said Wednesday, while highlighting the importance of trilateral cooperation between the U.S., South Korea and Japan to achieve that goal. Assistant Secretary of State for Asian and Pacific Affairs Daniel Kritenbrink also renewed the U.S. call for North Korea to engage in serious dialogue. "Issues related to security on the Korean Peninsula and particularly the threat posed by North Korea's nuclear and missile programs is, of course, a top priority for our three countries," Kritenbrink told reporters during a teleconference to explain the outcome of Secretary of State Antony Blinken's recent trip to Australia, Fiji and Hawaii.

During his visit to Hawaii, the top U.S. diplomat met with his South Korean and Japanese counterparts, Chung Eui-yong and Yoshimasa Hayashi, respectively, to discuss ways to engage with the North. "We also discussed in great detail the continued priority we continue to place on the DPRK, and Secretary Blinken was able to reiterate that our goal remains the complete denuclearization of the Korean Peninsula and will continue to consult closely with our allies and partners going forward," Kritenbrink said of the trilateral foreign ministerial talks, held Saturday in Honolulu.

http://www.koreatimes.co.kr/www/nation/2022/ 02/103_324063.html

Q. World/Misc.

US, 8 other countries urge UNSC to condemn North Korean missile test

The Korea Times, February 05, 2022

The United States and eight other countries called on the U.N. Security Council (UNSC), to condemn North Korea's recent missile tests after the council's closed meeting apparently failed to take any concrete action against Pyongyang. The meeting marked the second attempt by the U.S. and other like-minded countries in just about two weeks to hold North Korea to account for its recent series of missile launches. North Korea staged its seventh and last round of missile launches of the year last Sunday (KST). "The DPRK's January 30 (local time) launch of an intermediate-range ballistic missile (IRBM) is a significant escalation in the DPRK's recent violations of multiple Security Council resolutions and seeks to further destabilize the region. We condemn this unlawful action in the strongest terms," U.S. Ambassador to the U.N. Linda Thomas-Greenfield said in a joint statement.

DPRK is the acronym for North Korea's official name, the Democratic People's Republic of Korea. The statement was signed by the U.N. representatives from eight other UNSC member countries [–] Albania, Brazil, Britain, France, Ireland, Japan, Norway and the United Arab Emirates. They noted the IRBM marked the longest-range test conducted by North Korea since late 2017, also adding Pyongyang has so far fired nine ballistic missiles in its seven rounds of missile tests this year. "The nine ballistic missiles

launched in January is the largest number of launches the DPRK has conducted in a single month in the history of its WMD and ballistic missile programs," they said in their joint statement.

http://www.koreatimes.co.kr/www/nation/2022/ 02/103_323335.html

South Africa begins search for new reactor to sustain Molybdenum-99 output

Reuters, February 07, 2022

South Africa's state-owned nuclear energy firm, NECSA, launched a tender to replace its ageing nuclear research reactor, Safari 1, and help maintain its position as one of the world's top producers of Molybdenum-99 used in medical diagnostic imaging. Molybdenum-99, or Mo-99, is used in millions of diagnostic tests for cancer, heart disease and other illnesses worldwide. NTP Radioisotopes is a subsidiary of the South African Nuclear Energy Corporation (NECSA) and uses the 20 megawatt Safari 1 research reactor at Pelindaba, in operation since 1965, to produce Mo-99.

https://www.reuters.com/business/healthcarepharmaceuticals/south-africa-begins-searchnew-reactor-sustain-molybdenum-99-output-2022-02-07/

Understanding Artificial Neural Networks

The Hindu, February 07, 2022

Does the term "neuron" ring a bell in your mind? It is the building block of the brain and it inspired computer scientists from the 1950s – how to make a computer perform tasks like a brain does? It is not a simple problem and the clue to its complexity is in the brain structure. Through ANNs and the backpropagation method, artificial intelligence has become more powerful.

https://www.thehindu.com/sci-tech/technology/ understanding-artificial-neural-networks/ article38390874.ece

SpaceX satellites falling out of orbit after solar storm

Boston, February 09, 2022

SpaceX's newest fleet of satellites is tumbling out of orbit after being struck by a solar storm. Up to 40 of the 49 small satellites launched last week have either reentered the atmosphere and burned up, or are on the verge of doing so, the company said in an online update Tuesday night. SpaceX said a geomagnetic storm last Friday made the atmosphere denser, which increased the drag on the Starlink satellites, effectively dooming them. Ground controllers tried to save the compact, flat-panel satellites by putting them into a type of hibernation and flying them in a way to minimize drag. But the atmospheric pull was too great, and the satellites failed to awaken and climb to a higher, more stable orbit, according to the company.

https://www.boston.com/news/technology/2022/ 02/09/spacex-satellites-falling-out-of-orbit/

NASA raises concerns about SpaceX satellite deployment plan

David Shepardson and Steve Gorman

Reuters, February 10, 2022

The National Aeronautics and Space Administration (NASA) raised concerns about SpaceX's plan to deploy about 30,000 satellites for its Starlink, as have some major companies. Elon Musk's SpaceX previously received authorization for about 12,000 satellites to offer broadband internet and has requested authorization for a secondgeneration constellation of 30,000 satellites. "NASA has concerns with the potential for a significant increase in the frequency of conjunction events and possible impacts to NASA's science and human spaceflight missions," the agency wrote the Federal Communications Commission.

NASA noted there are currently 25,000 total objects tracked on-orbit - and about 6,100 below 600 km. SpaceX's Gen2 expansion "would more than double the number of

tracked objects in orbit and increase the number of objects below 600 km over fivefold," it added. Harvard-Smithsonian astrophysicist Jonathan McDowell, part of the American Astronomical Society panel examining the impacts of satellites on astronomy said: "We've been concerned with having these large numbers of satellites that interfere with astronomical observations... I think we need a little more experience with the several thousand operating satellites before we can ramp up to the tens of thousands."

https://www.reuters.com/lifestyle/science/nasaraises-concerns-about-spacex-satellite-deployment-plan-2022-02-09/

Warning time for a Russian attack is going down – NATO

Reuters, February 10, 2022

NATO's secretary general warned of a "dangerous moment" for Europe as Russia builds up troops near Ukraine and holds joint military drills in Belarus, but reiterated an offer of talks with Moscow. Jens Stoltenberg, speaking alongside British Prime Minister Boris Johnson, said he had sent a letter to Russian Foreign Minister Sergei Lavrov offering to discuss more transparency around exercises, as well as nuclear arms control. "This is a dangerous moment for European security," Stoltenberg told a news conference with Johnson. "The number of Russian forces is going up. The warning time for a possible attack is going down." "NATO is not a threat to Russia, but we must be prepared for the worst while remaining strongly committed to finding a political solution," Stoltenberg said. He said Russia must choose between a diplomatic solution to the crisis over Ukraine or face economic sanctions from the West and an increased military presence of NATO forces in the alliance's eastern countries.

https://www.reuters.com/world/europe/natosays-warning-time-russian-attack-is-goingdown-2022-02-10/

IAEA says it is helping Egypt and Saudi Arabia with nuclear power

Reuters, February 14, 2022

International Atomic Energy Agency (IAEA) head Rafael Grossi told a conference in Saudi Arabia that the organisation is working with Egypt and Saudi Arabia to help them to develop nuclear power.

https://www.reuters.com/world/middle-east/iaeasays-it-is-helping-egypt-saudi-arabia-withnuclear-power-2022-02-16/

SpaceX engineer Anna Menon to be among crew of new space mission

PTI, February 15, 2022

SpaceX engineer Anna Menon will be among the crew of a unique space mission announced on Monday by U.S. billionaire Jared Isaacman, who had commanded a human spaceflight mission last year. Anna Menon is a Lead Space Operations Engineer at SpaceX.

https://www.thehindu.com/sci-tech/science/ spacex-engineer-anna-menon-to-be-among-crewof-new-space-mission/article65051328.ece

R. Opinion

The specter of a nuclear arms race in the Middle East

Jane Harman

The Hill, February 10, 2022

The Biden administration will soon issue its annual National Security Strategy. But it is already clear that the world isn't waiting on us. Think Russia-Ukraine tensions or North Korean missile tests. But also think the brazen drone attacks on Abu Dhabi last month, which killed three people – rumored to be only part of a broader attack which included Dubai airport and landmarks there. The perpetrators were the Houthi insurgents in Yemen, probably using Iranian-provided weaponized drones and missiles. Horrifying, but it could become even worse.

Criticisms of the reckless and possibly criminal behavior of the Trump administration are piling up. But no doubt its most damaging foreign policy mistake was its withdrawal from the 2015 Joint Comprehensive Plan of Action (JCPOA) agreement, which was designed to contain Iran's nuclear program. The Obama administration oversold the deal as transformational, as Wilson Center scholar Robert Litwak has pointed out. But as a transactional deal, it was very effective. It only addressed Iran's nuclear program - not its missile development and use of proxies to attack Israel and generate mischief across the Middle East and beyond. A recent example is the connection between Islamic Revolutionary Guard Corps (IRGC) contractors and cyber espionage in the U.S. 2020 election. But it did the former very well, including capping Iran's plutonium production and permitting frequent inspections by the International Atomic Energy Agency (IAEA).

https://thehill.com/opinion/international/ 593718-the-specter-of-a-nuclear-arms-race-inthe-middle-east

Are we on the brink of a new era of nuclear proliferation?

Noah Millman

The Week, February 12, 2022

In Vienna, American and Iranian officials are racing to find a way back in to the abandoned 2015 deal to restrain Iran's nuclear program before Tehran's uranium enrichment advances so far it's no longer plausible to turn it back. Things have already gone so far, in fact, that some observers wonder whether the effort is still worth it. Meanwhile, in Berlin, French and German officials are attempting to restart another set of talks that have languished since 2015, the so-called Normandy format talks between Russia and Ukraine. As with Iran, the clock is ticking before fatal rubicons are crossed that cannot be crossed back. Apart from being showcases for the possibilities and limits of diplomacy, the two negotiations would seem to have nothing in common. But under the surface, they both reflect the decline in the nuclear nonproliferation regime over the past quarter century - and suggest the possibility that we stand on the brink of a wider spread of nuclear weapons.

https://theweek.com/foreign-affairs/1010035/arewe-on-the-brink-of-a-new-era-of-nuclear-proliferation

Asia and Biden's nuclear posture review

C. Rajamohan

The Korean Times, February 16, 2022

Expectations or concerns about major shifts in the U.S. nuclear posture review have not really matched the outcomes from the exercise that began with the end of the Cold War. All U.S. presidents since Bill Clinton George W. Bush, Barack Obama, and Donald Trump - have produced these reviews. The results of these reviews have been modest and have oscillated within a narrow band between the Republican emphasis on strengthening the U.S. nuclear arsenal and the Democratic desire to minimize the reliance on nuclear weapons. Nonetheless, the Democrats have struggled to translate this into practical policy. The enthusiasm of the Democratic presidents to make bold departures from the nuclear doctrine have always met stiff resistance from the Pentagon and the nuclear traditionalists. This time around, the Biden administration is under greater pressure from the progressive constituency in the Democratic Party to pronounce that the "sole purpose" of nuclear weapons is to deter a nuclear attack by an adversary. During the presidential campaign, Biden often said, "Deterring, and, if necessary, retaliating against a nuclear attack should be the sole purpose of the U.S. nuclear arsenal." Biden, however, gave himself some room by adding the caveat that his administration "will work to put that belief into practice, in consultation with our allies and military."

http://www.koreatimes.co.kr/www/opinion/2022/ 02/137_323918.html

Despite battlefield success, small killer drones slow to spread in Southeast Asia

Gerry Doyle

Reuters, February 16, 2022

Small, cheap, deadly drones caught the attention of military planners in 2020 when used to devastating effect in the conflict between Armenia and Azerbaijan, but political sensitivities may keep them out of Southeast Asia, a regional defence expert said. Some armed models were among the drones on display at the Singapore Airshow this week, though none matched the precise features of the so-called "loitering munitions" used in the fighting two years ago - flying quietly overhead until diving down to destroy a target. Yet many regional governments are interested in that capability, said Collin Koh, a research fellow at Singapore's Institute of Defence and Strategic Studies. "Killer drones were well emphasized during that conflict... and there is certainly growing interest," Koh said. "Some even argued that killer drones are a gamechanger to the future of conflict. All these lessons are being paid attention to in the region."

https://www.reuters.com/business/aerospacedefense/despite-battlefield-success-small-killerdrones-slow-spread-southeast-asia-2022-02-16/

How to deal with North Korean military threats

Yun Byung-se

The Korean Times, February 17, 2022

What has been unfolding in Eastern Europe and on the Korean Peninsula in recent months is a sad and ironic testament to the changing fortunes of Ukraine and North Korea. The year 1994 was special for nuclear diplomacy. In October 1994, the U.S.-DPRK Agreed Framework to resolve the first North Korean nuclear crisis was signed in Geneva after 18 months of negotiations. Two months later, the Budapest Memorandum on Security Assurances was signed by Ukraine, Russia, the United Kingdom and the United States. The background and rationale for these two agreements are quite different, but they shared some common characteristics. First, Ukraine, nuclear weapon state at that time with the third-largest nuclear arsenal, acceded to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) as a non-nuclear weapon state, and the DPRK, which had announced in 1993 its withdrawal for the first time in NPT history, decided to remain a party to the treaty (until 2003). Ukraine transferred some 1,900 strategic nuclear warheads (and earlier an additional 2,500 tactical nuclear weapons) to Russia. North Korea undertook a freeze and pledged to dismantle its nuclear facilities.

http://www.koreatimes.co.kr/www/opinion/2022/ 02/137_323933.html

BrahMos Missile Sale – A Rubicon Crossed

Pinak Ranjan Chakravarty

ORF, February 19, 2022

The undercurrents buffeting the international order are gathering The momentum. so-called liberal international order ended two decades ago. The post-Cold War era has also ended, with the current geopolitical trend defined by the economic rise of China and her aggressive expansionist policies. Whether the new international order will be based on a multipolar architecture or a plurilateral architecture that provides stability, is still work in progress. The most potent driver of this restructuring of the international order is China's attempt to create an alternative one, in which China is the global hegemon or at the least a rival one to USA, with vassal states in her orbit.

China has so far succeeded in creating considerable security concern in East Asia by her belligerent actions in the South China Sea [SCS], in pursuit of her hegemonic ambition. This has led to a critical mass of countries who all have decided that future threats to their countries emanate from China. This situation has set in motion countervailing trends. It is instructive to analyse these geopolitical trends by following strategic high technology weapons transfers from one country to another.

https://www.orfonline.org/research/brahmosmissile-sale-a-rubicon-crossed/

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Indian Pugwash Society welcomes research articles from students, researchers and faculties on Space, Missile, nuclear technology, WMD proliferation, arms control, disarmament, export controls and other related issues. Articles should be crisply written and should address contemporary debates in the policy arena. Manuscripts submitted for the consideration of the Indian Pugwash Society should be original contributions and should not have been submitted for consideration anywhere else. For further assistance, please contact us at : indianpugwashsociety@gmail.com

The Indian Pugwash Society aims to promote the study, discussion, and knowledge of and to stimulate general interest in, and to diffuse knowledge in regards to problems relating on WMD proliferation, arms control, disarmament, space security, export controls, nuclear technology and other related issues. This newsletter is part of the project "Emerging Nuclear Order in Asia: Implications for India" sanctioned to us by Department of Atomic Energy-Board of Research in Nuclear Sciences (DAE-BRNS).

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