



Nuclear, Missile & Space Digest

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<u>Convenor</u> Amb. Sujan R. Chinoy

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Dr. Rajesh Rajagopalan
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Prepared by Ms. Diya Deep Singh



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India

AERB may get to grant green nod to strategic nuclear power plants

Economic Times, September 24, 2021

The government is looking to free up the environmental clearance process for strategic nuclear power projects from the purview of the union environment ministry in view of the high confidentiality and national security interests involved. It is examining ways to delegate the green clearance process specifically for these projects to the Atomic Energy Regulatory Board (AERB) instead, ET has learnt.

Highly placed sources in the environment ministry confirmed that a proposal to secure the nuclear and strategic project processes is under consideration and various modalities are being examined to delegate the Environmental clearance process to the AERB instead.AERB responded to ET queries, saying it has not yet set up any committee on this issue.

https://economictimes.indiatimes.com/news/india/aerb-may-get-to-grant-green-nod-to-strategic-nuclear-power-plants/articleshow/86469263.cms

China

China urges India to stick to UNSC resolution to refrain from engaging in nuclear tests: FM Global Times, September 16, 2021

China hopes all parties in South Asia, including India, will make constructive efforts in maintaining peace and stability in the region, the Chinese Foreign Ministry said on Thursday in response to India's plan to conduct a trial of intercontinental-range ballistic missile that covers Beijing and other Chinese cities, citing the United Nations Security Council Resolution 1172. The resolution condemned India's nuclear bomb tests in 1998 and demanded it to refrain from engaging in further tests. India is set to conduct its first user trial of nuke capable intercontinental-range ballistic missile Agni-V, the Indian Express reported. The 5,000-km range missile is likely to be flight-tested on September 23, and is capable of hitting targets in all Asian countries and parts of Africa and Europe.

Another Indian media outlet swarajyamag.com said that the missile "will bring Beijing and many other critical Chinese cities within the range of Indian land-based nuclear weapons for the first time, establishing a credible nuclear deterrent." Responding to India's latest provocations, Zhao Lijian, a spokesperson of Chinese Foreign Ministry, said at the Thursday's press briefing that maintaining the peace, security and stability in South Asia is in the common interest of all parties, and China hopes all parties will make constructive efforts to this end. "As to whether India can develop ballistic missiles capable of carrying nuclear weapons, the UN Security Council Resolution 1172 has made clear provisions," Zhao said, citing the resolution that condemned the nuclear tests conducted by India in May 1998. The resolution also demanded India to refrain from further nuclear tests, and immediately stop its nuclear weapon development programs, ballistic missiles capable of delivering nuclear weapons and any further production of fissile materials for nuclear weapons.

https://www.globaltimes.cn/page/202109/1234509.shtml

Lift-off for Tianzhou 3, China's space station resupply mission William Zheng

South China Morning Post, September 20, 2021

The cargo ship was successfully launched from Hainan province days after the space station's first crew returned home. Three astronauts are expected to blast off early next month for a six month mission. China launched a cargo spaceship on Monday to deliver supplies to its

Tiangong space station and prepare for a second crewed mission planned for next month. The Tianzhou 3 lifted off aboard a Long March 7 Y4 rocket at 3.10pm from Hainan's Wenchang spacecraft launch centre in southern China, just three days after the first astronauts to crew the space station returned to Earth. The Tianzhou 3 entered orbit within 10 minutes of lift-off and began opening its solar panels after 15 minutes, prompting the China Manned Space Agency (CMSA) to declare the launch a success.

https://www.scmp.com/news/china/science/article/3149414/china-launches-tianzhou-3-ungong-space-station

Daya Bay Nuclear Power Plant achieve safe operation for 10,000 days

Global Times, September 21, 2021

The Daya Bay Nuclear Power Plant, China's first large-scale commercial nuclear power plant located in Shenzhen, South China's Guangdong Province, announced on Tuesday a record of 10,000 days of safe operations and the cumulative power supply of 380 billion kilowatt-hours, an important milestone for the country's nuclear plant development. As the first commercial nuclear power plant of this kind built in the Chinese mainland, it has set a high bar for domestic nuclear power industry while playing a key role in providing the much-needed electricity supply for regional economic development and effectively reducing carbon emissions in an unprecedented level.

https://www.globaltimes.cn/page/202109/1234758.shtml

China should 'fine-tune' nuclear weapons policy amid US pressure, ex-diplomat says

Laura Zhou

South China Morning Post, September 22, 2021

Former disarmament affairs envoy to UN calls for review of 'no first use' pledge as a way to counter America's growing military presence in region. In a speech, Sha Zukang also says it is only 'a matter of time' before Beijing joins an arms control pact with Washington and Moscow. China should review its policy of not being the first to use a nuclear weapon in a conflict, as it comes under growing pressure from the US and its military alliances, a former diplomat said.

Sha Zukang, who was the Chinese ambassador for disarmament affairs to the UN in Geneva in the 1990s and is now retired, also said it was only "a matter of time" before China joined an arms control pact with the US and Russia, but that would depend on American progress on nuclear arms reduction. He made the remarks at a conference in Beijing last week marking 20 years since the China Arms Control and Disarmament Association was founded.

 $\underline{https://www.scmp.com/news/china/military/article/3149720/china-should-fine-tune-nuclear\ we apons-policy-amid-us-pressure}$

Australian Aukus subs: are China's fears of a nuclear arms race in the Indo-Pacific founded?

Eduardo Baptista

South China Morning Post, September 27, 2021

China has said the United States' decision to help Australia acquire nuclear-powered submarines increased the risk of nuclear proliferation in the Indo-Pacific, but international experts say the extent of the risk depends on how the submarines are regulated. The trilateral Aukus pact will allow Australia to build nuclear-powered submarines using US technology, a prospect that Chinese foreign ministry spokesman Zhao Lijian said "will gravely undermine regional peace and stability, aggravate an arms race and impair international nuclear non

proliferation efforts". However, its potential to serve as a gateway for nuclear weapons depends on how the nuclear technology is transferred from the US to Australia, according to Milton Leitenberg, a senior researcher at the University of Maryland's Centre for International and Security Studies.

https://www.scmp.com/news/china/military/article/3150156/australian-aukus-subs-are chinas-fears-nuclear-arms-race-indo

Pakistan

US generals express concern over Pakistan's nuclear arsenal in wake of Taliban takeover of Afghanistan

Anwar Iqbal Dawn, September 29, 2021

Top US generals are claiming that they had warned US President Joe Biden that a rushed withdrawal from Afghanistan could increase risks to Pakistan's nuclear weapons and the country's security. "We estimated an accelerated withdrawal would increase risks of regional instability, the security of Pakistan and its nuclear arsenals," Chairman of the Joint Chief General Mark Milley told the Senate Armed Services Committee on Tuesday. "We need to fully examine the role of Pakistan sanctuary," the general said, while emphasising the need to probe how the Taliban withstood US military pressure for 20 years.

General Milley and General Frank McKenzie, the leader of US Central Command, also warned that the Taliban Pakistan will now have to deal with would be different from the one they dealt with earlier, and this would complicate their relations. "I believe Pakistan's relationship with the Taliban is going to become significantly more complicated as a result of the US withdrawal from Afghanistan," General McKenzie told the lawmakers.

https://www.dawn.com/news/1649127/us-generals-express-concern-over-pakistans-nuclear-arsenal-in-wake-of-taliban-takeover-of-afghanistan

USA

Biden slammed for challenging nuclear workplace health law

Nicholas K. Geranios AP News, September 17, 2021

Officials in Washington state are upset the Biden administration is challenging a law making it easier for workers who become ill at a former nuclear weapons production site to be compensated. The Supreme Court will likely decide in the next few weeks whether to accept the U.S. Department of Justice's appeal. If the high court rejects the case, the state law will stand.

State Attorney General Bob Ferguson on Thursday called on the Biden administration to "stop this assault on Hanford workers." "It's time to bring this fight to an end," Ferguson said at a news

conference at a Hanford union office in Pasco, Washington. "We want them to drop the appeal to the Supreme Court." "This is a matter of life and death" for Hanford workers," said Nick Bumpaous, a Hanford union leader, who called the appeal an "amoral endeavor." The Justice Department did not immediately respond to a request for comment.

https://apnews.com/article/business-health-laws-gun-politics-washington-4fd56322e4925237a0c2090b1ec9bec9

Pentagon removes top nuclear policy official from post

Paul Sonne

Washington Post, September 22, 2021

The Defense Department has removed a top political appointee in charge of nuclear policy from her position, prompting concern among disarmament advocates that the Pentagon is sidelining those with less hawkish views as the Biden administration develops its official policy on nuclear weapons. Top Pentagon officials asked Leonor Tomero, the deputy assistant secretary of defense for nuclear and missile defense, to resign from her post in recent days, according to people familiar with the matter, who spoke on the condition of anonymity to discuss a sensitive personnel matter.

The shake-up comes as the Biden administration hammers out the details of its Nuclear Posture Review, a document that each administration has released since the 1990s to set out its nuclear weapons policy and strategy, and which the administration is expected to release early next year. The process — which Tomero had been coordinating — will clarify whether President Biden plans to curtail the declared role of nuclear weapons in U.S. defense policy or roll back a \$1.2 trillion, 30-year modernization of the U.S. nuclear force that progressive lawmakers want to see curbed.

One of those lawmakers, House Armed Services Committee Chairman Adam Smith (D-Wash.), served as Tomero's boss in Congress for a decade before she joined the Pentagon. Tomero's departure was first reported by Politico.

https://www.washingtonpost.com/national-security/pentagon-nuclear-policy-tomero-fired/2021/09/22/8c37799a-1bb0-11ec-914a-99d701398e5a_story.html

SC senators debate how to spend \$525M in plutonium deal

Jeffrey Collins AP News, September 28, 2021

Along with billions of dollars in federal COVID-19 relief money, South Carolina lawmakers have another large bonus pot of money to spend soon — \$525 million from the federal government over plutonium still sitting inside the state. The money is part of a 2020 settlement with the federal government which promised a plant at the Savannah River Site near Aiken that would turn plutonium from unneeded nuclear weapons into nuclear reactor fuel but instead left about 21,000 pounds (9,500 kilograms) of the highly radioactive material in storage in South Carolina. A state Senate subcommittee looking into how to spend COVID-19 relief money also has been given the task of spending the plutonium settlement.

The two senators who represent the 310-square-mile (803-square-kilometer) federal site, where thousands were forced out of their homes in the early 1950s because the U.S. needed a place to build nuclear weapons during the Cold War, said the counties that lost land should get most of the money.

"We're not asking for all the money, but we're asking we get out fair share based on the history of this site," Sen. Brad Hutto said at Tuesday's meeting.

https://apnews.com/article/business-health-laws-gun-politics-washington-4fd56322e4925237a0c2090b1ec9bec9

US aims to relax testing of contaminants at nuke weapon lab

AP News, September 28, 2021

The U.S. Energy Department wants to switch to less stringent testing for detecting cancer-causing chemicals at and around one of its premier nuclear weapons laboratories despite concerns from environmentalists and New Mexico regulators. The federal agency is using New Mexico's three-year review of surface water rules to push for a test at Los Alamos National Laboratory that's more limited in detecting polychlorinated biphenyls, or PCBs, the Santa Fe New Mexican reported. Medical research has shown the chemicals can cause cancer, impair children's brain development, hurt reproductive systems and increase the chance of heart and liver diseases.

The Energy Department asserts that its testing would be sufficient and that the current method required by the state goes far beyond what's necessary. Parties in the dispute have submitted written arguments and testified at hearings held by the state Environmental Improvement Board as part of its review of surface water regulations done every three years. Rachel Conn, project director for the Taos-based Amigos Bravos water conservation organization, bashed the proposed testing change as another attempt by the Energy Department to cut corners on safeguarding public health. "It's a shame that our taxpayer money is being used to lower the bar for protections for New Mexico waters and weaken our water quality standards," she said. The birthplace of the atomic bomb, Los Alamos National Laboratory has more than 130 miles (209 kilometers) of streams in and around its site, covering 36 square miles (93 square kilometers). How often it monitors for pollution can range from hourly to yearly and in some cases every five years.

In New Mexico, the U.S. Environmental Protection Agency issues permits for discharges and stormwater runoff, and the state checks whether the water quality meets its standards. John Toll, an Energy Department consultant, testified that the state's required testing method was never officially approved by the EPA so New Mexico must use the EPA-backed test — what energy officials are proposing.

https://apnews.com/article/business-science-health-environment-and-nature-new-mexico-2465757b382f9389539e3f035c228043

'Neglected danger': Nukes not in forefront in speeches at UN Jennifer Peltz

AP News, September 29, 2021

It was the Marshall Islands' turn to speak, and the president wanted to remind world leaders of a cause the United Nations has espoused since its founding. "No effort should be spared," President David Kabua told the U.N. General Assembly this month, "to move towards a world free of nuclear weapons and nuclear risk." It might seem like a must-discuss topic in countries' big speeches at the annual meeting of presidents, prime ministers and other top officials — perhaps especially in a year when a historic nuclear weapons ban treaty take effect, though without participation from nuclear-armed nations.

This year also marks the 25th anniversary of the signing of the Comprehensive Nuclear Test Ban Treaty, which has yet to enter into force for lack of ratification by eight crucial nations but has helped greatly reduce such tests. And it's the 75th anniversary of the General Assembly's very first resolution, which sought proposals to eliminate atomic weapons.

https://apnews.com/article/climate-change-united-nations-general-assembly-europe-united-nations-nuclear-weapons-1a86868576b629a121e71ae36feda02a

US, Russia to push ahead on arms control, strategic talks

Jamey Keaten And Matthew Lee AP News, September 30, 2021

The United States and Russia agreed Thursday to press ahead with arms control and related strategic security talks despite significant differences between the two sides. In high-level discussions in Geneva, senior U.S. and Russian diplomats signed off on setting up two working groups to pursue potential accords related to nuclear weapons and other global threats: the Working Group on Principles and Objectives for Future Arms Control and the Working Group on Capabilities and Actions with Strategic Effects.

A senior U.S. official described the second meeting of the U.S.-Russia Strategic Stability Dialogue since President Joe Biden took office as having been "intensive and substantive" and "detailed and dynamic" but offered no specifics. A joint statement from the two sides said the talks were part of an "integrated, deliberate, and robust process."

https://apnews.com/article/joe-biden-russia-geneva-united-states-vladimir-putin-430e037f5c91cfd8d1969450dc9ade4d

Europe

EU unveils Indo-Pacific strategy in response to US-led pact

DW, September 16, 2021

EU foreign policy chief Josep Borrell has said the bloc was "not informed" about the "AUKUS" security pact in the Indo-Pacific and took it as a sign the EU needs to develop its own strategy for the region. The EU is looking to increase engagement in the Indo-Pacific as the US, UK and Australia increase ties. The European Union announced its own strategy to boost political and defense ties in the Indo-Pacific on Thursday. It comes a day after the United States, UK and Australia unveiled a new tri-lateral defense pact for the region.

EU foreign policy chief Josep Borrell said Thursday that Brussels had not been consulted on the pact, which has been dubbed "AUKUS." "We regret not having been informed, not having been part of these talks," Borrell said as he presented the strategy. We must survive on our own, as others do," he added. A particular sore spot of the pact is a new deal for the US to help Australia build a fleet of nuclear-powered submarines. That canceled a previous \$40-billion (€34-billion) diesel submarine deal with France, which drew the ire of Paris. "I understand the extent to which the French government must be disappointed," Borrell said.

https://www.dw.com/en/eu-unveils-indo-pacific-strategy-in-response-to-us-led-pact/a-59203426

France accuses US, Australia of 'duplicity' over submarine deal collapse DW, September 19, 2021

Foreign Minister Jean-Yves Le Drian lamented the "duplicity, disdain and lies" from allies over the growing crisis. The French Ambassador to Australia said he read about the scuttled defense deal in the Australian press. French Foreign Minister Jean-Yves Le Drian has expressed dismay over the collapse of a defense deal involving submarines with Australia France's foreign minister, Jean-Yves Le Drian, denounced the "duplicity, disdain and lies" on Saturday surrounding the collapse of a \$66 billion (€56 billion) contract between France's state-owned Naval Group and the Australian government for conventional submarines.

Australia is now in favor of nuclear-propelled submarines made by the United States, scuttling the French defense deal inked in 2016. French President Emmanuel Macron and US President Joe Biden will discuss the issue during a phone call in the coming days, a French government spokesperson said on Sunday. On Friday, France recalled its ambassadors to the US and Australia, but not the UK, in an unprecedented move on Macron's orders.

https://www.dw.com/en/france-accuses-us-australia-of-duplicity-over-submarine-deal-collapse/a-59228421

France recalls ambassadors from the US and Australia over submarine deal DW, September 17, 2021

The move came after Australia broke off a submarine deal with France to buy nuclear-powered subs from the US. The White House said it regrets France's decision. The French government on Friday announced it would recall its envoys from the United States and Australia. French Foreign Minister Jean-Yves Le Drian said the decision was requested by French President Emmanuel Macron. The move came after Australia on Thursday broke off a submarine deal worth at least \$40 billion (€34 billion) with France to build diesel-electric submarines to instead buy nuclear-powered ones from the US.

 $\underline{https://www.dw.com/en/france-recalls-ambassadors-from-the-us-and-australia-over-submarine-deal/a-59219866}$

Germany to shut controversial Gorleben nuclear waste facility DW, September 18, 2021

After serving for decades as a storage location for German radioactive nuclear waste, the government said it would close the Gorleben mine. Locals and environmental groups have protested against the facility for years. Germany has been searching for a permanent spot to store its nuclear waste for decades. The Gorleben mine in the German state of Lower Saxony will close, the country's Environment Ministry announced on Friday.

The mine in the Wendland region became the center of a long-running controversy after it was proposed as a possible site for the disposal of radioactive nuclear waste. "This ends the chapter on the Gorleben repository. I hope in Wendland wounds opened by the decades-long argument over Gorleben will now be able to heal," State Secretary at the Environment Ministry Jochen Flasbarth said.

https://www.dw.com/en/germany-to-shut-controversial-gorleben-nuclear-waste-facility/a-59211763

German minister: Submarine dispute is 'a wake-up call'

DW, September 20, 2021

Germany's European Affairs minister said it will be difficult to rebuild trust between the EU and its allies as the US, UK, and Australia insist that long-term relations with France won't be affected. Michael Roth said the EU had to unite behind France in the submarine row. Tensions in the trans-Atlantic alliance overshadowed the beginning of the United Nations General Assembly, as EU foreign ministers met on the sidelines of the UN General Assembly in New York to discuss the fallout from a US-Australian trade deal that left France in the lurch. Germany's European Affairs Minister Michael Roth called the row a "wake-up call" for the bloc.

"We cannot exclusively rely on others but must cooperate, and we have to overcome our differences (within the EU) and speak with one voice," he told reporters in Brussels, adding that "lost trust has to be rebuilt — and this will obviously not be easy. But we want to make a constructive contribution." Two EU diplomats also told reporters that European Union ambassadors have postponed discussions to prepare for a new EU-US trade and technology council on September 29 in protest of the submarine deal between the US and Australia.

https://www.dw.com/en/german-minister-submarine-dispute-is-a-wake-up-call/a-59245294

France to send ambassador back to the United States

DW, September 22, 2021

Emmanuel Macron and Joe Biden have agreed that "open consultations" could have prevented the diplomatic row between Paris and Washington over a nuclear submarine deal. Biden admitted a lack of communication led to the diplomatic rift. French President Emmanuel Macron will send his ambassador back to the United States next week, Macron's office announced on Wednesday. The decision was made after President Joe Biden recognized that Washington should have consulted France over a security pact with Australia, Macron's office said. Upon his return to the United States, the French ambassador will "have intensive work with senior US officials." France snubbed over nuclear submarines.

https://www.dw.com/en/france-to-send-ambassador-back-to-the-united-states/a-59265712

West Asia

Iran

Iran nuclear deal: What's next for the JCPOA?

Aljazeera, September 16, 2021

With a conservative government in Iran and Biden touting 'other options', restoring JCPOA will be difficult, analysts say. President Ebrahim Raisi delivers a speech after taking his oath as president in a ceremony at the parliament in Tehran. Tehran says it is seeking sanction relief; Washington says containing the Iranian nuclear programme is a national security priority. And so, both countries maintained that they have an interest in reviving the 2015 nuclear deal. But six rounds of talks in Vienna earlier this year have failed to produce a path to restore the multilateral agreement.

The election of conservative President Ebrahim Raisi in Iran has further complicated the situation. Negotiations have been on ice since June with the Iranian government in transition. Last week, the Iranian parliament approved Raisi's cabinet, but the parties are yet to set solid plans for resuming the negotiations. With hardliners consolidating power in Iran and US President Joe Biden tackling multiple crises at home, analysts have said reviving the nuclear pact will be difficult. Negar Mortazavi, an Iranian-American journalist and analyst, said she is pessimistic about the prospects of reinstating the deal, formally known as the Joint Comprehensive Plan of Action (JCPOA). A Raisi government run by ideologues and more interested in relations with China and Russia will not be rushing to negotiate with the US, she said. "I'm prepared for the possibility that the return would not happen," Mortazavi told Al Jazeera. "And this is not only on the Iranian side, but it's also the Biden administration. Joe Biden himself – even though he did promise a return to the JCPOA – it doesn't seem like he's willing to spend the political capital that is required for this return."

https://www.aljazeera.com/news/2021/9/3/iran-nuclear-deal-whats-next-for-the-jcpoa

Iran Suggests Harder Line in Nuclear Talks

Kelsey Davenport Arms Control Association, September 2021

Newly inaugurated Iranian President Ebrahim Raisi pledged to continue talks to restore the 2015 nuclear deal, but his rhetoric increasingly suggests Tehran may complicate the process by demanding more concessions from the United States. Will Iran's newly inaugurated President Ebrahim Raisi, shown at his Aug. 5 swearing-in ceremony in Tehran, insist on renegotiating certain issues as part of a nuclear deal with the United States? If so, the move could threaten the agreement. Will Iran's newly inaugurated President Ebrahim Raisi, shown at his Aug. 5 swearing-in ceremony in Tehran, insist on renegotiating certain issues as part of a nuclear deal with the United States? If so, the move could threaten the agreement. Prior to Raisi's election in June, the United States and Iran participated in six rounds of indirect talks in Vienna to hash out the steps that each side would need to take to return to compliance with the nuclear deal, known as the Joint Comprehensive Plan of Action (JCPOA). The European Union coordinated the negotiations on behalf of the other parties to the deal—China, France, Germany, Russia, and the United Kingdom.

Although the parties did not reach an agreement, Washington and Tehran said that considerable progress was made on determining the actions the United States and Iran must take to restore the deal. (See ACT, June 2021.) But talks have remained paused since Raisi's election. Rob Malley, U.S. special envoy for Iran, told Politico on Aug. 19 that although a deal with the Raisi administration is still possible, "[i]t's one big question mark" and "not something that [the United States] can fully control." Iranian officials informed the EU after the inauguration that they intend to return to talks in Vienna in September, and Raisi said during his Aug. 5 inaugural address that he would pursue "smart engagement" to achieve a lifting of U.S. and international sanctions on Iran. But his administration appears dissatisfied with the progress made during the first six rounds of negotiations and may attempt to renegotiate certain issues.

https://www.armscontrol.org/act/2021-09/news/iran-suggests-harder-line-nuclear-talks

Future of nuclear talks with Iran remains uncertain as Tehran expands enrichment Karen DeYoung and Kareem Fahim Washington Post, September 21, 2021

Three months after the last meeting to negotiate a revival of the nuclear deal between Iran and world powers, it remains unclear if and when the talks in Vienna will restart, or who might represent its new government. In the interim, Iran has continued to expand the quantity and quality of its uranium enrichment, leading some experts to conclude it is now even closer to possessing enough fissile material to build a bomb than the two or three months the Biden administration has publicly estimated. At the same time, Iran has repeatedly sparred with the International Atomic Energy Agency over monitoring of its nuclear activities agreed in the 2015 deal.

For its part, the administration has continued to warn that negotiating time is running out, without saying how much is left or what it will do if it does. "We don't have a timetable," a senior State Department official said. "Our position is that we're ready to go back" to the table although "at some point, that won't be possible any more, because their nuclear advances will become irreversible, and it simply will not be feasible to go back the deal" as it was initially negotiated. "We'll know it when we see it," said the official, who spoke on the condition of anonymity about the sensitive negotiations. "When we reach that point, we'll have to assess where we are and how we proceed."

 $\frac{https://www.washingtonpost.com/national-security/us-iran-nuclear-negotiations/2021/09/20/7e9fad86-1a37-11ec-bcb8-0cb135811007_story.html$

East Asia

North Korea

North Korea warns of 'arms race' in France-Australia submarine row DW, September 20, 2021

Pyongyang has said it would take action if a new Indo-Pacific alliance between the US, Australia and the UK had "even the smallest negative effect" on North Korea's security. North Korea said a secruity pact and nuclear-submaring deal could lead to arms race. North Korea said Monday that a US-Australia submarine deal, coupled with the new Indo-Pacific defense pact between the US, Australia and United Kingdom, could cause an "arms race." State media quoted a foreign ministry official as saying: "These are extremely undesirable and dangerous acts which will upset the strategic balance in the Asia-Pacific region and trigger off a chain of nuclear arms race."

https://www.dw.com/en/north-korea-warns-of-arms-race-in-france-australia-submarine-row/a-59235132

North Korea says Australia's submarine deal could trigger 'nuclear arms race' Rachel Pannett

Washington Post, September 20, 2021

North Korea on Monday condemned a new defense pact by the United States, Australia and Britain, and a plan to share nuclear submarine technology with Australia, saying the deal could trigger a nuclear arms race and upset the balance in the Asia-Pacific region. The Biden administration announced the three-nation pact, called AUKUS, on Wednesday. The surprise decision to share sensitive nuclear submarine technology with Australia has already prompted a swift backlash from China — the apparent target of the pact — and set off a diplomatic spat with France by scuttling an earlier deal in which Australia would have purchased 12 French diesel-powered submarines. Biden seeks a phone call with France's Macron to calm the waters

"These are extremely undesirable and dangerous acts which will upset the strategic balance in the Asia-Pacific region and trigger off a chain of nuclear arms race," North Korean state news media Korean Central News Agency quoted a Foreign Ministry official as saying. "It is quite natural that neighboring countries including China condemned these actions as irresponsible ones of destroying the peace and stability of the region and the international nuclear nonproliferation system and of catalyzing the arms race," the official added. The North Korean condemnation comes just days after Pyongyang test-fired a pair of ballistic missiles and a new long-range cruise missile, stoking tensions in the first public testing activity in months amid a prolonged deadlock in nuclear talks with Washington. North Korea has so far not responded to outreach efforts by the Biden administration. State media reported that North Korea developed the cruise missiles over two years, fulfilling key defense goals set by North Korean leader Kim Jong Un — a claim that hinted at the possible nuclear capability of the missiles. KCNA described the missiles as a "strategic weapon of great significance."

https://www.washingtonpost.com/world/2021/09/20/north-korea-submarine-nuclear-aukus/

North Korea tells UN it has a right to test missiles, as 'projectile' fired DW, September 28, 2021

South Korea has said the North fired an unidentified projectile as Pyongyang's UN envoy defended the rogue country's right to test weapons. North Korea is currently under UN sanctions banning weapons tests. North Korea has now carried out three missile tests in recent weeks. The first seen here on September 13. North Korea's ambassador to the United Nations, Kim Song, told the UN General Assembly on Monday that "nobody can deny" Pyongyang's right to test weapons, calling on the United States to end its "hostile policies" and drop its "double standards" towards the reclusive state.

"We are just building up our national defense in order to defend ourselves and reliably safeguard the security and peace of the country," Kim said in New York. The North Korean envoy also demanded the US "permanently" end joint military exercises with South Korea, along with deployment of weapons to the Korean Peninsula. Kim Song delivered his address as South Korea reported 'projectiles' had been fired by the North. Kim said "the possible outbreak of a new war on the Korean Peninsula is contained" not because of "mercy" from the US, but because the North has created a "reliable deterrent" that can control "hostile forces" attempting a "military invasion." Pyongyang has repeatedly said it considers US and South Korean joint military exercises as preparation for an invasion.

https://www.dw.com/en/north-korea-tells-un-it-has-a-right-to-test-missiles-as-projectile-fired/a-59333178

North Korea claims to have tested 'hypersonic' missile

DW, September 29, 2021

North Korea has said the missile it tested on Tuesday had a "hypersonic" component that is harder to detect and intercept. It also claimed to have successfully tested a new fueling system that speeds up launch times. North Korea propaganda claimed that the detachable tip of the missile was a 'hypersonic glide' vehicle; state news agency KCNA. Pyongyang's Korean Central News Agency (KCNA) state media outlet reported on Wednesday that a missile tested on Tuesday had a hypersonic glide component, although this claim has not been independently verified.

The South Korean military had announced the North's launch of a missile on Tuesday, but have not officially specified the type, or how far it had flown. South Korean President Moon Jae-in had ordered a "thorough analysis" of the test launch earlier on Wednesday, before the North's claims.

https://www.dw.com/en/north-korea-claims-to-have-tested-hypersonic-missile/a-59345764

North Korea says it tested rail-launched ballistic missiles

Kim Tong-Hyung And Hyung-Jin Kim AP News, September 16, 2021

North Korea said Thursday it successfully launched ballistic missiles from a train for the first time and was continuing to bolster its defenses, after the two Koreas test-fired missiles hours apart in dueling displays of military might. Wednesday's launches underscored a return of the tensions between the rivals amid a prolonged stalemate in U.S.-led talks aimed at stripping North Korea of its nuclear weapons program. Pyongyang's official Korean Central News Agency said the missiles were launched during a drill of a "railway-borne missile regiment" that transported the weapons system along rail tracks in the country's mountainous central region and accurately struck a sea target 800 kilometers (500 miles) away.

State media showed what appeared to be two different missiles streaking up from rail-car launchers engulfed in orange flames along tracks surrounded by dense forest. A rail-based ballistic system reflects North Korea's efforts to diversify its launch options, which now includes various vehicles and ground launch pads and may eventually include submarines. Firing a missile from a train could add mobility, but some experts say North Korea's simple rail networks running through its relatively small territory would be quickly destroyed by enemies during a crisis.

"Our military assesses that North Korea is continuously developing various mobile launch equipment," said Col. Kim Jun-rak, a spokesman for South Korea's Joint Chiefs of Staff. He said the South Korean and U.S. militaries were continuing to examine the North's launches.

 $\underline{https://apnews.com/article/business-seoul-south-korea-nuclear-weapons-north-korea-f3765cb77e74033b19817260811f243a}$

N. Korea accuses US of hostility, continues weapons tests

Kim Tong-Hyung AP News, September 28, 2021

North Korea on Monday accused the United States of keeping up its "hostile policy" and demanded the Biden administration permanently end joint military exercises with South Korea even as it continued its recent streak of weapons tests apparently aimed at pressuring Washington and Seoul over slow nuclear diplomacy. North Korean Ambassador Kim Song's comments on the last day of the U.N. General Assembly's annual high-level meeting came shortly after South Korea's military reported a North Korean firing into eastern waters.

The North's latest test, which followed two previous rounds of missile tests this month, indicated the country is returning to its tried-and-true technique of mixing weapons demonstrations and peace offers to wrest concessions amid long-stalled negotiations over its nuclear weapons program.

 $\frac{https://apnews.com/article/united-nations-general-assembly-united-states-seoul-united-nations-south-korea-0 a 151 c 648 a 4a e 6df 62cc 1e71 a bec 85f 6$

Op-ed

Kim Jong Un shift from nuclear push to economy intensified internal debates in country, report says

Michelle Ye Hee Lee Washington Post, September 22, 2021

In a pivotal 2018 address, North Korean leader Kim Jong Un announced he would shift from emphasis on nuclear development toward "concentrating all efforts" on modernizing and expanding the economy. But new research suggests that before Kim's speech, the policy shift was openly debated among high-level officials in the North Korea regime. Those who supported greater defense spending on the military and nuclear programs — widely viewed by the North's leadership as critical leverage with the world — made the case that investing in defense is actually good for the civilian economy.

Meanwhile, the gloves were practically off among those who wanted to see greater spending on civilians, who suggested the need to shift emphasis away from the military, according to the researchers.

https://www.washingtonpost.com/world/asia_pacific/kim-north-korea-nuclear-economy/2021/09/21/b12ee8aa-1a93-11ec-bcb8-0cb135811007_story.html

America Cannot Take On China And Russia Simultaneously

David T. Pyne

The National Interest, September 30, 2021

U.S. concerns about the risks of fighting a coming war with Russia and China are well-grounded, given it is unprepared to fight even a purely conventional war with them. In a previous article, "Russia and China are Already Winning the Nuclear Arms Race," I discussed the dangers to U.S. national security from the breathtaking advances by China and Russia in expanding the size of their nuclear arsenals to a level far in excess of the size of the current U.S. nuclear arsenal. The more that Russia's and China's superiority over the United States in terms of nuclear and other unconventional weapons such as super-Electromagnetic Pulse (EMP) and cyberweapons, as well as in terms of overall nuclear war survivability, continues to increase, the greater their temptation will be to engage in increasingly brazen international aggression abroad. We have already seen examples of this happening with Russia's invasion of Ukraine in 2014, China's occupation of disputed islands in the South China Sea over the last several years, and what appears to be an increasingly imminent Chinese invasion of Taiwan.

In March-April 2021, Russia reportedly massed 100,000-150,000 troops along Ukraine's northern and eastern borders poised for a possible invasion. In response, the United States raised its alert status to Defense Condition (DEFCON) Three for the first time since September 11, 2001. Moreover, U.S. European Command raised its watch level to "potential imminent crisis" in fear that a Russian invasion of Ukraine might be followed by a Russian attempt to overrun frontline NATO states including the former Soviet republics of Estonia, Latvia, and Lithuania. It was this crisis that caused President Joe Biden to propose the June 2021 Geneva summit with Russian president Vladimir Putin to reduce tensions and improve U.S.-Russian relations, which were then at their worst since the end of the Cold War. More disturbingly, Russia's achievement of nuclear supremacy over the United States could potentially enable it to coerce or blackmail U.S. leaders to do its bidding and unilaterally disarm or, far worse, launch a catastrophic attack on the U.S. homeland with a comparatively low risk of effective U.S. military retaliation. Such an attack would essentially have the effect of erasing the United States from the geopolitical map much as the Allies did to Germany at the end of World War II. The commander of U.S. Strategic Command, Admiral Charles Richard, testified to Congress in April 2021 that the United States might well face a two-front or even a three-front war if Russia were to invade

Ukraine and/or other Eastern Europe nations, China were to attack Taiwan, and North Korea were to attack South Korea simultaneously and in coordination. Adm. Richard testified that the United States currently has no contingency plans for how to confront two allied nuclear superpowers in a future war. Thus, the ability of the United States and its allies to survive, let alone win, a war fought with such powerful, unconventional weapons against our enemies remains very much in doubt.

https://nationalinterest.org/feature/america-cannot-take-china-and-russia-simultaneously-194899

World/Misc

Nuclear power: Downward trend ahead of climate summit

DW, September 28, 2021

Ten years since the Fukushima disaster, expensive nuclear energy plants are being shut down across the world as renewable power prices plummet. Due to be shuttered next year, this nuclear power plant in Biblis, Germany, is symbolic of an ailing nuclear energy industry. In the face of soaring gas prices in the UK, some incumbent conservative politicians are pushing nuclear energy as the savior. The argument goes that the energy source has low carbon emissions, and that new smaller reactors can more quickly be brought online.

Rolls-Royce stands ready to build 16 new mini-reactors in northern England, with UK Business & Energy Secretary Kwasi Kwarteng reportedly keen to approve the move. But as the 2021World Nuclear Industry Status Report (WNISR) released on Tuesday confirms, uranium-fuelled energy constitutes an ever-decreasing proportion of the energy mix. Exorbitant costs, especially compared to renewables, is exacerbating the fallout from Fukushima that drove countries like Germany and Belgium to phase out the fuel by 2022 and 2025 respectively. "Nuclear energy's share of global gross electricity generation continues its slow but steady decline from a peak of 17.5% in 1996 with a share of 10.1% in 2020," states the report.

The comparatively cheap cost of renewables is at the heart of the problem. The WNISR confirms that new renewable electricity investment was above \$300 billion (€256 billion) in 2020, which is 17 times higher than the reported global investment commitments to nuclear power. "As climate change moves up the political agenda, nuclear power is not considered in many countries to be part of the transformation of the energy sector in order to decarbonize," said Antony Froggatt, a WNISR lead author and Deputy Director & Senior Research Fellow with the Environment and Society Programme at London-based think tank Chatham House. Even if China — which in 2020 took over France as the seond-largest nuclear energy producer after the US — has kept the global nuclear capacity steady, the industry is struggling to push its low-carbon bona fides and has been sidelined at the upcoming COP26 climate summit.

https://www.dw.com/en/world-nuclear-industry-status-report-climate-renewables/a-59338202

The grass-roots movement for nuclear disarmament is growing

Washington Post, September 29, 2021

Why isn't it news that, last week, more than 300 state and local officials wrote to President Biden urging bold action on nuclear disarmament, yet in The Post on Sept. 24, there was an article ["House's defense bill includes Afghanistan investigation," news] reporting that the House of Representatives voted for an increased Pentagon budget, which includes more money for nuclear weapons? The officials' letter to Mr. Biden reflects the growing grass-roots power of the Back From the Brink: The

Call to Prevent Nuclear War movement. Among the local officials signing the letter were more than 25 elected officials from my home state of Maryland.

When will we stop spending half our discretionary federal budget on the Pentagon, just so it can buy weapons that endanger our existence through war or accident, pollute our environment, and risk a nuclear winter disaster? We, at the local level, want our tax dollars used to enhance our lives.

https://www.washingtonpost.com/opinions/letters-to-the-editor/the-grass-roots-movement-for-nuclear-disarmament-is-growing/2021/09/29/efd1273a-1fac-11ec-a8d9-0827a2a4b915_story.html

Contribute Articles

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

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

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Indian Pugwash Society No.1, Development Enclave, Rao Tula Ram Marg, Near USI, Delhi-110010 Tel. No (91-11) 2671-7983 Fax No. (91-11)2615-4192

Email: indianpugwashsociety@gmail.com