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&

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- At the Trump-Kim summit in Hanoi, expect a bad small deal
- Trump's cronies are in secret talks to sell nuclear tech to Saudi. The risks are clear

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- Trump-Kim summit 2.0: What you need to know
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- Iran envoy hails EU's 'first step' to save nuclear deal
- Ground license to be granted to Sinop NPP
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- Israel Burying 'Nuclear Waste With Radioactive Content' in Golan - UN Report
- US dismisses surprise resignation of Iran's Zarif
- India used Israeli arms for strike inside Pakistan - report
- British parliament warned Yemen is testbed for Iranian weapons
- Turkey wants to see world free of nuclear weapons: FM

- Iran's Foreign Minister Zarif, architect of nuclear deal, resigns
- Zarif resignation saga hampers nuclear deal
- Update to space laws long overdue
- Greek party leader to discuss situation in Mediterranean, Syria and Iran in Moscow
- Meridor: Preventing Iran Nuke Is Not The Only Strategy

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- ROK-EU Foreign Ministerial Meeting Held on Occasion of Munich Security Conference 2019
- Ministry of Foreign Affairs, Korea Feb 16 2019
- Outcome of ROK-Russia Foreign Ministerial Meeting Held on Occasion of Munich Security Conference 2019
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- Spain investigates incident in North Korean Embassy, AP

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- Japan and Tepco again ordered to pay damages to Fukushima nuclear disaster evacuees
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India

Joint Press Release on Joint Consultative Commission between India and Bangladesh

Ministry of External Affairs, February 08, 2019

During the meeting, the Ministers discussed the gamut of bilateral issues of mutual interest. They welcomed the fact that the relationship was now broadening to include new and high technology areas for partnership, such as space, nuclear energy, IT and electronics. The Ministers tasked their accompanying officials to develop a forward looking roadmap for bilateral cooperation to make the partnership irreversible. In particular, they desired that partnership-building efforts should be enhanced in a manner commensurate with commemoration of the 50th anniversary of Bangladesh's Liberation.

https://www.mea.gov.in/bilateral-documents.htm?dtl/31015/Joint_Press_Release_on_Joint_Consultative_Commission_between_India_and_Bangladesh

Nuclear Power in India *World Nuclear Organisation, February 2019*

- India has a largely indigenous nuclear power programme.
- The Indian government is committed to growing its nuclear power capacity as part of its massive infrastructure development programme.
- The government has set ambitious targets to grow nuclear capacity. At the start of 2018 six reactors were under construction in India, with a combined capacity of 4.4 GWe.
- Because India is outside the Nuclear Non-Proliferation Treaty due to its weapons programme, it was for 34 years largely excluded from trade in nuclear plant and materials, which hampered its development of civil nuclear energy until 2009.
- Due to earlier trade bans and lack of indigenous uranium, India has uniquely been developing a nuclear fuel cycle to exploit its reserves of thorium.
- Since 2010, a fundamental incompatibility between India's civil

liability law and international conventions limits foreign technology provision.

<http://www.world-nuclear.org/information-library/country-profiles/countries-g-n/india.aspx>

India-Argentina Joint Statement during State Visit of President of Argentina to India (February 17-19, 2019) *Ministry of External Affairs*

February 18, 2019

Recalling the Agreement on Cooperation in the Peaceful Uses of Nuclear Energy signed in 2010, both sides noted with satisfaction the progress in the ongoing cooperation on the Fission Molybdenum Project, the molybdenum plant being built in Mumbai by the Argentine company INVAP, with a target completion in 2020. Further, the sides also desired to enhance and explore cooperative ventures in the areas of nuclear power; other societal uses of nuclear energy in the health, agriculture sectors & for industrial applications; and Training and Capacity Building. They also noted that the MoU signed on the occasion, between the Department of Atomic Energy, India and National Atomic Energy Commission, Argentina for cooperation within the framework of Global Center for Nuclear Energy Partnership would bolster institutional linkages in civil nuclear R&D and capacity building.

Both sides expressed satisfaction with the support extended to their respective candidatures in various multilateral organizations. In this context, India expressed gratitude for Argentina's support to India's accession to the various non-proliferation regimes, including the Missile Technology Control Regime, Wassenaar Arrangement and Australia Group, and the active role played by Argentina for India's membership of the Nuclear Suppliers Group (NSG).

https://www.mea.gov.in/bilateral-documents.htm?dtl/31063/IndiaArgentina_Joint_Statement_during_State_Visit_of_President_of_Argentina_to_India_February_1719_2019

List of MOUs/Agreements signed during State Visit of President of Argentina to India *Ministry of External Affairs, February 18, 2019*

Civil nuclear

MOU between Global Centre for Nuclear Energy Partnership (GCNEP), India, and CNEA, the Secretariat of Energy, Argentina

Mr. Osvaldo Calzetta Larriou, President of CNEA

Mr. Sanjiv Ranjan, Ambassador of India to Argentina

https://www.mea.gov.in/bilateral-documents.htm?dtl/31062/List_of_MOUsAgreements_signed_during_State_Visit_of_President_of_Argentina_to_India

Translation of Prime Minister's Press Statement during the visit of President of Argentina *Ministry External Affairs, February 18, 2019*

India and Argentina have good cooperation in international forums. For global peace and security and economic and social advancement of all people we accept the need of reformed multilateralism. Argentina has strongly supported India's membership in the Missile Technology Control Regime, Wassenaar Arrangement, Australia Group and the Nuclear Suppliers Group. South-South Cooperation holds great importance for us. I am happy to say that India will actively participate in the second high level conference of United Nations on South-South Cooperation in Buenos Aires in 2019. Our views are similar in the fight against climate change. I am very happy to welcome Argentina as a new member in the International Solar Alliance (ISA). Our cooperation in the field of space and peaceful use of nuclear energy is continuously increasing.

https://www.mea.gov.in/Speeches-Statements.htm?dtl/31061/Translation_of_Prime_Ministers_Press_Statement_during_the_visit_of_President_of_Argentina_February_18_2019

Final Operational Clearance of LCA Tejas MK I for Indian Air Force *PIB, February 20, 2019*

20th February 2019 is a significant day in the journey of Light Combat Aircraft Tejas MK I for Indian Air Force (IAF), when the formal declaration of Final Operational Clearance (FOC) of the aircraft was made by Secretary Defence R&D and Chairman DRDO Dr G Satheesh Reddy. The day also witnessed the handing over of FOC Certificate and Release to Service Document (RSD) to the Chief of Air Staff Air Chief Marshal BS Dhanoa, in the presence of Defence Secretary Shri Sanjay Mitra and Chairman and Managing Director of Hindustan Aeronautics Limited Shri R Madhavan.

Initial Operational Clearance (IOC) of the aircraft took place in the year 2013 and IOC standard Aircraft were inducted into IAF No. 45 Squadron, in July 2016. The IAF Squadron has since flown over 1500 sorties successfully on the Aircraft. It is a proud day for all the agencies involved in the design, development and production of the aircraft i.e., Aeronautical Development Agency (ADA), the autonomous society of DRDO as the design agency and Hindustan Aeronautics Limited (HAL) as the manufacturer. Many other DRDO laboratories like ADE, GTRE, LRDE, CEMILAC etc., as well as other agencies such as BEL, CSIR, DG-AQA, and Private sector agencies have contributed in the journey of LCA.

<http://pib.nic.in/PressReleaseDetail.aspx?PRID=1565667>

India, Argentina further cooperation in nuclear energy *World Nuclear News Feb 20, 2019*

The two countries signed an Agreement on Cooperation in the Peaceful Uses of Nuclear Energy in 2010. That agreement has led to progress in cooperation on the Fission Molybdenum Project, the molybdenum plant being built in Mumbai by the Argentine company INVAP, with a target for completion in 2020.

According to a joint statement issued by India's Ministry of External Affairs, they have also hope to: "enhance and explore cooperative ventures" in civilian nuclear power; other societal uses of nuclear energy in the health, agriculture sectors and for industrial applications; and training. They also noted that the MoU would "bolster institutional linkages" in civilian nuclear R&D and capacity building.

<http://world-nuclear-news.org/Articles/India,-Argentina-further-cooperation-in-nuclear-en>

India to Test Fire Nuclear-Capable 'Nirbhay' Cruise Missile in April

Franz-Stefan Gady, Diplomat, February 21, 2019

India's Defense Research and Development Organization (DRDO) is slated to conduct the final developmental flight trial of the nuclear-capable Nirbhay cruise missile, the country's first indigenously designed and developed long-range cruise missile, according to an official of India's Aeronautical Development Establishment (ADE).

Two other test launches also ended in failure, with only one other flight trial, conducted in October 2014, declared a success. DRDO engineers have pointed to problems with the flight control software and navigation system of the Nirbhay, as well as hardware design flaws, for the causes of the failed missile tests. Without offering any details, the ADE officials noted that past issues related to the missile's control hardware and software have apparently now been fixed.

<https://thediplomat.com/2019/02/india-to-test-fire-nuclear-capable-nirbhay-cruise-missile-in-april/>

Rafael Unveils Stand-off "Rocks" Missile

Missile Defense Project, February 22, 2019

On February 20, Israel's Rafael Advanced Defence Systems unveiled its new stand-off "Rocks" air-to-surface missile (ASM) at the Aero India show in Bangalore. According to Rafael representatives, the Rocks travels faster than Mach 1 and is capable of attacking surface or more hidden

underground targets. The missile employs GPS/INS midcourse guidance, electro-optical IR seeker, scene-matching technology used in Rafael's Spice stand-off glide munitions, and either a penetration or blast-fragmentation warhead. Rafael's deputy general manager for business development, marketing, and strategy, Gideon Weiss, said the missile is in a "Technical Readiness Level (TRL 8)" development phase, completing full-scale development and testing with just the final phase of the development process remaining. The Rocks is currently certified on an Israeli Air Force F-16I Sufa multirole aircraft.

<https://missilethreat.csis.org/rafael-unveils-stand-off-rocks-missile/>

DAE Media Meet held at Anushakti Bhavan

PIB February 23, 2019

Efforts of DAE Units have ensured availability of state-of-the-art radiopharmaceuticals at an affordable price to thousands of patients in India everyday: DAE Secretary, PIB

The Department of Atomic Energy (DAE), in collaboration with PIB Mumbai, organized a half-day event today to provide an opportunity for the media interested in the sector to get a deeper understanding of issues germane to the field. The theme chosen for the Media Meet was "Radioisotopes in Healthcare – Radiopharmaceuticals for Nuclear Medicine: DAE Roles and Contributions"

<http://pib.nic.in/PressReleseDetail.aspx?PRID=1566088>

India reluctant nuclear weapon state, committed to no first use policy: Manmohan Singh

India Today, February 24, 2019

New proliferation risks and challenges can lead to "unintended escalations", increasing the likelihood of a nuclear strike, former prime minister Manmohan Singh said on Sunday, asserting that India is a "reluctant" nuclear weapon state.

Asserting that multipolarity has become a reality in the global economy but the political structures have yet to overcome the inertia of outmoded thinking, he said, "Many countries are modernising their nuclear arsenals with tactical and low yield weapons, and increasing the likelihood of their use. The goal of nuclear disarmament seems to be receding."

<https://www.indiatoday.in/india/story/india-reluctant-nuclear-weapon-state-committed-to-no-first-use-policy-manmohan-singh-1464104-2019-02-24>

Musharraf warns Pak consequences of nuke war with India *Deccan Herald, February 25, 2019*

Pakistan's former military dictator Gen (ret.) Pervez Musharraf has termed talk of any nuclear war with India as rubbish, saying if Pakistan would attack India with one atomic bomb, then New Delhi could "finish us by attacking with 20 bombs".

Musharraf, who was the army chief of Pakistan during the Kargil War in 1999, said India had advantage in some areas in Kashmir and it could launch a surgical strike, but Pakistan also had advantage in many other areas. He suggested to Pakistan Army t...

<https://www.deccanherald.com/international/musharraf-warns-pak-720265.html>

The top seven nuclear power plants in India *Jack Unwin, Power Technology, February 26, 2019*

Nuclear power forms an important part of India's energy mix and the country is looking to expand this, with another 5.4GW to be added to current nuclear power plants in the next decade. Power Technology takes a look at the country's current fleet.

Kudankulam Nuclear Power Plant, Tamil Nadu, Tarapur Nuclear Reactor, Maharashtra, Rajasthan Atomic Power Plant, Rajasthan, Kaiga Atomic Power Plant, Karnataka, Kalapakkam Nuclear Power Plant, Tamil Nadu, Narora Nuclear

Reactor, Uttar Pradesh, Kakrapar Atomic Power Plant, Gujarat

<https://www.power-technology.com/features/nuclear-power-plants-in-india/>

India's Strategic Preparedness in Times of Escalating Cross-border Tensions *Ali Ahmed, Economic and Political Weekly, February 26, 2019*

Besides the operation four days after the Pulwama attack which killed three JeM operatives, India recently launched a "non-military pre-emptive strike" targeting a JeM training camp in Balakot. In response, the Pakistani Foreign Minister Shah Mahmood Qureshi termed the strike an "act of aggression" that violated the Line of Control, and that Pakistan had every right to respond. The present government has refrained from publishing a national defence white paper. Ali Ahmed writes that operations such as the "surgical strike" across the LoC suggest that India's disposition towards the use of force has changed from traditional "strategic restraint" to "strategic proactivism".

<https://www.epw.in/engage/article/indias-strategic-preparedness-times>

India Test-Fires Surface-To-Air Missiles Capable Of Engaging Multiple Targets *Bloomberg Quint February 26 2019*

India successfully test-fired two indigenously developed Quick Reaction Surface-to-Air missiles capable of simultaneously engaging multiple targets, officials said.

The missiles, equipped with radars with search on move capability, were test-fired from the Integrated Test Range at Chandipur on a day when India conducted a major air assault on the biggest training camp of terror outfit Jaish-e-Mohammed inside Pakistan. Describing the launch as "fully successful", an official from Defence Research and Development Organisation said all the mission objectives

were met during the trial. The two missiles were tested for different altitude and conditions. The test flights successfully demonstrated the robust control, aerodynamics, propulsion, structural performance and high maneuvering capabilities thus proving the design configuration.

“Radars, Electro Optical Systems, Telemetry and other stations have tracked the Missiles and monitored through the entire flights. All the mission objectives have been met,” a defence statement said. Defence Minister Nirmala Sitharaman congratulated the DRDO for the achievement.

<https://www.bloombergquint.com/global-economics/india-test-fires-surface-to-air-missiles-capable-of-engaging#gs.19q05m>

Twin Success for Quick Reaction Surface-to-Air Missile *PIB February 26, 2019*

Defence Research and Development Organisation (DRDO) successfully test fired indigenously developed Quick Reach Surface-to-Air missiles (QRSAM) from ITR Chandipur, off the Odisha Coast today. The two missiles were tested for different altitude and conditions. The test flights successfully demonstrated the robust Control, Aerodynamics, Propulsion, Structural performance and high manoeuvring capabilities thus proving the design configuration.

Radars, Electro Optical Systems, Telemetry and other stations have tracked the Missiles and monitored through the entire flights. All the mission objectives have been met.

<http://pib.nic.in/PressReleaseDetail.aspx?PRID=1566363>

Nuclear power can avert catastrophic climate change *Pratap M Anam, The Hans India, February 26, 2019*

Global warming, the cause of climate change, is driven to a great extent by human activities that involve emission of greenhouse gases, primarily carbon dioxide (CO₂). Recently, Government of India accorded

approval in one go for setting up 12 indigenous PHWR-type nuclear power reactors in the country. And with these reactors, India is poised to add a total of 20 new reactors in an unprecedented push to achieve a capacity addition of 15,200 megawatts. This positive move will increase the share of clean power generation significantly, thereby not only facilitating India to realise its climate goals, but also help the earth by contributing towards slowing down global warming.

<https://www.thehansindia.com/posts/index/Opinion/2019-02-26/Nuclear-power-can-avert-catastrophic-climate-change-/502893>

India nuclear weapons: Does India have nuclear weapons? Latest World War 3 threat, *Amani Hughes Express, February 27, 2019*

Pakistan carried out air strikes and shot down two Indian jets on Wednesday, Pakistani officials said today. The shocking strike comes just a day after Indian warplanes struck inside Pakistan for the first time since a war in 1971, prompting fears World War 3 could break out imminently. And according to Brian Toon, a Professor of Atmospheric and Oceanic Sciences, a war between India and Pakistan could bring a nuclear winter which would “destroy civilisation”.

<https://www.express.co.uk/news/world/1093084/India-nuclear-weapons-does-India-have-nuclear-weapons-World-War-3-latest>

Pak warns India of ‘surprise’, calls nuclear authority meeting: report *Asian Age, February 27, 2019*

Pakistan Prime Minister Imran Khan has called a meeting of National Command Authority on Wednesday, hours after India attacked on a terrorist camp in Balakot in response to attack in Pulwama terror attack.

Even though Pakistan has denied Indian Air Force had ambushed terror camp and cause heavy casualties, Islamabad vowed to respond “at the time and place of its

choosing' and will raise issue at the United Nation and other international forums.

<http://www.asianage.com/world/south-asia/270219/paks-warns-india-of-surprise-calls-nuclear-authority-meeting.html>

The Nuclear Game Theory of the India-Pakistan Crisis *Uri Friedman and Krishnadev Calamur* *The Atlantic*, February 27, 2013

Pakistan's prime minister and senior Indian officials have said they don't want to see the situation deteriorate any further, but the risk of miscalculation remains high, amid fears that any misstep could trigger all-out war, the first between the two countries since they both developed nuclear weapons—in fact, the first between two nuclear-armed states, ever.

The situation illustrates the paradox a nuclear arsenal poses: Nonproliferation advocates would argue that the danger of escalation into apocalyptic war is why states should not possess such weapons. But it is precisely because of situations like these that countries such as India and Pakistan will never renounce them.

<https://www.theatlantic.com/international/archive/2019/02/pakistan-india-nuclear-north-korea-trump/583723/>

Joint Communiqué of the 16th Meeting of the Foreign Ministers of the Russian Federation, the Republic of India and the People's Republic of China *Ministry of External Affairs*, February 27, 2019

The Ministers welcomed the significant positive changes in Korean Peninsula since 2018 and DPRK's declared commitment for denuclearization. They welcomed the talks and consultations between the US and the DPRK, as well as improvement of inter-Korea relations. The Ministers reaffirmed that the Korean Peninsula issues should be resolved by peaceful and diplomatic means and expressed the hope that all parties concerned work together for continued progress in the

political settlement process and realize denuclearization and lasting peace on the Peninsula at an early date.

The Ministers underscored that the Joint Comprehensive Plan of Action on the Iranian nuclear issue was an important achievement of multilateral diplomacy, which serves international and regional peace and security and the common interests of the international community. Recalling the Joint Comprehensive Plan of Action (JCPOA) on the Iranian Nuclear Programme and the UN Security Council Resolution 2231, they called upon all parties to fully comply with their obligations and ensure full and effective implementation of the JCPOA to promote international and regional peace and security. They recognized Iran's right to peaceful uses of nuclear energy as also the international community's strong interest in the exclusively peaceful nature of Iran's nuclear programme.

https://www.mea.gov.in/bilateral-documents.htm?dtl/31097/Joint_Communique_of_the_16th_Meeting_of_the_Foreign_Ministers_of_the_Russian_Federation_the_Republic_of_India_and_the_Peoples_Republic_of_China

While the world watched US-North Korean negotiations, two nuclear powers squared off *Matt Field* *Bulletin of Atomic Scientist*, February 28, 2019

While audiences around the world watched the breathless media coverage of US President Donald Trump's follow-up summit with North Korean leader Kim Jong Un, the proud owner of perhaps 10-20 nuclear weapons, they may have missed escalating military tensions between India and Pakistan, two countries with almost 300 nuclear warheads between them. Pakistan now has about 140-150 nuclear warheads, according to the Bulletin of the Atomic Scientists' Nuclear Notebook. That figure could grow to 220 to 250 by 2025, the notebook's authors write. A lot depends on how India builds up its nuclear and other military forces. India, meanwhile,

probably has between 130-140 nuclear warheads and is modernizing its capabilities, keeping a cautious eye on China, in addition to its traditional nemesis, Pakistan.

<https://thebulletin.org/2019/02/while-the-world-watched-us-north-korean-negotiations-two-nuclear-powers-squared-off/>

Inside a nuclear bunker in Berlin

Rasheed Kappan, Deccan Herald, February 28, 2019

Reports indicate that about 14,000 nuclear bunkers are being built by India, all of them on the Indo-Pak border to protect families. The border towns and villages are within the range of tactical nuclear weapons in Pakistan's possession, although the N-option is now only in the realm of blackmail, say defence analysts. But decades ago, faced with the prospect of total annihilation by Soviet nuclear missiles, the West Germans had built 23 nuclear bunkers in West Berlin. However, each of these underground bunkers (called fallout shelters) would let in only the first 3,000 people, lined up in an orderly manner.

Stepping into one of them in the heart of Berlin, this correspondent was instantly struck by the claustrophobic feel. The first step was the toughest: Getting into an air-locked decontamination chamber. Terrified by an imminent attack, the people would first be asked to strip naked for an ice-cold shower to decontaminate. Extremely limited food and water stocks were to be rationed. Filtered air would not last for more than two weeks. The bunker had bathrooms, a kitchen, a diesel-powered electric generator and storage areas. Despite three major wars with Pakistan and one with China, urban bunkers have not been a priority in India. "We have not moved forward in that direction, because nuclear exchange as a possibility is still too far away," defence analyst, Air Marshal B K Pandey told Deccan Herald.

<https://www.deccanherald.com/specials/inside-nuclear-bunker-berlin-720829.html>

Can nuclear-armed Pakistan and India step back from the brink?

Dan De Luce and Robert Windrem, NBCNEWS, Feb 28, 2019

Nuclear-armed rivals Pakistan and India are locked in the worst crisis in years over the disputed region of Kashmir, and the capture of an Indian fighter pilot could mean the confrontation will only get worse, former diplomats and regional analysts say. India's Prime Minister Narendra Modi now faces a crucial crossroads, experts said, faced with either holding back and seeking to settle the dispute, or taking further military action. With elections in less than three months in India, hitting back at Pakistan could play well to nationalist sentiment — but it could also risk a full-blown war.

The U.S. and China have helped tamp down tensions between Islamabad and New Delhi in previous crises, but it was unclear if Washington and Beijing would be able to exert similar influence this time. The Trump administration only recently named a nominee for the top State Department position overseeing diplomacy in South Asia, and it has not appointed an ambassador to Pakistan.

<https://www.chinabusinessreview.com/the-handshake-that-changed-the-world/>

China

Submarine arms race seen heating up in Indo-Pacific amid 'great threat' from China,

Minnie Chan, South China Morning Post, February 16, 2019

The submarine arms race in the Indo-Pacific is heating up, military analysts said after the US Indo-Pacific commander told a Senate panel that America needed to strengthen its underwater advantage in the region. Admiral Phil Davidson told a Senate Armed Services Committee hearing on Tuesday that Chinese technological advances had been cutting into the US military advantage in the air and in space.

All the US submarines are nuclear-powered, so they are quieter and more

stealthy, with better strike capability, than Chinese submarines," Li said. Earlier this month, US ally Australia announced it had signed a US\$50 billion deal for a fleet of 12 Attack-class submarines with French shipbuilder Naval Group. The submarines are to be designed and built in Australia under a "strategic partnership" as part of the government's A\$90 billion (US\$63.94 billion) National Shipbuilding Plan.

Meanwhile, India's defence ministry last month approved a US\$5.6 billion project for six advanced submarines to be built under a strategic partnership model to bolster the country's undersea forces, the Hindustan Times reported. The report said the submarine project would help the Indian navy counter the swift expansion of China's fleet.

<https://www.scmp.com/news/china/military/article/2186376/submarine-arms-race-seen-heating-indo-pacific-amid-great-threat>

China rejects German appeal to join endangered cold war-era nuclear treaty *Liu Zhen, South China Morning Post, February 17, 2019*

Politburo member Yang Jiechi says Chinese weapons are defensive and don't pose a threat

German Chancellor Angela Merkel is calling for a global medium-range treaty to take account of China's growing missile power. China has rejected German Chancellor Angela Merkel's appeal for Beijing to sign up to a key US-Russia nuclear arms control treaty that is about to collapse, saying it would place unfair limits on its military.

Yang Jiechi, a member of the Communist Party's decision-making Politburo, told the Munich Security Conference in Germany on Saturday that China opposed expansion of the 1987 Intermediate-Range Nuclear Forces Treaty (INF) between the United States and the former Soviet Union into a multilateral agreement. The INF was a key nuclear arms control deal during the cold war, but US President Donald Trump started the six-month withdrawal from it this month, citing

Russian violations. Moscow denied any wrongdoing.

<https://www.scmp.com/news/china/diplomacy/article/2186502/china-says-no-germanys-call-arms-control-deal-us-and-russia>

China rebuffs Germany's call for U.S. missile deal with Russia *Robin Emmott, Reuters, February 17, 2019*

China rejected on Saturday German Chancellor Angela Merkel's appeal to join a Cold War-era arms control treaty that the United States accuses Russia of breaching, saying it would place unfair limits on the Chinese military. Fearing a nuclear arms race between China, Russia and the United States after the collapse of the Intermediate-Range Nuclear Forces (INF) treaty, which the United States is withdrawing from, Merkel made her call for a global treaty. "Disarmament is something that concerns us all and we would of course be glad if such talks were held not just between the United States, Europe and Russia but also with China," Merkel told the Munich Security Conference.

Merkel's suggestion of involving China in a negotiation is seen by European NATO diplomats as a potential way out of the impasse because a new treaty could address American concerns about a growing military threat from China and Russia. But China's top diplomat Yang Jiechi, who spoke on a panel in Munich, said that Chinese missiles were defensive. So we are opposed to the multilateralization of the INF.

China's stated ambition is to modernize its People's Liberation Army by 2035, improve its air force and push into new technologies including very high speed cruise missiles and artificial intelligence. Its defense budget grew nearly six percent between 2017 and 2018, according to the London-based International Institute for Security Studies (IISS). Cheaper to build, more mobile and easier to hide, ground-based rocket launchers are an attractive option to China as it develops its armed forces, experts say, whereas the United

States operates more costly sea-based systems to comply with the INF.

<https://www.reuters.com/article/us-germany-security-china/china-rebuffs-germanys-call-for-u-s-missile-deal-with-russia-idUSKCN1Q50NZ>

China hopes US, Russia will return to INF Treaty: official *China Daily*

February 18 2019

China hopes that the United States and Russia will return to the Intermediate-Range Nuclear Forces (INF) Treaty, a senior Chinese official said here Saturday. Yang Jiechi, a member of the Political Bureau of the Communist Party of China (CPC) Central Committee and also director of the Office of the Foreign Affairs Commission of the CPC Central Committee, made the remarks after delivering a keynote speech at the 55th Munich Security Conference.

Yang said that China firmly advocates maintaining global strategic stability. The unilateral declaration by the United States to withdraw from the INF Treaty has serious consequences, and has drawn widespread concern from the international community, he said. China hopes that the United States and Russia can get back to the INF Treaty and is opposed to the multilateralization of the treaty, Yang said.

<http://www.chinadaily.com.cn/a/201902/18/WS5c6a13a1a3106c65c34e9d56.html>

Docter Chen talks about graphene research *China Daily, February 19 2019*

Chen Xudong, Ph.D in Materials from BIAM graphene research teams recently shared his views on the applications and industrialization of graphene in China. It is alleged that that if the 20th century is the century of monocrystalline silicon (electricity), then the 21st century is the century of graphene.

Graphene is recognized by scientists as the next generation of revolutionary and strategic materials. With a thickness of only 0.334 nm, graphene possesses a series of excellent properties. "The most solid": graphene is proved to be the sturdiest

material; its strength is over 100 times that of steel. "The fastest conduction": electron transfer rate of graphene is also the fastest among the currently known materials. In addition, the light transmitting rate of graphene reaches 97.7 percent. It also has the best thermal conductivity of 5000 W / (m · K).

With Beijing taking lead in innovation, Beijing-Tianjin-Hebei region serving as the platform, a national network can be connected. Beijing's leading role in innovation is also reflected in the incubation of small and medium-sized technology companies. Currently, a large industrial cluster with a plant area of 77,400 square meters has been built in Dongli district of Tianjin, with an investment of 4 billion yuan.

http://www.chinadaily.com.cn/m/beijing/zhongguancun/2019-02/19/content_37438903.htm

China, Iran vow to boost relationship *Cao Desheng, China Daily, February 20, 2019*

Two countries agree to strengthen dialogue, coordination on nuclear issue. Beijing and Teheran agreed on Tuesday to continue to strengthen communication and coordination on the Iran nuclear issue. The two nations also pledged to safeguard their respective legitimate rights and interests, implement the nuclear agreement and defend multilateral rules when State Councilor and Foreign Minister Wang Yi and Iranian Foreign Minister Mohammad Javad Zarif met in Beijing. The meeting between Wang and Zarif took place amid efforts to preserve the Iran nuclear deal.

Zarif said Iran considers China an important and all-around cooperation partner. "Our relationship with China is valuable to us. We consider the comprehensive strategic partnership between Iran and China as one of our most important relations." He commended the China-proposed Belt and Road Initiative, and said the initiative is especially important to Iran and China. His

country stands ready to actively participate in the cooperation on the initiative, Zarif said. Teheran welcomes China playing a more important role in the Middle East and nearby regions, such as in the Syria issue, the rebuilding of Iraq and the peace process in Afghanistan, he added.

<http://global.chinadaily.com.cn/a/201902/20/WS5c6c9099a3106c65c34ea351.html>

US military plans new war-fighting concept in response to threat from China, Russia *Zhenhua Lu, South China Morning Post, February 20, 2019*

It involves 'stealth and joint penetration' on land, in the air and at sea, causing simultaneous dilemmas for adversaries to effectively fight back. US Air Force chief of staff says US\$135 billion budget will be sought for 'penetrating capability'

America's military is developing a new war-fighting concept in response to the threat of conflict with China, Russia and other adversaries, the US Air Force chief of staff said. General David Goldfein told a Brookings Institution event on Tuesday that the US Army and Air Force would put forward the "concept of operations" within a year and would seek a US\$135 billion budget for "penetrating capability". The US Marine Corps and Navy were also involved in the planning, the general said.

China has stepped up the modernisation of its military in recent years, but experts generally agreed that the People's Liberation Army still lagged behind the US in areas such as air and naval forces as well as missile capabilities. According to Goldfein, the stated purpose of the new concept was to carry out "stealth and joint penetration" in adversaries' territories on land, in the air and at sea, causing simultaneous dilemmas for the opposing forces to effectively fight back.

<https://www.scmp.com/news/china/diplomacy/article/2187006/us-military-plans-new-war-fighting-concept-response-threat>

The Handshake that Changed the World *Doug Barry, China Business Review, February 21, 2019*

Forty-seven years ago today, Nixon grasped the hand of Chinese Premier Zhou Enlai, an image that represented a sea change in foreign relations for the two countries. Lesser known, however, is the story of how those images were captured and broadcast around the world. Robert Siegenthaler, the head of the TV network pool covering the visit, shares his story with CBR.

China and the United States have had almost a half century to talk; but mutual understanding and negotiation of each nation's strategic goals have been elusive.

Nixon was concerned about defusing tensions with a nuclear-armed China, capitalizing on a Sino-Soviet split, and enlisting China's help with ending the Vietnam War. Today, the United States and China are clashing over trade, cyber espionage, and China's efforts to expand its spheres of influence within Asia and beyond.

A reset of the relationship is long overdue, but will require potentially painful concessions and changes by both countries. Only if successful can we begin to realize how a reimagined relationship could address the world's many grave challenges. If unsuccessful, the relationship could become one of its gravest challenges. Perhaps it's time to share a bowl of tangerines and recall days long ago when an unexpected visit changed history.

<https://www.chinabusinessreview.com/the-handshake-that-changed-the-world/>

China, Russia, India to strengthen cooperation after foreign ministers' meeting, *Xinhuanet, February 27, 2019*

China, Russia and India on Wednesday agreed to enhance coordination and cooperation, firmly uphold multilateralism

and jointly fight against terrorism. The agreement came as Chinese State Councilor and Foreign Minister Wang Yi, Russian Foreign Minister Sergei Lavrov and Indian External Affairs Minister Sushma Swaraj held the 16th meeting of the foreign ministers of China, Russia and India in Wuzhen, eastern China's Zhejiang Province.

Noting that the world today is undergoing unprecedented changes that have not been seen in the past 100 years, Wang said China, Russia and India, as influential major powers and important emerging economies, should enhance coordination, converge consensus, cement cooperation and jointly promote world peace and stability. He suggested that the three countries should firmly safeguard the international system with the United Nations (UN) as the core, and adhere to the principle of non-interference in internal affairs and deepen counter-terrorism and security cooperation.

The three sides agreed to constantly consolidate and expand trilateral practical cooperation, and work on setting up a meeting mechanism among their defense ministers in an appropriate time. China also proposed to discuss "China, Russia, India plus" cooperation, so as to improve global influence of the trilateral cooperation. The next meeting between three foreign ministers will be held in Russia, Wang said.

http://www.xinhuanet.com/english/2019-02/27/c_137855295.htm

Foreign Ministry Spokesperson Lu Kang's Regular Press Conference on February 26, 2019 *Consulate General of the People's Republic of China, February 27, 2019*

Q: Iranian Foreign Minister Mohammad Javad Zarif announced his decision to resign today. What is the Foreign Ministry's response to this? It was only last week that Zarif wrapped up his visit to China. Is the Chinese side worried about the future of the Iranian nuclear deal?

A: The Chinese side noted relevant reports. Over the past five years or so, as the Iranian Foreign Minister Mr. Mohammad Javad

Zarif has made positive contributions to the development of China-Iran relations. The Chinese side appreciates this. China and Iran are comprehensive strategic partners, and we stand ready to work with Iran to advance our comprehensive strategic partnership. Regarding the JCPOA you mentioned, I believe you are aware of China's position. We always believe that the JCPOA must be upheld, and we are making our best efforts along with relevant parties, including Russia, to uphold the validity of the deal. We believe this is conducive to the peace and stability in the Middle East and the international nuclear non-proliferation system, and serves the shared interests of the international community.

Q: The second summit between the DPRK and the US leaders will soon be held in Hanoi. What expectations does China have for this meeting? What kind of role will China play between the DPRK and the US during this meeting? What is China's comment on Vietnam's efforts and role in hosting this meeting?

A: As you know, China's proposition on the Korean Peninsula issue mainly comprises two aspects: first, to realize the denuclearization of the Korean Peninsula; second, to achieve and maintain the lasting peace and stability on the Peninsula and then in Northeast Asia. To achieve these two goals, we believe that the DPRK and the US, as the key parties concerned, should take effective measures, fully consider and accommodate each other's legitimate concerns, and work for the shared goal of realizing denuclearization and lasting peace of the Peninsula on the basis of mutual respect. We are pleased to see that the situation is developing in the direction that China has advocated and hoped for. This is the role that China has always played and will continue to play. The second meeting between the DPRK and the US leaders is going to be held in Hanoi. It is not only the Chinese side, but also actually all parties in the international community, that hope the DPRK and the US will continue to make substantial steps

towards realizing the denuclearization, peace and stability on the Peninsula.

Q: About the DPRK-related sanctions, last week China said that the Security Council needs to consider holding a debate on invoking the provisions of Security Council resolutions, which would at least take a concession from the US. Do you have any suggestions about what concessions might be made on either side to make the negotiations move forward as the DPRK-US summit is to be held in days?

A: Like I just said, progress needs to be made in the negotiations between the DPRK and the United States, and the key is that both sides should carefully listen to, consider and accommodate each other's legitimate concerns and meet each other half way. As the Chinese side said, the general direction should be both promoting the denuclearization of the Korean Peninsula and replacing the armistice with a peace regime in parallel. We believe that under the current circumstances, as various members of the international community are calling for, if some positive measures are taken, such as easing or even lifting part of the sanctions against the DPRK, it will surely be conducive to this process. As for what kind of concessions the DPRK and the US should make respectively, it depends on the talks between the DPRK and the US, and the Chinese side cannot get ahead of that. But we believe that the two sides should follow the general direction of mutual respect and accommodation of each other's legitimate concerns.

https://www.fmprc.gov.cn/mfa_eng/xwfw_665399/s2510_665401/2511_665403/t1641180.shtml

Foreign Ministry Spokesperson Lu Kang's Regular Press Conference on February 27, 2019 *Consulate General of the People's Republic of China, February 27, 2019*

Q: It is reported that the US and the DPRK leaders may discuss the declaration on ending the Korean War during their meeting. China was part of the Korean War.

What is China's comment on an end-of-war declaration?

A: As we said yesterday, we hope the upcoming DPRK-US summit will build on what has been achieved and lead to more positive outcomes. China supports an early end to the state of war on the Korean Peninsula. We proposed and still believe that the effective way to resolve the Peninsula issue is to follow the dual-track approach, which is to promote denuclearization and the establishment of a peace mechanism on the Peninsula in parallel. We support all efforts that are conducive to this process and stand ready to play our role in this regard.

https://www.fmprc.gov.cn/mfa_eng/xwfw_665399/s2510_665401/2511_665403/t1641502.shtml

China's been very helpful for both the US and North Korea: Trump No deal reached in Hanoi, *Global Times February 28, 2019*

Despite the setback at the Kim-Trump summit held in Hanoi, venue for the second meeting between the US and North Korean leaders, Trump thanked Chinese President Xi Jinping for acting as mediator between the two sides.

Trump and US Secretary of State Mike Pompeo, who both attended the press conference, said that differences on sanctions were the key reason contributing to the outcome. Trump told the press conference that North Korea wants the sanctions lifted entirely, but "we couldn't do that," and that North Korea was "willing to denuke a large portion of the areas that we wanted, but we couldn't give up all of the sanctions for that ... We had to walk away from that."

Observers from both China and South Korea said the outcome was surprising and disappointing. But it proved that the US still believes sanctions are the most important measure to guarantee complete denuclearization, and they cannot be lifted so quickly. However, the North thinks it is

time for the US to show more sincerity.

Although the two leaders showed publicly they have a good relationship, the outcome proves a continued lack of trust, said Koh Yu-hwan, a professor from the South Korean Dongguk University, speaking at a forum in Hanoi held by the (South) Korea Press Foundation to review the Kim-Trump summit. China hopes North Korea and the US will continue their dialogue in which China is willing to play a constructive role, Lu said. The bilateral negotiation [between North Korea and the US] has entered a “deep-water zone” and difficulties are inevitable, said Chinese State Councilor and Foreign Minister Wang Yi.

<http://www.globaltimes.cn/content/1140562.shtml>

In-depth insights into glass corrosion *Science Daily February 28, 2019*

Silicate glass has many applications, including the use as a nuclear waste form to immobilize radioactive elements from spent fuel. However, it has one disadvantage – it corrodes when it comes into contact with aqueous solutions. Scientists at the University of Bonn were able to observe in detail which processes take place. The results have now been published in the journal *Nature Materials*.

The results indicate that silicate glass quickly dissolves when it comes into contact with aqueous solutions – almost like a sugar cube in a cup of coffee. However, while the sugar molecules are quickly distributed evenly in the water by diffusion, this is not the case during glass corrosion: Part of the resulting dissolved silica seems to remain near the surface of the glass. At some point, its concentration becomes so high that it solidifies.

“For the first time, we have experimentally demonstrated that a boundary solution with dissolved silica forms between the opal layer and the underlying glass,” explains Geisler-Wierwille. “As the thickness of the opal layer increases, it increasingly prevents the silica solution from being transported away from the reaction interface. “We suspect that it eventually gels to a viscous mass, which

dramatically slows down glass dissolution.” The researchers and their partners want to investigate the influence of self-irradiation damage in the glass on its corrosion resistance. “The current work should mainly prove that our new method can provide far-reaching insights into these processes,” says Geisler-Wierwille.

<https://www.sciencedaily.com/releases/2019/02/190228113627.htm>

Foreign Ministry Spokesperson Lu Kang’s Regular Press Conference on February 28, 2019 *Consulate General of the People’s Republic of China, February 28, 2019*

Q: The second DPRK-US summit in Hanoi ended abruptly. Apparently, they failed to reach an agreement. Do you have any comment?

A: I see that you have already come to a conclusion for their meeting? Based on the information released by the US side, my understanding is that President Trump will hold a press briefing. I am just as interested as you are in how the DPRK and the US would comment on their Hanoi summit. Over the past year or so, the situation on the Korean Peninsula has witnessed a major turnaround and the Peninsula issue has been brought back onto the right track of political settlement. This outcome is hard-won and should be cherished.

In fact, ups and downs on the Peninsula over the past several decades show that dialogue and consultation is the only way out, and only by meeting each other half way can ensure steady progress on the right course. We hope that the DPRK and the US will continue to engage in dialogue, show sincerity, respect and accommodate each other’s legitimate concerns and jointly promote denuclearization and the establishment of a peace mechanism on the Korean Peninsula. China will continue to play a constructive role in this regard.

Q: Regarding the second DPRK-US summit, the US said in a press release that no agreement was reached and the

working lunch between the two sides was canceled. Some say that this meeting ended with outcomes. What's your comment?

A: I just answered a similar question raised by an ROK journalist. To be honest, we are closely following the development of the situation. We noted some comments and media reports, but I hope you will listen to what the governments of the DPRK and the US will say about how they view this meeting later on. I also hope you understand that as the Korean Peninsula nuclear issue has been there for many years, it cannot be resolved easily overnight.

Over the past year or so, the fact that the issue is brought onto the right track of political settlement has proved that it is necessary for the two sides to demonstrate good faith, meet each other halfway and stay committed to dialogue and consultation. The key is, the DPRK and the US, as two parties directly concerned, should truly respect and accommodate each other's legitimate concerns. As far as I know, based on what we can see from the reports by far, the two sides may continue with their talks at the working level. This is what we hope for. We also hope that the two sides, by truly respecting and accommodating each other's legitimate concerns, will reach positive outcomes that they and all people around the world aspire for.

Q: The second DPRK-US summit has encountered setbacks. What role will China play at this moment? Do you think the Six-Party Talks will be a good choice?

A: Just now some of you said the DPRK-US talks have "failed", some said no agreement was reached, and some said there are setbacks. We're following the latest development, and I hope you can first listen to what the US and the DPRK governments say about this summit. We may find what we can do based on their views.

As to China's role, like we said, over the past year or so, there has been a major turnaround in the situation on the Korean Peninsula. The Chinese side has been promoting peace, facilitating talks and contributing our propositions and ideas,

including the dual-track approach and our consistent efforts to encourage the DPRK and the US to meet each other half way and truly take into consideration each other's legitimate concerns.

In fact, since the very beginning of the Korean Peninsula nuclear issue, even in the most trying time, China has been making its utmost effort to encourage the DPRK and the US to resolve the issue through the only viable way of dialogue and consultation and uphold the peace and stability on the Peninsula. The Six-Party Talks you mentioned is an important platform for the solution of the Korean Peninsula nuclear issue, the establishment of which was guided by China with its utmost efforts. The September 19 Joint Statement of the Six-Party Talks was a very good consensus, but unfortunately, it has not been implemented afterwards. We hope all parties can learn lessons from the past, continue the momentum of dialogue, meet each other half way, and jointly commit themselves to promoting denuclearization and the establishment of a peace mechanism on the Peninsula.

https://www.fmprc.gov.cn/mfa_eng/xwfw_665399/s2510_665401/2511_665403/t1641847.shtml

Pakistan

Saudi Arabia Is Investing \$20 Billion in Pakistan. Here's What It's Getting in Return *Joseph Hincks, Time, February 19, 2019*

Saudi Arabia's Crown Prince Mohammed bin Salman has been shunned by much of the world after the murder of dissident journalist Jamal Khashoggi in October, which the CIA concluded he had ordered. A-list executives pulled out of his Riyadh investment forum (dubbed 'Davos in the Desert'), street protests greeted his arrival in Tunisia in November, and there were reports Morocco's King Mohammed VI snubbed him on a visit to the North African country. That wasn't the case earlier this week in Pakistan, however, which bestowed its highest civilian award on the young Saudi prince, gave him a

gold-plated gun, and declared Monday a public holiday in addition to the staggering financial package, MBS on Khan's request ordered the "immediate release" of more than 2,000 Pakistani prisoners incarcerated in the Kingdom. It precedes stops in India and China, which like Pakistan have not spoken out about Khashoggi's murder. But Saudi Arabia's investment in the nuclear-armed South Asian state is more than just a PR exercise.

<http://time.com/5531724/saudi-arabia-pakistan-mbs-imran-khan/>

Here's a look at how the militaries of India and Pakistan stack up *The Express Tribune (Reuters) February 20, 2019*

Tensions between India and Pakistan have escalated sharply after a suicide bombing in the Indian-occupied region of Kashmir killed 40 Indian paramilitary police, an attack claimed by banned group Jaish-e-Mohammad.

Missiles and nuclear weapons

Both nations have ballistic missiles capable of delivering nuclear weapons. India has nine types of operational missiles, including the Agni-3 with a range of 3,000 km (1,864 miles) to 5,000 km (3,106 miles), according to the Center for Strategic and International Studies (CSIS) in Washington. Pakistan's missile programme includes mobile short- and medium-range weapons that can reach any part of India, CSIS said. The Shaheen 2 has the longest range, of up to 2,000 km (1,242 miles)

<https://tribune.com.pk/story/1914519/1-heres-look-militaries-india-pakistan-stack/>

Musharraf says half of Imran's cabinet are 'his people' *Amir Wasim, Dawn, February 24, 2019*

Chief of the All-Pakistan Muslim League (APML) and former military ruler retired Gen Pervez Musharraf sees "political environment" in Pakistan "favourable" for his return though he has no immediate plan to come back to the motherland.

He said tension between the neighbouring nuclear powers, India and Pakistan, had again reached a "dangerous level". The former army chief said India had advantage in some areas in Kashmir and it could launch a surgical strike, but Pakistan also had advantage in many other areas.

<https://www.dawn.com/news/1465699>

Imran calls top decision making body on nuclear issues *PTI Deccan Herald, February 27, 2019*

Pakistan Prime Minister Imran Khan on Wednesday called a meeting of the top decision-making body on nuclear issues after India targeted terrorist camp in the country. The National Command Authority controls policy formulation, exercises, deployment, research and development, employment and operational command and control of the country's nuclear arsenals.

The decision to call the NCA meeting was taken on Tuesday in the meeting of National Security Committee - a civil-military top level body that discussed the situation after the Indian attack. The parliamentary leaders will also be given an in-camera briefing by the government on the situation after India's strikes.

<https://www.deccanherald.com/international/imran-khan-calls-meeting-top-720582.html>

Get ready for our surprise': Pakistan warns India it will respond to airstrikes *Michael Safi in Delhi, Mehreen Zahra-Malik in Islamabad and Azhar Farooq in Srinagar, The Guardian, February 27, 2019*

Pakistan's army has warned it will respond to India's aerial bombing over the disputed border in Kashmir, telling Delhi: "It is your turn now to wait and get ready for our surprise." Gokhale said Indian jets struck JeM's largest training camp in the Balakot area, claiming a "very large number of JeM terrorists, trainers, senior commanders and groups of jihadis being

trained for fidayeen [suicide] action were eliminated." The facility, which he described as being in thick forest on a hilltop, was far away from any civilian settlements, overseen by the brother-in-law of the JeM chief, Masood Azhar, he added.

Significantly, Balakot is in the province of Khyber Pakhtunkhwa, about 50 miles from the line of control and well into accepted Pakistan territory. An attack there would represent an escalation from previous Indian reprisals.

<https://www.theguardian.com/world/2019/feb/26/pakistan-india-jets-breached-ceasefire-line-kashmir-bomb>

Pakistan nuclear weapons: Does Pakistan have nuclear weapons? Imran Khan to consult chiefs *Rachel Russel, Express UK, February 27, 2019*

Mr Khan will hold an emergency parliamentary session and also meet with the body in control of Islamabad's nuclear arsenal. This will be in response to India's first air strikes on Pakistan since 1971. On Tuesday, India launched an air strike on what it said was a militant training base.

Pakistan spent 1.26 trillion Pakistani rupees (\$8.3 billion), which about 3.6 percent of its GDP, on 653,800 troops. The Stockholm International Peace Research Institute (SIPRI) said that more than 20 percent of Pakistan's annual government expenditure was spent of the military between 1993 and 2006. India said a large number of JeM fighters had been killed but in conflicting reports, but Pakistani officials said the strike was a failure as it did not cause any casualties. In a statement, Pakistan's foreign ministry said it had hit a "non-military" target inside Indian-controlled Kashmir.

<https://www.express.co.uk/news/world/1093079/Pakistan-nuclear-weapons-does-Pakistan-have-nuclear-weapons-World-War-3-latest>

PM to Modi: 'Let better sense prevail' *The Express Tribune February 27, 2019*

As escalating tensions fuelled concerns of all-out war between nuclear-tipped Pakistan

and India on Wednesday, Prime Minister Imran Khan warned of catastrophic consequences should "better sense" not prevail.

"Can we afford any miscalculation with the kind of weapons that we have and you have?" the prime minister said, alluding to the nuclear arsenal of both the countries and asking: "If escalation begins from here, where will it go?" He added that if the situation escalates from here, "it will not be in my or Modi's control". The director general of the Strategic Plans Division presented a briefing on Pakistan's nuclear capability.

<https://tribune.com.pk/story/1919458/1-pm-imran-address-nation-shortly/>

What is National Command Authority: Imran Khan convenes meeting of Pakistan's apex nuclear body after Balakot air strikes *Firstpost, February 27, 2019*

Pakistan Prime Minister Imran Khan has called for a meeting of the National Command Authority (NCA) in the aftermath of India's pre-emptive, non-military air strikes at terror camps in Balakot in the Khyber Pakhtunkhwa province.

The NCA comprises the Employment Control Committee, Development Control Committee and a Strategic Plans Division of Pakistan. All three committees were to be led by the head of the government, which was Musharraf at that time. In 2019, the Pakistani National Assembly approved the National Command Authority (NCA) Bill, 2009, legally establishing the NCA as a civilian-led body in charge of the country's nuclear assets. Late in 2016, the Pakistani Senate passed the National Command Authority (Amendment) Bill, 2016, giving it the power to disburse funds to the country's Central government, instead of the finance department.

<https://www.firstpost.com/world/what-is-the-national-command-authority-imran-khan-convenes-meeting-of-pakistans-apex-nuclear-body-after-balakot-airstrikes-6160131.html>

Diplomacy the only path to resolve Indo-Pak conflict *PTI, Deccan Herald, February 28, 2019*

Top US lawmakers have said that the escalating tension between Pakistan and India is “deeply alarming” and asked the two nuclear-armed countries to settle their differences through negotiations and not war.

Democratic presidential aspirant Tulsi Gabbard said, “To our friends in India and Pakistan: As nuclear powers, please remember it’s your responsibility to the global community to settle differences through negotiations – not war. In times like this.

<https://www.deccanherald.com/international/diplomacy-only-path-resolve-720792.html>

USA & Europe

US nuclear industry seeks presidential support *World Nuclear News, February 16, 2019*

Representatives from companies including Centrus Energy, Exelon, General Electric, Lightbridge, NuScale Power, TerraPower, Westinghouse and X-energy were invited to the White House to discuss a variety of issues relating to nuclear energy. The meeting was arranged by Jack Keane, a co-founder and director of the IP3 International organisation which works to integrate the US industry into the development and operations of peaceful and secure nuclear power in the global marketplace via public/private initiatives and US industry-led partnerships.

According to *Axios*, a White House official said the president talks “periodically” with Keane, who is a retired US Army general. A full nuclear cooperation agreement - also known as a 123 agreement - between Saudi Arabia and the USA will be needed before any exports of US nuclear technology or equipment would be possible.

<http://www.world-nuclear-news.org/Articles/US-nuclear-industry-seeks-presidential-support>

US will not open door to Saudi Arabia building nuclear weapons, deputy energy secretary says *David Reid, CNBC, February 16, 2019*

A representative of the United States government said Saturday that it would not help Saudi Arabia develop nuclear technology without guarantees that it would only be used for civilian purposes. Saudi Arabia has put the U.S. on a shortlist with China, Russia and others to bid for nuclear power projects in the country. Washington sees Saudi Arabia as a big customer of American nuclear expertise and hardware, but lawmakers from both U.S. political parties are demanding a deal be based on tough controls.

Section 123 of the United States Atomic Energy Act of 1954, titled “Cooperation With Other Nations,” sets an agreement for cooperation as a prerequisite for nuclear deals between the U.S. and any other nation. Under a “123 measure,” any U.S. nuclear deal with Saudi Arabia would prohibit routes toward the making of nuclear weapons by banning enrichment of uranium or the reprocessing of plutonium.

<https://www.cnn.com/2019/02/16/brouillette-us-wont-give-saudi-arabia-key-to-nuclear-weapon-building.html>

Whistleblowers Raise Grave Concerns with Trump Administration’s Efforts to Transfer Sensitive Nuclear Technology to Saudi Arabia Prepared for Chairman Elijah E. Cummings Interim Staff Report, Committee on Oversight and Reform *U.S. House of Representatives February 2019*

This interim staff report was prepared for Rep. Elijah E. Cummings, the Chairman of the Committee on Oversight and Reform, after multiple whistleblowers came forward to warn about efforts inside the White House to rush the transfer of highly sensitive U.S. nuclear technology to

Saudi Arabia in potential violation of the Atomic Energy Act and without review by Congress as required by law – efforts that may be ongoing to this day. The Trump Administration’s interactions with Saudi Arabia have been shrouded in secrecy, raising significant questions about the nature of the relationship. Finally, General Flynn told investigators that he stayed at the King Khaled International Hotel, but a U.S. consulate official could not identify any such hotel in Saudi Arabia. According to this news report, 24% of the \$7 billion in investments raised by Mr. Barrack’s company since Donald Trump won the nomination “has come from the Persian Gulf all from either the U.A.E. or Saudi Arabia.”

<https://oversight.house.gov/sites/democrats.oversight.house.gov/files/Trump%20Saudi%20Nuclear%20Report%20-%202019-2019.pdf>

A Plausible Scenario for Saudi Arabia’s Nuclear Energy Plan; Goodbye US AP1000, Hello China Hualong One via Pakistan *Nuetron Bytes*

Bytes, February 17, 2019

The Kingdom of Saudi Arabia (KSA) has long maintained that if it doesn’t get what it wants from a US 123 Agreement for export of nuclear reactor technologies, it has other options including buying Chinese Hualong One PWRs, at 1100 NMW each, similar to the two units now being built at a coastal site in Pakistan near Karachi.

Such an scenario would be a win for China, which would benefit from a long-standing relationship, first documented in 2003, between KSA and Pakistan, involving KSA’s financial support for Pakistan’s nuclear weapons program.

The Chinese Hualong One, a PWR at 1100 MW is comparable in electrical power output to the Westinghouse AP1000 at 1150 MW.

For its part, the US reiterated at the Munich Security Conference on Feb 16 that the U.S. will not open door to Saudi Arabia building nuclear weapons by abandoning the “gold standard” set with a similar agreement with the United Arab Emirates.

Saudi Arabia may be playing a double game with the US. On hand it makes fiery disclaimers that it it doesn’t get a modified 123 agreement, it will talk to China. On the other hand, getting them from Westinghouse and big chunks of its supply chain makes protecting Saudi Arabia from Iran much more in the US interest. Because . . . they will now have our nuclear reactors and we will want to keep an eye on them. Is Saudi Arabia strong enough to make good on its “disclaimer” of having other sources? Maybe they do have a China option, but would China also come with a security guarantee? I don’t think so.

<https://neutronbytes.com/2019/02/17/a-plausible-scenario-for-saudi-arabias-nuclear-energy-plan-goodbye-us-ap1000-hello-china-hualong-one-via-pakistan/>

House Opens Inquiry into Proposed U.S. Nuclear Venture in Saudi Arabia *Nicholas Fandos and Mark Mazzetti*

New York Times, February 19, 2019

Top Trump administration officials have pushed to build nuclear power plants throughout Saudi Arabia over the vigorous objections of White House lawyers who question the legality of the plan and the ethics of a venture that could enrich Trump allies, according to a new report by House Democrats released on Tuesday.

The report is the most detailed portrait to date of how senior White House figures – including Michael T. Flynn, President Trump’s first national security adviser – worked with retired military officers to circumvent the normal policymaking process to promote an export plan that experts worried could spread nuclear weapons technology in the volatile Middle East. Administration lawyers warned that the nuclear exports plan – called the Middle East Marshall Plan – could violate laws meant to stop nuclear proliferation and raised concerns about Mr. Flynn’s conflicts of interest.

<https://www.nytimes.com/2019/02/19/us/politics/trump-saudi-arabia-nuclear-power.html>

The Marine Corps Wants to Be Able to Sink Enemy Warships (With An F-35 Assist), *David Axe, The National Interest February 19 2019*

Interest February 19 2019

The U.S. Marine Corps wants new missiles so its forces can help the U.S. Navy to sink enemy ships. "There's a ground component to the maritime fight," Gen. Robert Neller, the Marine Corps commandant, said at a February 2019 conference in San Diego. "We're a naval force in a naval campaign," Neller said. "You have to help the ships control sea space. And you can do that from the land." Neller said land-based sea-control forces would complement, not replace, Marine aircraft operating in the anti-ship role.

Marine units with anti-ship missiles could spread out across islands in order to control strategic ocean checkpoints. "So there's a lot of geographical chokepoints, and you know what they are, and the potential adversaries know what they are," Neller said. "So if you get there first and you can control that space, then you have an operational advantage."

"Fortifying the offshore island chain while deploying naval assets in adjoining waters could yield major strategic gains on the cheap," James Holmes, a professor at the Naval War College in Rhode Island, advised in 2014. "Doing so is common sense."

The Marines' new missile should be compatible with Navy ships, Neller stressed. "This is the same type of stuff you'd want to put on a ship." The Corps could team up with the Navy to test the new weapon, Neller pointed out. The need is urgent, according to the commandant. "The urgency is just the situation security-wise we find ourselves in the world." China rapidly is modernizing and growing its maritime forces and exerting more and more pressure on U.S. allies in disputed waters in the China Seas.

<https://nationalinterest.org/blog/buzz/marine-corps-wants-be-able-sink-enemy-warships-f-35-assist-45042>

Zarif decries 'US hypocrisy' over planned nuclear sale to Saudis

Aljazeera, February 20, 2019

Iranian Foreign Minister Mohammad Javad Zarif accused the US of hypocrisy for allegedly attempting to sell nuclear technology to Saudi Arabia while Washington tries to wreck Iran's nuclear programme.

"First a dismembered journalist; now illicit sale of nuclear technology to Saudi Arabia fully expose #US Hypocrisy," Zarif added, referring to the killing of Saudi writer Jamal Khashoggi at the hands of Saudi agents, and the new report by a US congressional committee on the planned technology sale

<https://www.aljazeera.com/news/2019/02/zarif-decries-hypocrisy-planned-nuclear-sale-saudis-190220100506949.html>

Trump's Idea of a Middle East Nuclear Deal *The New York Times*

February 20, 2019

An interim report from the House Oversight Committee paints a familiar picture of Trump associates skirting the law to curry favor with people who can make them richer. This time, the dealing doesn't involve Russians but Saudis, and it is not about a lavish tower in Moscow but the sale of nuclear power reactors.

The United States has long been a leader in nuclear technology, the sale of which is governed by bilateral pacts, called "123 agreements," which require adherence to nine nonproliferation criteria. Some 21 countries, the European Union and the International Atomic Energy Agency have these agreements.

<https://www.nytimes.com/2019/02/20/opinion/trump-saudi-arabia-nuclear-technology.html>

A Big Reason America Needs the F-35: Russia Would Crush the A-10 Warthog *Dave Majumdar, The National Interest, February 22, 2019*

Interest, February 22, 2019

In a military confrontation against the Kremlin in the European theatre, the A-

10 would not be able to get close enough to a Russian Ground Forces' motor rifle brigade (MRB) – the most common Russian mechanized unit – to engage because of their heavy organic air defenses.

Assuming the F-35B is able to survive against Russian air defenses, four jets flying four sorties per day could potentially devastate a Russian armored brigade. Given the Russian threat, the United States Air Force should consider adopting some number of F-35B wings for the European theater. The United States Air Force recently issued a request for proposals (RFP) for a program called the A-10 Thunderbolt Advanced-Wing Continuation Kit – or ATTACK – to fit new wings onto the venerable close air support jet.

Once the Air Force selects a vendor, there would be a contracting period followed by five years of firm orders plus options for two more years of production. The Air Force intends to order the kit as an indefinite quantity contract – which the service defines as having contract minimum of the first article plus three Low Rate Initial Production articles. The maximum production number would be 112 each of wing sets and 15 kits. The winning bidder would not have to deliver the first low rate production kits until 2029.

The kits would not be sufficient to re-wing all of the so-called “thin wing” A-10s, but the order quantity and timing would be enough to keep enough Warthogs flying in six super-sized squadrons into the 2040s. That means that out of the roughly 280 A-10s in service, about 80 jets would be retired eventually. But the Air Force is only keeping the Warthog in service because of pressure from the U.S. Congress, which has refused to allow the service to retire the A-10. Instead, the Boeing F-15C Eagle is likely going to be on the chopping block.

<https://nationalinterest.org/blog/buzz/big-reason-america-needs-f-35-russia-would-crush-10-warthog-45297>

The Pentagon wants to boldly go where no nuclear reactor has gone before *Edwin Lyman Bulletin of the Atomic Scientists, February 22, 2019*

In January, the Defense Department issued a call for information in support of the aptly titled Project Dilithium. It seeks to develop a tiny, readily transportable, yet virtually indestructible nuclear power reactor for use at forward operating bases, the military facilities that provide logistical and troop support to the front-lines of conflict zones.

The Pentagon presumably chose the name to convey a futuristic image – at least, to the Star Trek aficionados among us. Make no mistake, however: The project, with its naïve optimism that such reactors “have the potential to be an across-the-board strategic game changer,” is less Captain James T. Kirk and more Lieutenant General Samuel D. Sturgis, who founded the now-defunct Army Nuclear Power Program more than sixty years ago.

Project Dilithium's name isn't its only science fiction-related aspect. To be sure, the type of reactor it is seeking could be a great military asset: all the benefits of nuclear energy with none of the risks. The costly and dangerous process of trucking diesel fuel to bases, sometimes through hostile territory, may eventually be a thing of the past. Unfortunately, the need to store and ship irradiated nuclear fuel in a war zone will introduce different problems. And the odds that a meltdown-proof reactor could be successfully developed any time soon are vanishingly small.

<https://thebulletin.org/2019/02/the-pentagon-wants-to-boldly-go-where-no-nuclear-reactor-has-gone-before-it-wont-work/>

TRUMP -KIM SUMMIT

House Dems reveal new info on a shady White House plan to sell nuclear tech to Saudi Arabia

Michael Flynn, Trump's disgraced former national security adviser, was behind it. *Alex WardVox,*

February 19, 2019

A new report from House Democrats reveals disturbing new details about a secretive effort by top Trump administration officials to sell sensitive nuclear technology to Saudi Arabia — in defiance of at least some of the nation's ethics statutes.

The House Oversight and Reform Committee on Tuesday released a report — accompanied by a tranche of internal White House emails — detailing a scheme spearheaded by now-disgraced former National Security Adviser Michael Flynn to sell technology for roughly 40 nuclear power plants to Saudi Arabia. The plan was already known due to previous reporting by the Wall Street Journal, for example, but the Democrats' report does add more insight into what was happening behind the scenes to push the proposal through. The effort was part of a broader Middle East economic development plan Flynn began putting together before Trump's inauguration while he was serving as an adviser to Trump's campaign and transition team.

During that same time period, though, Flynn was also working as an adviser for a private company called IP3 International — a firm run by retired US military generals that bills itself as a “global enterprise to develop sustainable energy and security infrastructure.” In other words, a company that had a clear financial interest in exporting US nuclear energy technology to Saudi Arabia. Once Trump was inaugurated, Flynn, along with longtime Trump associate Thomas Barrack, worked with other senior officials in the new Trump administration to make the plan a reality.

<https://www.vox.com/world/2019/2/19/18231812/saudi-arabia-nuclear-flynn-trump-democrats>

Threatening U.S., Putin Promises Russians Both Missiles and Butter

Neil MacFarquhar The New York Times, February 20, 2019

President Vladimir V. Putin of Russia facing an economically beleaguered, less-supportive public used his annual state-of-the-nation speech on Wednesday to promise a raft of social spending, while also doubling down on threats against the United States.

Mr. Putin said Washington was fueling a new arms race by withdrawing from a landmark nuclear weapons treaty and possibly deploying new missiles in Europe. Without mentioning any country in particular, he warned that if American missiles were deployed on the continent, within a few minutes' flight of his country, Russia would aim its weapons at those missiles and at targets in the United States.

Over all, Mr. Putin's approval rating has dropped sharply in the last year, initially prompted by raising the retirement age but also fueled by five years of dropping real incomes, higher prices and a variety of new taxes. Mr. Putin seemed to be trying to address all those grievances with his laundry list of promises.

<https://www.nytimes.com/2019/02/20/world/europe/russia-missile-threat.html>

North Korea's Kim shuffles nuclear talks team after defections, spying allegations

Hyonhee Shin, Reuters, February 20, 2019

Veteran North Korean diplomats are being sidelined from nuclear talks ahead of a second summit with the United States as recent defections and allegations of spying undermine the trust of leader Kim Jong Un, South Korean officials and experts say.

Kim has purged and replaced many top diplomats and officials who served his father and grandfather with new, younger advisors as he gears up to meet

U.S. President Donald Trump in Vietnam next week.

<https://www.reuters.com/article/us-northkorea-usa-diplomats-analysis/north-koreas-kim-shuffles-nuclear-talks-team-after-defections-spying-allegations-idUSKCN1Q90HN>

SMR-160 attracts Ukrainian and US attention *World Nuclear News, February 21, 2019*

The SMR-160 application is under review by the Canadian Nuclear Safety Commission and is in Phase 1 of the three-phase evaluation cycle. State Nuclear Regulatory Inspectorate of Ukraine, the nuclear regulatory authority in Ukraine, is expected to coordinate its regulatory assessment of SMR-160 under a collaborative arrangement with its Canadian counterpart.

Energoatom President Yury Nedashkovsky announced plans to establish a consortium with Holtec and Ukraine's national nuclear consultant, State Scientific and Technical Centre for Nuclear and Radiation Safety (SSTC-NRS), to explore the environmental and technical feasibility of qualifying a 'generic' SMR-160 system that can be built and operated at any candidate site in the country "with absolute assurance of public health and safety" A formal announcement of the adoption of the terms of engagement for the consortium is expected shortly.

<http://www.world-nuclear-news.org/Articles/SMR-160-attracts-Ukrainian-and-US-attention>

Four US companies chosen for Mo-99 production funding *World Nuclear News, February 21, 2019*

The US Department of Energy's National Nuclear Security Administration (NNSA) has selected four companies to begin negotiations for potential new cooperative agreement awards for the supply of molybdenum-99 (Mo-99) without using highly enriched uranium (HEU).

Mo-99 is used in hospitals to produce the technetium-99m employed in around 80% of nuclear imaging procedures. Produced in

research reactors, Mo-99 has a half-life of only 66 hours and cannot be stockpiled, and security of supply is a key concern. Most of the world's supply currently comes from just four reactors in Belgium, the Netherlands, Russia and South Africa, and recent years have illustrated how unexpected shutdowns at any of those reactors can quickly lead to shortages. Furthermore, most Mo-99 is currently produced from HEU targets, which are seen as a potential nuclear proliferation risk.

<http://www.world-nuclear-news.org/Articles/Four-US-companies-chosen-for-Mo-99-production-fund>

Czech PM outlines nuclear expansion with state control over construction *Robert Muller, Reuters, February 21, 2019*

Czech Prime Minister Andrej Babis on Thursday outlined the government's plan to build a number of nuclear reactors, saying the state should control construction so it can halt the expansion should power prices fail to support the project. The government expects to sign a contract with majority state-owned CEZ to build one or more new reactors at Dukovany, with a tender towards the end of 2020 and a supplier chosen by 2024.

Babis said the government would not provide CEZ an unlimited state guarantee and that the utility would cover any extra costs not generated by the state or foreign regulators. "The basic aim of the state should be to take control of construction of new nuclear capacity," Babis told a nuclear conference. "The state would get such control by signing a contract with CEZ on construction." "It is simpler and more favourable for customers than state guarantees, which would in fact amount to a blank cheque."

The government has been considering how to fund a multi-billion-dollar expansion of CEZ's nuclear power plants, before some units reach the end of their lifetime. CEZ has balked at starting a tender without receiving state guarantees but Babis has

said the company, Central Europe's largest listed utility, can handle the project itself.

<https://www.reuters.com/article/czech-nuclear/update-1-czech-pm-outlines-nuclear-expansion-with-state-control-over-construction-idUSL5N20G3O4>

What to Expect at the Second North Korea Summit. Trump, Kim, and the Dangers of Bromance Diplomacy

Victor Cha and Katrin Fraser Katz, Foreign Affairs Korea, February 22, 2019

s U.S. President Donald Trump and North Korean leader Kim Jong Un geared up for a historic face-to-face meeting in Singapore last June, one question loomed large: Would the two return to the bluster that had characterized their relationship in 2017? That year, a steady drumbeat of North Korean nuclear and missile tests had prompted the United States to talk of "bloody nose" military strikes to compel Kim to denuclearize.

None of this was optimal. But history suggests that there are no perfect outcomes between the United States and North Korea—only suboptimal and terrible ones. And Trump did accomplish some good things in Singapore. He secured a commitment from Kim to repatriate the remains of U.S. troops killed in the Korean War, and he established the basis for a trusting relationship, itself a prerequisite for any diplomatic process that might lead to denuclearization or lasting peace. Equally significant, the summit did not end with either leader abruptly walking away from the negotiations, which could have precipitated a devastating war.

Of all these pros and cons coming out of the Singapore summit, the surprising affection that has evolved between Trump and Kim has proved to be the biggest game changer. Although the long-term impact of this unusual relationship remains to be seen, it is already reshaping the diplomatic landscape—in ways that put Trump in a distinctly disadvantaged position as he heads into Hanoi.

<https://www.foreignaffairs.com/articles/north-korea/2019-02-22/what-expect-second-north-korea-summit>

North Korea's Kim: I don't want my children to bear burden of nuclear arms - report, Jack Kim,

Reuters, February 23, 2019

North Korean leader Kim Jong Un told the U.S. secretary of state he did not want his children to live with the burden of nuclear weapons, a former CIA officer involved in high-level diplomacy over the North's weapons was quoted as saying on Saturday. Kim made the rare personal comments to Mike Pompeo during a visit to the North Korean capital, Pyongyang, in April last year to lay the groundwork for the historic first summit between the North's leader and U.S. President Donald Trump in June in Singapore, former CIA official Andrew Kim said, South Korea's Yonhap news agency and the Wall Street Journal reported. "'I'm a father and a husband. And I have children,'" Andrew Kim quoted the North Korean leader as telling Pompeo, when asked whether he was willing to end his nuclear program. "'And I don't want my children to carry the nuclear weapon on their back their whole life.'

That was his answer," Andrew Kim told a lecture on Friday at Stanford University's Asia Pacific Research Center, where he is a visiting scholar. Before he retired from the CIA, Kim established the agency's Korea Mission Center, in April 2017, and accompanied Pompeo - who was then CIA director - to Pyongyang last year. In their Singapore summit, Kim and Trump pledged to work toward peace between their countries and for the denuclearization of the Korean peninsula.

<https://www.reuters.com/article/us-northkorea-usa-kim/north-koreas-kim-i-dont-want-my-children-to-bear-burden-of-nuclear-arms-report-idUSKCN1QC0CZ>

At the Trump-Kim summit in Hanoi, expect a bad small deal *The Economist, February 23, 2019*

After their made-for-television spectacular last June in Singapore, Donald Trump and Kim Jong Un needed another gig. A second

summit between the American president and North Korea's dictator will take place on February 27th and 28th in Hanoi, the Vietnamese capital. The choice of venue is intriguing. For America, Vietnam's Communist Party is foe turned buddy, and it has blazed a trail of market reforms in the country. Mr Kim, presumably, is expected to look and learn. But he has steadfastly refused to emulate Vietnam's economic transformation. And, though Mr Trump has confessed to falling in love with the young despot, North Korea and America have only just started dating. For Mr Kim, Vietnam may just be a country that defeated the United States.

<https://www.economist.com/asia/2019/02/23/at-the-trump-kim-summit-in-hanoi-expect-a-bad-small-deal>

Trump's cronies are in secret talks to sell nuclear tech to Saudi. The risks are clear *Simon Tisdall, The Guardian, February 23, 2019*

The idea that the US might sell state-of-the-art nuclear technology to Saudi Arabia, potentially enabling Crown Prince Mohammed bin Salman's reckless regime to build nuclear weapons, sounds so far-fetched as to be almost grotesque.

The inquiry's interim findings, published last week by newly empowered Democrats on the House of Representatives' oversight committee, were based in part on testimony from "multiple" whistleblowers, its authors said. They focus in particular on two high-profile figures – Jared Kushner, Trump's son-in-law and Middle East envoy, and General Michael Flynn, his former national security adviser. Both have featured prominently in Robert Mueller's almost completed federal probe into the Trump campaign's dealings with Russia. The committee said it would urgently expand its inquiry "to determine whether the actions being pursued by the Trump administration are in the national security interests of the US or, rather, serve those who stand to gain financially".

<https://www.theguardian.com/us-news/2019/feb/23/trump-cronies-secret-talks-nuclear-tech-saudi-arabia>

After Putin's warning, Russian TV lists nuclear targets in U.S. *Andrew Osborn, Reuters, February 25, 2019*

Russian state television has listed U.S. military facilities that Moscow would target in the event of a nuclear strike, and said that a hypersonic missile Russia is developing would be able to hit them in less than five minutes.

The United States says it has no immediate plans to deploy such missiles in Europe and has dismissed Putin's warnings as disingenuous propaganda. It does not currently have ground-based intermediate-range nuclear missiles that it could place in Europe.

Kiselyov, who is close to the Kremlin, said the "Tsirkon" ('Zircon') hypersonic missile that Russia is developing could hit the targets in less than five minutes if launched from Russian submarines. Hypersonic flight is generally taken to mean traveling through the atmosphere at more than five times the speed of sound.

<https://www.reuters.com/article/us-usa-nuclear-russia/after-putins-warning-russian-tv-lists-nuclear-targets-in-us-idUSKCN1QE1DM>

(US-NK summit) Political parties express hope for success of Trump-Kim summit *Yonhap February 25, 2019*

The ruling Democratic Party (DP) and four opposition parties on Monday adopted a joint statement expressing their support for this week's summit between the leaders of the United States and North Korea.

The floor leaders of the five parties voiced hope that a second summit between U.S. President Donald Trump and North Korean leader Kim Jong-un, set for Wednesday and Thursday in Hanoi, could set a "new milestone" for North Korea's denuclearization. "We welcome the smooth preparation for a second U.S.-North Korea summit to be held in Hanoi and wish for the success of the talks with the international community," the statement said.

They said the upcoming summit should proceed based on a strong alliance between South Korea and the U.S. and that close coordination with relevant countries is needed down the road. "We strongly hope the summit can set a new milestone for North Korea's complete denuclearization and permanent peace of the Korean Peninsula," it said. The National Assembly will closely monitor the outcome of the summit and take bipartisan action if needed, it added.

<https://en.yna.co.kr/view/AEN20190225006800315>

Regulator concludes Finnish EPR can operate safely *World Nuclear News* February 26, 2019

Finland's Radiation and Nuclear Safety Authority (Stuk) yesterday informed the government it sees no reason why an operating licence for the first-of-a-kind EPR at Olkiluoto should not be granted to utility Teollisuuden Voima Oyj (TVO). TVO submitted its 130,000-page application to the Finnish Ministry of Employment and the Economy (TEM) in April 2016. The application contained information on, among other things, the technical and operational safety principles, arrangement for nuclear waste management, and details of TVO's expertise and financial position.

In addition to seeking approval to operate Olkiluoto 3 for an initial 20-year period (from the beginning of 2018 to the end of 2038), TVO's application also seeks permission to use the existing on-site interim storage facilities for the used fuel and other radioactive wastes that will be generated by the unit over this period. The application does not concern the use of final disposal facilities for nuclear wastes. The application has been reviewed by Stuk, as well as several ministries and certain other authorities and communities. Stuk has now given its overall safety assessment for the application, while the others will submit statements to TEM. The Finnish government will make a decision on TVO's application based on the ministry's recommendations.

<http://www.world-nuclear-news.org/Articles/regulator-concludes-Finnish-EPR-can-operate-safely>

Korean, Czech companies strengthen cooperation *World Nuclear News*, February 26, 2019

South Korea's Kepco Engineering & Construction Company has signed an agreement with Czech engineering firm UJV Rez to strengthen their cooperation in nuclear power plant projects. Kepco E&C said it had already carried out many activities with UJV Rez, including hosting a nuclear technology exchange workshop. It said it hoped to establish more concrete cooperation with the Czech company through a memorandum of understanding (MoU) signed yesterday. Under the MoU, the two companies will carry out mutual workforce and technology exchanges for research and development to bolster technical cooperation and joint business development. They will also expand technical cooperation for new nuclear power generation, as well as jointly develop new technology to enhance the safety of nuclear power plants.

Kepco E&C said, "Through this MoU, the company has established a practical cooperation system with UJV Rez in the field of nuclear power plant design and research, and has set up an opportunity for localisation in the future for new nuclear power plant orders." The Korean company noted that it will acquire technology experience of the Russian VVER pressurised water reactors operating in the Czech Republic. For UJV Rez, there are expected to be opportunities for major equipment replacement orders from Korean nuclear power plants. Kepco E&C - which built South Korea's fleet of 14 nuclear power plants - said it intends to further strengthen its cooperation with other Czech nuclear-related organisations.

<http://www.world-nuclear-news.org/Articles/Korean,-Czech-companies-strengthen-cooperation>

4 Ways North Korea Fell Short of Its Nuclear Promises After the First Trump-Kim Summit, *Abigail Abrams* *Time*, February 26, 2019

After a summit in Singapore with North Korean dictator Kim Jong Un last summer,

President Donald Trump tweeted that “there is no longer a nuclear threat from North Korea.” As he heads to a second summit in Vietnam this week, Trump has continued to lavish praise on Kim, but he has dialed down some of the claims. Other U.S. officials, including Secretary of State Mike Pompeo, have said they hope to achieve more “real demonstrable, verifiable” steps this time around.

North Korea is still making fuel for nuclear weapons

Soon after Trump and Kim met in Singapore, analysts began to raise questions about how much progress was really being made. Few expected North Korea to make drastic changes right away, but it soon became clear that many aspects of the country’s nuclear weapons program were running business as usual.

“North Korea is never going to unilaterally give up their nuclear weapons as long as the political relationship with the United States stays the same,” she said. “Until there is an actual change in the nature of the relationship that helps justify them going down that path and there are some tangible benefits, that are not only promised but have started to be received, we’re not getting to the end of the road.”

<http://time.com/5537298/north-korea-summit-nuclear-program/>

Trump-Kim summit 2.0: What you need to know *Faraz Ghani, Aljazeera, February 26, 2019*

Donald Trump and Kim Jong Un are due to meet in Hanoi, Vietnam, this week, more than eight months after their landmark first summit in Singapore. Heading into the talks on Wednesday and Thursday, officials from both the United States and North Korea have not disclosed details about the focus of the meetings.

As Trump has made clear, the US is seeking an assurance from North Korea that it will stop testing its nuclear weapons and ballistic missiles. It also wants Pyongyang to get rid

of all its weapons for its mass destruction programmes, as well as produce a roadmap and concrete plan of action on how it sets about achieving that goal.

Apart from the easing of sanctions and a declaration formally ending the Korean War, North Korea is also calling for the relaunching of some inter-Korean economic projects and the opening of a US liaison office in Pyongyang, according to Biegun.

<https://www.aljazeera.com/news/2019/02/190226020435999.html>

Summit collapse clouds future of U.S.-North Korea nuclear diplomacy *Jeff Mason, Hyonhee Shin, Reuters, February 28, 2019*

A second summit between U.S. President Donald Trump and North Korean leader Kim Jong Un collapsed on Thursday over sanctions, and the two sides gave conflicting accounts of what happened, raising questions about the future of their denuclearisation negotiations.

Trump said two days of talks in the Vietnamese capital Hanoi had made good progress in building relations and on the main issue of denuclearisation, but it was important not to rush into a bad deal. He said he had walked away because of unacceptable North Korean demands.

“It was all about the sanctions,” Trump told a news conference after the talks were cut short. “Basically, they wanted the sanctions lifted in their entirety, and we couldn’t do that.” However, North Korean Foreign Minister Ri Yong Ho told a news conference past midnight and hours after Trump left Hanoi that North Korea had sought only a partial lifting of sanctions “related to people’s livelihoods and unrelated to military sanctions”.

<https://in.reuters.com/article/northkorea-usa/trump-and-kim-hold-second-day-of-summit-in-hanoi-idINKCN1QG2ZY>

The art of no deal: how Trump and Kim misread each other, *Julian Borger, The Guardian, February 28, 2019*

As with many disastrous second dates, the collapse of Donald Trump's summit with Kim Jong-un was made inevitable by the misreading of each other's intentions at their first encounter. Since their initial meeting in Singapore last June, the US president had become fixated on what he saw as a close personal bond with the North Korean dictator half his age. In North Korea, however, the phrase is a routine regime slogan that refers to a gradual defusing of tensions on the peninsula and phased multilateral disarmament, during which North Korea would be treated as a nuclear power.

For his part, Kim appears to have come away from Singapore interpreting Trump's gushing behaviour as sign of a desperation to strike a deal, which would potentially leave most of his arsenal in place while normalising relations with the US and lifting sanctions. These wildly different perceptions collided painfully in Hanoi, where the two leaders discovered each other not to be the ideal partner they had previously imagined.

<https://www.theguardian.com/world/2019/feb/28/how-donald-trump-kim-jong-un-misread-each-other-hanoi-summit>

Trump Made Decision Not to Sign Joint Statement With N Korea's Kim - Pompeo *Sputnik, February 28, 2019*

Earlier in the day, the US and North Korea failed to reach an agreement after the second meeting between North Korean leader Kim Jong-un and US President Donald Trump. According to Mike Pompeo, US President Donald Trump has made the decision not to sign a joint statement with North Korea. Pompeo added that a date hasn't been set for next working-level meeting on North Korea, because it may take a little while as both sides need to regroup.

<https://sputniknews.com/asia/201902281072836504-trump-north-korea-usa-kim/>

'Sometimes you just have to walk': Trump and Kim fail to reach nuke deal at second summit *Jesse Johnson, Japan Times, February 28, 2019*

"Sometimes you just have to walk." That was how U.S. President Donald Trump explained the stunning breakdown in nuclear talks between him and North Korean leader Kim Jong Un in Tokyo, Prime Minister Shinzo Abe praised Trump after the news for "not striking an easy compromise" on the denuclearization issue. "With a strong determination to realize denuclearization, (Trump) didn't strike an easy compromise," Abe told reporters after a telephone conversation with the U.S. president. "I support Mr. Trump's decision."

The prime minister also said Trump had explained Abe's stance on the issue of Japanese nationals abducted by North Korean agents during the one-on-one meeting with Kim.

"Next, I myself must face chairman Kim Jong Un" to resolve issues related to Japan, he said. Abe has made addressing the issue of Japanese nationals kidnapped by North Korean agents in the 1970s and 1980s one of his administration's top priorities. Despite the talks' breakdown, some analysts said Tokyo "will not be unhappy with this outcome."

"While sanguine publicly, the Abe government would have been worried about the prospect of Trump cutting a side deal with Kim that limited threats to the continental U.S. ... but not those to Japan in the form of Nodong delivery systems," Andrew O'Neil, an expert on North Korea and a professor at Griffith University in Australia, said in reference to intercontinental ballistic missiles and shorter-range Nodong weapons that Tokyo views as a top threat.

<https://www.japantimes.co.jp/news/2019/02/28/asia-pacific/politics-diplomacy-asia-pacific/trump-says-hes-no-rush-nuclear-deal-second-meeting-north-koreas-kim/#.XIXJ0JgvO7h>

Trump says Kim promised not to test nuclear weapons, missiles

Reuters, February 28, 2019

U.S. President Donald Trump said on Thursday had still wanted to keep his relationship with North Korean leader Kim Jong Un, who had promised not to test nuclear weapons or rockets. Trump was talking to reporters after his second summit with Kim, held in the Vietnamese capital, ended without any agreements being finalised.

<https://www.reuters.com/article/us-northkorea-usa-trump-kim-nuclear/trump-says-kim-promised-not-to-test-nuclear-weapons-missiles-idUSKCN1QH0YS>

Russian choir draws criticism over performance describing nuclear attack on U.S., *Louis Casiano, Fox News,*

February 28, 2019

The Russian Orthodox Church expressed regret over a choir performance that featured a satirical Soviet-era song describing a nuclear attack on the United States in the midst of heightened tensions between Washington and Moscow. The Feb. 23 performance by the St. Petersburg Concert Choir at the historic St. Isaac's Cathedral attracted widespread attention after it was posted on social media.

During its performance to mark Defending the Fatherland Day, the choir sang an untitled song from 1980 that described Soviet submariners and bomber pilots preparing to launch a nuclear strike at the U.S. "for three rubles." The lyrics include the lines: "On a submarine with an atomic motor/ And with a dozen bombs of a hundred megatons / Crossed the Atlantic and I call on the gunner: / "Aim, I say, at the city of Washington!"

In his state of the nation speech last week, Russian President Vladimir Putin warned the U.S. not to deploy missiles to Europe, saying Russia would respond with new weaponry designed to reach targets quickly. That was followed by Dmitry Kiselyov, the Kremlin's top propagandist, who displayed

maps Sunday showing how Russian missiles could reach targets in the U.S.

<https://www.foxnews.com/world/russian-choir-draws-criticism-over-performance-describing-nuclear-attack-on-u-s>

Russia

A Nuclear Arms Race Will Produce No Winners *Mikhail*

Gorbachev, The Moscow Times, February 14, 2019

That INF Treaty was the first step, and it was followed by others – the Strategic Arms Reduction Treaty (START I) and mutual steps towards eliminating a significant part of all tactical nuclear weapons. The two states revised their military doctrines to reduce their reliance on nuclear weapons, slashing their number by more than 80 percent from their highpoint during the Cold War.

I would like to address all Americans, and particularly the Republican and Democratic members of Congress. It is unfortunate that the divisive domestic political situation in the U.S. in recent years has led to the breakdown of the entire U.S.-Russian dialogue, including on nuclear weapons. It is time to overcome inter-party disagreements and begin serious talks. I am confident that Russia is open for them.

<https://www.themoscowtimes.com/2019/02/14/mikhail-gorbachev-a-nuclear-arms-race-will-produce-no-winners-op-ed-a64491>

Russian nuclear-capable bombers fly over Sea of Japan: *Ifax Reuters,*

February 15, 2019

Nuclear-capable Russian bombers carried out a training flight over the Sea of Japan, prompting Tokyo to scramble air force planes to intercept them, the Interfax news agency cited the Russian defense ministry as saying on Friday. Japanese fighter jets accompanied the Russian bombers for parts of their more than 15-hour flight, which also passed over the Sea of Okhotsk

and eastern parts of the Pacific Ocean, the ministry was quoted as saying.

<https://www.reuters.com/article/us-russia-japan-bombers/russian-nuclear-capable-bombers-fly-over-sea-of-japan-ifax-idUSKCN1Q41PN>

Why Russia is standing aloof on the Korean Peninsula, *Artyom Lukin, East Asia Forum, February 16, 2019*

Moscow did host the first ever Russia-China-North Korea trilateral at the vice foreign minister level in October 2018. Russia is also calling for the easing of sanctions on North Korea to reward Pyongyang for its peaceful gestures such as the nuclear and missile testing moratorium.

Russia's relative passivity on the Korean Peninsula is also explained by Russia's limited economic resources. Moscow cannot afford to generously subsidise North Korea as China does through oil supplies and other means. It is notable that Moscow denies as 'stupid' the reports that Russia offered to build a nuclear power plant in North Korea in exchange for Pyongyang's abandonment of nuclear weapons. According to Russian officials, Moscow is not able to make North Korea a gift as expensive as a nuclear power plant worth several billion dollars.

Even though this strategy has never been spelled out officially or publicly, the Kremlin appears to have chosen to refrain from balancing China in East Asia. Mongolia is the only East Asian nation that can count on Russian security guarantees vis-a-vis China. Most of East Asia lies outside the area of Russia's vital interests. Russia's overriding priority there is purely defensive: keeping sovereignty over the geopolitically vulnerable Russian Far East. As long as Russia remains a formidable military and nuclear power, its Far Eastern territories are safe against aggression from any potential predator, be it China or anyone else.

<https://www.eastasiaforum.org/2019/02/16/why-russia-is-standing-aloof-on-the-korean-peninsula/>

Are Trump and Putin Opening Pandora's Box? *Theodore Postol, The New York Times, February 19, 2019*

One particularly difficult aspect of this situation is that the Russians and the Americans each accuse the other of flouting the treaty's purpose in Europe by planning for, or deploying, nuclear-capable weaponry that could have a dual use – defensive on its face but potentially offensive after quick modification. It is fair to say that each side has given the other a reason to fear its ultimate intent and that Americans must take the Russian position seriously. Unless both sides back away from their threats, accusations and suppositions about the other side, both will be in peril if the treaty is abandoned.

Facts support the Russian position. This reality must be taken into account if the United States and Russia (and possibly other countries) are to agree on continued control of intermediate-range missiles. Both sides must stop and think about the common and avoidable danger they are creating by clinging to arguments about each getting some inconsequential military advantage. In fact, existing nuclear weapons systems can do anything imaginable, and much more that is unimaginable. It is the unimaginable capabilities of these weapons that must take center stage when considering the giant and still unknown terrors and threats they pose to global stability and humanity's future.

<https://www.nytimes.com/2019/02/19/opinion/inf-treaty-missile-defense.html>

Zambia Keen on Expanding Nuclear Energy Cooperation With Russia – Foreign Min. *Sputnik News February 20, 2019*

In 2017, Russia and Zambia signed a deal to cooperate in the construction of a nuclear science and technology centre in Zambia, which is expected to begin in 2019. Sputnik spoke on the issue as well as on additional prospects for cooperation

between the two countries with Zambian Minister of Foreign Affairs Joseph Malanji.

<https://sputniknews.com/interviews/201902201072592429-zambia-cooperation-russia-nuclear-energy/>

Moscow ready to cut time for nuclear strike on U.S. if necessary - Putin *Andrew Osborn, Katya Golubkova, Reuters, February 20, 2019*

Moscow will match any U.S. move to deploy new nuclear missiles closer to Russia by stationing its own missiles closer to the United States or by deploying faster missiles or both, President Vladimir Putin said. Putin said Russia was not seeking confrontation and would not take the first step to deploy missiles in response to Washington's decision this month to quit a landmark Cold War-era arms control treaty.

But in his toughest remarks yet on a potential new arms race, he said Russia's reaction to any deployment would be resolute and that U.S. policymakers, some of whom he accused of being obsessed with U.S. exceptionalism, should calculate the risks before taking any steps. "It's their right to think how they want. But can they count? I'm sure they can. Let them count the speed and the range of the weapons systems we are developing," Putin told Russia's political elite to strong applause.

"Russia will be forced to create and deploy types of weapons which can be used not only in respect of those territories from which the direct threat to us originates, but also in respect of those territories where the centres of decision-making are located," he said. "These weapons, by their tactical and technical specifications, including their flight time to the command centres I'm talking about, will fully correspond to the threats that will be directed against Russia." The U.S. State Department said Washington was not developing "exotic new nuclear weapons delivery systems" and repeated its claim that Russia violates the INF treaty while the United States does not. In Washington, the U.S. State Department dismissed Putin's comments as

"propaganda designed to divert attention from what Washington alleges are Moscow's violations of the Intermediate-range Nuclear Forces (INF) Treaty.

<https://in.reuters.com/article/russia-putin-usa-missiles/moscow-ready-to-cut-time-for-nuclear-strike-on-u-s-if-necessary-putin-idINKCN1Q918Q>

Putin's warning on missiles in Europe pushes U.S. and Russia closer to new arms race *Sabra Ayres And David S. Cloud, LA Times, February 20, 2019*

Russian President Vladimir Putin warned the Trump administration Wednesday against basing intermediate-range missiles in Europe, saying that Moscow would respond by deploying new weapons of its own that could directly target Washington.

Although the threat did not mark a change in Russian doctrine, it raised the ante in what could be a new arms race between the two countries. Russia and the United States already have stockpiles of hundreds of nuclear-armed missiles capable of reaching each other's territory, a vestige of Cold War hostilities. But Putin's annual state of the nation address to both houses of parliament and his government ministries was a warning that a nuclear-armed standoff between the two countries appears in danger of returning. It came less than a month after President Trump said the United States was withdrawing from the 1987 Intermediate Nuclear Force Treaty, a landmark Cold War agreement that lessened tensions between Moscow and Washington but which the U.S. now says Moscow is violating.

Russia is not looking for confrontation and remains open to arms control talks with Washington, but Moscow will respond to any threats to its security, Putin said. In theory, the U.S. and its allies will be free to base missiles in Europe once the U.S. completes its pullout from the INF treaty in April. Putin's bellicose speech appeared to be a warning against any move by the

Trump administration to return U.S. medium-range missiles to Europe.

<https://www.latimes.com/world/europe/la-fg-russia-putin-20190220-story.html>

Russia to Replace Damaged S-400 Missile Shipment to China *Missile Defense Project, The Center for Strategic and International Studies, February 20, 2019*

On February 18, Sergey Chemezov, CEO of Russian defense contractor Rostec, revealed that a ship delivering S-400 missiles to China was damaged in a storm in the English Channel. The shipment was one of three total ships delivering the 40N6 interceptors to China, the other two successfully completing the delivery. Chemezov confirmed that all of the 40N6 missiles on board were discovered to be damaged after reaching China. The missiles were sent back to Russia and destroyed. Russia is expected to deliver replacement missiles to China by the end of 2020.

<https://missilethreat.csis.org/russia-to-replace-damaged-s-400-missile-shipment-to-china/>

Russia Confirms Development of Tsirkon Hypersonic Cruise Missile *Missile Defense Project, The Center for Strategic and International Studies, February 22, 2019*

On February 20, Russian President Vladimir Putin confirmed the country's development of the Tsirkon hypersonic cruise missile at his state of the nation address. President Putin said the missile will travel at Mach 9 (2.06 km/s) and will have a range of 1,000 km. Compatible with the Kalibr missile system, the Tsirkon will be ship-launch and sub-launch capable, designed to strike surface or land targets. U.S. intelligence have reported Russia's testing of the Tsirkon in December 2018, as well as five other tests since 2015, and the missile is scheduled to enter into service in 2022.

<https://missilethreat.csis.org/russia-confirms-development-of-tsirkon-hypersonic-cruise-missile/>

Advanced coastal defense missile systems to protect Russia's Caspian Flotilla base, Military & Defense *TASS Russian News Agency February 22, 2019*

The Bal coastal defense missile system is armed with Kh-35 subsonic low-altitude anti-ship missiles and is capable of destroying enemy ground and naval targets at a range of about 130 km

A battalion of the Bal coastal defense missile systems has arrived at the Caspian Flotilla base in Dagestan in North Caucasus, Commander of Russia's Southern Military District Alexander Dvornikov said on Friday. The battalion's main task is to protect the places of the stationing of Caspian Flotilla warships and units on the republic's territory in areas vulnerable to amphibious assaults, the commander stressed. The modernized Kh-35E missile with a range capability of up to 300 km can be guided by a drone.

Caspian Flotilla's new base: Russian Defense Minister Sergei Shoigu said in early April 2018 that the Caspian Flotilla will be relocated from Astrakhan to Kaspiysk. Late in June, Russian Navy Commander-in-Chief Vladimir Koroloyov told journalists that the Flotilla would be moved to its new stationing place gradually as the necessary infrastructure was built.

<http://tass.com/defense/1045956>

Winning the Nuclear Game Against Putin's Russia *Tobin Harshaw, Bloomberg, February 23, 2019*

Last week I discussed nuclear game theory with Vipin Narang, a professor of political science at MIT and author of "Nuclear Strategy in the Modern Era." If we agreed on one thing, it was that nuclear war is not a game. "It's really about a strategic logic," Narang explained, "how your adversary behaves based on your moves and how you react to their reaction to your moves." President Donald Trump meets

with Kim Jong Un in Vietnam next week. I don't expect to see much strategic logic when the self-proclaimed "best negotiator in the world" sits down with the monomaniacal leader of a starving police state. I also don't consider North Korea a viable nuclear threat to the U.S. or its allies. Kim may be unhinged, but he doesn't seem the suicidal type.

<https://www.bloomberg.com/opinion/articles/2019-02-23/winning-the-nuclear-weapons-game-against-putin-s-russia>

After Putin's warning, Russian TV lists nuclear targets in U.S. *Andrew Osborn, Reuters, February 25 2019*

Russian state television has listed U.S. military facilities that Moscow would target in the event of a nuclear strike, and said that a hypersonic missile Russia is developing would be able to hit them in less than five minutes. The targets included the Pentagon and the presidential retreat in Camp David, Maryland. The report, unusual even by the sometimes bellicose standards of Russian state TV, was broadcast on Sunday evening, days after President Vladimir Putin said Moscow was militarily ready for a "Cuban Missile"-style crisis if the United States wanted one.

In the Sunday evening broadcast, Dmitry Kiselyov, presenter of Russia's main weekly TV news show 'Vesti Nedeli', showed a map of the United States and identified several targets he said Moscow would want to hit in the event of a nuclear war. The targets, which Kiselyov described as U.S. presidential or military command centres, also included Fort Ritchie, a military training centre in Maryland closed in 1998, McClellan, a U.S. Air Force base in California closed in 2001, and Jim Creek, a naval communications base in Washington state.

Kiselyov, who is close to the Kremlin, said the "Tsirkon" ("Zircon") hypersonic missile that Russia is developing could hit the targets in less than five minutes if launched from Russian submarines. Kiselyov is one of the main conduits of state television's

strongly anti-American tone, once saying Moscow could turn the United States into radioactive ash. Asked to comment on Kiselyov's report, the Kremlin said on Monday it did not interfere in state TV's editorial policy.

With tensions rising over Russian fears that the United States might deploy intermediate-range nuclear missiles in Europe as a Cold War-era arms-control treaty unravels, Putin has said Russia would be forced to respond by placing hypersonic nuclear missiles on submarines near U.S. waters. The United States says it has no immediate plans to deploy such missiles in Europe and has dismissed Putin's warnings as disingenuous propaganda. It does not currently have ground-based intermediate-range nuclear missiles that it could place in Europe.

<https://in.reuters.com/article/usa-nuclear-russia/after-putins-warning-russian-tv-lists-nuclear-targets-in-u-s-idINKCN1QE1DQ>

Russia's Latest Diesel-Electric Attack Sub to Commence Sea Trials in 2019 *Franz-Stefan Gady, The Diplomat, February 28, 2019*

Russia second Project 677 Lada-class diesel-electric attack submarine (SSK), christened Kronstadt, will undergo a series of trials in 2019, the commander in chief of the Russian Navy, Admiral Vladimir Korolyov, told reporters during a visit to the Rubin Central Design Bureau for Marine Engineering in St. Petersburg this month.

"Serial production of the non-nuclear Lada-class submarines continues. This year, testing will commence on the second non-nuclear Lada-class submarine Kronstadt, which was launched in September 2018," Korolyov was quoted as saying by TASS news agency on February 22. The Kronstadt, was officially launched at the St. Petersburg-based Admiralty Shipyards on September 20 thirteen years after the SSK was laid down. The construction of the Kronstadt was suspended in 2011 due to a number of

design and technical challenges, in addition to a funding shortage, and only restarted in 2013.

<https://thediplomat.com/2019/02/russias-latest-diesel-electric-attack-sub-to-commence-sea-trials-in-2019/>

West Asia

Pence says time has come for EU to withdraw from Iran nuclear deal

Reuters, February 16, 2019

U.S. Vice President Mike Pence pressed European countries on Saturday to withdraw from a nuclear deal between Iran and major powers, and urged them to be wary of using telecoms equipment supplied by Chinese provider Huawei. "The time has come for our European partners to stand with us and with the Iranian people," Pence told the Munich Security Conference. "The time has come for our European partners to withdraw from the Iran nuclear deal."

"The United States has also been very clear with our security partners on the threat posed by Huawei and other Chinese telecom companies," he said. "We must protect our critical telecom infrastructure and America is calling on all our security partners to be vigilant".

<https://www.reuters.com/article/us-germany-security-usa/pence-says-time-has-come-for-eu-to-withdraw-from-iran-nuclear-deal-idUSKCN1Q50CK>

Merkel warns US pullout from Syria risks boosting Iran, Russia

The Times of Israel, February 16, 2019

German chancellor plays down differences with Trump administration over nuclear deal, calls accord an 'anchor' allowing pressure on Tehran. In her remarks, Merkel also defended European powers' decision to stand by the Iran nuclear deal, describing it as an "anchor" allowing the West to exert pressure.

US Vice President Mike Pence earlier this week accused Germany, France and Britain

of trying to "break" American sanctions on Iran and called on them to follow Washington in pulling out of the nuclear deal.

<https://www.timesofisrael.com/merkel-warns-us-pullout-from-syria-risks-boosting-iran-russia/>

Iran's Zarif says there is 'great risk' of war with Israel

Times of Israel, February 17, 2019

Iranian FM tells Munich Security Conference that Jerusalem is using bombing raids in Syria to instigate conflict, flouting international law along with US. Iran's foreign minister said Sunday that Jerusalem is "looking for war" and that the behavior of Israel and the United States was increasing the prospects of a conflict.

Israel in recent years has carried out hundreds of airstrikes in Syria against targets linked to Iran, which alongside its proxies and Russia is fighting on behalf of the regime of Syrian President Bashar Assad.

<https://www.timesofisrael.com/irans-zarif-says-there-is-great-risk-of-war-with-israel/>

Netanyahu Calls Out Gantz For Iran Nuclear Deal Support In Campaign Video

Jerusalem Post, February 17, 2019

Prime Minister Benjamin Netanyahu released a campaign video on his Facebook page last week that criticizes former IDF chief of staff Benny Gantz for supporting the Iran nuclear deal. "Fact: Gantz supported the Iran nuclear deal," the video says

It then shows Netanyahu speaking before various groups as the narrator says, "He made a speech at the American Congress, sent the Mossad to Tehran to bring the nuclear archive, and convinced President Trump to exit the deal and to place sanctions on Iran."

<https://www.jpost.com/Israel-Elections/Netanyahu-calls-out-Gantz-for-Iran-nuclear-deal-support-in-campaign-video-580888>

Abu Dhabi arms fair opens amid Yemen war criticism *The Associated Press - The Star February 17, 2019*

A biennial arms fair has opened in the United Arab Emirates as the country faces increasing scrutiny over its involvement in the Saudi-led war in Yemen. While the war went unmentioned at the opening ceremony of the International Defence Exhibition and Conference in Abu Dhabi on Sunday, it was clearly present in the theatrical show offered to spectators. In it, a militia threatens an unknown country with both launchpad-based and mobile ballistic missiles. Saudi Arabia has faced over 100 such launches by Yemen's Houthi rebels into the kingdom. Saudi Arabia and the UAE are the leading members of a coalition that has been at war with the Iran-aligned Houthis since March 2015. The conflict that has killed tens of thousands of people and caused the world's worst humanitarian crisis.

<https://www.thestar.com/news/world/middleeast/2019/02/17/abu-dhabi-arms-fair-opens-amid-yemen-war-criticism.html>

Iran urges Europe to do more on nuclear deal following U.S. call for withdrawal *Global Times February 18, 2019*

Iranian Foreign Minister Mohammad Javad Zarif on Sunday urged European powers to do more to save the nuclear deal with the Islamic republic, and accused Washington of having an "obsession" with Iran. Europe has to do more if it wants to preserve relations with Iran, said Zarif at the Munich Security Conference. He added that Europe needs to "walk the walk" to match the talk of multilateralism. "Europe needs to be willing to get wet if it wants to swim against the dangerous tide of U.S. unilateralism," he told the conference, saying that Iran for now was committed to a 2015 nuclear deal with world powers.

Zarif's speech came a day after U.S. Vice President Mike Pence urged Germany, France and Britain to follow Washington in withdrawing from the deal and to "stop undermining U.S. sanctions." The United States had an "unhealthy fixation" or "obsession" with Iran, said Zarif.

<http://www.globaltimes.cn/content/1139216.shtml>

Iran exporting radiopharmaceuticals to 15 countries *Tehran Times February 19, 2019*

Radiopharmaceuticals, or medicinal radiocompounds, are a group of pharmaceutical drugs which have radioactivity. Radiopharmaceuticals can be used as diagnostic and therapeutic agents. They emit radiation themselves, which is different from contrast media which absorb or alter external electromagnetism or ultrasound. The main group of these compounds are the radiotracers used to diagnose dysfunction in body tissues. While not all medical isotopes are radioactive, radiopharmaceuticals are the oldest and still most common such drugs.

Iran is a pioneer in the field of developing and producing radiopharmaceuticals in western Asia, Salehi said, adding that the compounds are being exported to Egypt, India, Pakistan, Iraq, Lebanon, Syria, and some European countries. Salehi went on to say enemies are striving to impose sanctions on exportation of radiopharmaceuticals, however, "we don't give up".

<https://www.tehrantimes.com/news/433091/Iran-exporting-radiopharmaceuticals-to-15-countries>

Michael Flynn Pushed to Share Nuclear Power Technology With Saudi Arabia, Report Says *Haaretz February 20, 2019*

Senior White House officials pushed a project to share nuclear power technology with Saudi Arabia despite the objections of ethics and national security officials, according to a new congressional report citing whistleblowers within the administration. Lawmakers from both parties have expressed concerns that Saudi Arabia could develop nuclear weapons if the U.S. technology were transferred without proper safeguards.

According to the report, the nuclear effort was pushed by former National Security Adviser Michael Flynn, who was fired in early 2017. Derek Harvey, a National Security Council official brought in by

Flynn, continued work on the proposal, which has remained under consideration by the Trump administration.

<https://www.haaretz.com/us-news/flynn-pushed-to-share-nuclear-power-technology-with-saudi-arabia-report-says-1.6955296>

Ex-Fm Official: Put Secret Iran Nuke Archives On Internet *Yonah*

Jeremy Bob, Jerusalem Post, February 20, 2019

The entire secret Iranian nuclear archives taken by the Mossad from Tehran should be posted online, former foreign ministry director-general Dore Gold said on Monday.

On the nuclear front, Amidror said that the Islamic Republic “didn’t jump yet into the nuclear area, but is building long-range missiles and the next generation of centrifuges” to enrich uranium for a bomb.

Further, he said that the secret nuclear archives Iran kept have proven it will not give up the goal of developing nuclear weapons, since that was the only reason it would have held on to and concealed such files after the 2015 nuclear deal.

<https://www.jpost.com/Israel-News/Ex-top-official-Put-secret-Iran-nuke-archives-on-internet-581041>

Iran’s Rouhani says U.S. sanctions are ‘terrorist act’ *Reuters, February 20, 2019*

Iranian President Hassan Rouhani said on Wednesday relations with the United States had rarely been so bad and that sanctions imposed by the Trump administration targeting Tehran’s oil and banking sectors amounted to “a terrorist act”. Animosity between Washington and Tehran - bitter foes since Iran’s 1979 revolution - has intensified since U.S. President Donald Trump withdrew from an international nuclear deal with Tehran last May and reimposed sanctions lifted under the accord.

“The struggle between Iran and America is currently at a maximum. America has employed all its power against us,” Rouhani

was quoted as saying in a cabinet meeting by the state broadcaster IRIB. “The U.S. pressures on firms and banks to halt business with Iran is one hundred percent a terrorist act,” he said. Trump has reimposed the sanctions with the aim of slashing Iranian oil sales and choking its economy in order to curb its ballistic missile program and its activities in the Middle East, especially in the conflicts in Syria and Yemen. Iranian Foreign Minister Mohammad Javad Zarif accused the United States of hypocrisy for trying to wreck Iran’s nuclear program while seeking to sell nuclear technology to Saudi Arabia, Tehran’s regional rival.

<https://www.reuters.com/article/us-iran-usa-rouhani/irans-rouhani-says-u-s-sanctions-are-terrorist-act-idUSKCN1Q90ZO>

Iran still holding up its end of nuclear deal, IAEA report shows

Francois Murphy, Reuters, February 22, 2019

The International Atomic Energy Agency is policing the deal, which lifted sanctions against Tehran in exchange for restrictions on Tehran’s atomic activities aimed at increasing the time Iran would need to make an atom bomb if it chose to.

Iran has stayed within caps on the level to which it can enrich uranium, as well as its stock of enriched uranium, the IAEA said in a confidential quarterly report sent to its member states and obtained by Reuters. “Not much has changed..., a continuing reporting of the implementation (by Iran),” a senior diplomat said on condition of anonymity, summarising the report. The IAEA also repeated its usual statement that it carried out so-called complementary access inspections - which are often at short notice - at all locations in Iran that it needed to visit.

<https://www.reuters.com/article/us-iran-nuclear-iaea/iran-still-holding-up-its-end-of-nuclear-deal-iaea-report-shows-idUSKCN1QB1XC>

Iran starts Gulf war games, to test submarine-launched missiles *Arab*

News, February 22, 2019

Iran on Friday began large-scale naval drills at the mouth of the Gulf, which will feature its first submarine cruise missile launches, state media reported, at a time of rising tensions with the United States. More than 100 vessels were taking part in the three-day war games in a vast area stretching from the Strait of Hormuz to the Indian Ocean, the state news agency IRNA reported.

“The exercise will cover confronting a range of threats, testing weapons, and evaluating the readiness of equipment and personnel,” navy commander Rear Admiral Hossein Khanzadi, said in remarks carried by state television. “Submarine missile launches will be carried out ... in addition to helicopter and drone launches from the deck of the Sahand destroyer”. Iran has expanded its missile program, particularly its ballistic missiles. Western experts say Iran often exaggerates its weapons capabilities, although there are concerns about its long-range ballistic missiles.

<http://www.arabnews.com/node/1456296/middle-east>

Iran launches cruise missile from submarine during drill *Arab News,*

February 24, 2019

Iran launched a cruise missile from a submarine for the first time during an ongoing annual military drill in the Strait of Hormuz, local media reported Sunday. The semi-official Fars news agency reported on the Sunday launch and released an image of a green submarine on the surface of the water launching an orange missile. It said other submarines have the same capability. It did not provide details on the missile's range. State TV showed a video of the launch in which a missile fired from a submarine hit a pre-determined target.

“They were trying to carry out sabotage in part by exploding missiles in the air, but they failed to do anything since we had predicted and secured,” the program, he said. Iranian

media said the missile was an upgraded version of the Nasr-1 missile the country had showcased in 2008. It was then described as an anti-vessel missile with a range of 35 kilometers (or 22 miles). Iran frequently touts its military arsenal, much of which is manufactured locally because of international sanctions. The Strait of Hormuz, at the mouth of the Arabian Gulf, is a crucial bottleneck for global energy supplies, with about a third of all oil traded by sea passing through it.

<http://www.arabnews.com/node/1457211/middle-east>

Bid by ‘enemies’ to sabotage missiles foiled: Iran Guards *Arab*

News, February 24, 2019

The Revolutionary Guards on Sunday accused “enemies” of Iran of trying to sabotage the country’s missiles so that they would “explode mid-air” but said the bid was foiled. “They tried as best as they could to sabotage a small part which we import so that our missiles would not reach their target and explode mid-air,” Fars news agency reported, quoting the Guards’ aerospace commander Amir Ali Hajjizadeh. “But they couldn’t do a damn thing because we had seen this coming from the start and had reinforced this sector,” he added, accusing Iran’s “enemies” of sabotage without naming any specific country.

Iran reined in most of its nuclear program under a landmark 2015 deal with major powers in return for sanctions relief, but has continued to develop its ballistic missile technology. Earlier this month the New York Times reported that the US administration of President Donald Trump was pushing a secret program aimed at sabotaging Iranian rockets and missiles. It said Washington was trying to “slip faulty parts and materials into Iran’s aerospace supply chains” as part of a campaign to undercut Tehran’s military. UN Security Council Resolution 2231 – adopted just after the nuclear deal – calls on Iran “not to undertake any activity related to ballistic missiles designed

to be capable of delivering nuclear weapons.”

Tehran insists that its missile program is “purely defensive” and compliant with the resolution but it has developed medium-range ballistic missiles capable of reaching arch-foe Israel. Hajjizadeh, whose remarks were also reported by Tasnim news agency, said similar sabotage attempts had happened before and targeted Iran’s nuclear and oil sectors.

<http://www.arabnews.com/node/1457291/middle-east>

Iran envoy hails EU’s ‘first step’ to save nuclear deal *Yao Lijuan Source, Global Times, February 24 2019*

Iranian ambassador to China Mohammad Keshavarz-Zadeh hailed the registration of the Instrument for Supporting Trade Exchanges (INSTEX) on Friday after France, Germany and the UK announced the new mechanism for facilitating legitimate trade with Iran to bypass US sanctions.

“This shows that the European side is determined to safeguard multilateralism. China firmly supports their efforts in sustaining cooperation with Iran, getting INSTEX up and running at an early date, and keeping it open to third parties to promote normal economic and trade cooperation between the international community and Iran,” Chinese foreign Ministry spokesperson Geng Shuang said on Friday.

The French, German and British foreign ministers on Thursday issued a joint statement on the creation of INSTEX. “It will support legitimate European trade with Iran, focusing initially on the sectors most essential to the Iranian population, such as pharmaceutical, medical devices and agricultural goods. INSTEX aims in the long term to be open to economic operators from third countries who wish to trade with Iran and the E3 to continue to explore how to achieve this objective,” the statement said. The EU and Iran started talks on the Special Purpose Vehicle after the US announced its withdrawal from JCPOA last May. The White House has warned the EU

not to try to evade Iran sanctions, or will face stiff fines.

<http://www.globaltimes.cn/content/1139871.shtml>

Ground license to be granted to Sinop NPP Baris *Siimsek, Daily Sabah, February 25, 2019*

Turkey’s second nuclear power plant (NPP), to be built in Sinop under a Japanese-French partnership, will make a breakthrough by obtaining a ground license this year. The plant, which will have an installed capacity of 4,480 megawatts (MW) and consist of four reactors with a 1,120-MW capacity each, will cost \$20 billion.

The first reactor of the nuclear power plant is scheduled to be put into operation in 2025. The environmental impact assessment report for the project will also be obtained this year. The ministry will complete legislative and institutional infrastructure works related to nuclear energy and prepare necessary plans and programs accordingly.

<https://www.dailysabah.com/energy/2019/02/25/ground-license-to-be-granted-to-sinop-npp>

Over 50 Turkish experts to work at Akkuyu Nuclear JSC *Daily Sabah, February 25, 2019*

Over 50 new Turkish specialists, receiving diplomas from the Moscow Engineering Physics Institute (MEPhI) of Russia’s National Research Nuclear University (NRNU), commenced their work at Akkuyu Nuclear JSC, the Russian nuclear energy company Rosatom announced on Saturday.

The second group of Turkish students graduated from NRNU MEPhI in Moscow, Rosatom said in a statement, adding that a group of students from Vietnam and Mongolia have also obtained their diploma.

<https://www.dailysabah.com/energy/2019/02/25/over-50-turkish-experts-to-work-at-akkuyu-nuclear-jsc>

Israel Burying 'Nuclear Waste With Radioactive Content' in Golan - UN Report

Sputnik, February 25, 2019

Secretary-General of the UN Antonio Guterres has presented a report to the UN Human Rights Council based on Syrian accusations against Israel's action in the Golan Heights, saying that Israel has been burying "nuclear waste with radioactive content in 20 different areas populated by Syrian citizens" in the occupied territory. Most of the waste has allegedly been dumped in the area near Al-Sheikh Mountain.

Israel is suspected of possessing nuclear weapons, but no evidence proving or disproving the suspicion has been presented so far. Tel Aviv has neither confirmed, nor denied possessing nuclear weapons.

<https://sputniknews.com/middleeast/201902251072730944-israel-nuclear-waste-golan-heights-un/>

US dismisses surprise resignation of Iran's Zarif

The Times of Israel, February 26, 2019

The US said its policy regarding Tehran would not change after Iranian Foreign Minister Mohammad Javad Zarif abruptly tendered his resignation Monday. He has served as Rouhani's foreign minister since August 2013 and has been under constant pressure and criticism by hardliners who opposed his policy of detente with the West, as well as by the Trump administration, which has hammered away at the nuclear deal he helped broker.

Within Iran, Zarif's standing in the country's political establishment took a hit when the US withdrew last year from the nuclear deal, aimed at curbing Tehran's nuclear program, and the pact's achievements became less and less clear as Iran's economy nosedived.

Zarif was blamed by ultra-conservatives for negotiating a bad deal that had not gained anything meaningful for Iran in exchange for all the concessions it had made in its nuclear program.

<https://www.timesofisrael.com/us-dismisses-surprise-resignation-of-irans-zarif/>

India used Israeli arms for strike inside Pakistan — report

Judah Ari Gross and Agencies, The Times of Israel, February 26, 2019

Israeli-made smart bombs were reportedly used by India in an airstrike on Pakistani jihadists across the volatile Kashmir border early Tuesday, in an attack that raised tensions between the two nuclear arch-rivals.

The EU called on New Delhi and Islamabad to exercise "maximum restraint" amid the soaring tension between the nuclear-armed powers who both lay claim to the Kashmir region. "We remain in contact with both countries and what we believe is essential is that all exercise maximum restraint and avoid further escalation of tensions," EU spokeswoman Maja Kocijancic told reporters.

<https://www.timesofisrael.com/india-used-israeli-arms-for-strike-inside-pakistan-report/>

British parliament warned Yemen is testbed for Iranian weapons

Damien McElroy, The Nation, February 26, 2019

A leading British lawmaker has warned that the Yemen conflict is being used by Iran to test advanced missile developments that have violated United Nations resolutions on Tehran's ballistic weapons programme.

Iran's ballistic missiles represents a threat to the region despite the signing of the 2015 nuclear deal, according to the Foreign Office's Middle East minister Alistair Burt. "Alongside our partners we continue to call on Iran to act consistently with all UN security council resolutions in relation to ballistic missile programme," he said. "It is essential to get the conflict in Yemen to an end, to prevent that sort of threat, to prevent it being used as a based for the testing of weapons."

Mr Burt added that while London continued to believe that Iran was complying with the restrictions on its

nuclear programme set out in the 2015 nuclear deal, it needed to be clear about that the issues around weaponry was equally critical.

<https://www.thenational.ae/world/british-parliament-warned-yemen-is-testbed-for-iranian-weapons-1.830701>

Turkey wants to see world free of nuclear weapons: FM *Hurriyet Daily*

February 26, 2019

Turkey's ultimate goal is to see a world free of nuclear weapons, the country's foreign minister said on Feb. 25. Mevlüt Çavuşoğlu's remarks came at the UN's Disarmament Conference held in Geneva, Switzerland.

"Disarmament, proliferation of nuclear weapons and weapon control is of critical importance for global security and peace," Çavuşoğlu said, adding that Turkey faced numerous risk and threats in its region. He emphasized that a world without nuclear weapons could only be achieved by implementing the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) in a successive and universal manner.

<http://www.hurriyetdailynews.com/turkey-wants-to-see-world-free-of-nuclear-weapons-fm-141486>

Iran's Foreign Minister Zarif, architect of nuclear deal, resigns

Parisa Hafezi, Reuters, February 26, 2019

Iran's Foreign Minister Mohammad Javad Zarif, the urbane, U.S.-educated architect of its 2015 nuclear deal with world powers, announced his resignation unexpectedly on Monday on Instagram. "Many thanks for the generosity of the dear and brave people of Iran and its authorities over the past 67 months. I sincerely apologise for the inability to continue serving and for all the shortcomings during my service. Be happy and worthy", he wrote on his Instagram page [jzarif_ir](https://www.instagram.com/jzarif_ir).

He gave no specific reasons for his decision. Unconfirmed media reports indicated he resigned over Syrian President Bashar al Assad's visit to Tehran on Monday. Noting that Zarif was not pictured in any of the

coverage of the visit, one online website said "the foreign minister was not informed". Zarif played the lead role in striking the deal under which Iran agreed to curbs on its nuclear programme in return for the lifting of international financial sanctions. He came under attack from anti-Western hardliners in Iran after the United States pulled out of the agreement last May and reimposed sanctions on Iran's economy and its lifeblood oil industry that were lifted under the deal.

<https://in.reuters.com/article/iran-zarif-resignation/irans-foreign-minister-zarif-architect-of-nuclear-deal-resigns-idINKCN1QE2H6>

Zarif resignation saga hampers nuclear deal *Lu Wenao, Global Times,*

February 27 2019

President Hassan Rouhani on Wednesday rejected the shock resignation of Iranian foreign minister Mohammed Javad Zarif. Zarif, lead negotiator in the landmark 2015 nuclear deal with major world powers, at first gave no specific reason for his resignation, but later indicated that internal factional struggles might have forced his hand. He previously told the Tehran-based news agency Islamic Republic News Agency (IRNA) that he hoped his resignation could serve as a reminder to the Iranian Foreign Ministry to reclaim its "legal position" in maintaining foreign relations. Rouhani said in a letter published by IRNA on Wednesday that Zarif's resignation was "against the country's national interests," and rejected it, standing by his moderate ally. Zarif's resignation shed light on a schism between Iran's hard-liners and moderates.

However, the modest man received a malicious response from US Secretary of State Mike Pompeo, who described Zarif and Rouhani as front men for a "corrupt religious mafia." Chinese Foreign Ministry spokesperson Lu Kang said on Tuesday. "We believe this is conducive to peace and stability in the Middle East and the international nuclear non-proliferation system, and serves the shared interests of

the international community." If Iran is abandoning the 2015 nuclear deal, years of multilateral diplomatic work will have been in vain and Iran's hard-earned peace and stability will for sure be jeopardized once again. The world cannot afford to see Iran copying North Korea by building a nuclear arsenal, as nuclear tests reverberate in the Middle East.

<http://www.globaltimes.cn/content/1140398.shtml>

Update to space laws long overdue

Nidhal Guessoum, Arab News, February 27, 2019

Does any state or international organization "police" outer space? What laws apply out there? If a crime is committed in space, say on the International Space Station, what jurisdiction applies? If small or large debris from launch rockets or broken satellites hit and damage or even destroy a spacecraft, who will be held responsible for the damages and possibly the loss of life? If a space organization (national or private) lands on an asteroid (and, as I write, the Japanese Hayabusa-2 just landed on Ryugu), can it, as will soon be possible, mine it for rare, valuable and expensive minerals, bring them back to Earth and commercially benefit from them? When people start establishing stations on the Moon or on Mars, can they just claim ownership of the lands? CUPUOS has led efforts to regulate space affairs, and indeed five treaties and five declarations and legal principles have been issued and signed by many countries. Those treaties, however, require some updating.

The first thing to note is that 40 years have passed since the most recent treaty, and more than 20 years since the last declaration. Secondly, these documents speak only of states and do not consider private companies, especially multinational ones. And thirdly, some of the problems they barely touch upon (damages and liability) have become much more pressing today, as there are now more than half a million pieces of debris bigger than 1 centimeter. The important issue of military operations, especially with the recent creation of an

American "space force," a new branch of the US military to be dedicated to "handling threats in space." However, as I have indicated, there are a number of space issues, some of them newly emerging, that require major updates and that will not be easy to work out.

Indeed, it is not far-fetched to predict that, within the next decade or two, many accidents and disputes will take place in space. There will soon be new space stations, manned missions to the Moon and Mars, perhaps even small stations built there to house astronauts for months or even years, companies taking hundreds if not thousands of tourists to space for a few hours or longer, states or private companies beginning to mine asteroids, and other developments, this will require some new laws and legal frameworks to ensure that outer space remains, as the very first treaty stated, "the province of mankind," not of the rich and powerful.

<http://www.arabnews.com/node/1458926>

Greek party leader to discuss situation in Mediterranean, Syria and Iran in Moscow

TASS Russian New Agency, February 27, 2019

President of the New Democracy party Kyriakos Mitsotakis is going to meet with Russian officials during his two-day visit to Moscow and discuss bilateral relations with them, the situation in the Mediterranean, in Syria and Iran's nuclear problem, he said in an interview with TASS.

"I'll have a number of important meetings with Russian Prime Minister Dmitry Medvedev, Foreign Minister Sergey Lavrov and State Duma Speaker Vyacheslav Volodin. I'm looking forward to thematic discussions on all issues of bilateral relations - on regional and international issues of mutual interest, the last events in the Eastern Mediterranean and important challenges in the sphere of international security, such as terrorism, the situation in Syria and Iran's nuclear problem. I will discuss all of this in light of Russia's special

role and responsibility in the creation of a safe environment and stability in Europe,” the Greek opposition leader said.

<http://tass.com/world/1046659>

Meridor: Preventing Iran Nuke Is Not The Only Strategy *Yonah Jeremy Bob, Jerusalem Post, February 27, 2019*

Preventing Iran from obtaining a nuclear weapon is not Israel’s only defense option, former intelligence minister Dan Meridor told *The Jerusalem Post* on Tuesday. Speaking following INSS’s publication late Monday of Meridor’s update to his landmark 2006 report on Israel’s national security doctrine, his point was not that Israel should not do all it can to stop the Islamic Republic from getting a weapon. Rather, he wanted to emphasize the need to plan five and 10 years into the future for what Israel’s optimal response would be if Tehran gets a nuclear weapon despite military and diplomatic efforts to stop it.

Some put forth an announcement by Prime Minister Benjamin Netanyahu in late 2018 that he had developed a long-term doctrine looking toward the year 2030 as an example of an updated doctrine. While Meridor said he was not familiar with the specifics of the Netanyahu strategy – the prime minister released only snippets for public consumption – he said that his understanding was that the strategy dealt with only a limited list of projects and was not comprehensive.

<https://www.jpost.com/Israel-News/Meridor-Preventing-Iran-nuke-is-not-the-only-option-581>

East Asia

Korea

ROK-EU Foreign Ministerial Meeting Held on Occasion of Munich Security Conference 2019 *Ministry of Foreign Affairs, Korea February 16 2019*

The Minister and the High Representative shared with each other assessments of the current situation on the Korean Peninsula,

agreeing to remain highly cooperative with each other in order for a complete denuclearization and a lasting peace on the Korean Peninsula to be achieved through advances in inter-Korean and United States-Democratic People’s Republic of Korea relations in a virtuous circle.

- Minister Kang, placing hope on the forthcoming second US-DPRK summit as a significant opportunity to see meaningful progress toward a complete denuclearization and the establishment of peace on the Korean Peninsula, asked the EU to remain supportive and cooperative to that end.
- High Representative Mogherini voiced hope that the second US-DPRK summit would produce tangible progress toward denuclearization, reaffirming the EU’s all-out support and commitment to cooperation regarding the peace process on the Korean Peninsula.

http://www.mofa.go.kr/eng/brd/m_5676/viub?sr=2018&sdF=&spdlto=&spdlWbd=&spdltp=&spmlinof=&spmlsq1=&spmlsq2=&company_cd=&company_nm=&page=5&titleNm=

Outcome of ROK-Russia Foreign Ministerial Meeting Held on Occasion of Munich Security Conference 2019 *Ministry of Foreign Affairs, Korea February 16, 2019*

Minister Kang shared with her Russian counterpart the ROK government’s work to accomplish a complete denuclearization and establish a lasting peace on the Korean Peninsula. She added that the ROK government, in close communication with Russia and other relevant countries, would make utmost efforts for the success of the forthcoming second summit between the United States and the Democratic People’s Republic of Korea and for progress in the currently ongoing denuclearization negotiations. She asked for Russia’s continued cooperation in that regard.

Minister Lavrov highly commended the progress in the situation on the Korean Peninsula; expressed strong support for

the efforts to resolve Korean Peninsula issues through dialogue; and mentioned that Russia, on its part, would continue playing a constructive role in the work to achieve denuclearization and a lasting peace on the Korean Peninsula.

Minister Kang's fourth meeting with her Russian counterpart since her inauguration and her first in 2019 is seen to carry significance as having serving as an opportunity to step up ROK-Russia strategic communication for denuclearization and peace on the Korean Peninsula at a very significant time ahead of the second US-DPRK summit as well as to reaffirm close cooperation with Russia, the ROK's pivotal partner in implementing its New Northern Policy.

http://www.mofa.go.kr/eng/brd/m_5676/uaub?sr=2019&sdF=&psdilo=&psdihl=&psdiltf=&psdiltf=&multi_itm_seq=0&itm_seq_1=0&itm_seq_2=0&company_at=&company_nm=&page=5&titleNm=

Glimpse into Yongbyon nuclear complex *Park Han-na, Korea Herald, February 28, 2019*

The Yongbyon Scientific Research Center has been at the center of nuclear talks between the US and North Korea for more than two decades. Built in the 1960s under the leadership of North Korea's founding leader Kim Il-sung, the Yongbyon complex has expanded in scale by adding a 5-megawatt-electric reactor, 100-megawatt-thermal experimental light water reactor, uranium enrichment buildings as well as spent fuel reprocessing facilities and research buildings.

Just as Siegfried Hecker, a leading nuclear scientist at Stanford University who has visited the site four times, called Yongbyon "the heart of nuclear program" of North Korea, it produces the two key materials used in making nuclear weapons – plutonium and highly enriched uranium – at the same location. The facility also produces the tritium it needs to make nuclear warheads small enough to fit its long-range missiles.

In 2010, Hecker said he witnessed 2,000 centrifuges capable of producing highly

enriched, weapons-grade uranium. He now believes the facility has since doubled in size. Yongbyon is estimated to have 50 kilograms of weaponized plutonium, enough for six to 10 bombs, and a highly enriched uranium inventory of 250 to 500 kilograms, sufficient for 25 to 30 nuclear devices.

"The uranium enrichment facility which started running in 2010 requires significant operating experience for high performance. The North may have a covert space to accumulate the experience," said Ahn Jin-soo, a former researcher at the Korea Institute of Nuclear Nonproliferation and Control. Yongbyon's light water reactor is known to be capable of producing 10 to 15 kilograms of plutonium a year, but the quality falls short of weapons-grade plutonium, Ahn said.

http://www.koreaherald.com/view.php?ud=20190228000534&ACE_SEARCH=1

Spain investigates incident in North Korean Embassy, AP Korea Herald, February 28, 2019

Spanish authorities said police were investigating an incident last week at the North Korean Embassy in Madrid in which a woman was hurt and, according to a North Korean government's aide, computers and cellphones also were stolen. A group of unidentified assailants bound and gagged workers inside the gated embassy compound on Feb. 22 for four hours, according to Spain's El Confidencial news site, which first reported the incident on Wednesday. The site said that a woman escaped from the assailants and that her screams prompted residents in the affluent Madrid neighborhood where the embassy is located to call police.

A National Police spokesman confirmed to The Associated Press that its officers assisted a North Korean woman with unspecified injuries. The spokesman, who wasn't authorized to be named in media reports, declined to comment further. An Interior Ministry official who was also bound by customary rules of anonymity

said the incident was “under investigation” and noted that North Korean authorities hadn’t filed any official complaint. The embassy couldn’t be reached for comment Wednesday.

http://www.koreaherald.com/view.php?ud=20190228000533&ACE_SEARCH=1

Japan

TEPCO training workers to shift spent nuclear fuel from March

Chikako Kawahara, The Asahi Shimbun, February 16, 2019

Tokyo Electric Power Co. has instituted a rigorous training program so technicians can proceed with the removal in late March of spent nuclear fuel from the No. 3 reactor of the Fukushima No. 1 nuclear power plant. A reporter from The Asahi Shimbun was permitted to observe a session Feb. 15 that involved using a huge 50-ton crane to lift and move a container, simulating the conditions under which spent nuclear fuel would be recovered.

The No. 3 reactor has 566 nuclear fuel assemblies stored in the fuel pool on the top floor of the reactor building. Moving the spent nuclear fuel is considered an urgent task due to fears the crippled facility could be further damaged in the event of another major earthquake or tsunami. Plans call for removing seven fuel assemblies in late March. A new roof for the reactor building was completed last year to contain any radioactive fallout. A hydrogen explosion blew the original roof apart shortly after the magnitude-9.0 Great East Japan Earthquake of March 2011 that generated towering tsunami, inundating the plant’s cooling system and triggering the nuclear disaster.

<http://www.asahi.com/ajw/articles/AJ201902160021.html>

Japan, Russia foreign ministers meet over postwar peace treaty

Mainichi Japan, February 17, 2019

The foreign ministers of Japan and Russia met Saturday hoping to make progress toward concluding a postwar peace treaty

despite deep divisions over how to solve a decades-old territorial dispute. The meeting between Japanese Foreign Minister Taro Kono and his Russian counterpart Sergey Lavrov in Munich on the sidelines of an annual security conference is a follow-up to their leaders’ summit in January in Moscow.

Abe is believed to be setting his sights on reaching a broad agreement with Putin in June, when the Russian leader is expected to visit Japan for the Group of 20 summit. But the likelihood of an immediate breakthrough seems to be slim. Not only do the two countries have differing interpretations of the joint declaration, but opposition lawmakers in Japan have taken issue with Abe’s perceived shift in policy to seek the return of two rather than all four of the contested islands. Abe and Putin agreed in November to accelerate peace treaty talks based on the 1956 declaration, which mentions the transfer from Moscow to Tokyo of the smaller two of the four islands – Shikotan and the Habomai islet group – once a peace treaty is concluded.

Japan is not part of the 1987 treaty that bans the development and possession of land-based missiles with ranges of between 500 and 5,500 kilometers. The dispute over the islands, called the Northern Territories in Japan and the Southern Kurils in Russia, has prevented the conclusion of a peace treaty to formally end World War II hostilities.

<https://mainichi.jp/english/articles/20190217/p2g/00m/0na/001000c>

Nuclear plants should be kept, ex-premier says, Lin Chia-nan, Taipei

Times, February 19, 2019

The Democratic Progressive Party (DPP) administration should maintain the nation’s nuclear power plants as required by approval of a referendum held on Nov. 24 last year, former premier Jiang Yi-huah said yesterday. Jiang made the remarks at a Taipei news conference called by the Fair Winds Foundation – of which Jiang is chairman – and former president Ma Ying-jeou’s foundation.

The government should stop sending unused nuclear fuel rods away, he said. Ma Ying-jeou Foundation executive director Hsiao Hsu-tsen said the two foundations would hold a non-governmental energy forum on March 10. Premier Su Tseng-chang on Saturday said that if Ma and Jiang could have found proper sites for long-term storage of nuclear waste, they would not have mothballed the Fourth Nuclear Power Plant, the construction and maintenance of which has wasted billions of dollars.

<http://www.taipeitimes.com/News/taiwan/archives/2019/02/19/2003709992>

Host town of crippled nuke plant to lift evacuation order, *Hideyuki Miura and Daiki Ishizuka, The Asahi Shimbun, February 20, 2019*

An evacuation order will be lifted for two districts here as early as April, eight years after the triple meltdown at the Fukushima No. 1 nuclear power plant spewed massive amounts of radioactive substances into the air. It would be the first time for Okuma, which co-hosts the plant, to see the evacuation order lifted, albeit partially.

The Okuma town government, which moved 100 kilometers to Aizuwakamatsu in the prefecture following the disaster, reported at a meeting of town assembly members on Feb. 19 that conditions in Okuma, including radiation levels, have improved to meet the criteria for lifting the order. The town plans to discuss the schedule for lifting the order with the central government and hold a meeting in March with evacuees. "I want to explain the town's stance in such a way that residents will fully understand," said Okuma Mayor Toshitsuna Watanabe. The entire town, with a population of 11,500, was ordered to evacuate after the onset of the nuclear crisis following the Great East Japan Earthquake and tsunami in March 2011.

The lifting of the order is expected to cover the Ogawara and Chuyashiki districts, both southwest of the plant.

<http://www.asahi.com/ajw/articles/AJ201902200049.html>

Japan and Tepco again ordered to pay damages to Fukushima nuclear disaster evacuees *Japan Times*

February 20, 2019

A district court Wednesday ordered the state and the operator of the crippled Fukushima nuclear plant to pay a combined ¥419 million (\$3.78 million) in damages to evacuees from the 2011 nuclear disaster. The order by the Yokohama District Court was the eighth such decision against Tokyo Electric Power Company Holdings Inc. and the fifth against the central government. Most of the 175 plaintiffs were forced to evacuate from Fukushima to Kanagawa Prefecture, near Tokyo, following the disaster, which was triggered by a massive earthquake and tsunami. They had sought a combined ¥5.4 billion from the utility and the state.

The ruling awarded compensation to 152 of the 175 plaintiffs, of whom 50 had evacuated voluntarily and 125 were forced to do so. They had each demanded ¥350,000 per month and compensation of ¥20 million for psychological damage due to "the loss of their hometown" in addition to compensation already paid by Tepco. The ruling was the eighth among approximately 30 similar suits filed by more than 10,000 evacuees. The state became a defendant together with Tepco in six cases and was exempted from compensation claims in only one ruling, which was handed down by the Chiba District Court in September 2017.

<https://www.japantimes.co.jp/news/2019/02/20/national/crime-legal/japan-tepco-ordered-pay-damages-fukushima-nuclear-disaster-evacuees/#.XIXJFZgvO7h>

Fierce opposition to recycling radioactive soil from Fukushima

The Asahi Shimbun, February 26, 2019

How to dispose of mountains of soil contaminated by radiation from the 2011 Fukushima nuclear disaster poses a massive headache for the central government. Officials had long insisted that contaminated surface soil removed

after the triple meltdown at the Fukushima No. 1 nuclear power plant would eventually be stored outside of Fukushima Prefecture. According to one estimate, the total volume of such soil will reach 14 million cubic meters by fiscal 2021. Local entities outside of Fukushima are understandably hesitant about serving as host to such vast quantities of possibly hazardous dirt. Officials in Tokyo are now hoping to sway local governments to act as hosts by proposing reuse of the contaminated soil for public works projects under certain conditions.

However, discussions have yet to begin on where to build the structure. Koji Yamada, an Environment Ministry official who has been involved in the issue, conceded it will not be easy to find a candidate municipality for the facility. "We are now at the stage of trying to obtain understanding from a national perspective," he said.

<http://www.asahi.com/ajw/articles/AJ201902260058.html>

Chu wavering on nuclear power: Su

Sean Lin, Taipei Times, February 27, 2019

Premier Su Tseng-chang yesterday accused former New Taipei City mayor Eric Chu of vacillating on his position on nuclear energy for electoral gains. Su made the remark when asked by Democratic Progressive Party (DPP) Legislator Chen Man-li about Chu's remark that he would activate the mothballed Fourth Nuclear Power Plant in New Taipei City's in Gongliao District

<http://www.taipetimes.com/News/taiwan/archives/2019/02/27/2003710499>

Japan hopes US-N. Korea summit will lead to return of abductees

Mainichi Japan, February 27, 2019

Japan expressed hope Wednesday that the second U.S.-North Korean summit starting later in the day in Hanoi will produce a breakthrough in resolving the issue of past abductions of Japanese nationals by the North, as well as in dismantling its nuclear and missile programs. Chief Cabinet Secretary Yoshihide Suga told a news conference that Prime Minister Shinzo Abe

has asked U.S. President Donald Trump for help in securing the return of the abductees.

Iizuka, who heads a group of abductees' relatives, also urged the Japanese government to stand firm on not easing economic sanctions imposed over North Korea's nuclear and missile programs unless the abductees are repatriated. Tokyo officially recognized 17 Japanese nationals, including Iizuka's younger sister Yaeko Taguchi, as having been abducted by the North and suspects the country's involvement in many more disappearances. Five of the 17 returned home in 2002, but Pyongyang maintains that eight have died and the other four were never in the country.

<https://mainichi.jp/english/articles/20190227/p2g/00m/0na/054000c>

South, South East and Central Asia

Bangladesh's energy conundrum

Shooha Tabil, Dhaka Tribune, February 16, 2019

In developing economies, growth in modern sectors like industry, motorized transportation, and urban development requires gigantic growth in energy consumption. But it should also be kept in mind that energy use also reflects climatic and geographic factors. Energy usage has been growing rapidly in low and middle-income countries, with Bangladesh being no exception. Total energy use refers to not only refined petroleum products and nuclear power-based energy consumption, but also to the power usage that comes from combustible renewables, industrial and municipal waste including solid biomass and animal products, and liquid and gas from biomass.

Leaning upon naturally devastating and expensive energy resources like coal and nuclear power plants, in spite of having the scope of using low-cost renewable energy sources, has raised a burning question about the course of Bangladesh's power-sector policies. The fact of the cost declination of renewable sources is clearly

seen in a recent report by the International Renewable Energy Agency (IRENA). The cost of installing 1MW capacity of a solar power plant has been reduced to Tk11 crore from Tk35 crore between 2010 and 2017.

<https://www.dhakatribune.com/opinion/op-ed/2019/02/18/bangladesh-s-energy-conundrum>

Op-eds, Reports and Editorial

China's Missile Program and U.S. Withdrawal from the Intermediate-Range Nuclear Forces (INF) Treaty

Author: Jacob Stokes, Policy Analyst, Security and Foreign Affairs Contributor: Alec C. Blivas, Research Assistant, Security and Foreign Affairs

U.S.-China Economic and Security Review Commission *February 04, 2019*

On February 2, 2019, the United States suspended its obligations under the INF Treaty that it entered into with the Soviet Union in 1987 and began the technical process of treaty withdrawal. †1 The INF Treaty requires destruction of ground-launched ballistic and cruise missiles with ranges of between 500 and 5,500 kilometers (km) (310 and 3,410 miles), their launchers, and associated support structures and equipment.² China is not a party to the treaty, and has consistently refused to accede to the accord.³ In the meantime, over the last two decades Beijing has built up a formidable missile arsenal outside the limits of the pact. In explaining its justification for withdrawing from the INF Treaty, the Trump Administration has cited both Chinese missile capabilities and Russian violations of the agreement. President Trump criticized both countries' development of INF Treaty-noncompliant missiles and explained his rationale for planning to leave the treaty, saying, "If Russia's doing it, and if China's doing it, and we're adhering to the agreement, that's unacceptable."⁴ National Security Advisor John Bolton further explained the Administration's assessment, noting that China's missile capabilities meant there was a "new strategic reality out

there" and that the INF Treaty had now become a "bilateral treaty in a multipolar ballistic missile world."⁵ This brief explains the importance of China's groundlaunched missile capabilities to Beijing's overall military strategy; surveys Chinese reactions to U.S. withdrawal from the INF Treaty; and assesses both the positive and negative implications of treaty withdrawal for the military balance in Asia, global arms control regime, U.S. relations with Asian allies, and China-Russia ties.

https://www.uscc.gov/sites/default/files/Research/China%20and%20INF_0.pdf

Nuclear power should be part of energy mix in fighting climate change *Alan Medsker, Daily Herald, February 10, 2019*

A recent open letter to legislators signed by 626 organizations states that we must transition our power generation to 100 percent renewable energy. The letter's definition of renewable energy excludes large hydroelectric and nuclear generation, yet nuclear and hydro are the very energy sources that have been used to successfully decarbonize large-grid electric generation. France, Norway, Sweden, Ontario, Costa Rica and Uruguay have transitioned their energy generation to low carbon sources and each did so using nuclear or hydro technologies. (See electricitymap.org to graphically view sources of world electricity generation.) No large electrical grid has ever been transitioned without them. Based on this experience, it would make more sense to focus first on these already-successful clean energy sources rather than excluding them. Excluding nuclear is particularly puzzling to me, because nuclear energy gives us everything we value about energy sources:

- Nuclear energy is clean, with lifetime CO₂ emissions comparable to wind.
- Its environmental impact is small, with low land use requirements and zero operational emissions.

- It is reliable and largely not affected by weather (something we should be thankful for given the recent polar vortex). Most nuclear plants run at 100 percent capacity well over 90 percent of the time.
- It is economical — energy costs over life of a nuclear plant are both predictable and competitive.
- The materials requirements per unit of generating capacity for nuclear are low.
- It can be deployed rapidly.
- It produces the least amount of waste, which is responsibly captured and safely managed.
- It is one of our safest forms of energy production.
- It is available now, and we can realize the full benefits without the significant delay and expense of (for example) still-developing storage technology or smart grid upgrades.

Given the challenge of decarbonizing, it makes no sense to exclude nuclear. If the climate is in crisis, we need all hands on deck. We cannot afford to ignore a technology with this type of track record. The Green New Deal resolution has the potential to push us, as a society, out of the climate change discussion and into climate change action. We need that push to continue for more and bolder action. However, we also need to be pragmatic and use science, data and history to guide our choices. Science has given us many tools to help us slow the warming of our planet. We must be open to using all of these. Based on the data we have, most models tell us that without nuclear, our chances of making fast and significant reductions in our emissions are much lower. Self-imposed restrictions on our energy choices will make decarbonization that much harder.

<https://www.dailyherald.com/discuss/20190210/nuclear-power-should-be-part-of-energy-mix-in-fighting-climate-change?fbclid=IwAR3fLTsacTs66GctObosydlfm8ptZr57Qskj93FjzYrQpP14OqKg7MUM0o>

EDITORIAL: Probe shows challenges posed by melted fuel at Fukushima plant *The Asahi Shimbun*

February 18, 2019

A specially designed, remotely controlled probe touched melted nuclear fuel debris at the bottom of a ruined reactor at the Fukushima No. 1 nuclear power plant in the first successful operation to inspect radioactive debris through direct contact. The plant's operator, Tokyo Electric Power Co. (TEPCO), lowered the rod-like probe outfitted with a tong-like pinching device into the primary containment vessel of the No. 2 reactor at the crippled plant and used the machine to successfully lift pieces of the debris several centimeters.

The Fukushima prefectural government demands that the nuclear waste from the stricken plant including debris should be eventually moved out of the prefecture. But there has been little serious debate on specifics. Both the government and TEPCO should confront this issue head-on. It is vital for them to offer sufficient and straightforward explanations about their efforts to tackle this problem to local governments and residents concerned while seeking to win their understanding through sincere discussions. It is simply impossible to complete the long and tricky process of decommissioning the reactors without support from the local communities. The government and the utility should keep this firmly in mind.

<http://www.asahi.com/ajw/articles/AJ201902180019.html>

Trump aides ignored legal warnings in pushing reactor plan: Democratic report *Jonathan Landay, Nathan Layne, Reuters, February 20 2019*

Top White House aides ignored repeated warnings they could be breaking the law as they worked with former U.S. officials and a close friend of President Donald Trump to advance a multi-billion-dollar plan to build nuclear reactors in the Middle East, Democratic lawmakers alleged in a report released Tuesday. The effort, the

report said, began before Trump took office and continued after his inauguration in January 2017 despite National Security Council staff warnings that a proposed transfer of U.S. nuclear technology to Saudi Arabia was being fast-tracked around a mandatory approval process in possible breach of the Atomic Energy Act.

The nuclear project is being promoted by IP3 International, a consortium of U.S. technology firms founded by retired Navy Rear Admiral Michael Hewitt, retired Army General John Keane, and Robert McFarlane, a former national security adviser to President Ronald Reagan. The board includes former senior U.S. civilian and military officials. The report said the companies include reactor manufacturer Westinghouse, which emerged from Chapter 11 bankruptcy last year. The White House had no immediate response to the report. IP3 denied in a statement that Flynn ever served as an adviser and said he “had no stake in the company and was never compensated or reimbursed for expenses.” IP3 “looks forward to sharing what we know” with Cummings and the committee’s top Republican, Jim Jordan, it said. A spokesman for Barrack said in an email that the long-time Trump friend and CEO of Colony Capital, a private equity firm, was not contacted prior to the report’s release, was reviewing the document and “stands ready to cooperate” with the committee.

<https://in.reuters.com/article/usa-trump-mideast-oversight/trump-aides-ignored-legal-warnings-in-pushing-reactor-plan-democratic-report-idINKCN1Q82FM>

Trump’s Idea of a Middle East Nuclear Deal *New York Times,*

February 20, 2019

By ramming through the sale of as much as \$80 billion in nuclear power plants, the Trump administration would provide sensitive know-how and materials to a government whose de facto leader, Crown Prince Mohammed bin Salman, has suggested that he may eventually want a nuclear weapon as a hedge against Iran and has shown little concern for what the rest of the world thinks.

The report also warned, “Within the United States, strong private commercial interests have been pressing aggressively for the transfer of highly sensitive nuclear technology to Saudi Arabia – a potential risk to U.S. national security absent adequate safeguards.” The Saudis began dangling visions of billion-dollar deals soon after President Trump was elected. In January 2017, IP3 International, a private company that has assembled a consortium of American companies to build nuclear plants in Saudi Arabia, wrote Prince Mohammed, proposing a “Marshall Plan for the Middle East.”

The United States has long been a leader in nuclear technology, the sale of which is governed by bilateral pacts, called “123 agreements,” which require adherence to nine nonproliferation criteria. Some 21 countries, the European Union and the International Atomic Energy Agency have these agreements. The criteria include guarantees that none of the nuclear materials provided by the United States will be used for explosives, that none of the technology or classified data will be transferred to third parties without American consent, and that the other country involved in the agreement will not enrich uranium or reprocess plutonium, which could be a pathway to a nuclear bomb.

The requirements are intended to prevent another country from gaining nuclear weapons. The Saudis say they want the technology only to produce nuclear power for domestic purposes and thus prolong their oil reserves, not to acquire a weapons capability. But it’s hard to trust such assurances, given Saudi animosity toward Iran and Prince Mohammed’s 2018 comment, “Without a doubt, if Iran developed a nuclear bomb, we will follow suit as soon as possible.”

Although Iran never produced a nuclear weapon, it had a robust nuclear program until it agreed to an international deal in 2015 that curbed its activities. The deal, opposed by the Saudis, is now hanging by a thread because Mr. Trump abrogated America’s commitment.

<https://www.nytimes.com/2019/02/20/opinion/trump-saudi-arabia-nuclear-technology.html>

Stop Letting Your Cartoon Fears Of Nuclear Bombs Kill The Planet

*Michael Shellenberger, Forbes,
February 21, 2019*

Forget what you read about Iran, Saudi Arabia, and North Korea. Most experts believe that the risk of nuclear war has never been lower. The closest we came to nuclear war was in 1962, a tender 13 years after the Soviet Union got the bomb. It was then that the US government discovered the Soviets had transferred missiles to Cuba. The same expert worried that “many of the political, technical, and situational roots of stable nuclear deterrence between the U.S. and the Soviet Union may be absent in South Asia, the Middle East or other regions to which nuclear weapons are spreading.”

The Real Threat

Last week, the former head of US nuclear weapons laboratory, Los Alamos, Sigfried Hecker, concluded the nuclear-armed nation of North Korea is “less dangerous today than it was at the end of 2017.” The reason? Diplomacy is working. Yes, North Korean missiles can still reach Japan and South Korea, and experts believe it won’t ever give up its nuclear arsenal.

We have, for decades, seen nuclear plants as little nuclear bombs – and nuclear meltdowns as little explosions. We need some fear so that we continue to only use nuclear weapons in peace, not war, but we’ve let our fears get the best of us. It’s hard to believe that humankind would kill off our best hope for preventing catastrophic climate change out of an exaggerated fear of nuclear weapons, but that is precisely what we are in the process of doing.

<https://www.forbes.com/sites/michaelshellenberger/2019/02/21/stop-letting-your-cartoon-fears-of-nuclear-bombs-kill-the-planet/#8bcd3b819edf>

Editorial: Doubts linger over Japan-US alignment on North Korea

Mainichi Japan February 22, 2019

Japanese Prime Minister Shinzo Abe recently held telephone talks with U.S. President Donald Trump. Holding such talks was

significant from the perspective of coordinating views ahead of the summit between the U.S. and North Korean leaders at the end of February. But there remain doubts about whether Abe and Trump are on the same wavelength.

Japan and the United States, however, were supposed to have been united on maintaining sanctions against North Korea until denuclearization was achieved. If Trump loosens sanctions without sufficient steps from the North as he hurries to produce results, then Pyongyang may end up keeping its nuclear weapons. Japan and the U.S. should work together on various levels. After the telephone talks, Abe stated, “We spoke at length particularly about the abduction issue” – a reference to North Korea’s past abduction of Japanese citizens. Japan will not progress simply by asking the United States to represent Tokyo’s interests. While backing the talks between the U.S. and North Korea, the Japanese government should independently consider how to engage with Pyongyang.

<https://mainichi.jp/english/articles/20190222/p2a/00m/0na/005000c>

US and Europe on chessboard over Iran

*Yao Lijuan, Global Times,
February 24 2019*

The vaunted US-sponsored Middle East security conference, held with the aim to isolate Iran, was hobbled by the tepid eagerness shown by key European powers to attend. EU foreign policy chief Federica Mogherini was absent from the Warsaw conference held on February 13 and 14. UK Foreign Secretary Jeremy Hunt left early, while neither France nor Germany sent high-ranking officials. The reasons for major European powers giving the meeting a short shrift are many. First, these European states may have been swamped by domestic issues, like France caught up in the yellow vest protests.

The US’ record of failure in the Middle East is another cause, leading to confrontation

among great powers, such as the one between Washington and Moscow on Syria, strains with Iran and Turkey and US' involvement in Yemen. Furthermore, the US and European countries lack consensus on how to deal with Middle East issues, including Iran. Withdrawal of US President

The Iran issue will be crucial in negotiations between the US and Europe. There are many bumps in US-Europe ties. Washington has adjusted its policies toward Europe. US-Europe relations are at a low point as the two sides lack consensus on a number of issues, such as how to play the role of major powers, and on their economic policies. Among them, the disagreement on Iran is an important factor influencing ties. If European nations bypass US sanctions to continue to trade with Iran, Washington may punish the companies involved. Political and economic differences are apparent in current transatlantic ties. France and Germany renewed their outlook over their self-interest and intend to maintain the EU's autonomy, which will make the US livid.

<http://www.globaltimes.cn/content/1139598.shtml>

Pak jihad's nuclear umbrella C.

Christine Fair, The Tribune, February 24, 2019

Punishing Pakistan for using terrorists as an elemental pillar of foreign policy will require not only India but the US as well to disencumber themselves from Pakistan's nuclear coercion strategy.

Understanding how Pakistan has managed to use Islamist (and non-Islamist) proxies with breathtaking impunity requires one to grasp how the state developed its nuclear program precisely to shield it from reprisals for its proxy warfare strategy. In many ways, the history of Pakistan's nuclear program and strategy of proxy warfare are inexorably tied together.

Not only does Pakistan's nuclear program constrain India's punitive options, it also keeps in check the options of the international community, which is also

coerced by Pakistan's fast expanding arsenal. Punishing Pakistan for using terrorists as an elemental pillar of foreign policy will require not only India but the United States as well to disencumber themselves from Pakistan's nuclear coercion strategy. While not impossible, doing so is politically risky and few policy makers would be willing seriously to contemplate such options.

<https://www.tribuneindia.com/news/sunday-special/perspective/pak-jihad-s-nuclear-umbrella/733917.html>

End to nuke deal may start 'era worse than Cold War': Expert

Barçın Yinanç, Hurriyet Daily, February 25, 2019

The collapse of the nuclear arms control regime can open an era even more dangerous than the cold war years, says a scholar. Turkey risks to become the setting of a crisis between Washington and Moscow according to Professor Mustafa Kibarodlu.

The US announcement at the beginning of the month that it is suspending its compliance with the Intermediate-range Nuclear Forces (INF) treaty can lead to the demise of an arms control regime opening the way to an era of uncertainty with devastating consequences said a scholar. In the resulting tension between Moscow and Washington the parties could opt to give each other messages via limited scale crisis and Turkey risks to be one of the setting areas of these crisis warned Professor Mustafa Kibarodlu.

<http://www.hurriyetdailynews.com/end-to-nuke-deal-may-start-era-worse-than-cold-war-141455>

Pakistan, Saudi Arabia, China, and Russia: a new strategic and economic bloc

Azhar Azam, Daily Times, February 25, 2019

Saudi Arabia has been one of the United States' closest allies for years, but some recent tiffs seem to have disrupted bilateral

relations. Excessive regulations on nuclear technology transfer by the US – apparently to protect the interests of its peerless partner, Israel – were a factor here.

Riyadh does not have a nuclear bomb and it is also a NPT signatory. However, it has established a nuclear research center, King Abdullah City for Atomic and Renewable Energy (KA-CARE), in 2010 to meet the country's energy and water needs.

<https://dailymtimes.com.pk/358330/pakistan-saudi-arabia-china-and-russia-a-new-strategic-and-economic-bloc/>

Global arms control architecture

'collapsing': UN, Arab News,

February 25, 2019

The international arms control system is facing collapse, the United Nations chief said Monday, as he urged Russia and the US to stop the imminent demise of a crucial nuclear treaty.

Secretary General Antonio Guterres used an address to the UN's Conference on Disarmament to warn that one of the cornerstones of diplomatic achievement over the last half century – arms control – was in "grave danger."

"I will be blunt. Key components of the international arms control architecture are collapsing," Guterres said. The United States has already begun the process of withdrawing from the Intermediate-Range Nuclear Forces (INF) treaty, in response to Moscow's deployment of the 9M729 missile, prompting Russia to announce its own withdrawal. "We simply cannot afford to return to the unrestrained nuclear competition of the darkest days of the Cold War," Guterres said. "I call on the parties to the INF Treaty to use the time remaining to engage in sincere dialogue on the various issues that have been raised," he added. "It is very important that this treaty be preserved."

<http://www.arabnews.com/node/1457961/world>

What the Trump-Kim Summit

Means for India, Jagannath Panda, The Diplomat, February 26, 2019

The wisdom of Delhi's insistence on "dialogue diplomacy" with North Korea is finally being acknowledged. The world had overlooked the importance of both "dialogue" and "diplomacy" in the Korean Peninsula for many years now, contrary to India's continuous advocacy that dialogue diplomacy should be the real pathway to attain peace. The prospects of "dialogue diplomacy" in the Korean Peninsula remained bleak with North Korea's withdrawal from the Six-Party Talks in 2009, and Pyongyang's continuous missile and nuclear tests ever since. China, North Korea's lone military ally, had also emphasized "dialogue" repeatedly, but Beijing's sincerity was always questionable. After all, China continued to offer a strategic shield to North Korea's continuous missile and nuclear tests by resisting and delaying sanctions and measures at the United Nation Security Council (UNSC). The years after the Six-Party Talks did not encourage an environment that would be conducive for "dialogue diplomacy" in the region. Segregating Pyongyang through sanctions became the preferred measure to find solutions to North Korea conundrum.

The Hanoi summit between Trump and Kim this week reiterates the significance of "dialogue diplomacy." With this, the fall of North Korea is no longer a breaking story to reckon with, nor does the world seem to be diffident about engagement with the Kim regime in Pyongyang any more. Even though a permanent solution is still a long way off, the world has started realizing that continuous engagement with Pyongyang is the best way to find a solution to North Korea's nuclear impasse, making Delhi's stance triumphant. The time has come to revisit and recount India's perspective toward the Korean Peninsula to promote peace and partnerships.

<https://thediplomat.com/2019/02/what-the-trump-kim-summit-means-for-india/>

Paul Flynn was a champion in the fight against nuclear power

David Lowry, The Guardian, February 26, 2019

Paul Flynn had a huge range of causes, often championing minority issues where others feared to tread, such as legalising cannabis and supporting the troops returning from overseas wars in Afghanistan, Iraq and Syria, and the families of the fallen in these wars, which he opposed.

The issue on which I worked most with Paul was nuclear power and weapons dangers, costs and secrecy. According to the Parliamentary Archives database, Paul asked 1,410 parliamentary questions on nuclear issues during his time as an MP. Indeed his first three questions as an MP (in July 1987) were posed on nuclear safety. He opposed the Hinkley C plant in Somerset, opposite his constituency across the Bristol Channel, to the end, and insisted the plans for new nuclear plants in Wales at Wylfa and a small modular reactor at Trawsfynydd were expensive white elephants, while backing “clean, green eternal” tidal power to the last.

<https://www.theguardian.com/politics/2019/feb/26/paul-flynn-obituary-letter>

Europe fears new Cold War amid suspension of nuclear treaty

Ranvir S. Nayar, Arab News, February 27, 2019

There is never a good time to start an arms race, but for Europe the news of the suspension of a nuclear arms treaty could not have come at a worse time. Europe is already in deep paroxysms and uncertainty over the way Brexit is lurching ahead blindly. To add to it, the famous Franco-German engine that gives direction and power to the EU has become entirely dysfunctional since the election of Emmanuel Macron as president of France and the severe setbacks suffered by Chancellor Angela Merkel in Germany. The two leaders share a relationship that seems almost cold in comparison with the ties between earlier heads of the two nations, right from the end of the Second World War, nearly 75 years ago.

Thus, the announcement by the Trump administration that it will back out of the Intermediate-Range Nuclear Forces (INF) Treaty unless Russia urgently mends its ways has come like a bolt from the blue for an EU that has been bitterly divided, listless and directionless for several years now.

Leaders in countries like Poland and even Hungary and the Baltic states would actually be happy to have the US missiles back on their territory as they fear being the first in line of any possible Russian attack and, hence, they remain vulnerable. But other nations, notably Germany, the largest member of the EU, is less than keen on having any missiles, let alone nuclear weapons, in its backyard. With the rapid rise of the Green Party, which is fiercely anti-nuclear, the German people and the government would be reluctant to see a return to the Cold War scenario. Another big challenge for Europe is the weakening of the Franco-German alliance that has so far guided and given strength to the EU, not just in its enlargement but also in deepening intra-EU ties.

If EU leaders cannot quickly agree on a common strategy to respond to the US position on INF, or convince the Americans to use other means of getting the Russians to toe the line, it is very likely that US President Donald Trump will go ahead and tear up the treaty, meaning the EU will be pulled closer to a renewed Cold War.

<http://www.arabnews.com/node/1458931>

After the Trump-Kim Failure

Nicholas Kristof, The New York Times, February 28, 2019

President Trump was right to walk away from his summit with Kim Jong-un rather than accept a bad nuclear agreement, but the outcome underscores that he was bamboozled last year at his first summit with Kim. Whatever genius Trump sees in the mirror, “the art of the deal” is not his thing. Still, there are significant risks ahead. The most important is that North Korea

may return to testing nuclear weapons and ballistic missiles, for that would mark a huge escalation of tensions and renewed concerns about brinkmanship and war.

The collapse of the latest talks also underscores how misguided Trump was at that earlier meeting. He didn't understand that Kim uses "denuclearization" to mean something different than the meaning in the United States, and he gave Kim the enormous gift of legitimacy that comes with a summit, without getting anything comparable in return.

<https://www.nytimes.com/2019/02/28/opinion/trump-kim-summit.html>

Here's why US-North Korea talks will continue to fail *Darius Shahtahmaseb, Russian Times, February 28, 2019*

Given the current media climate on the issue of North Korea, I can't say I'm all the surprised with the outcome of the summit. Despite Trump and Kim's grandiose and laughable compliments towards each other, and despite the fact that NBC reported the US was considering waiving its demand for full accounting of Pyongyang's nuclear program, we all knew at the end of the day that little could be achieved between these two nations because of the core issues at stake here. Some of us just disagree on the real reasons why this relationship was doomed from the outset (and some of us are just plain lying to you).

Still, to all those in the corporate media decrying that the Hanoi-based summit was a waste of time, they need not fret. While in Vietnam, the Trump administration managed to ink a deal with Vietnam for 110 Boeing planes worth billions of dollars. Seems to me like it was a very lucrative and fruitful time in Vietnam, particularly for the people who matter the most: corporations that thrive as part of the US war machine.

<https://www.rt.com/op-ed/452698-korea-trump-talks-fail/>

Revisiting Chernobyl: 'It is a huge cemetery of dreams' *Malcolm*

Borthwick, The Guardian, February 28, 2019

The 1986 nuclear disaster blighted Ukraine and changed the world. Serhii Plokhyy, who won the Baillie Gifford prize for his history of the tragedy, returns to the once sought-after Soviet town

<https://www.theguardian.com/books/2019/feb/28/revisiting-chernobyl-cemetery-of-dreams>

Focus on North Korea's nuclear arsenal obscures threat posed by chemical and biological weapons

James Stavridis, Japan Times, February 28, 2019

As U.S. President Donald Trump and North Korean leader Kim Jong Un held their summit in Vietnam, the narrow focus on nuclear weapons obscured a major danger: Kim holds the whip in a three-ring circus of weapons of mass destruction. The other two rings, adjacent and in many ways more frightening, feature chemical weapons and – above all – biological threats.

The North Koreans are suspected by U.S. and South Korean intelligence agencies of holding substantial amounts of a variety of biological agents including smallpox, botulism, typhoid and anthrax. This means international pressure on North Korea to sign global agreements banning such weapons; making those weapons part of the agenda alongside nukes in summit negotiations; and pressuring Russia and China to persuade Kim to rid himself of any stockpiles before sanctions can be fully lifted.

The chances of Kim quickly surrendering his entire nuclear arsenal are roughly the same as that of Mexico paying for Trump's beautiful wall. Still, pursuing a diplomatic conclusion – not Trump's loose talk of "fire and fury" – to the standoff on the Korean Peninsula is the path forward. But the U.S. shouldn't forget to put other weapons of mass destruction on the table as well.

<https://www.japantimes.co.jp/news/2019/02/28/asia-pacific/focus-north-koreas-nuclear-arsenal-obscures-threat-posed-chemical-biological-weapons/#.XIXKuZgvO7h>

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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