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- Putin calls for multilateral security guarantee for N. Korea
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- New Directions in Arms Control, Russia sends warning to US and accuses Trump of starting new arms race - 'INEVITABLE END!'
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- Judicial Watch launches probe into Kerry's Iran talks
- Trump administration ignoring intl. law, Zarif says
- Japan relies on Iranian oil, to talk to US about it: Minister
- 'Iran to design mechanisms similar to INSTEX with Iraq, Syria, Turkey and China'
- Trump's dilemma with Iran: to extend waivers or not!
- Iran says leaving nuclear treaty one of many options after U.S. sanctions move
- Iran says U.S. sanctions on its oil industry will damage market stability
- Iran sanctions, unrest hit Middle East growth: IMF

H. Israel

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- Israeli F-16 Jets Blew Up a Syrian Missile Factory (And Russia's Air Defense Missiles Didn't Strike)
- Report: Israel Just Used In Combat Its New Rampage Missile. Here Is What It Can Do.
- 2020 Democrats Promise to Re-enter the Iran Deal, and Israel Is Concerned
- Benjamin Netanyahu Plans to Name an Illegal Settlement in Donald Trump's Honor
- Israel-Iran tensions SURGE as Israel 'launch supersonic Rampage missiles on Iran'
- Biden's pro-Israel record could help with defense of Iran nuclear deal

- Russia invites Israel to discuss nuclear program
- Trump's Policy Is 'Israel First', Not 'America First'

I. Turkey

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- Hazardous Armenian nuclear plant near Turkish border in spotlight
- Akkuyu nuclear power plant to have core holder vessel in September
- Turkey faces hike in oil prices as US thwarts Iran oil sales
- Foreign backers set to pull out of Turkish nuclear power project
- Turkey expanding ties with Russia and China
- Turkey seeks alternate oil sources as US ends Iran sanctions waivers
- Foreign backers set to pull out of Turkish nuclear power project
- Turkey, Iran to hold political consultations in Ankara

J. Egypt

- Egypt presses ahead with nuclear power

EAST ASIA

K Japan

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- Anti-drone 'jammers' eyed to thwart terrorism at major events
- 'Nuclear village' website closed down after host of complaints
- TEPCO plans to use new foreign workers at Fukushima plant
- President Trump to visit Japan in late May, meet new emperor
- Policy Book Omits 'maximizing Pressure On North Korea'
- J-Village reopens as sporting site, drops role as plant cleanup lot
- Japan expects little impact from U.S. scrapping Iran oil waivers
- Japan recast meaning of WTO ruling on South Korea food ban
- Japan's Heisei imperial era: three generations look back, and ahead
- Japan takes softer stand with Russia, N. Korea to resolve issues
- Watered-down strategy against global warming draws criticism
- NRA stands firm on deadline; nuclear plants may shut down
- Revamped peace museum offers personal look at A-bomb victims
- Japan nuclear regulator to halt reactors without anti-terrorism systems
- Japan expands the hunt for F-35 jet that went missing during exercise
- Trump upbeat on potential for US-Japan trade deal
- Japan nuclear plants threatened with closure over antiterrorism measures

L. North Korea

- N. Korea says it tested new weapon, wants Pompeo out of talks
- Analysis: N. Korea's Kim back to military optics to raise heat
- North Korea warns of 'corresponding response' over U.S.-ROK drills
- Putin, Kim hold "fruitful" talks on Korean Peninsula nuclear issue, bilateral cooperation
- Daimler says it has no idea how Kim Jong Un got his limos
- Kim says peace on Korean Peninsula depends on U.S. attitude -KCNA
- North Korea nuclear, missile activity 'inconsistent' with denuclearization: U.S. general

M. Taiwan

- Thousands urge end to nuclear power
- DPP joining Saturday's anti-nuclear rallies

N. Central, South and Southeast Asia

- Could Kazakhstan's Past Be The Key To De-Nuclearizing North Korea?

- Central Asian uranium legacy set for remedial work
- Kyrgyzstan: New key step to tackle Central Asia's harmful uranium legacy
- Uzbek Energy Ministry talks on Power Uzbekistan international forum with Azerbaijan's participation
- From Lab to Field: Indonesian Scientists Develop New Crops for Farmers Using Nuclear Science

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- Will splashy philanthropy cause the biosecurity field to focus on the wrong risks?
- NASA probe detects likely 'marsquake': an interplanetary first
- Global military spending at new post-Cold War high, fueled by US, China - think-tank
- SpaceX escape engines were test fired before mishap: panel
- Nuclear Security, Arms Control and the U.S.-Russia Relationship
- Nuclear risks Reduction: The State of Ideas
- Here's 3 Reasons Nuclear Power Can Help Beat Thanos and Save the Planet
- Shifting Nuclear Sands in South Asia: Understanding India's Counterforce Temptations
- Your New START Explainer: The Value of Cooperation on Nuclear Arms Control
- Seeing the quantum
- Marking World Book Day with the IAEA's Three Most Popular Publications in 2018
- Papers for International Conference on Effective Nuclear and Radiation Regulatory Systems due 28 May

P. Op-eds/Reports

A-SAT

- It's time to speak out about India's reckless anti-satellite test
- ASAT a testimony to Indian technological capabilities: DRDO Chairman
- India will need pragmatism, diplomatic skill in shaping new rules for regulation of outer space

INDIA

- Villagers in Madhya Pradesh's Chutka, twice displaced, vow to fight government over proposed nuclear power plant
- Modi should know India's status as a nuclear weapon state demands responsible leadership
- New Delhi's Indian Ocean security dilemma
- India's options as US announces end of Iran waiver
- Indian Carrier's Fire Likely Result of Lax Military Regulation - Chinese Experts
- Order from Chaos: Trump tightens sanctions on Iran's oil exports-How India will respond

CHINA

- China's upcoming maritime parade not a muscle show
- Stronger PLA Navy enhances world peace
- How China should respond to US' Iranian oil request
- China, Russia bound to further expand collaboration
- New missile gap leaves U.S. scrambling to counter China
- Special Report: China's vast fleet is tipping the balance in the Pacific
- China is building an armada
- China's fear of an American blockade
- How China is replacing America as Asia's military titan
- Special Report - New missile gap leaves U.S. scrambling to counter China
- Is China the largest opportunity for Britain in a post-Brexit world?

PAKISTAN

- India's ASAT test
- Foreign nuclear assistance to India and its implications
- Nuclear powers and poverty in South Asia
- India's space ambitions
- Can India or Pakistan Break Deterrence?
- Indian Irresponsible Behavior as Nuclear Power
- Nuclear Pakistan: Maintaining Peace of South Asia
- Pakistan's Cold War And How to Win it
- Why India And Pakistan Must Make Peace Not War

USA

- The folly of war with Iran
- Pressing The Button: How Nuclear-Armed Countries Plan To Launch Armageddon (And What To Do About The U.S.)
- Outside the Box Thinking for Unusual Nuclear Wastes
- PM Modi must avoid casual mentions of war games as Nuclear rhetoric is not meant for election speeches
- Come Inside President Kennedy's Super Secret Nuclear War Bunker
- Prof. Doubts China Would Like Trump's 'Grand Nuclear Deal' Proposal
- Globalizing the INF Treaty
- Full interview: Javad Zarif on "Face the Nation"
- Donald Trump: Serious about Arms Control?
- India and Pakistan Will 'Never Be Friends' as U.S. Sits Out Aggressive Nuclear Threats
- Global Nuclear Reactor Construction Market (2018) By Manufacturers, Type and Application, With Sales Market Share and Growth Rate Forecasts till 2023
- Nuclear Magnetic Resonance Spectrometer (NMR) Market to Set Phenomenal Growth by 2025
- Senator Richard G. Lugar: An appreciation

EUROPE

- Fly me to the moon: Germany eyes slice of lucrative space market

RUSSIA

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- New Directions in Arms Control
- Putin might be the last best hope for Kim Jong Un

ISRAEL

- Israel's New Army Chief Has an Ambitious Plan
- Keep Up The Pressure
- Putin Walks Tightrope Between Israel and Iran
- Editor's Notes: Taking The Fight To The Iranians
- In Arab Media, Increased Discussion Of Imminent Israel-Hizbullah War

CENTRAL, SOUTH AND SOUTHEAST ASIA

- Asia continues to pivot away from coal

Q. Events organised by the Indian Pugwash Society

- The Future of Global Nuclear Disarmament, April 24, 2019
- The Future of India's Nuclear Industry, April 25, 2019

A. India

AUSINDEX-19 Concludes

PIB Delhi, April 16, 2019

The Australian and Indian Navy have concluded a two-week long bilateral maritime exercise code-named AUSINDEX on 14 Apr 19. Personnel from the Eastern Fleet bid farewell to Her Majesty's Australian Ships Canberra, Newcastle, Paramatta and Success with a promise to meet again.

The current edition of the exercise had the participation of the highest number of units thus far with four frontline ships with integral helicopters, one submarine and a variety of aircraft including P8I and P8A long-range Maritime Reconnaissance Anti-Submarine Warfare aircraft took part from both navies. For the first time, 55 American and 20 New Zealand military personnel embarked onboard the RAN ships and witnessed the exercises during AUSINDEX-19.

[http://pib.nic.in/
PressReleaseDetail.aspx?PRID=1570731](http://pib.nic.in/PressReleaseDetail.aspx?PRID=1570731)

Second Edition of Indian Navy-Vietnam Peoples' Navy Bilateral Exercise (IN - VPN BILAT EX) Concludes

PIB Delhi, April 17, 2019

In the backdrop of the growing maritime engagement between India and Vietnam, the Indian Navy undertook the second edition of the bilateral maritime exercise between Indian Navy and Vietnam Peoples' Navy at/ off Cam Ranh Bay, Vietnam from 13 to 16 Apr 19. The maiden edition was conducted from 21 to 26 May 18 at Da Nang, Vietnam. The exercise was undertaken as a part of the ongoing Overseas Deployment of Eastern Fleet ships to South East Asian countries. IN Ships Kolkata under the command of Capt Aditya Hara and Shakti under the command of Capt Sriram Amur participated in the exercise, comprising a harbour and a sea phase.

The Indian Navy and the Vietnam Peoples' Navy have traditionally shared good relations. Conduct of the bilateral exercise

on an annual basis would give a further fillip to the existing strong bilateral relation between the two countries, which since Sep 16 have been elevated to the level of 'Comprehensive Strategic Partnership' after the visit of the Hon'ble PM to Vietnam. The Navy to Navy cooperation involves a Composite Training Programme in the fields of Submarine, Aviation and Dockyard training. The two countries have also signed an agreement to exchange White Shipping Information and have a running 'Information Sharing' programme.

[http://pib.nic.in/
PressReleaseDetail.aspx?PRID=1570838](http://pib.nic.in/PressReleaseDetail.aspx?PRID=1570838)

IN Ships to participate in International Fleet Review at Qingdao, China

PIB Delhi, April 19, 2019

IN Ships Kolkata and Shakti are scheduled to arrive Qingdao, China on 21 Apr 19 to participate in the International Fleet Review as part of 70TH Anniversary celebrations of PLA (Navy). International Fleet Review (IFR) is a parade of naval ships, aircraft and submarines, and is organised by nations to promote goodwill, strengthen cooperation and showcase their organisational capabilities. IFR also serves as an ideal platform for world's navies to showcase their prowess and indigenous ship designing and ship building capabilities in a global/international arena. The second IFR conducted by India off Visakhapatnam in Feb 2016 saw overwhelming participation of 50 navies with nearly 100 warships.

[http://pib.nic.in/
PressReleaseDetail.aspx?PRID=1570906](http://pib.nic.in/PressReleaseDetail.aspx?PRID=1570906)

What is Nirbhay missile? All you want to know about India's indigenous 1,000-km nuclear-capable missile

Debjit Sinha, Financial Express,
April 16, 2019

Another Made in India nuclear boost! Defence Research and Development Organisation (DRDO) has recently

successfully test fired the Nirbhay missile from Integrated Test Range (ITR) on Abdul Kalam Island off Odisha's Chandipur coast. This was the sixth test for the Nirbhay missile. The missile successfully met all the mission objectives. According to DRDO, the Nirbhay missile also showcased its sea-skimming capability to cruise at very low altitudes. The successful test of the nuclear-capable cruise missile adds much-needed strike and deterrence power to India's defence preparedness.

<https://www.financialexpress.com/defence/what-is-nirbhay-missile-test-2019-nuclear-range-of-india-pakistan-china-drdo/1549892/>

'Called Pak's N-bluff because India is nuclear power'

Deccan Herald, April 17, 2019

Prime Minister Narendra Modi on Wednesday said he did not fall prey to Pakistan's nuclear blackmail, because India has the "mother of nuclear bombs". Addressing a campaign rally at Surendranagar in Gujarat, Modi was referring to the surgical strikes and air strikes conducted by the country's forces inside Pakistan in response to terrorist attacks in Uri and Pulwama.

<https://www.deccanherald.com/national/called-paks-n-bluff-because-india-is-nuclear-power-729173.html>

'India's ASAT test could exacerbate rivalry with China'

Deccan Herald, April 17, 2019

India's anti-satellite missile test carried out last month was clearly targeted towards China and could exacerbate New Delhi's rivalry with Beijing, a top US expert has said, underlining that India now must brace itself for a long-term space competition. On March 27, India achieved a historic feat by shooting down its own low-orbit satellite with a ground-to-space missile, making the country a space power. The test made India the fourth country in the world after the US, Russia and China to have the ASAT capabilities.

<https://www.deccanherald.com/international/indias-asat-test-could-exacerbate-rivalry-with-china-729095.html>

Indian Military Advancements and Strategic Stability of South Asia

Syeda Saiqa Bukhari, Modern Diplomacy, April 18, 2019

South Asia is one of the most instable regions in the world because of the ever growing hostility between Pakistan and India. Since partition India has always tried to dominate the region due to its conventional superiority over Pakistan. The bilateral relations of Pakistan and India are based on distrust and uncertainty. Consequently, Pakistan's major security threat perceptions are always inclined towards its Eastern border i.e. India.

The current Indian military developments and intention to purchase advanced weaponry have disturbed the existing strategic stability of the region. These developments include induction of 05 Dhanush artillery guns (indigenous) and launch of Electronic Management Intelligence Satellite 'EMISAT'. Moreover, according to a media report, India has also recently ordered 240 Spike medium range Anti-Tank Guided Missiles (ATGM) and 12 launchers as an emergency purchase from Israel in wake of the recent military escalation with Pakistan.

Spike is a medium range multipurpose weapon, having a capability to hit and completely destroy the heavy military armored vehicles. It has a fire and forget mode which enables it to lock on to the target before it fires instead of acquiring it once the missile is in the air. The missile can be launched from anywhere i.e. air, land or sea. India Army has a requirement around 68, 000 anti-tank guided missiles and 850 launchers of various types. In February 2019 crisis, Indian response showed that it lacks in terms of advanced military weaponry and efficient response capabilities. In this scenario, the emergency purchase ATGM is significant and somehow it immediately fulfills the operational requirements of Indian offensive military capabilities.

<https://modern diplomacy.eu/2019/04/25/indian-military-advancements-and-strategic-stability-of-south-asia/>

China can strike India's satellite system despite ASAT test: Report

Ajai Shukla, Business Standard, April '18, 2019

An analysis of India's March 27 anti-satellite (ASAT) test concludes that it was directed squarely at China, but would not deter Beijing from interfering with, or damaging, India's satellite network in wartime. The report by Ashley Tellis, which the Carnegie Endowment for International Peace released on Tuesday, argues that, while India has demonstrated its ASAT interceptors can destroy Chinese satellites with kinetic (direct impact) strikes, Beijing's highly sophisticated ASAT programme provides it with several non-kinetic options to disable Indian satellites without physically striking them.

https://www.business-standard.com/article/economy-policy/china-can-strike-india-s-satellite-system-despite-asat-test-report-119041800030_1.html

India must provide sovereign guarantee for financial assistance to Jaitapur nuclear power plant, says EDF

Financial Express, April 21, 2019

French major EDF, which has got the contract for building reactors for the Jaitapur nuclear power plant, has said India will have to provide a sovereign guarantee to two other state-run firms of France for providing financial assistance for the project. The EDF, which will construct the country's largest nuclear power park comprising six atomic power reactors of 1,650-MW each in coastal Maharashtra, had submitted a techno-commercial offer to the Nuclear Power Corporation of India (NPCIL) in December last year.

The NPCIL, a PSU under the Department of Atomic Energy, operates over 20 nuclear reactors in the country. India is yet to respond to the techno-commercial offer, sources said. Replying to a question on the financial aspect of the project, Vakis Ramany, Senior Vice President at EDF, in an e-mail interview to PTI, said the total cost

of the project is "confidential and may not be disclosed" at this stage.

<https://www.financialexpress.com/industry/india-must-provide-sovereign-guarantee-for-financial-assistance-to-jaitapur-nuclear-power-plant-says-edf/1554773/>

ASAT test shows India has means to destroy ICBMs in outer space: Experts

Bhaswar Kumar, Business Standard, April 23, 2019

Last month's successful 'Mission Shakti' anti-satellite (ASAT) weapon test showed that India has developed the technological capability to destroy enemy nuclear-tipped missiles launched from as far away as 5,500 kilometres or more, at high altitudes outside the atmosphere, say experts.

Shortly after the test, the Ministry of External Affairs had said that the missile used in Mission Shakti was "DRDO's Ballistic Missile Defence interceptor", which was "part of the ongoing ballistic missile defence programme". Early reports on the test said the same. However, a day after the test, Defence Research and Development Organisation (DRDO) Chairman G Satheesh Reddy said that this was a new missile, developed specifically as an anti-satellite weapon. "The missile has technologies developed for ballistic missile defence applications, particularly the kill vehicle," Reddy told a news agency in an interview.

https://www.business-standard.com/article/current-affairs/asat-test-shows-india-has-means-to-destroy-icbms-in-outer-space-experts-119042200713_1.html

12 more nuclear power plants in India soon, says Department of Atomic Energy chief

Energy Economics, April 22, 2019

India will soon have 12 more nuclear plants soon to improve the power situation and ensure there is a free flow of uninterrupted power supply for both

industries and residential use, a statement issued on Monday here quoted Secretary of the Department of Atomic Energy (DAE), K N Vyas, as saying.

“Nuclear technology helps in betterment of lives through varied usages and is an irreplaceable source of clean, pollution-free energy,” the statement quoted Vyas, who is also the Atomic Energy Commission of India’s Chairman, as saying at the 11th International Forum AtomExpo 2019, sponsored by Rosatom State Atomic Energy Corporation, held in Sochi, Russia.

<https://energy.economictimes.indiatimes.com/news/power/12-more-nuclear-power-plants-in-india-soon-says-department-of-atomic-energy-chief/68991919>

After PM’s “Nuclear” Remark, Jyotiraditya Scindia, Mehbooba Mufti Hit Out

Anuj Pant, NDTV, April 23, 2019

Opposition leaders on Monday charged Prime Minister Narendra Modi of making the extraordinary threat of a nuclear war to influence voters amid the ongoing national elections, after the Prime Minister warned Pakistan at a poll rally in Rajasthan that India’s “nuclear button” was not “for Diwali”. The nuclear button and the army “is not the property of one individual,” senior Congress leader Jyotiraditya Scindia told NDTV but for showing India was not afraid of its neighbour anymore.

The BJP has built its election campaign around national security ever since tension between India and Pakistan escalated after a terror attack on a CRPF convoy in Jammu and Kashmir’s Pulwama.

<https://www.ndtv.com/india-news/election-2019-after-pm-narendra-modi-nuclear-remark-jyotiraditya-scindia-mehbooba-mufti-hit-out-2026979>

At nuclear test site, nationalism is a hard sell

Ajai Sreevatsan, Livemint, April 28, 2019

In the perpetually hot, dust-blown highway between Jodhpur and Jaisalmer, hidden

amidst babul trees, is a road that leads toward a village which has begun to call itself ‘shakti stal’.

The inspiration behind the name is India’s second nuclear test in 1998, which went by the code word Operation Shakti. The heavily-guarded site of the underground explosion is a mere 3 km from Khetolai, a village of roughly 5000 people near the town of Pokhran. India’s first nuclear test, which happened under Indira Gandhi in 1974, was conducted about 10 km away.

<https://www.livemint.com/news/india/at-nuclear-test-site-nationalism-is-a-hard-sell-1556453661419.html>

‘Nuclear bombs not for Diwali’: Report on PM’s Barmer speech sent to EC

The Indian Express, April 29, 2019

Barmer district poll authorities Monday said that a factual report on Prime Minister Narendra Modi’s speech in the district has been submitted to the Election Commission of India after Congress alleged that he violated the Model Code of Conduct “brazenly” by talking about the armed forces.

<https://indianexpress.com/elections/lok-sabha-elections-2019-narendra-modi-barmer-speech-election-commission-of-india-5700598/>

Pakistan’s security concerns top Khan’s agenda on visit to Iran

The Arab Weekly, April 28, 2019

Iran and Pakistan agreed to set up a joint rapid reaction force for their shared border, which stretches nearly 1,000km. The agreement came as Pakistani Prime Minister Imran Khan made his first visit to Iran, which had been postponed earlier in the year.

The neighbours agreeing to a joint force comes after a terrorist attack in Pakistan’s south-western province of Balochistan on April 15. Militants wearing military uniforms stopped a bus en route from Karachi, Pakistan’s largest city, to Gwadar

on a key coastal highway and killed 12 Pakistani military servicemen.

<https://thearabweekly.com/pakistans-security-concerns-top-khans-agenda-visit-iran>

As Trump Says Time Up for Iranian Oil Imports, India's Economy Straps in For a Rough Ride

Rishika Pardika, News18, April 30, 2019

Oil prices hit \$74.30 a barrel, the highest since November 2018, on Monday as the grace period extended by the United States to certain countries to import oil from Iran despite sanctions ends later this week.

In November 2018, the US had granted a six-month additional waiver to eight countries, including India and China, the biggest importers of Iranian oil. Post this period, when the waiver ends on May 2, it would be safe to assume that bilateral relations, including trade relations, with the US would be strained.

<https://www.news18.com/news/india/as-trump-says-time-up-for-iranian-oil-imports-indias-economy-straps-in-for-a-rough-ride-2122491.html>

B. China

Experts call for rapid development of nuclear technology at ATOMEXPO forum

Xinhua, April 15, 2019

Global experts called for the further development of nuclear technology and cooperation so as to cope with climate change and realize sustainable development at the 11th ATOMEXPO International Forum here on Monday. Themed "Nuclear for better life," the two-day forum has attracted over 3,600 guests from 74 countries, including about 1,500 guests from outside Russia.

Participants will take part in discussions on the development of the nuclear industry and the application of nuclear technologies in various areas such as medicine and health, unique materials, agriculture, transportation, the ecosystem, security and

space exploration. More nuclear energy is required to achieve the goal of dealing with climate change and limiting global warming to 1.5 degrees Celsius, she said. A number of documents on cooperation are expected to be signed during the forum, according to the organizer of the event

http://www.xinhuanet.com/english/2019-04/15/c_137979563.htm

Nuclear efforts see renewed momentum

By Zheng Xin and Hu Meidong, China Daily, April 16, 2019

After a three-year hiatus, nuclear energy efforts are set to go into the overdrive in China, with a few of projects expected to go on-stream or start to work this year, industry sources said. China last approved a nuclear project in December 2015 and has since stopped approvals for construction of nuclear reactors.

According to Joseph Jacobelli, an independent energy analyst and Asia-Pacific CEO of clean energy producer Joule Power, nuclear power, which will help China reduce emissions and replace coal-fired plants, is expected to see renewed impetus in the next few decades. China has charted plans to raise its total installed nuclear capacity to 58 gigawatts by 2020, while it also aims to have another 30 gigawatts under construction by the end of 2020.

<http://www.chinadaily.com.cn/a/201904/16/WS5cb5164ba3104842260b6587.html>

US using Taiwan question as ruse to interfere in China's internal affairs

Li Haidong, Global Times, April 16, 2019

According to CNN on Tuesday, the US State Department has approved a possible deal with Taiwan to renew a \$500 million training program for Taiwan's F-16 pilots and maintenance crews. It is also worth noting that April 10 marks the 40th anniversary of the US' unilateral creation of the Taiwan Relations Act (TRA). To

commemorate the piece of legislation that lays down how Washington was supposed to deal with the island, the US acted quite conspicuously.

Given Trump's personality, using the Chinese island as a bargaining chip with Beijing on other issues such as China's participation in the US-Russia nuclear disarmament agreement can't be excluded. The Taiwan question involves China's core interests and is the political foundation for stable China-US relations. Any changes in the US policy on Taiwan will have a huge impact on this relationship, which is closely related to regional and global order.

<http://www.globaltimes.cn/content/1146175.shtml>

US has to review aggressive stance as China triumphs

Azhar Azam, *Global Times*, April 16, 2019

After a dismal February, China's dollar-denominated exports rebounded with growth of 14.2 percent in March. Total trade contracted by 1.5 percent to \$1.03 trillion for the first quarter of 2019 largely because of a 4.8 percent drop in imports. This was perhaps the most awaited quarterly release from China customs for the Trump administration since it waged a trade war on Beijing and now hopes for progress in the ongoing trade negotiations. But unfortunately for the US, Trump's tariffs seem not to have damaged the world's second largest economy.

The EU-China Summit Joint Statement broadly endorsed Beijing's efforts in reform and opening. In the statement, both sides also reaffirmed their support for the Iran nuclear deal and agreed to work with other parties on a peaceful and democratic way out of the Venezuelan crisis. Maybe Trump will learn and maybe he won't, preferring to go into the next election with the same old anti-China rhetoric. Considering Trump's history, he probably will opt for the latter.

<http://www.globaltimes.cn/content/1146149.shtml>

China's economy is regaining traction, thanks to stimulus, technology investment, BRI

Wen Sheng, *Global Times*, April 17, 2019

Following careful and substantive fiscal and monetary pump-priming, China's economy is regaining traction, as the country's newest statistics reported cozy 6.4 percent GDP growth for the first three months of 2019. A massive stimulus package, increasing investment and output of high-tech industrial lines have fired up the once sputtering engine.

China also needs to be firm in implementing the Belt and Road Initiative (BRI). The policy's benefits are two-pronged, as it will direct capital and Chinese experience and knowledge to help recipient countries develop their economies, while China's trade with BRI participant economies will grow as these countries become well off. After all, through enhanced imports and exports, both China and BRI countries will continue to prosper. This is another reason the Trump administration has been throwing mud on the BRI.

<http://www.globaltimes.cn/content/1146373.shtml>

China's power generation up 4.2 pct in Q1

Xinhua, April 17, 2019

China's power generation climbed 4.2 percent year on year in the first quarter of 2019, official data showed. The pace of growth eased from 8 percent registered in the same period last year, according to the National Bureau of Statistics. In March alone, power generation rose 5.4 percent from a year earlier, up from a rise of 2.9 percent in the first two months.

Generation of hydroelectricity expanded 22 percent year on year in March, the highest growth since March 2016, due to abundant water from southern regions. The generation of nuclear power and solar power both posted faster year-on-year

growth, at 31.7 percent and 12.9 percent respectively.

http://www.xinhuanet.com/english/2019-04/20/c_137993093.htm

Across China: Chinese SOEs' tech prowess wows and inspires sci-fi writers

Xinhua, April 17, 2019

China's state-owned enterprises (SOEs) are opening doors, and their minds too, to a group of curious visitors – science fiction writers. Five state-owned industrial heavyweights, including electricity giants, nuclear firms and construction conglomerates, have invited sci-fi writers to visit their factories, megaprojects and laboratories and, hopefully, find clues for their new stories.

"It has never happened before – we sci-fi writers visit SOEs to collect material for our works," said writer Ling Chen, who prefers to be identified by her pen name. "China's technology development has been so fast that sometimes I feel I lag behind. This is a rare opportunity for me to get in touch with the SOEs' advanced technology."

http://www.xinhuanet.com/english/2019-04/18/c_137988391.htm

China's cooperation with Iran should be respected: Foreign Ministry spokesperson

Global Times, April 22, 2019

The People's Liberation Army (PLA) Navy will hold multinational naval activities from Monday to Thursday to celebrate its 70th anniversary. The opening ceremony was held Monday, and a maritime parade is scheduled on Tuesday in Qingdao, East China's Shandong Province. The PLA Navy is undoubtedly the focus of the world's naval forces. The PLA Navy is a microcosm of China's rapid development. Whatever new warships will be debuted at the parade will attract much attention. Which countries send a delegation to the event would be regarded as a symbol of China's military and diplomatic influence. Some Western media

said China's upcoming maritime parade is a muscle show. This is not surprising. The West still dislikes China's rise.

<http://www.globaltimes.cn/content/1146956.shtml>

Xi reviews multinational fleet, champions maritime community with shared future

Xinhua, April 23, 2019

Chinese President Xi Jinping reviewed a multinational fleet in the Yellow Sea on Tuesday afternoon as part of the activities to mark the 70th founding anniversary of the People's Liberation Army (PLA) Navy. The first stage of the parade featured 32 Chinese naval vessels and 39 aircraft, including China's first aircraft carrier Liaoning and nuclear-powered submarines. The vessels sailed in six groups, including submarines, destroyers, frigates, and aircraft carrier, while the aircraft flew in 10 echelons, showcasing warplanes for early warning, reconnaissance, anti-submarine patrol, as well as bombers, carrier-based fighters and helicopters.

The second stage saw the participation of 18 visiting naval ships from 13 countries, including Russian Navy frigate Admiral Gorshkov and Australian Navy HMAS frigate Melbourne.

http://www.xinhuanet.com/english/2019-04/23/c_138002396.htm

China debuts most powerful destroyer in celebrations

Guo Yuandan and Liu Xuanzun, Global Times, April 23, 2019

The Chinese People's Liberation Army (PLA) Navy celebrated its 70th anniversary Tuesday afternoon in Qingdao, East China's Shandong Province by holding a grand maritime parade, which featured China's latest and most powerful destroyer, the Type 055, for the first time. Chinese President Xi Jinping, also general secretary of the Communist Party of China Central Committee and

chairman of the Central Military Commission, reviewed the fleet, which consisted of Chinese and foreign vessels.

<http://www.globaltimes.cn/content/1147119.shtml>

Indian, Australian warships arrive in China for naval parade

Ben Blanchard, Reuters, April 23, 2019

Warships from India, Australia and several other nations arrived in the eastern Chinese port city of Qingdao on Sunday to attend a naval parade, part of a goodwill visit as China extends the hand of friendship despite regional tensions and suspicions. China on Tuesday will mark 70 years since the founding of the People's Liberation Army Navy, where it will show off new warships including nuclear submarines and destroyers at a major review in the waters off Qingdao. China says warships from about a dozen nations are also taking part - one diplomatic source with direct knowledge said it was 13 countries in total - and the PLA is putting its best foot forward to welcome them.

<https://in.reuters.com/article/china-military-anniversary/indian-australian-warships-arrive-in-china-for-naval-parade-idINKCN1RX050>

China leads U.S. on potent super-fast missiles

David Lague, Reuters, April 25, 2019

China is leading the U.S. in a race to deploy hypersonic missiles that would defeat existing air defense systems, according to senior U.S. officials. The combination of speed, maneuverability and altitude of these missiles makes them difficult to track and intercept. They travel at speeds of more than five times the speed of sound or about 6,200 kilometers (3,853 miles) per hour. Some will travel as fast as 25,000 kilometers per hour, according to U.S. and other Western weapons researchers. That's about 25 times as fast as modern passenger jets.

Admiral Harry Harris, the former head of U.S. Pacific Command, told the House Armed Services Committee in February last

year that hypersonic weapons were one of a range of advanced technologies where China was beginning to outpace the U.S. military, challenging its dominance in the Asia-Pacific region.

<https://in.reuters.com/article/china-army-hypersonic/china-leads-u-s-on-potent-super-fast-missiles-idINKCN1S11F3>

China's 'artificial sun' project to harness nuclear fusion energy

Chen Xi Source, Global Times, April 24, 2019

China's "artificial sun" will achieve nuclear fusion by the middle of this century, one of the project leaders said. HL-2M Tokamak, the modified Chinese-designed "artificial sun" and a device to harness energy from fusion, will be completed this year. It is expected to increase the electricity intensity from one mega amperes to three mega amperes, an important step to achieve nuclear fusion, a spokesperson surnamed Liu with the press office of the Southwestern Institute of Physics (SWIP), affiliated with China National Nuclear Corporation, told the Global Times. An ampere is a standard measurement of electric current.

For instance, the deuterium (also known as heavy hydrogen) extracted from one liter of seawater releases the energy equivalent of burning 300 liters of gasoline in a complete fusion reaction, Liu said. The "artificial sun" aims to release nuclear fusion in the same way as the sun by using deuterium and tritium (radioactive hydrogen-3), and finally generate electricity. It is clean energy that will not generate waste, which makes it ideal for people to use in the future, Liu said.

<http://www.globaltimes.cn/content/1147302.shtml>

CIAE birthplace of China's nuclear technology

Cai Yang, Xinhua, April 26, 2019

Journalists visit a Miniature Neutron Source Reactor (MNSR) at the China

Institute of Atomic Energy (CIAE) of China National Nuclear Corporation in Xinzhen Town of Beijing, capital of China, April 18, 2019. CIAE is the birthplace of China's nuclear technology.

http://www.xinhuanet.com/english/2019-04/26/c_138011209.htm

Xi vows open, inclusive and transparent BRI

Li Ruohan and Li Xuanmin, *Global Times*, April 26, 2019

Chinese President Xi Jinping on Friday pledged transparency and zero-tolerance of corruption for the implementation of the China-proposed Belt and Road Initiative (BRI), a commitment hailed by the international society as further boosting confidence in cooperation. In his speech at the opening of the Second Belt and Road Forum for International Cooperation (BRF) on Friday, Xi called for building an open, green and clean initiative.

He stressed that "everything should be done in a transparent way," and called for a zero tolerance attitude against corruption. Every country has a corruption problem, and the promise in Xi's speech shows that the BRI is following the correct direction, José Picasso Salinas, chairman of the Peru-based Volcan Compania Minera S.A.A, a mining company, told the *Global Times*.

<http://www.globaltimes.cn/content/1147663.shtml>

Cold functional test starts at China's first Hualong One nuclear project

Xinhua, April 27, 2019

Cold functional tests began Saturday on a reactor of China's first nuclear power project using Hualong One technology, a domestically developed third-generation reactor design. The test was conducted on a circuit of the No. 5 nuclear power unit in the city of Fuqing, eastern China's Fujian Province, to evaluate the performance of the circuit system and its supporting facilities under high-pressure conditions, according

to the China National Nuclear Corporation (CNNC).

The CNNC said the test started 50 days ahead of schedule. Hualong One reactors were jointly designed by two nuclear power giants, China General Nuclear Power Group and the CNNC, and passed inspection by a national panel in August 2014. China has since approved the use of Hualong One technology to build two reactors in Fujian, the No. 5 and No. 6 units.

http://www.xinhuanet.com/english/2019-04/27/c_138015914.htm

New START talks cannot include China

Global Times, April 28, 2019

Several White House officials told the US media that US President Donald Trump will not renew the New Strategic Arms Reduction Treaty (START) between the US and Russia, which expires in 2021. Washington intends to build another nuclear pact that includes China. After withdrawing from the Intermediate-Range Nuclear Forces (INF) Treaty, the Trump administration is adopting the same tactic toward START. The key objective of this US tactic is to restrain China from developing its strategic nuclear forces. Washington hopes to exert pressure on Beijing with the help of Moscow and Western public opinion. Chinese people should be clear that US' arrogant strategy toward China mainly lies in the difference of magnitude between US' and China's strategic nuclear force.

If China's nuclear warheads were in the thousands, the US will never conduct such frivolous "free navigation" in the South China Sea and its moves in the Taiwan Straits would be more restrained. The thought that having enough nuclear weapons is good enough should keep abreast of the national security situation to figure out the concept of "enough." China does not have to regard the US as an example in terms of nuclear weapons, which is also unrealistic. But China's nuclear force must be enough to deter US

hawks' ideas of making strategic threats toward China, which should be the minimum for China's nuclear forces.

<http://www.globaltimes.cn/content/1147895.shtml>

Indian carrier's fire likely result of lax military regulation: Chinese experts

Zhang Han, Global Times, April 28, 2019

Chinese military experts on Sunday said that India's military culture cannot keep up with its ambitious weapon and equipment development, which might be the reason behind its aircraft carrier's fatal fire on Friday. A fire broke out at the engine room of India's aircraft carrier Vikramaditya while it was entering harbor in Karnataka's Karwar on Friday. The fire killed a naval officer who led the firefighting efforts in the affected compartment, according to a Saturday report by the Times of India.

The cause of the fire is yet to be announced by Indian authorities. Li Jie, a Beijing-based naval expert, told the Global Times on Sunday that the fire was more likely to be out of human error rather than mechanical problems. The fire and the extinguishing process suggested that they are unprofessional and unprepared to address such an emergency, he said.

<http://www.globaltimes.cn/content/1147863.shtml>

China develops unique heat-resistant material for hypersonic aircraft

Liu Xuanzun, Global Times, April 28, 2019

Chinese scientists have developed a new heat-resistant material for hypersonic aircraft which can endure over 3,000 C from friction caused by a Mach 5-20 flight within the atmosphere. The lead scientist on the project said the material outperforms all similar foreign-made ones with its high melting point, low density and high malleability.

The new material enables a hypersonic aircraft to fly at Mach 5-20 within the atmosphere for several hours, as the high heat resulting from the friction between the aircraft and the air reaches between 2,000 C to 3,000 C, a temperature normal metal would not be able to endure. Normal metals melt at around 1,500 C, but this new material can bear over 3,000 C for an extended period, state-owned Hunan Television reported recently.

<http://www.globaltimes.cn/content/1147843.shtml>

Nuclear-oriented technologies play more important role in people's daily life

Zhang Xingjian, Global Times, April 29, 2019

"The radiation used to process foods is totally different from the radioactive fallout that comes with nuclear accident, and people often misunderstand that irradiated food is radioactive," Yan Jianbing, professor from College of Life Science and Technology of Huazhong Agricultural University, told the Global Times on Monday. Meanwhile, China has approved 18 kinds of irradiated foods, totaling 100,000 tons annually, ranking first in the world, according to Science and Technology Daily reports.

Also, Chinese scientific institutes have utilized devices like reactors in the field of radio pharmaceutical production and nuclear medicine equipment development. He added that widespread expansion of reactor-related technology will require increased technical training, higher investment and, more patients' willingness to make the switch. But he remains optimistic. "Many people misunderstand the daily usage of nuclear-oriented technologies in China, which shows that there is great potential in the market," he said.

<http://www.globaltimes.cn/content/1148081.shtml>

China science & technology news summary

Xinhua, April 29, 2019

Cosmic Ray Observatory Starts Operation- An observatory for detecting cosmic rays in southwest China's Sichuan Province recently began scientific observation as it launched operation of its first set of detectors.

Tracking Ship Yuanwang-2 For Science Popularization - China's retired space tracking ship Yuanwang-2 will start its new mission of public education in the city of Jiangyin, in east China's Jiangsu Province. **Investigation On Danxia Landform -** Over 40 geologists from China and other countries are conducting a joint scientific investigation on a Danxia landform in northwest China's Shaanxi Province, the Shaanxi Institute of Geological Survey said Sunday.

http://www.xinhuanet.com/english/2019-04/29/c_138021362.htm

C. Pakistan

Pakistan Says Modi's Nuclear Threat Disregards Strategic Stability in South Asia

Sputnik news, April 22, 2019

During an election rally, Prime Minister Modi remarked that India's nuclear arsenal was not just meant for Diwali fireworks. Diwali is an Indian festival of lights which is also marked by the bursting of firecrackers.

New Delhi (Sputnik): Pakistan has termed Indian Prime Minister Narendra Modi's remark "unfortunate" and "regrettable" in which he had warned that if Pakistan insists they have a nuclear button, then India has not saved its own nuclear arsenal for Diwali (festival of lights) – giving a strong indication that its nuclear weapons were not meant for mere festivity fireworks.

<https://sputniknews.com/asia/201904221074356471-india-pakistan-nuclear-threats/>

International community acknowledges safety of Pakistan's nuclear weapons: FM Qureshi

The Express tribune, April 24, 2019

Islamabad on Wednesday dismissed concerns that Pakistan had any aggressive designs as Foreign Minister Shah Mehmood Qureshi said that the international community acknowledges the safety of Pakistan's nuclear weapons, Express News reported. The foreign minister made the comments at the end of his three-day visit to Tokyo. The visit has provided an opportunity to further build on the momentum of recent high-level visits between the two countries, according to a statement issued by the Foreign Office (FO).

<https://tribune.com.pk/story/1958059/1-international-community-acknowledges-safety-pakistans-nuclear-weapons-fm-qureshi/>

Dr Shireen Mazari cautions against US push to make India member of NSG

Dawn, April 26, 2019

Minister for Human Rights Dr Shireen Mazari on Thursday cautioned against the US push to make India a member of the Nuclear Suppliers Group (NSG). "India's membership would put Pakistan at a severe disadvantage. India's rapid modernisation of its nuclear forces is adversely affecting the strategic stability in the region," she said speaking at a workshop, "The international strategic environment and Pakistan's policy imperatives" organised for women parliamentarians.

<https://www.dawn.com/news/1478403>

Army signals legal action against PTM

The Express Tribune, April 29, 2019

The army has signalled taking legal action against the leadership of Pashtun Tahafuz Movement (PTM), stating that "those who

are playing in others' hands, their time is up". Speaking at a news conference in Rawalpindi on Monday, Inter-Services Public Relations (ISPR) Director General Maj Gen Asif Ghafoor accused the PTM of getting funds from Afghanistan's secret agency, National Directorate of Security (NDS) and India's Research and Analysis Wing (RAW).

Maj Gen Ghafoor reiterated that none of Pakistan Air Force's (PAF) F-16 fighter jets were missing, the fact which was also proven right by a report in an American news publication. "In your [Indian] rhetoric, you keep using nuclear power as a threat. Nuclear weapons are not a threat; they are a weapon of deterrence that should not be mentioned lightly."

<https://tribune.com.pk/story/1961958/1-showed-responsibility-despite-indian-lies-dg-ispr/>

D. USA

U.S. And Russia Back Nuclear Projects On Opposite Sides Of Red Sea As They Fight For Influence

Tom O Connor, Newsweek, April 16, 2019

Russia and the United States have embarked on separate nuclear projects on opposite sides of the Red Sea, along a vital node of competing interests between Moscow and Washington.

At the 2019 Atomexpo gathering in Sochi, Russia and Ethiopia "signed a three-year roadmap for establishing cooperation on the construction of a nuclear power plant and a center for nuclear science and technology in the African country," according to a news release from the event published Monday. The agreement was signed by Moscow's state-run Rosatom General Director Alexei Likhachev and Addis Ababa's Innovation and Technology Minister Getahun Mecuria Kuma.

<https://www.newsweek.com/us-russia-nuclear-projects-red-sea-1398707>

Entergy agrees to sell Indian Point

World Nuclear News, April 17, 2019

Entergy Corp has agreed to sell the Indian Point Energy Center to a subsidiary of Holtec

International following the shut-down of the final reactor at the site, which is planned for 2021. Holtec-SNC Lavalin joint venture Comprehensive Decommissioning Inc will decommission the plant on an accelerated timescale.

Indian Point 2 is due to shut down by 30 April 2020 and unit 3 by 30 April 2021. The sale of the Entergy subsidiaries that own the three units in Buchanan, New York State to Holtec will become effective when unit 3 has been shut down and permanently defuelled, and includes the transfer of the licences, used fuel, decommissioning liabilities and nuclear decommissioning trusts for all three Indian Point units including Indian Point 1, which was shut down in 1974.

<https://www.world-nuclear-news.org/Articles/Entergy-agrees-to-sell-Indian-Point>

US and Russia in nuclear FACE OFF in Red Sea region in wrestle for power

Simon Osborne, Express UK, April 17, 2019

Russia and the US are facing off from opposite shores of the Red Sea with Moscow backing a nuclear science and technology centre in Ethiopia and Washington making similar moves across the water in Saudi Arabia.

Russia and Ethiopia have signed a three-year roadmap for establishing co-operation on the construction of a nuclear power plant and a centre for nuclear science and technology in the African country. The agreement was signed by Moscow's state-run Rosatom General Director Alexei Likhachev and Addis Ababa's Innovation and Technology Minister Getahun Mecuria Kuma.

<https://www.express.co.uk/news/world/1115710/usa-russia-ethiopia-saudi-arabia-red-sea-nuclear-programs>

Uranium producers await US presidential decision

World Nuclear News, April 18, 2019

The US Department of Commerce (DOC) on 15 April submitted to the White House

the results of an investigation into the effects of uranium imports on US national security. US President Donald Trump now has up to 90 days to decide whether to act on the DOC's findings and recommendations, which have not been made public.

The investigation, under Section 232 of the Trade Expansion Act of 1962, was triggered by the filing in January 2018 of a petition by uranium mining companies Energy Fuels Inc and Ur-Energy. In it, the companies said the loss of a viable US uranium mining industry would have a significant detrimental impact on the country's national, energy and economic security and its ability to sustain an independent nuclear fuel cycle. They sought a quota to limit imports of uranium into the USA, effectively reserving 25% of the market for domestic production, and a "buy American" policy for federal entities needing to purchase the material.

<https://www.world-nuclear-news.org/Articles/Uranium-producers-await-US-presidential-decision>

CWRU faculty involved in nuclear forensic research

Anna Giubileo, *The Observer*, April 19, 2019

This question was posed by Christine Duval, an assistant professor in the department of chemical and biomolecular engineering. Her presentation on nuclear forensic research was the final in a series hosted by the Case Western Reserve University Science and Human Rights Coalition.

Duval's talk touched on these historical advancements, as well as the history of the atomic bomb and weapon detonation during World War II and the Cold War, before moving onto nuclear technology today.

<http://observer.case.edu/cwru-faculty-involved-in-nuclear-forensic-research/>

North Korea's Strategy: Slam Everyone But Trump

William Gallo, *Voanews*, April 22, 2019

North Korea has directed a wave of criticism at top White House officials, as talks with

the United States have stalled. But one person Pyongyang hasn't criticized: Donald Trump. The pattern reflects North Korea's apparent preference to continue negotiating directly with Trump, who has taken a more conciliatory approach to the nuclear talks than many of his deputies.

It also appears to be a carefully calibrated effort by North Korea to increase negotiating pressure on the U.S. without completely derailing the talks. "They're good at drawing the line," says David Kim, who specializes in East Asia security policy at the Washington-based Stimson Center. "As long as they don't bash Trump, we'll be OK."

<https://www.voanews.com/a/north-korea-negotiations-with-trump/4885758.html>

Experts Warn Latest Trump Administration Move on Iran Could Backfire

John Walcott, *Time*, April 22, 2019

President Donald Trump's decision Monday to end six-month waivers from U.S. sanctions for five countries that have continued buying Iranian oil — the latest turn of the screw in his Administration's "maximum pressure" campaign against Iran — was met with predictable outrage from Tehran.

But some U.S. State Department, Defense and intelligence officials and outside experts warn that the move could backfire by causing ripple effects in countries like China, Turkey and Iraq.

<http://time.com/5575620/donald-trump-iran-sanctions-waiver/>

This Vermont Town Took A Big Hit When Its Nuclear Plant Closed

Bruce Gellerman, *WBUR*, April 23, 2019

At the end of May, the Pilgrim Nuclear Power Station in Plymouth will permanently shut down. Forty-six years ago it began generating electricity, high-paying jobs and intense controversy over safety and environmental impact. Pilgrim went into service just one day after its

sister plant: Vermont Yankee. Both reactors were the same make and model: a GE Mark I reactor. And since 2002, they have been operated by the same company: Entergy.

<https://www.wbur.org/earthwhile/2019/04/23/vermont-yankee-vernon-lessons>

U.S. Moves to Stop All Nations From Buying Iranian Oil, but China Is Defiant

Edward Wong and Clifford Krauss, *New York Times*, April 22, 2019

In tightening sanctions on Iran, the Trump administration moved on Monday to isolate Tehran economically and undercut its power across the Middle East. But the clampdown has complicated relations with China at a particularly sensitive moment.

The decision to stop five of Iran's biggest customers from buying its oil was an audacious strike at Tehran's lifeline — one million barrels of oil exports daily, fully half of which go to China. The order was also aimed at India, Japan, South Korea and Turkey, all countries that trade robustly with the United States.

<https://www.nytimes.com/2019/04/22/world/middleeast/us-iran-oil-sanctions-.html>

US 'not interested in matching new Russian weapons', but will use nukes if it 'has to'

Russian Times, April 25, 2019

Despite a defense budget bigger than the next 7 countries combined, the US says Russia is pulling ahead in a new arms race, and the Pentagon has no choice but to rely on its nuclear deterrent. But how sincere are they being?

"It takes two to race," David Trachtenberg, the US deputy undersecretary of defense, said this week, adding that America is *"not interested in matching the Russians system for system."* He also casually noted that *"the Russians are developing an incredible amount of new nuclear weapons systems"* and generally *"are doing a number of things we are simply not doing."*

<https://www.rt.com/usa/457508-us-no-arms-race-russia/>

With US-Russian arms control treaties on shaky ground, the future is worrying

Steven Pifer, *Brookings*, April 25, 2019

For nearly five decades, Washington and Moscow have engaged in negotiations to manage their nuclear competition. Those negotiations produced a string of acronyms—SALT, INF, START—for arms control agreements that strengthened strategic stability, reduced bloated nuclear arsenals and had a positive impact on the broader bilateral relationship.

That is changing. The Intermediate-range Nuclear Forces (INF) Treaty is headed for demise. The New Strategic Arms Reduction Treaty (New START) has less than two years to run, and the administration of Donald Trump has yet to engage on Russian suggestions to extend it. Bilateral strategic stability talks have not been held in 18 months.

<https://www.brookings.edu/blog/order-from-chaos/2019/04/25/nuclear-security-arms-control-and-the-us-russia-relationship/>

There's a bigger Russian threat than meddling. Vladimir Putin is acting like he wants war

Leon Aron, *LA Times*, April 25, 2019

Russia's meddling in the 2016 U.S. presidential election was an attack on our sovereignty and can't be ignored. But we shouldn't allow it to distract us from the larger threat Russian President Vladimir Putin poses to both the United States and the world.

To understand that threat, we have to examine Putin's motivations. His policies are dictated by deeply held convictions and ambitions rooted less in Russian patriotism than in Soviet patriotism. In his mind, the end of the Soviet Union was a profound historical injustice, visited upon his country by plotters from without and traitors from within.

<https://www.latimes.com/opinion/op-ed/la-oe-aron-putin-russia-military-20190425-story.html>

U.S. Air Force B-52 Bombers Practiced a Nuclear Strike on Russia Last Month

David Axe, *The National Interest*, April 25, 2019

The U.S. Air Force in early March 2019 deployed five B-52 bombers from Barksdale Air Force Base in Louisiana to the United Kingdom. Some of the eight-engine, long-range planes flew mock nuclear attacks on Russian soil.

The U.S. Air Force in early March 2019 deployed five B-52 bombers from Barksdale Air Force Base in Louisiana to the United Kingdom. Some of the eight-engine, long-range planes flew mock nuclear attacks on Russian soil.

<https://nationalinterest.org/blog/buzz/us-air-force-b-52-bombers-practiced-nuclear-strike-russia-last-month-54182>

Trump says U.S. 'will never ratify' arms trade treaty

David Brown, *Politico*, April 26, 2019

President Donald Trump declared Friday his intent to walk away from the 2014 Arms Trade Treaty, a mostly symbolic move but one that drew condemnation from advocates.

The decision is the latest in a series of moves by the administration to end participation in international agreements such as the Paris climate agreement, the Iran nuclear deal and, more recently, the Intermediate-Range Nuclear Forces Treaty with Russia.

<https://www.politico.com/story/2019/04/26/trump-arms-trade-treaty-1385303>

National Security Adviser: President Trump Doesn't Want Multi-Nation North Korea Talks

Time, April 28, 2019

The U.S. has little interest in joining other countries in a multi-nation effort to get North Korea to give up its nuclear weapons, President Donald Trump's national security adviser said Sunday. "I think Kim Jong Un, at least up until now, has wanted the one-

on-one contact with the United States, which is what he has gotten," Bolton said, adding that Trump is open to possibility of a third summit with Kim.

<http://time.com/5579286/united-states-not-joining-north-korea-effort/>

Senator Richard Lugar, a Republican who helped Russia get rid of Cold War-era nukes, dies aged 87

Russian Times, April 28, 2019

Former Indiana Senator and nuclear disarmament champion Richard Lugar has died, aged 87. Lugar was honored by the Russian embassy in Washington for legislation that helped Russia dispose of thousands of Cold War-era weapons.

It may seem improbable today, but there were times Russia and the US closely cooperated on issues of security, and Lugar was at the forefront of this effort. The Russian embassy in Washington honored the late Senator on Sunday, highlighting his work in fostering cooperation between the two nuclear powers.

<https://www.rt.com/usa/457778-senator-richard-lugar-dies/>

IMF: US Sanctions Cutting Iranian Growth, Boosting Inflation

Voanews, April 29, 2019

The International Monetary Fund is forecasting Iran's economy to shrink by 6% this year as it faces pressure from U.S. sanctions.

In a report released Monday, the IMF said its estimates for Iran, which include the potential for inflation to top 40%, predate a U.S. decision to end waivers that have allowed some Iranian oil buyers to continue making their purchases despite new sanctions that went into effect last year. The Trump administration is due to formally end the waivers on Thursday for some of Iran's top crude purchasers, including China, India, Japan, Turkey and South Korea.

<https://www.voanews.com/a/us-sanctions-on-iran/4895465.html>

Nuclear power companies have spent millions lobbying for subsidies. Should Ohio, other states bail them out?

Jackie Borchardt, Cincinnati Enquirer, April 30, 2019

The nation's struggling nuclear power plants have struck out in several attempts to get federal help to keep them afloat amid cheaper alternatives such as natural gas and wind and solar power.

In 2016, New York approved 12 years of subsidies for nuclear plants. Illinois' governor signed a bill in 2016 to collect \$235 million a year from customers to keep open two nuclear plants there. Connecticut followed suit with a 10-year package, despite reports the plant there was profitable.

<https://www.cincinnati.com/story/news/2019/04/29/ohio-nuclear-plant-bailout/3519840002/>

Nuclear power finds odd bedfellow in 2020 Dems as voters look for climate change solutions

Ledyard King, USA Today, April 30, 2019

Several candidates vying for the party's presidential nomination in 2020 are promoting or have shown openness to expanding "next-generation" nuclear power as part of the arsenal of options to aggressively address the effects of climate change.

Sen. Cory Booker, D-N.J., Rep. John Delaney, D-Md., and Sen. Amy Klobuchar, D-Minn. are backing expansion of modern nuclear energy that would have to meet tougher safety standards. Several other White House candidates, including former Colorado Gov. John Hickenlooper, Rep. Tim Ryan, D-Ohio, and Sen. Elizabeth Warren, D-Mass., have signaled they are open to the idea of nuclear power but have not pushed it as part of their agendas.

<https://www.usatoday.com/story/news/politics/elections/2019/04/30/climate-change-elevates-carbon-free-nuclear-power-2020-election/3496524002/>

Energy Solutions to decommission Fort Calhoun

World Nuclear News, April 30, 2019

Energy Solutions is to decommission the Fort Calhoun nuclear power plant in Nebraska - which was permanently shut down in October 2016 - under a contract signed yesterday with owner Omaha Public Power District (OPPD).

OPPD has previously said it will use the Safestor decommissioning option for Fort Calhoun, a deferred dismantling strategy where residual radioactivity is allowed to naturally decay over a period of up to 60 years, after which the plant is dismantled. It will cost an estimated USD1.2 billion to decommission Fort Calhoun.

<http://world-nuclear-news.org/Articles/EnergySolutions-to-decommission-Fort-Calhoun>

E. Europe

Integrated Research Reactor Utilization Review Mission Concludes in Italy

Aleksandra Peeva, IAEA Department of Nuclear Applications, April 26, 2019

A team of four international experts, including from the IAEA, completed a review mission at Italy's University of Pavia earlier this month to assist the operators of the university's research reactor in improving the utilization and sustainable operation of their facilities. "Utilization and strategic planning are areas of particular importance to us and our stakeholders," said Andrea Salvini, Manager of the TRIGA Mark II research reactor. "This IAEA mission has helped us to zoom in on strengthening our user community and enhancing our scientific capability in new areas."

Of the 252 research reactors in operation in 55 countries, some are utilized to full capacity in education, research, the production of medical isotopes and the modification of materials for industrial use, but several countries have expressed the need for support from the IAEA to

review the strategic plans and improve the utilization of their facilities.

<https://www.iaea.org/newscenter/news/integrated-research-reactor-utilization-review-mission-concludes-in-italy>

Norway's last nuclear research reactor to close permanently

Reuters, April 25, 2019

Norway's last nuclear research reactor will shut permanently and be decommissioned after more than 50 years of operations, the country's Institute for Energy Technology (IFE) said on Thursday. The JEEP II research reactor at Kjeller near Oslo has been shut for scheduled maintenance since last December and corrosion was found on several important safety components during an inspection. The institute said it would be too costly to repair the reactor.

"The board of directors has decided, based on an overall assessment, that the reactor will not be restarted. IFE will consequently initiate work to prepare the decommissioning of the reactor," the institute said in a statement.

<https://in.reuters.com/article/norway-nuclear/norways-last-nuclear-research-reactor-to-close-permanently-idINL5N22789V>

EU, UN launch joint project to prevent nuclear terrorism acts

Xinhua, April 26, 2019

The European Union (EU) and the United Nations (UN) launched Thursday a joint project to prevent acts of nuclear terrorism through the promotion of the universal ratification and effective implementation of the International Convention for the Suppression of Acts of Nuclear Terrorism (ICSANT). "The risk of terrorists gaining access to nuclear and radiological materials is a significant threat to humanity and international peace and security. Unfortunately, we know that the possibility of such materials falling into the hands of terrorists is real," said Vladimir Voronkov, under-secretary-general of the United Nations Counter-Terrorism Office, at the opening of the launch event.

Pedro Serrano, deputy secretary general of the European External Action Service, said that the international community must remain united to prevent the threat of nuclear terrorism. According to the press release, the joint project is "a testament of shared commitment of the UN and the EU to address this challenge." In 2018, the European Council passed a decision allocating a total of 5 million euros (557 million U.S. dollars) to fund the project.

http://www.xinhuanet.com/english/2019-04/26/c_138010219.htm

F. Russia

Ethiopia, Russia Ink Nuclear Deal

New Business Ethiopia, April 16, 2019

The Government of Ethiopia and Russia inked a nuclear development deal, which enables the former to use nuclear power as an alternative renewable energy source.

The deal between the two sides involves establishing a nuclear science center and a nuclear power plant as well as training professionals in the field. It allows Ethiopia to use nuclear technology for in agriculture, health and other industries. The nuclear application roadmap signed on Monday between Ethiopia's Innovation and Technology Minister Eng. Getahun Mekuria and Russian State Atomic Energy Corporation Director General Rosatom Alexei Likhachev.

<https://newbusinessethiopia.com/ethiopia-russia-ink-nuclear-deal/>

Wanna Get Your Hands on 4 Russia Nuclear Weapons? (Just Go 15,000 Feet Below the Waves)

Robert Farley, National Interest Blog, April 16, 2019

Although details remain scarce, there apparently was no opportunity to safely remove the four nuclear torpedoes from K-8, and transfer them to the repair ship.

The Bay of Biscay is one of the world's great submarine graveyards. In late World

War II, British and American aircraft sank nearly seventy German U-boats in the Bay, which joined a handful of Allied and German subs sunk in the region during World War I. On April 12, 1970, a Soviet submarine found the same resting place. Unlike the others, however, K-8 was propelled by two nuclear reactors, and carried four torpedoes tipped by nuclear warheads.

<https://nationalinterest.org/blog/buzz/wanna-get-your-hands-4-russia-nuclear-weapons-just-go-15000-feet-below-waves-52767>

U.S. Ignored Russia's Nuclear War Prevention Pact - Reports

The Moscow Times, April 19, 2019

Russia sent the United States a draft joint declaration on how to prevent nuclear war, only to never hear back from Washington, the Kommersant business daily reported on Friday. The U.S. and Russia are suspending the 1987 Intermediate-range Nuclear Forces (INF) Treaty this summer. The only U.S.-Russia arms control pact limiting deployed nuclear weapons – the New START – expires in February 2021.

<https://www.themoscowtimes.com/2019/04/19/us-ignored-russias-nuclear-war-prevention-pact-reports-a65313>

Russia decides to scrap its legendary nuclear-powered battlecruisers to save money

Defence Blog, April 22, 2019

The Russian Navy with state-owned nuclear power company Rosatom decided canceling planned service-life extensions and modernization on its two legendary nuclear-powered Kirov-class battlecruisers or heavy missile cruisers, according to Izvestiya newspaper.

According to media reports in recent weeks, the Russian Navy has decided to recycled two heavy nuclear battlecruisers of Kirov-class – the Admiral Ushakov and the Admiral Lazarev owing to funding shortfalls.

<https://defence-blog.com/news/russia-decides-to-scrap-its-legendary-nuclear-powered-battlecruisers-to-save-money.html>

Russia Wants to Take Its Monster Typhoon-Class Subs and Make them Missile Carriers

Sebastien Roblin, The National Interest, April 22, 2019

“At first glance, the idea of equipping Akulas with cruise missiles looks attractive... But those [benefits] pale compared to the costs of restoring and operating Severstal and Arkhangelsk...”

On April 20, 2019, Russia's TASS Agency reported that Vice Admiral Oleg Burtsev announced Russia's intention to take two of its decommissioned Typhoon-class ballistic submarines and pack them full of hundreds of cruise missiles.

<https://nationalinterest.org/blog/buzz/russia-wants-take-its-monster-typhoon-class-subs-and-make-them-missile-carriers-53662F>

America and Russia Must Agree to Avoid a New Arms Race

Lily Wojtowicz, The National Interest, April 23, 2019

A decade ago this month, President Barack Obama stood before a cheering crowd in Prague and said, “I state clearly and with conviction America's commitment to seek the peace and security of a world without nuclear weapons.” Today, however, we are on the cusp of a world with more nuclear weapons, not fewer.

The future of U.S.-Russian arms control – a tradition of bilateral frameworks to reduce the threat of two superpowers instigating nuclear war dating back to Nixon and Brezhnev – looks dim. Once both countries officially leave the Intermediate-Range Nuclear Forces (INF) Treaty in August, there will remain only one formal agreement between the two nuclear possessors limiting the size and scope of their nuclear arsenals, the New Strategic Arms Reduction Treaty (START). And if that wasn't enough, New START is due to expire in February 2021.

<https://nationalinterest.org/feature/america-and-russia-must-agree-avoid-new-arms-race-53912>

Putin Unveils World's Longest Nuclear Submarine at Shipyard Ceremony

The Moscow Times, April 23, 2019

President Vladimir Putin has unveiled a submarine capable of carrying six thermonuclear warheads on Tuesday ahead of its deployment in 2020-2021.

Russia's naval submarine called "Belgorod" will be the world's longest submarine ever built, measuring 184 meters, The Barents Observer has estimated. The Belgorod will be able to carry six underwater "Poseidon" drones, the state-run TASS news agency reported.

<https://www.themoscowtimes.com/2019/04/23/putin-unveils-worlds-longest-nuclear-submarine-at-shipyard-ceremony-a65355>

Kim Jong-un Arrives in Russia for Meeting With Putin

Choe Sang-Hun, New York Times, April 24, 2019

Wearing a black fedora and black overcoat, a smiling Kim Jong-un, North Korea's leader, stepped off an armored train that had taken him on a daylong journey from Pyongyang to the Russian port city of Vladivostok on Wednesday.

Mr. Kim's arrival came a day before he is scheduled to meet with President Vladimir V. Putin as part of the North Korean leader's efforts to fend off American pressure to give up his nuclear weapons arsenal.

<https://www.nytimes.com/2019/04/24/world/asia/kim-jong-un-vladimir-putin.html>

Russia expects operating licence for floating plant in July

World Nuclear News, April 24, 2019

After a series of successful and comprehensive tests, including on its twin KLT-40 reactor system, the floating nuclear power plant Akademik Lomonosov is ready to start commercial operations, Russia's Rosatom announced today.

The plant's two reactors were successfully brought up to 100% capacity on 31 March. These tests confirmed the operational stability of the main and auxiliary equipment of the plant, as well as the automatic process control systems, Rosatom said. Andrei Petrov, director general of Rosenergoatom, Rosatom operator subsidiary, said an acceptance certificate for the unit would now be issued by the regulatory authorities with a view to the granting of an operating licence in July.

<http://world-nuclear-news.org/Articles/Russia-expects-operating-licence-for-floating-plant>

Kim Jong-un Meets Putin in Russia With U.S. Talks Faltering

Andrew E. Kramer and Choe Sang-Hun, New York Times, April 24, 2019

Two months after a failed summit meeting with President Trump, North Korea's leader, Kim Jong-un, met on Thursday with President Vladimir V. Putin of Russia, as Mr. Kim tries to rally international support for an approach to sanctions relief and gradual nuclear disarmament that the Trump administration opposes. North Korea wanted security guarantees from nations other than the United States before it abandons its nuclear arsenal, along with assurances that "its sovereignty will be preserved," Mr. Putin said after the meeting.

<https://www.nytimes.com/2019/04/24/world/asia/putin-kim-russia-summit.html>

What Russia thinks about North Korea's nuclear weapons

Anastasia Barannikova, Bulletin of the Atomic Sciences, April 24, 2019

North Korean leader Kim Jong Un arrived in Russia today for a meeting with President Vladimir Putin. For Kim this is a logical step. Aside from the fact that his country shares a border and has traditionally friendly relations with Russia, Kim needs to diversify his big-power relations and balance the influence

of China. He hasn't yet succeeded in doing so with the United States; and now it looks like he may decide to turn to Russia for support. Despite Russia's past vote in favor of sanctions on Kim's regime, Moscow has many reasons not to lean too hard on Kim over nuclear disarmament.

<https://thebulletin.org/2019/04/what-russia-thinks-about-north-koreas-nuclear-weapons/>

Critical success: 10-month trial of Russia's floating nuclear power plant reactor complete

Russian Times, April 24, 2019

Russia's pioneering floating nuclear power plant is one step closer to becoming fully operational after a successful trial of its nuclear reactor cores. The plan is to provide energy to remote coastal areas on demand. Akademik Lomonosov is the experimental vessel built for Russian nuclear energy giant Rosatom as a proof of economic viability of a sea-mobile nuclear power plant. Its reactor cores were loaded with fuel rods in May 2018 and have since proven their safety and reliability, according to its subsidiary.

"On March 31, 2019 reactors No 1 and 2 of the Floating Power Unit (FPU) have successfully reached 100 percent power capacity. The trial confirmed reliable operation of primary and auxiliary equipment of the FPU and the automation of its technological processes," the subsidiary, Rosenergoatom, said in a statement on Wednesday.

<https://www.rt.com/russia/457401-russia-floating-nuclear-plant/>

Russia vows no delay in delivery of S-400s

Hurriyet Daily News, April 24, 2019

Russia will start delivering its S-400 missile defense systems to Turkey in July, Russian state arms exporter Rosoboron export head Alexander Mikheev said April 24, according to Interfax news agency. "Everything has already been discussed and agreed," Mikheev told Interfax. The U.S. has threatened to impose sanctions if Turkey

seals its S-400 deal with Russia.

But Ankara has said its purchase should not trigger sanctions as Turkey is not an adversary of Washington and remains committed to the NATO alliance. Washington suggested Ankara purchase the U.S. Patriot missile systems rather than the S-400s from Moscow, on grounds that it would be incompatible with NATO systems and expose the F-35 to possible Russian subterfuge. Washington warned Ankara of its purchase of the S-400 system and last week suspended the delivery of parts and other services related to F-35 jets.

<http://www.hurriyetdailynews.com/russia-vows-no-delay-in-delivery-of-s-400s-142909>

Kremlin: Six-party talks only efficient way to tackle nuclear North Korea

Anton Kolodyazhnyy, Reuters, April 24, 2019

The Kremlin said on Wednesday that six-party talks, which are currently stalled, were the only efficient way of addressing the de-nuclearisation of the Korean peninsula, but all other efforts also merited support.

North Korean leader Kim Jong Un arrived in the Russian city of Vladivostok on Wednesday for a summit he is likely to use to seek support from Russian President Vladimir Putin while Pyongyang's nuclear talks with Washington are in limbo. "There are no other efficient international mechanisms at the moment," Kremlin spokesman Dmitry Peskov said. "But, on the other hand, efforts are being made by other countries. Here all efforts merit support as long as they really aim at de-nuclearisation and resolving the problem of the two Koreas," he told reporters.

https://www.reuters.com/article/us-northkorea-russia-kremlin-idUSKCN1S01BN?utm_campaign=trueAnthem:+Trending+Content&utm_content=5cc056e50cef930001bd4101&utm_medium=trueAnthem&utm_source=twitter

Putin calls for multilateral security guarantee for N. Korea

Song Sang-ho, Yonhap News Agency, April 25, 2019

Russian President Vladimir Putin on Thursday stressed the need for an “international” security guarantee for North Korea as part of efforts to denuclearize and bring lasting peace on the Korean Peninsula. Putin also said that multilateral talks on the North’s denuclearization, including long-stalled six-party dialogue, ought to resume if a need arises.

He made the remarks after his first summit with North Korean leader Kim Jong-un in Russia’s Far Eastern city of Vladivostok, where Pyongyang’s decadeslong nuclear quandary topped the agenda. “I’m not sure these (six-party) talks need to be resumed right now but I am confident that if we reach a stage where we will need to develop some kind of guarantees for one of the parties, primarily, security guarantees for North Korea, international guarantees will be necessary,” Putin was quoted by Russian news agency TASS as saying.

<https://en.yna.co.kr/view/AEN20190425011752325>

Russia Says U.S. Able to Carry Out ‘Space Strikes’

The Moscow Times, April 25, 2019

The United States is capable of attacking Russia from space, a senior Russian general said Wednesday. U.S. President Donald Trump unveiled a plan in January calling for the development of space-based sensors to shoot down missiles before they can threaten U.S. soil, among other capabilities. Moscow warned the new U.S. missile defense strategy would unleash a dangerous arms race in space, saying it amounts to a relaunch of the Cold War-era “Star Wars” program.

<https://www.themoscowtimes.com/2019/04/25/russia-says-us-able-to-carry-out-space-strikes-a65375>

U.S. Air Force B-52 Bombers Practiced a Nuclear Strike on Russia Last Month

David Axe, The National Interest, April 25, 2019

The U.S. Air Force in early March 2019 deployed five B-52 bombers from Barksdale Air Force Base in Louisiana to the United Kingdom. Some of the eight-engine, long-range planes flew mock nuclear attacks on Russian soil.

The U.S. Air Force in early March 2019 deployed five B-52 bombers from Barksdale Air Force Base in Louisiana to the United Kingdom. Some of the eight-engine, long-range planes flew mock nuclear attacks on Russian soil.

<https://nationalinterest.org/blog/buzz/us-air-force-b-52-bombers-practiced-nuclear-strike-russia-last-month-54182>

After Meeting Kim Jong-un, Putin Supports North Korea on Nuclear Disarmament

Andrew E. Kramer and Choe Sang-Hun, New York Times, April 25, 2019

President Vladimir V. Putin of Russia made a public show of support for North Korea on nuclear disarmament, seeming to undermine President Trump’s approach to nuclear diplomacy, as Mr. Putin and Kim Jong-un on Thursday wrapped up their first summit meeting.

Russian officials have long insisted they wanted to support Mr. Trump’s efforts at one-on-one nuclear negotiations with Mr. Kim, the North Korean leader. But speaking to reporters after the meeting in Vladivostok, on Russia’s Pacific Ocean coast, Mr. Putin said that North Korea needs security guarantees from more nations than just the United States before abandoning its nuclear arsenal.

<https://www.nytimes.com/2019/04/25/world/europe/summit-kim-putin-trump-nuclear-north-korea.html>

Russian Spy Plane Flies Over Nuclear Bases in US Southwest, Radar Data Shows

Sputnik News, April 26, 2019

The flight was carried out by a Tu-214ON observation plane packed with airborne surveillance tools, panoramic and topographic cameras, airborne radar, and other equipment. A Russian military aircraft flying under the Open Skies Treaty has made an observation flight over strategic nuclear and chemical weapons storage facilities in the southwestern United States, The Drive has reported, citing FlightRadar24, a real-time air traffic tracking application.

The Tu-214ON's flight, taking it over western Texas, New Mexico and Colorado, saw it fly over Fort Bliss, the White Sands Missile Range, the Pueblo Chemical Depot, Kirtland Air Force Base and the Los Alamos National Laboratories, birthplace of the US nuclear program.

<https://sputniknews.com/military/201904261074502016-russian-spy-plane/>

Trump proposals on nuclear arms disarmament 'not serious': Kremlin

Reuters, April 27, 2019

Trump has ordered his administration to prepare a push for a new arms-control agreements with Russia and China citing the cost of the 21st-century nuclear arms race, The Washington Post reported on Thursday citing administration officials.

"It would be ideal to clean up the whole world from the nuclear weapon...but on the other hand we would have been deprived from the deterrent factor," Dmitry Peskov told reporters on the sidelines of a summit on China's Belt and Road plan. "Don't forget about the deterrent factor, about the deterrent parity," he said.

<https://in.reuters.com/article/russia-nuclear/trump-proposals-on-nuclear-arms-disarmament-not-serious-kremlin-idINKCN1S305N>

Kremlin: Trump's nuclear disarmament ideas are commendable, no discussions with Russia yet

TASS News Agency, April 27, 2019

US President Donald Trump's nuclear disarmament ideas are commendable but the US has not discussed them with Russia yet, Kremlin Spokesman Dmitry Peskov told reporters.

"Certain initiatives on nuclear reductions are welcome but in this case, it is difficult to judge by general statements," he said. "Intentions are good but we would like to know the details: what does President Trump mean and whether there have been preliminary discussions of the matter," Peskov added.

<http://tass.com/politics/1056152>

Polar powers: Russia's bid for supremacy in the Arctic Ocean

Nastassia Astrasheuskaya and Henry Foy, Financial Times, April 28, 2019

Just days before a major Arctic conference this month in St Petersburg, where president Vladimir Putin was to host four regional leaders under the banner "Arctic: Territory of Dialogue", Russian warships were on manoeuvres in the frigid northern waters. On the waves of the Barents Sea, a frigate from the Northern Fleet fired rockets to shoot down cruise missiles launched from one of its own anti-submarine warships. It was a show of strength not missed by Mr Putin's guests. The Barents, whose waters lap Norway's coast, marks the western boundary of the Northern Sea Route, a stretch of water encircling the North Pole that has for thousands of years remained mainly ice-bound, but whose rapid thaw has ushered in one of the world's biggest emerging geopolitical flashpoints.

<https://www.ft.com/content/2fa82760-5c4a-11e9-939a-341f5ada9d40>

Russia is open to possible new arms control deals with U.S.: Kremlin aide

Reuters, April 28, 2019

Kremlin aide Yuri Ushakov, commenting on a media report that U.S. President Donald Trump wants a new arms control deal with Moscow and Beijing, said Russia was open to the possibility of new arms control deals, but that there were no ongoing talks. Citing administration officials, The Washington Post reported on Thursday that Trump has ordered his administration to prepare a push for a new arms control agreement with Russia and China due to the mounting cost of the 21st-century nuclear arms race.

<https://www.reuters.com/article/us-usa-nuclear-russia/russia-is-open-to-possible-new-arms-control-deals-with-us-kremlin-aide-idUSKCN1S40AG>

New Directions in Arms Control, Russia sends warning to US and accuses Trump of starting new arms race - 'INEVITABLE END!'

Ciaran Mcgrath, Express UK, April 29, 2019

Russian defence minister Sergei Shoigu has accused Donald Trump's United States and other Western nations of trying to start an arms race as he warned America's world dominance was coming to an end. And he claimed the USA was unable to accept the "end of the unipolar world order" in which it has been the dominant world power since the collapse of the Soviet Union. Mr Shoigu told Russian state news agency Tass diplomatic mechanisms crucial for non-proliferation, including the Joint Comprehensive Plan of Action (JCOA) for Iran's nuclear program brokered by Mr Trump's predecessor Barack Obama, were increasingly being undermined. Speaking at a meeting of the Shanghai Cooperation Organisation (SCO) member states in the Kyrgyz capital of Bishkek, Mr Shoigu said: "Attempts are being made to return to an offensive arms race.

<https://www.express.co.uk/news/world/1120632/world-war-3-russia-news-arms-race-usa-donald-trump-russia-oladimir-putin>

You're Lucky You Did Not Sail On Russia's First Nuclear Submarine

Sebastien Roblin, The National Interest Blog, April 30, 2019

The November-class submarines may not have been particularly silent hunters, but they nonetheless marked a breakthrough in providing the Soviet submarine fleet global reach while operating submerged. They also provided painful lessons, paid in human lives lost or irreparably injured, in the risks inherent to exploiting nuclear power, and in the high price to be paid for technical errors and lax safety procedures.

<https://nationalinterest.org/blog/buzz/youre-lucky-you-did-not-sail-russias-first-nuclear-submarine-54987>

New Russian nuclear submarines: New quality of the Russian Navy

Dmitry Sudakov, Pravada, April 30, 2019

In 2019, the Russian Navy will receive two nuclear submarines: "Prince Vladimir" and "Kazan." These new nuclear submarines are to strengthen the combat capability of the submarine fleet of the Russian Federation and to ensure the nuclear deterrence factor in relation to the United States.

According to previously published official information, in 2019, the Russian Navy should receive strategic-purpose missile cruiser Prince ('Knyaz' in Russian) Vladimir (Project 955A Borei-A) and multi-purpose nuclear submarine Kazan (Project 885M Yasen-M).

http://www.pravdareport.com/science/142373-nuclear_submarines/

Gorbachev says there is urgent need for strategic engagement between US and Russia

TASS News Agency, April 30, 2019

There is an urgent need for strategic engagement between the US and Russia

on nuclear deterrence, former USSR President Mikhail Gorbachev said in an op-ed published in The Wall Street Journal.

“Deterrence cannot protect the world from a nuclear blunder or nuclear terrorism,’ George Schultz, William Perry and Sam Nunn recently wrote. ‘Both become more likely when there is no sustained, meaningful dialogue between Washington and Moscow.’ I agree with them about the urgent need for strategic engagement between the US and Russia,” Gorbachev said

<http://tass.com/world/1056476>

An F-35 or F-22 Can’t Match This: Russia’s Stealth Fighter Has a New Weapon

Mark Episkopos, *The National Interest*, April 30, 2019

In the prior months, The National Interest discussed the possibility of Russia’s fifth-generation stealth fighter being outfitted with hypersonic Kinzhal missiles. Russian state news reported Kinzhal integration on the Su-57 earlier this week: “In accordance with Russia’s State Armament Program for 2018-2027, Su-57 jet fighters will be equipped with hypersonic missiles. The jet fighters will receive missiles with characteristics similar to that of the Kinzhal missiles, but with inter-body placement and smaller size,” says a defense industry insider.

<https://nationalinterest.org/blog/buzz/f-35-or-f-22-cant-match-russias-stealth-fighter-has-new-weapon-54952>

WEST ASIA

G. Iran

Zarif: No nuclear enrichment prohibition by Iran ‘neither now, nor in 2025 or beyond’

Tehran Times, April 15, 2019

In a post on his Twitter account on Wednesday, Foreign Minister Mohammad Javad Zarif told France, Britain and France – the three European signatories to the 2015

nuclear deal – that there is no prohibition for enriching uranium by Iran “neither now, nor in 2025 or beyond.”

The tweet by Zarif came after French Ambassador to Washington Gerard Araud in a tweet on Saturday claimed that “it’s false to say that at the expiration of the JCPOA, Iran will be allowed to enriching uranium.” Under the international nuclear deal, officially called the Joint Comprehensive Plan of Action (JCPOA), Iran is obliged to put limits on its nuclear activities in exchange for termination of economic and financial sanctions. According to the agreement, endorsed by the UN Security Council Resolution 2231, the limits on Iran’s enrichment program will be lifted in 2025.

“Reminder to our E3 partners in #JCPOA: There is NO prohibition on the enrichment of uranium by Iran under #NPT, JCPOA or UNSCR 2231. Neither now, nor in 2025 or beyond,” Zarif asserted. Zarif advised the French ambassador to go and study the JCPOA text.

<https://www.tehrantimes.com/news/434713/Zarif-No-nuclear-enrichment-prohibition-by-Iran-neither-now>

Oil market fragile due to U.S. sanctions: Zanganeh

Tehran Times, April 15, 2019

“If the United States decides to increase the pressures on Iran, the oil market will become more fragile” IRNA quoted Zanganeh as saying on Sunday. “Oil prices are going up every day. That shows the market is worried,” the minister said. Zanganeh noted that Trump should choose between increasing pressure on Iran and keeping his country’s fuel prices low. “Venezuela is in trouble. Russia is also under sanctions. Libya is in distress. Part of U.S. oil production has stopped. These show the supply-demand balance is very fragile,” Zanganeh said.

<https://www.tehrantimes.com/news/434724/Oil-market-fragile-due-to-U-S-sanctions-Zanganeh>

U.S. humiliates EU by calling INSTEX 'paper tiger'

M.A. Saki, Tehran Times, April 16, 2019

"EU's new proposal for trade with the Islamic Republic of Iran is nothing, but a paper tiger," Radio Farda quoted Sondland as saying in a meeting in Brussels on April 11, Radio Farda reported. By appearing too weak in the face of the Trump administration, Europe will be considered as unimportant and spineless by other countries in the world, especially by major powers such as China and Russia.

The Europeans should feel assured that they will suffer more humiliations if they try to act passively toward illegal moves and humiliating remarks by Trump and his soldiers. Europeans' lame response to U.S. embassy move to Jerusalem and its recognition of the occupied Golan Heights as Israeli land in violation of international law are all making Europe to look impotent and as a bloc that cannot be reckoned with. The Europeans have been long proclaiming support for sovereign rights of the nations and respect for international law and order but their passive reaction to such violations is making the Trump administration more arrogant.

<https://www.tehrantimes.com/news/434754/U-S-humiliates-EU-by-calling-INSTEX-paper-tiger>

Judicial Watch launches probe into Kerry's Iran talks

Tehran Times, April 16, 2019

"In the months preceding the U.S. withdrawal (from the nuclear deal), Kerry reportedly had been on a 'stealthy yet aggressive mission' of shadow diplomacy in an attempt to preserve the Iran nuclear deal. Kerry reportedly held meetings and spoke with major players, foreign and domestic, involved in the Iran nuclear agreement who opposed the U.S. withdrawal," Judicial Watch explained, according to WorldNetDaily.

<https://www.tehrantimes.com/news/434789/Judicial-Watch-launches-probe-into-Kerry-s-Iran-talks>

Trump administration ignoring intl. law, Zarif says

Tehran Times, April 17, 2019

During a joint press conference with Turkish Foreign Minister Mevlut Cavusoglu in Ankara, Zarif said that Iran and Turkey believe that law should be respected in all areas. Trump sees no limit for his hostile approach toward Iran. In addition to withdrawing the U.S. from the international nuclear deal in May last year and illegally reimposing sanctions on Iran, his country has even prevented humanitarian aid to Iranian flood victims by freezing the accounts of the Iranian Red Crescent Society.

This happened despite the fact that the UN Security Council adopted a resolution in July 2015 endorsing the JCPOA. The International Atomic Energy Agency (IAEA), which has been tasked to police the implementation of the JCPOA, has also issued 14 reports each time confirming that Iran is fully abiding by the terms of the agreement.

<https://www.tehrantimes.com/news/434819/Trump-administration-ignoring-intl-law-Zarif-says>

Japan relies on Iranian oil, to talk to US about it: Minister

Tehran Times, April 20, 2019

"Japan's relationship with Iran, as one of the world's leading oil producing countries, is important as the country (Japan) relies on almost all of its petroleum [needs] on imports," Japanese Minister of Economy, Trade, and Industry Hiroshige Seko said at a Friday press conference in Tokyo, oil pricing agency S&P Global Platts reported. "We intend to have close discussions with the US side in order to avoid having a harmful effect from the US measures on Japan's stable energy supply and its corporate activity," Seko added.

The administration of US President Donald Trump has taken an aggressive approach toward the Islamic Republic. Trump has unilaterally withdrawn America from a

multilateral nuclear deal with Iran that mainly guarantees continued Iranian oil sales.

<https://www.tehrantimes.com/news/434859/Japan-relies-on-Iranian-oil-to-talk-to-US-about-it-Minister>

'Iran to design mechanisms similar to INSTEX with Iraq, Syria, Turkey and China'

Tehran Times, April 21, 2019

In an interview with ILNA published on Sunday, Nahavandia also said steps have been taken in line with implementing the INSTEX with the Europeans. On January 31, France, Germany and Britain announced the creation of INSTEX, a special purpose vehicle aimed at facilitating legitimate trade between European economic operators and Iran.

<https://www.tehrantimes.com/news/434897/Iran-to-design-mechanisms-similar-to-INSTEX-with-Iraq-Syria>

Trump's dilemma with Iran: to extend waivers or not!

Tehran Times, April 22, 2019

The sanctions targeted Iran's oil sector, financial transactions and banks, as well as shipping and ship-building industries in order to cut off the country's revenue sources. Clearly Trump hadn't included the importance of Iranian oil for the market balance in his calculations. In the absence of Iranian oil in the market, the prices skyrocketed and that unleashed a wave of panic among the U.S. gasoline consumers which were facing prices going up

On the other hand, Saudi Arabia which had been under Trump's tweet bombarding since April 2018, for cutting oil production, pushed back at him and went on with the plan for extending the OPEC+ cuts deal. The market statistics were all against Trump's visions and that made him retreat for the time being, adjourning the execution of the "zero Iranian oil" for a six-month period. Now, with the waivers expiration due nearing, once again Trump is facing a

dilemma regarding his Iran policies.

<https://www.tehrantimes.com/news/434875/Trump-s-dilemma-with-Iran-to-extend-waivers-or-not>

Iran says leaving nuclear treaty one of many options after U.S. sanctions move

Joey Roulette, Reuters, April 28, 2019

Iran said on Sunday it could quit a treaty against the spread of nuclear weapons after the United States tightens sanctions, while an Iranian general said the U.S. Navy was interacting as before with an elite military unit blacklisted by Washington. Tensions between Tehran and Washington have risen since the Trump administration withdrew last year from a 2015 international nuclear deal with Iran and began ratcheting up sanctions. Earlier this month, the United States blacklisted Iran's elite Revolutionary Guards (IRGC) and demanded buyers of Iranian oil stop purchases by May or face sanctions

<https://in.reuters.com/article/iran-usa-zarif/iran-says-leaving-nuclear-treaty-one-of-many-options-after-u-s-sanctions-move-idINKCN1S403>

Iran says U.S. sanctions on its oil industry will damage market stability

Reuters, April 29, 2019

U.S. sanctions against Iran's oil industry will damage the stability of global oil markets, a senior Iranian official was quoted as saying on Monday. These sanctions are an example of America's bullying reaction to the change of the balance of power in the world," Amir Hossein Zamaninia, a deputy oil minister, said in a report carried by the oil ministry's news website SHANA. U.S. sanctions make life more difficult for ordinary Iranians but the Islamic Republic will get through them, Zamaninia said.

<https://in.reuters.com/article/usa-iran-oil/iran-says-u-s-sanctions-on-its-oil-industry-will-damage-market-stability-idINKCN1S50YK>

Iran sanctions, unrest hit Middle East growth: IMF

Global Times, April 29, 2019

US sanctions on Iran, rising unrest in the Middle East and North Africa and oil price volatility are dragging regional economic growth, the International Monetary Fund (IMF) said Monday. The IMF warned in a biannual economic outlook report that prospects for the region are “clouded by elevated levels of uncertainty.” “Such uncertainty may increase investors’ perception of risk for the whole region, leading to capital outflows and exchange rate pressure,” it said.

The IMF forecasts the economy in Iran, the second-largest in the region behind Saudi Arabia, will shrink by 6.0 percent this year after contracting by 3.9 percent in 2018.

<http://www.globaltimes.cn/content/1148054.shtml>

H. Israel

Iran president urges Mideast states to ‘drive back Zionism’

Amir Havasi, The Times of Israel, April 18, 2019

Iran’s President Hassan Rouhani called on Middle East states on Thursday to “drive back Zionism,” in an Army Day tirade against the Islamic republic’s arch-foe Israel.

Speaking flanked by top general as troops paraded in a show of might, Rouhani also sought to reassure the region that the weaponry on display was for defensive purposes and not a threat. “The region’s nations have lived alongside each other for centuries and never had a problem... If there is a problem, it is caused by others,” he said in the speech broadcast live on state television. “Let us stand together, be together and rid the region of the aggressor’s presence.”

<https://www.timesofisrael.com/iran-president-urges-mideast-states-to-drive-back-zionism/>

The Crazy Story of How Israel Became a Military Giant (Thanks to Nuclear Weapons)

Zachary Keck, The National Interest Blog, April 18, 2019

Although Israel doesn’t officially acknowledge it, it is well understood that the country possesses a nuclear weapon arsenal (although the exact number of warheads are in dispute). It is similarly well understood that the United States opposed Israel’s nuclear weapons program during the John F. Kennedy and, to a lesser extent, Lyndon B. Johnson administrations. One part of the history that is less well known is that much of the funding for Israel’s nuclear weapons program came from private Americans in an effort that was spearheaded by, Abraham Feinberg, a prominent American who served as an unofficial advisor to both President Kennedy and President Johnson.

<https://nationalinterest.org/blog/buzz/crazy-story-how-israel-became-military-giant-thanks-nuclear-weapons-53097>

Israeli F-16 Jets Blew Up a Syrian Missile Factory (And Russia’s Air Defense Missiles Didn’t Strike)

Sebastien Roblin, The National Interest, April 21, 2019

At 2:30 in the morning on April 13, 2019, around a dozen missiles tore over the night sky of Hama province, Syria, launched by Israeli F-16 jets flying over Lebanon.

In response, short-range Syrian air missiles arced into the night sky trailing plumes of fire from their rocket motors. One or two can be seen exploding mid-air, possibly having hit their target.

<https://nationalinterest.org/blog/buzz/israeli-f-16-jets-blew-syrian-missile-factory-and-russia%E2%80%99s-air-defense-missiles-didn%E2%80%99t>

Report: Israel Just Used In Combat Its New Rampage Missile. Here Is What It Can Do.

David Axe, *The National Interest*, April 23, 2019

According to aviation journalist Babak Taghvaei, on April 13, 2019 Israeli air force warplanes fired, for the first time, at least one Rampage air-launched ballistic missile at a missile factory and weapons warehouses in Masyaf, Syria.

Rampage first broke cover in the summer of 2018. Israel Aerospace Industries and Israel Military Industry Systems announced they had tested, from an F-16, the 15-foot-long, 1,200-pound, GPS-guided Rampage — and had already inked a sale contract with one customer, presumably the Israeli air force.

<https://nationalinterest.org/blog/buzz/report-israel-just-used-combat-its-new-rampage-missile-here-what-it-can-do-53602>

2020 Democrats Promise to Re-enter the Iran Deal, and Israel Is Concerned

Amir Tibon and Amos Harel, *Haaretz*, April 23, 2019

Israeli officials are concerned about the growing number of Democratic presidential candidates who are promising to reverse President Donald Trump's withdrawal from the Iran nuclear deal.

The concern has to do with both the possibility of the United States re-entering the nuclear agreement, which the Israeli government strongly opposed when it was signed in 2015, and the prospect of Israel becoming too involved in internal American politics during a tense and divisive election campaign.

<https://www.haaretz.com/us-news/.premium-2020-democrats-promise-to-re-enter-the-iran-deal-and-israel-is-concerned-1.7157623>

Benjamin Netanyahu Plans to Name an Illegal Settlement in Donald Trump's Honor

Robert Mackey, *The Intercept*, April 24, 2019

Netanyahu made his announcement during

a Passover holiday trip to the Golan Heights, accompanied by his wife and two sons. One of the prime minister's sons, Yair, spent part of the holiday taunting Palestinian refugees. After first posting images of the ruins of Lifta, a village outside Jerusalem Palestinians were forced to flee in 1948, following attacks by Jewish militias, Yair Netanyahu argued on Twitter that Mark Twain's account of his trip to Palestine in 1867, "Innocents Abroad," should be treated as proof that it was "an empty land" before Zionist pioneers arrived to establish a Jewish homeland.

The naked appeal to Trump's vanity — proposing to add his name to the map of the Middle East even as it disappears from apartment buildings in New York — came as Israeli officials expressed alarm that the American president had not yet done enough to sabotage the Iran nuclear deal.

<https://theintercept.com/2019/04/23/netanyahu-trump-golan-heights-illegal-settlement/>

Israel-Iran tensions SURGE as Israel 'launch supersonic Rampage missiles on Iran'

Claire Anderson, *Express*, April 24, 2019

The attack allegedly hit a potential Iranian surface-to-surface missile factory in Masyaf. Satellite images captured by Israeli intelligence firm ImageSat International (ISI) reportedly show the destruction of the factory, the *Jerusalem Post* (JPost) reported.

"If you take the Middle East arena and areas protected by air defence systems, the whole point of this missile is that it can target within standoff ranges." The new missile can be fitted to Israel Air Force's F-15, F-16 and F-35 fighter jets. The 4.7-metre missile is guided by a GPS system. The air strikes were reportedly part of a series of Israeli's attacks against Iran's military positions in India

<https://www.express.co.uk/news/world/1118010/israel-iran-latest-news-world-war-3-supersonic-missiles-syria-masyaf-nuclear>

Biden's pro-Israel record could help with defense of Iran nuclear deal

Bryant Harris, *Al Monitor*, April 25, 2019

Joe Biden's key foreign policy role as Barack Obama's vice president and his record of support for Israel make him one of the candidates best positioned to defend the nuclear deal with Iran as he enters the 2020 presidential race today.

Unlike his rivals, the former chairman of the Senate Foreign Relations Committee boasts a decades-long relationship with Prime Minister Benjamin Netanyahu, potentially helping Biden to fend off Republican attacks against his support for Obama's signature foreign policy effort. That tight connection, however, could prove a liability with some left-wing primary voters who have soured on Israel's right-wing leadership.

<https://www.al-monitor.com/pulse/originals/2019/04/biden-pro-israel-record-defend-nuclear-deal-iran-2020.html#ixzz5mkaHsg8b>

Russia invites Israel to discuss nuclear program

Elena Teslova, *Anadolu Agency*, April 26, 2019

Moscow invited Israel to discuss its nuclear program at a conference on the establishment of a zone free of weapons of mass-destruction in the Middle East, Russia said on Friday. Tel Aviv has yet to announce whether it would participate in the event slated for the end of 2019, deputy foreign minister Sergey Ryabkov told to Anadolu Agency in Moscow.

"We think all potential participants of this event will have fair opportunity to effectively exercise, defend and support their interests and priorities," said Ryabkov. He underlined that there would be many participants at the conference who would be willing to open Israel's nuclear program to discussion at the conference.

"I am a supporter of discussing the issues related to certain aspects of the security of a state in the presence of such a [nuclear armed] state," Ryabkov said, adding that decisions would be made via consensus and that none would be able to "dictate" Israel

against its security interests.

<https://www.aa.com.tr/en/world/russia-invites-israel-to-discuss-nuclear-program/1463504>

Trump's Policy Is 'Israel First', Not 'America First'

Iran Front Page, April 30, 2019

Iran's ambassador to the UN says the Israeli regime is the top priority for the United States, unlike the "America First" policy declared by President Donald Trump.

He recalled the UN Security Council's legal responsibility with regards to the maintenance of international peace and security. He said all the international body has done in the past seven decades has been to adopt resolutions which have practically had no effect in restoring the rights of Palestinians.

<https://ifpnews.com/exclusive/trumps-policy-is-israel-first-not-america-first/>

I. Turkey

Mending Turkey-US relations

Burhanettin Duran, *Daily Sabah*, April 16, 2019

Congress is evidently poised to display an approach that will target the Turkish economy and the defense industry. Also, it is quite dubious if President Donald Trump is willing, or competent enough, to prevent this negative trajectory. In fact, the S-400 issue is just the tip of the iceberg. The U.S. is highly disturbed by the improvement of ties between Turkey and Russia. Turkey's cooperation with Russia in the field of energy is not being talked about that much for now. But it must be noted that Germany confronts the threat of U.S. sanctions due to its cooperation with Russia in the fields of nuclear energy and natural gas. As known already, the Countering America's Adversaries Through Sanctions Act (CAATSA) is not limited to the defense industry.

<https://www.dailysabah.com/columns/duran-burhanettin/2019/04/17/mending-turkey-us-relations>

Hazardous Armenian nuclear plant near Turkish border in spotlight

Daily Sabah, April 17, 2019

A workshop began in the eastern province of Iğdır Tuesday on the Armenian Metsamor nuclear power plant that is located close to this Turkish border province. The staff of local emergency authorities attended the workshop on radioactive emergency focused on the plant, which Turkey has repeatedly described as dangerous.

Metsamor is located some 16 kilometers away from central Iğdır and participants of the workshop will discuss details of an upcoming emergency exercise against a possible accident in the plant. Speaking at the opening of the workshop, Bülent Zeđem, provincial director for the Disaster and Emergency Management Authority (AFAD), said they would organize an exercise in June with the participation of AFAD teams from other cities. Associate professor Sertan Yeđil, an atomic energy engineer from the Turkish Atomic Energy Agency (TAEK) said they would assess radiation leaks from the plant and inform local authorities about monitoring radioactivity and taking samples in the three-day workshop. Metsamor is Armenia's only nuclear power plant and produces more than a third of the country's electricity.

<https://www.dailysabah.com/turkey/2019/04/17/hazardous-armenian-nuclear-plant-near-turkish-border-in-spotlight>

Akkuyu nuclear power plant to have core holder vessel in September

Bari° im°ek, Daily Sabah, April 19, 2019

The strategic Turkish-Russian energy project Akkuyu Nuclear Power Plant (NPP), poised to be the first nuclear power plant in Turkey, will have its core holder vessel placed in September, Akkuyu Nuclear Inc. General Manager Anastasia Zoteeva said in a meeting with reporters in Sochi on Tuesday.

Zoteeva explained that the "core holder vessel" will be brought by four ships from Russia to Akkuyu Port, which will be opened

in June, adding: "In some way, we can consider it a giant vessel made of an alloy of various metals. When uranium falls in the vessel, in case of any molten uranium leaks, it will close like a Venus flytrap. Since there will be no leakage into the soil and water and the uranium will be completely buried, there will be no risk."

<https://www.dailysabah.com/energy/2019/04/19/akkuyu-nuclear-power-plant-to-have-core-holder-vessel-in-september>

Turkey faces hike in oil prices as US thwarts Iran oil sales

Andrew Wilks, Al Jazeera, April 25, 2019

Washington's unilateral decision to impose sanctions on Iran is set to hit Turkey next week, when an exemption on buying Iranian oil expires for the energy-hungry nation.

When US President Donald Trump reimposed sanctions on Iran last November - after backing out of an internationally brokered deal to curb Tehran's nuclear programme - Turkey was among eight nations granted a six-month waiver on oil trading.

<https://www.aljazeera.com/news/2019/04/devastating-effect-turkey-thwarts-iran-oil-sales-190424201131496.html>

Foreign backers set to pull out of Turkish nuclear power project

Ahval, April 25, 2019

The Japanese-French consortium that agreed to build a nuclear power plant in Turkey is set to abandon the project, a former nuclear inspector at the International Atomic Energy Agency said in an analysis for Greek newspaper Kathimerini on Thursday.

The plant, set to be built with four reactors in Sinop province along the Black Sea, was to be Turkey's second nuclear power plant, following Akkuyu, currently under construction in cooperation with Russia's Rosatom

<https://ahvalnews.com/energy/foreign-backers-set-pull-out-turkish-nuclear-power-project>

Turkey expanding ties with Russia and China

Sinem Cengiz, Arab News, April 26, 2019

The 12th round of Astana talks on Syria took place this week in the Kazakh capital Nur-Sultan, formerly known as Astana. The 11 previous meetings, under the sponsorship of Turkey, Russia and Iran, produced tangible outcomes in regards to finding a solution to end the long-lasting conflict.

The latest high-level meeting was scheduled to bring together some old and new participants in order to make a fresh effort to form Syria's constitutional committee, as well as to discuss other issues concerning the political settlement.

<http://www.arabnews.com/node/1488576>

Turkey seeks alternate oil sources as US ends Iran sanctions waivers

Fehim Tastekin, Al Monitor, April 26, 2019

Despite striking a defiant tone on Washington's decision to end sanctions waivers for Iranian oil imports, Turkey seems to be complying with the sanctions regime, as Iranian imports recently shrank to zero. The situation, however, is bringing a new problem to light: finding alternative sellers of oil.

Iranian sanctions have been added to a long list of problems plaguing US-Turkey ties, which are already strained over American support for the Syrian Kurds and Turkey's commitment to buy the Russian S-400 air defense system.

The sanctions waivers the Donald Trump administration granted to eight countries, including Turkey, to import oil from Iran have come to an end. Ankara's efforts to negotiate an extension for the waivers failed. Secretary of State Mike Pompeo declared that Iranian exports will be reduced to zero and there will be no more waivers.

<https://www.al-monitor.com/pulse/originals/2019/04/turkey-iran-usa-ankara-seeks-alternative-sources-iranian-oil.html#ixzz5mlMa7ZdE>

Foreign backers set to pull out of Turkish nuclear power project

Tiny Url, Ahval News, April 25, 2019

The Japanese-French consortium that agreed to build a nuclear power plant in Turkey is set to abandon the project, a former nuclear inspector at the International Atomic Energy Agency said in an analysis for Greek newspaper Kathimerini on Thursday.

The plant, set to be built with four reactors in Sinop province along the Black Sea, was to be Turkey's second nuclear power plant, following Akkuyu, currently under construction in cooperation with Russia's Rosatom. In 2013, Turkey signed a contract with Atmea, a Japanese-French consortium comprising Mitsubishi Heavy Industries and Areva, for the construction of the Sinop plant, which included a build-operate-transfer scheme

<https://ahvalnews.com/energy/foreign-backers-set-pull-out-turkish-nuclear-power-project>

Turkey, Iran to hold political consultations in Ankara

Daily Sabah, April 30, 2019

Political consultations between the Turkish Foreign Ministry and Iranian Foreign Ministry are expected to be held today in the capital Ankara. The consultations will be co-chaired by Sedat Önal, Turkey's deputy foreign minister, and his Iranian counterpart Abbas Araqchi, read the statement released by the Turkish Foreign Ministry.

The consultations will be held in the wake of an April 17 visit by Iranian Foreign Minister Javad Zarif to Turkey. Zarif met with Foreign Minister Mevlüt Çavuşoğlu and was received by President Recep Tayyip Erdoğan as part of his official visit.

<https://www.dailysabah.com/diplomacy/2019/04/30/turkey-iran-to-hold-political-consultations-in-ankara>

J. Egypt

Egypt presses ahead with nuclear power

Rasha Mahmoud, *Al Monitor*, April 30, 2019

Egypt's Nuclear and Radiological Regulatory Authority (ENRRA) has approved the site of al-Dabaa in the first step of the licensing process required to build a nuclear station. The ENRRA oversees nuclear activities in Egypt to ensure the safety and security of people, property and the environment from the risk of radiation.

The nuclear power station at al-Dabaa will be built by Egypt's Nuclear Power Plants Authority (NPPA), which is affiliated with the Ministry of Electricity and Renewable Energy, in cooperation with a Russian contractor.

<https://www.al-monitor.com/pulse/originals/2019/04/egypt-dabaa-site-license-nuclear-power-station.html#ixzz5mkSprdwz>

EAST ASIA

K. Japan

Abe visits Fukushima nuclear plant in revival message

The Asahi Shimbun, April 15, 2019

Prime Minister Shinzo Abe on Sunday visited the Fukushima No. 1 nuclear power plant, which sank into meltdowns after a tsunami eight years ago, in an effort to highlight revival and safety as the nation prepares to host the 2020 Olympics. The visit by Abe, who last went to the plant five years ago, was seen as damage control after Yoshitaka Sakurada, a ruling party minister overseeing the Olympics, resigned for a remark appearing to belittle reconstruction in northeastern Japan.

"Our basic policy is that every minister is a reconstruction minister," Abe said during his visit. "We reaffirmed our commitment to work for the revival of Fukushima and northeastern Japan."

<http://www.asahi.com/ajw/articles/AJ201904150014.html>

Anti-drone 'jammers' eyed to thwart terrorism at major events

The Asahi Shimbun, April 15, 2019

The National Police Agency plans to deploy anti-drone "jammers" as early as in April to prevent terrorist attacks and accidents at a slew of major events scheduled in Japan. The jammers block radio signals between the drone and the operator in designated no-fly zones, making the unmanned aircraft unable to approach a target. The affected drones will slowly descend, return to the operator or remain stuck in one location. The NPA included a total of about 1.4 billion yen (\$12 million) in the fiscal 2018 supplementary budget and the fiscal 2019 budget for anti-drone measures.

<http://www.asahi.com/ajw/articles/AJ201904150025.html>

'Nuclear village' website closed down after host of complaints

Atsushi Komori, *The Asahi Shimbun*, April 15, 2019

An association of electric power companies and nuclear plant manufacturers shut down a pro-nuclear website after widespread complaints that it was in poor taste and made light of the Fukushima disaster. The website, titled "Atsumare Genshiryoku Mura" (Let's gather, nuclear village) and run by Japan Atomic Industrial Forum Inc. (JAIF), was online only from April 8 to April 12.

The website featured an old Japanese town filled with colorful cartoon characters, including sumo wrestlers, merchants and ninja. Internet users were shocked and appalled that the nuclear industry would identify itself as "Genshiryoku Mura," a derogatory term used for the often closed nuclear community since the 2011 Great East Japan Earthquake and tsunami triggered the triple meltdown at the Fukushima No. 1 nuclear power plant.

<http://www.asahi.com/ajw/articles/AJ201904150040.html>

TEPCO plans to use new foreign workers at Fukushima plant

Miki Aoki, The Asahi Shimbun, April 18, 2019

Tokyo Electric Power Co. plans to use the new visa program to deploy foreign workers to its crippled Fukushima No. 1 nuclear plant, sparking concerns that language barriers could cause safety hazards and accidents. The specified skills visa program started in April to alleviate labor shortages in 14 different industrial sectors. TEPCO says it has long lacked enough workers for decommissioning work at the Fukushima nuclear plant.

At a March 28 meeting, the utility explained its plan to hire foreign workers to dozens of construction and other companies that have been contracted for decommissioning work.

TEPCO officials asked the companies to be aware that workers sent to radiation monitoring zones must wear dosimeters and receive special education about the dangers they will face.

<http://www.asahi.com/ajw/articles/AJ201904180027.html>

President Trump to visit Japan in late May, meet new emperor

AP News, April 19, 2019

President Donald Trump and his wife Melania will make a state visit to Japan at the end of May to meet the newly enthroned emperor. Crown Prince Naruhito will succeed his abdicating father, current Emperor Akihito, on May 1. Trump will also hold talks with Japanese Prime Minister Shinzo Abe during the May 25-28 visit, and reportedly may attend a sumo match as well. The White House said Friday that Abe will also visit Washington on April 26-27 to talk about North Korean nuclear disarmament, trade and other issues.

<https://www.apnews.com/871722cea4944a4e800071f6cdeb68e3>

Policy Book Omits 'maximizing Pressure On North Korea'

Tamiyuki Kihara, The Asahi Shimbun, April 19, 2019

The Foreign Ministry will omit the phrase "maximizing pressure on North Korea" from its 2019 Diplomatic Bluebook in another conciliatory move aimed at restarting talks on the abduction issue, government sources said. The annual document about Japan's diplomatic policies and the international situation is scheduled to be submitted to a Cabinet meeting on April 23.

Prime Minister Shinzo Abe had long called for exerting "maximum pressure" to get North Korea to dismantle its nuclear and missile programs. The phrase was included in the 2018 Diplomatic Bluebook. However, the phrase will not appear in the 2019 version because Japan is stepping up efforts to resolve the issue of Japanese abducted by North Korean agents in the 1970s and 1980s. The 2018 version noted Japan's policy of using pressure by the international community to push North Korea into resolving the abduction issue, but that phrase will also be altered for the 2019 version, the sources said.

<http://www.asahi.com/ajw/articles/AJ201904190042.html>

J-Village reopens as sporting site, drops role as plant cleanup lot

Koichi Tokonami, The Asahi Shimbun, April 20, 2019

The J-Village sporting complex on April 20 returned to its full, former self as a training ground for future soccer stars. For eight years after the 2011 triple meltdown at the nearby Fukushima No. 1 nuclear power plant, J-Village was used as a makeshift base for dealing with the aftermath of disaster and start of decommissioning work. At that time, the sprawling complex straddling the Fukushima Prefecture towns of Naraha and Hirono was used as a parking lot and storage area for materials to be used at the

Fukushima plant. Temporary quarters were constructed at a soccer stadium within the complex's grounds for the many workers who were shuttled to the nuclear plant.

<http://www.asahi.com/ajw/articles/AJ201904200045.html>

Japan expects little impact from U.S. scrapping Iran oil waivers

Reuters, April 23, 2019

Japan expects a limited impact from the U.S. decision not to renew waivers it had previously granted on Iran oil import sanctions, trade and industry minister Hiroshige Seko said on Tuesday. The United States on Monday demanded all buyers of Iranian oil stop purchases by May 1 or face sanctions, a move to choke off Tehran's oil revenues that sent crude prices to six-month highs. Japan is among a group of countries that were previously granted sanctions waivers.

Speaking at a regular press conference, minister Seko told reporters the Japanese government did not see any need to tap national oil reserves following the U.S. decision. Japan, the world's fourth-biggest oil consumer, has been reducing its reliance on Iranian crude supplies. Iran now accounts for about 3 percent of purchases, Seko said.

<https://www.reuters.com/article/us-usa-iran-oil-japan/japan-expects-little-impact-from-us-scrapping-iran-oil-waivers-idUSKCN1RZ024>

Japan recast meaning of WTO ruling on South Korea food ban

Hirobumi Ohinata, *The Asahi Shimbun*, April 23, 2019

Government officials are being accused of misinterpreting a World Trade Organization report on South Korea's ban on Japanese seafood imports to suggest that such products were safe, despite no mention of the term. A WTO appeals panel ruled on April 11 that South Korea could maintain a ban it introduced against Japanese seafood following the Fukushima nuclear disaster in 2011.

However, a number of legal experts have raised doubts about that interpretation, as the initial dispute panel's ruling did not contain any wording about the scientific safety of Japanese food products. Also, while the first dispute panel concluded that Japanese seafood had levels of radioactive substances below the safety standards set by South Korea, the appeals body threw out the conclusion on grounds that the discussions were insufficient.

<http://www.asahi.com/ajw/articles/AJ201904230050.html>

Japan's Heisei imperial era: three generations look back, and ahead

Linda Sieg, Kwiyeon Ha, Reuters, April 23, 2019

Japan's Heisei era, which began on Jan. 8, 1989 after Emperor Akihito inherited the throne and ends when he abdicates on April 30, saw economic stagnation, disasters and technological change. Generations of Japanese lived through those decades. Their differing views and experiences will shape the legacy of the Heisei years. For decades, Haruyo Nihei kept her wartime memories locked away: mothers and infants burnt alive by incendiary bombs; herself struggling under corpses of fleeing victims; her sister's body covered with maggot-infested burns.

But in 2002, almost six decades after World War Two ended and 13 years after Akihito took the throne, she decided to speak out. The trigger: a visit to a new museum about the March 10, 1945, U.S. firebombing that killed an estimated 100,000 people in Tokyo. Nihei, now 82, still hopes that by recounting her experience as an eight-year-old in the final days of the conflict, she can convey the horrors of war to young Japanese who know only peace. Japan this month introduced a visa programme to let in more blue-collar workers, a big step in the immigration-shy country.

"If we don't do this properly, we could follow the same path" as Western countries gripped by anger over immigration, said Harada, who has studied abroad and majors in international

relations. Such fears cloud her hopes for the new “Reiwa” imperial era, which begins on May 1. “I’d like to be optimistic, but I can’t,” she said.

<https://in.reuters.com/article/japan-emperor-generations/corrected-japans-heisei-imperial-era-three-generations-look-back-and-ahead-idINKCN1S003E>

Japan takes softer stand with Russia, N. Korea to resolve issues

Tamiyuki Kihara, *The Asahi Shimbun*, April 24, 2019

The government dropped its claim of sovereignty over four disputed islands with Russia in its latest annual foreign policy report, a gesture apparently aimed at not antagonizing Moscow. The conciliatory approach reflects Tokyo’s decision to tread cautiously on the issue as it seeks the return of at least two of the islands known as the Northern Territories. The Foreign Ministry’s 2019 Diplomatic Bluebook, released April 23, dropped last year’s wording, “Japan’s position is that the four Northern Islands belong to Japan.”

Asked about the shift, Foreign Minister Taro Kono said at a news conference the same day, “The Diplomatic Bluebook is compiled each year after taking various factors into consideration with much thought.” Japanese officials have avoided expressions such as “illegal occupation of the islands by Russia” and “the issue of the attribution of the Northern Territories” during recent Diet sessions. The cautious approach follows an agreement reached last November by Prime Minister Shinzo Abe and Russian President Vladimir Putin to accelerate talks on the conclusion of a peace treaty to formally end hostilities dating from World War II.

<http://www.asahi.com/ajw/articles/AJ201904240032.html>

Watered-down strategy against global warming draws criticism

The Asahi Shimbun, April 24, 2019

Environmentalists criticized the government’s draft of its long-term strategy to reduce greenhouse gases, saying the

watered-down plan bends to businesses and prevents Japan from playing a leading role against global warming. The draft, compiled by an advisory panel and released on April 23, is intended to show how Japan will meet its objective of reducing greenhouse gas emissions by 80 percent by 2050.

The strategy does seek an elimination of all chlorofluorocarbons that have a high greenhouse effect. It also proposes that renewable energy sources be turned into a major power source by 2050, and that technological developments be pushed to increase the use of hydrogen energy. The draft leaves open the use of nuclear energy, saying efforts should be made to produce reactors that have high safety levels, are economically feasible and are flexible in their use.

<http://www.asahi.com/ajw/articles/AJ201904240034.html>

NRA stands firm on deadline; nuclear plants may shut down

Toshio Kawada, *The Asahi Shimbun*, April 24, 2019

The government’s nuclear watchdog refused to extend its deadline for the installation of anti-terror facilities at nuclear power plants, raising the prospect that some sites may be forced to shut down as early as in 2020. The Nuclear Regulation Authority’s decision, announced April 24, followed a request on April 17 by three utilities – Kansai Electric Power Co., Shikoku Electric Power Co. and Kyushu Electric Power Co. – for an extension of the deadline.

The companies said they needed up to two and half more years to comply, citing the enormity and difficulty of such emergency construction. Nine reactors at five nuclear plants operated by the companies are now in service, having cleared stringent reactor regulations that took force in 2013, two years after the triple meltdown at the Fukushima No. 1 nuclear power plant triggered by the earthquake and tsunami disaster.

<http://www.asahi.com/ajw/articles/AJ201904240044.html>

Revamped peace museum offers personal look at A-bomb victims

Sonoko Miyazaki, The Asahi Shimbun, April 24, 2019

Words can never tell the entire story of the August 1945 day that forever changed this western city. This is one of the guiding principles of the overhauled Hiroshima peace museum, which focuses on the visual and the tactile in conveying the stark horror of the atomic bombing. After four and a half years of renewal work, the facility's main building is set to open April 25, with an emphasis on physical items to give visitors a sense of the actual hardships of the atomic bombing victims. The Hiroshima Peace Memorial Museum houses 20,000 or so items, including the belongings of those who died in the disaster, in its main and east buildings, which opened in 1955 and 1994, respectively.

<http://www.asahi.com/ajw/articles/AJ201904240061.html>

Japan nuclear regulator to halt reactors without anti-terrorism systems

Reuters, April 24, 2019

Japan's nuclear regulator on Wednesday said it would start ordering shutdowns on any reactors for which power companies have not met deadlines for installing anti-terrorism safety features. The deadlines start next year and are different for each reactor. The earliest deadline falls in March 2020 for Kyushu Electric's Sendai reactor in southwestern Japan.

The Nuclear Regulation Authority (NRA) has declined requests for extensions to the deadlines from Kansai Electric Power Co, Kyushu Electric and Shikoku Electric, a spokesman for the regulator told Reuters. The three companies told the NRA that the anti-terrorism measures would not be on time at 10 of their reactors, according to documents published on the regulator's website.

<https://in.reuters.com/article/japan-nuclear/japan-nuclear-regulator-to-halt-reactors-without-anti-terrorism-systems-idINKCN1S00MS>

Japan expands the hunt for F-35 jet that went missing during exercise

Tim Kelly, Reuters, April 25, 2019

Japan expanded its search for a missing F-35 stealth fighter on Thursday with a maritime survey vessel joining a navy ship and a U.S. Navy salvage team is expected in the area in coming days, a Japanese air force spokesman said. Only small pieces of the Japanese Air Self Defense Force aircraft's tail have been found since the advanced jet disappeared from radar screens during an exercise with three other F-35s over the Pacific, near northwest Japan, on April 9.

"The plane and the pilot are still missing," the air force spokesman said. Investigators have been unable to unravel the fate of the lost aircraft, he added. The search ships are equipped with sonar equipment that can scour the 1,500 metre (4,922 ft) deep sea floor, where the F-35 may lie.

<https://in.reuters.com/article/japan-defence-f35/japan-expands-the-hunt-for-f-35-jet-that-went-missing-during-exercise-idINKCN1S200D>

Trump upbeat on potential for US-Japan trade deal

Darlene Superville and Deb Riechmann, AP News, April 27, 2019

President Donald Trump expressed confidence Friday that a bilateral trade deal between the U.S. and Japan can be reached quickly despite ongoing differences over tariffs as he opened talks with Prime Minister Shinzo Abe at the White House. In their talks Friday, the two leaders were also expected to discuss North Korea's nuclear program and efforts by the U.S. and other nations to achieve a denuclearized Korean Peninsula. Trump and Abe met on the heels of Thursday's nuclear talks between North Korean leader Kim Jong Un and President Vladimir Putin of Russia. Trump's second summit with Kim in Hanoi in February ended with no agreement, but Trump said earlier Friday that progress is being made.

<https://www.apnews.com/f3e93197bdcf4606afe8214723e019c1>

Japan nuclear plants threatened with closure over antiterrorism measures

Yomiuri Shimbun, April 25, 2019

The Nuclear Regulation Authority has decided to order power companies to shut down nuclear reactors if they have not had certain facilities, legally required as antiterrorism measures, completed by specified deadlines. Nine reactors are currently online at five nuclear plants across the nation, and these are unlikely to have the necessary facilities completed before their deadlines. Consequently, it is possible that, one by one, these reactors will have to suspend operations.

NRA Chairman Toyoshi Fuketa emphasized the nuclear watchdog's tough stance at a press conference Wednesday. Reactors will be considered "nonconforming with required standards at the point the deadline passes," Fuketa said.

<http://the-japan-news.com/news/article/0005699286>

L. North Korea

N. Korea says it tested new weapon, wants Pompeo out of talks

Foster Klug And Kim Tong-Hyung, AP News, April 18, 2019

North Korea said Thursday that it had test-fired a new type of "tactical guided weapon," its first such test in nearly half a year, and demanded that Washington remove Secretary of State Mike Pompeo from nuclear negotiations. The test, which didn't appear to be of a banned mid- or long-range ballistic missile that could scuttle negotiations, allows North Korea to show its people it is pushing ahead with weapons development while also reassuring domestic military officials worried that diplomacy with Washington signals weakness.

Separately, the North Korean Foreign Ministry accused Pompeo of playing down the significance of comments by leader Kim Jong Un, who said last week that Washington has until the end of the year to

offer mutually acceptable terms for an agreement to salvage the high-stakes nuclear diplomacy. Both the demand for Pompeo's removal from the talks and the weapon test point to North Korea's displeasure with the deadlocked negotiations.

<https://www.apnews.com/2ff1e53cfc9d42a7821c7f4e6a740642>

Analysis: N. Korea's Kim back to military optics to raise heat

Eric Talmadge, AP News, April 19, 2019

Returning to military optics for the first time in five months, Kim on Tuesday paid a surprise visit to an Air Force base to inspect fighter combat readiness and followed that up the next day by supervising the test of what the North's official media described ominously but ambiguously — and without any photos or video — as a new type of "tactical guided weapon." The military-related posturing comes after Kim expressed deep disappointment earlier this month with what the North claims was an inflexible, "gangster-like" demands by the U.S. in Hanoi.

<https://www.apnews.com/3199ba910378419f95f1bbd39a7c8994>

North Korea warns of 'corresponding response' over U.S.-ROK drills

Chad O'Carroll, NK News, April 25, 2019

An ongoing and "provocative combined aerial drill" between South Korea and the U.S. will necessitate a "corresponding response" from North Korea's army, a press statement from the Committee for the Peaceful Reunification of the Country (CPRC) said on Thursday.

The remark, issued by one of the DPRK departments responsible for inter-Korean issues, slammed what's been described as a scaled-back alternative to canceled Max Thunder drills as "an open violation" of 2018's inter-Korean military declaration. "Now that the south Korean authorities

get undisguised in their military provocation against the DPRK together with the U.S., there will be corresponding response to it from our army," the statement warned.

https://www.nknews.org/2019/04/north-korea-warns-of-corresponding-response-over-u-s-rokdrills/?fbclid=IwAR0EfloKl9k1MWWLrFBclkFaOG6ez_6HUt2wCc221VrdNqolZrOg8gcGLVs

Putin, Kim hold "fruitful" talks on Korean Peninsula nuclear issue, bilateral cooperation

Xinhua, April 25, 2019

Russian President Vladimir Putin and top leader of the Democratic People's Republic of Korea (DPRK) Kim Jong Un on Thursday said that they had substantial discussions on bilateral ties and the Korean Peninsula nuclear issue during their first-ever meeting.

The four-hour talks started with a one-on-one conversation between the two leaders and they were later joined by members of national delegations. The two sides had an in-depth discussion on various topics including the denuclearization of the Korean Peninsula, bilateral relations, the United Nations and relations with the United States.

Putin reaffirmed that "there is no alternative to the peaceful solution of nuclear and other issues on the Korean Peninsula," adding that Russia is ready to continue cooperation to reduce tensions on the peninsula, and to strengthen security in Northeast Asia as a whole.

"Denuclearization means to a certain extent the disarmament of the DPRK. Definitely, the DPRK needs guarantees of its security and the preservation of sovereignty," Putin said at a press conference after talks with Kim.

http://www.xinhuanet.com/english/2019-04/25/c_138009861.htm

Daimler says it has no idea how Kim Jong Un got his limos

Eric Talmadge, AP News, April 26, 2019

German automaker Daimler, which makes armored limousines used by North Korean leader Kim Jong Un, says it has no idea

where he got them and has no business dealings with the North. Kim has raised eyebrows by using Daimler-branded stretch limousines at several very high-profile summits, including his meeting this week with Russian President Vladimir Putin and both of his earlier summits with President Donald Trump.

The sale of luxury goods, including limousines, is banned under U. N. sanctions intended to put pressure on North Korea to abandon its nuclear weapons.

<https://www.apnews.com/fa653739ce0e43abb5f59837d8f23f3>

Kim says peace on Korean Peninsula depends on U.S. attitude -KCNA

Reuters, April 26, 2019

North Korean leader Kim Jong Un, during his summit with Russian President Vladimir Putin, said peace and security on the Korean Peninsula will entirely depend on the future U.S. attitude, North Korean state media Korean Central News Agency (KCNA) said on Friday. "The situation on the Korean peninsula and the region is now at a standstill and has reached a critical point where it may return to its original state as the U.S. took a unilateral attitude in bad faith at the recent second DPRK-U.S. summit talks," KCNA reported Kim saying.

<https://in.reuters.com/article/northkorea-russia/kim-says-peace-on-korean-peninsula-depends-on-us-attitude-kcna-idINS6N20601A>

North Korea nuclear, missile activity 'inconsistent' with denuclearization: U.S. general

Idrees Ali, Reuters, April 27, 2019

North Korea's activity on nuclear weapons and missiles is inconsistent with its pledge to denuclearize, the commander of U.S. forces in South Korea said on Wednesday. "Their activity that we have observed is inconsistent with denuclearization," U.S. Army General Robert Abrams said during

a House Armed Services Committee hearing. Abrams did not provide further details. He had been asked if the United States had seen a change in North Korea's production of nuclear weapons, material and missiles. Abrams said that while he had enough intelligence and surveillance resources to deal with the current situation, that might not be the case if relations were to worsen on the Korean peninsula.

<https://www.reuters.com/article/us-usa-northkorea-military/north-korea-nuclear-missile-activity-inconsistent-with-denuclearization-us-general-idUSKCN1R81RJ>

M. Taiwan

Thousands urge end to nuclear power

Lin Chia-nan, Taipei Times, April 25, 2019

The rumor that the nation would face a power shortage without nuclear power plants is not true, President Tsai Ing-wen said at the Taipei march. Thousands of people in Taipei and Kaohsiung yesterday marched against nuclear power, urging the government to put more effort into phasing out nuclear power plants by 2025 and promoting renewable energy sources.

The marches were organized by the National Nuclear Abolition Action Platform with the theme "Farewell to Nuclear Power for a Beautiful Future." Taiwanese should face the nuclear power issue pragmatically, instead of simplifying it as a matter of support or objection, Ko said on Friday when asked if he supported the marches. The nation's nuclear power plants are too close to densely populated urban areas, but the government cannot even create an evacuation plan for people living within 30km of them, he said.

<http://www.taipeitimes.com/News/front/archives/2019/04/28/2003714179b>

DPP joining Saturday's anti-nuclear rallies

Lin Chia-nan, Taipei Times, April 25, 2019

The Democratic Progressive Party is taking a proactive approach to tackling misinformation about nuclear power by taking part in this year's anti-nuclear

parades in Taipei and Kaohsiung on Saturday, DPP Secretary-General Luo Wen-jia said yesterday.

The Taipei march is to start at 1pm from the main stage on Ketagalan Boulevard, while participants in Kaohsiung are to gather at 2pm at Aozihdi Forest Park, the National Anti-nuclear Action Platform said.

<http://www.taipeitimes.com/News/taiwan/archives/2019/04/25/2003714014>

N. Central, South and Southeast Asia

Could Kazakhstan's Past Be The Key To De-Nuclearizing North Korea?

Nazrin Gadimova, Caspian News April 24, 2019

The willingness of the Kazakhstani government in the early 1990s to give up the country's nuclear arsenal in exchange for massive amounts of aid from the United States and international community was historic. Moon Jae-in, the president of South Korea, thinks it is also a roadmap for the future.

This week Moon was in Nur-Sultan, formerly known as Astana and the capital of Kazakhstan, as part of his trip to Central Asia and where he met with President Kassym-Jomart Tokayev on Sunday. The South Korean leader was hoping to learn a thing or two from Kazakhstanis regarding denuclearization - a word that, these days, is more associated with the Korean peninsula than the post-Soviet world.

<https://caspiannews.com/news-detail/could-kazakhstans-past-be-the-key-to-de-nuclearizing-north-korea-2019-4-24-48/>

Central Asian uranium legacy set for remedial work

World Nuclear News, April 30, 2019

Work is expected to start this year on remedial work at two uranium legacy sites in the Kyrgyz Republic, the European

Bank for Reconstruction and Development announced yesterday. The work is part of a wider plan to deal with the legacy of Soviet-era uranium mining and processing in Central Asia.

Work will begin at the Shekaftar site, following a grant agreement signed between the Kyrgyz authorities and the London-based bank. A grant is provided by the Environmental Remediation Account for Central Asia (ERA), a fund initiated by the European Commission and managed by the EBRD. The ERA was set up in 2015 to rehabilitate high-priority sites in the Kyrgyz Republic, Tajikistan and Uzbekistan. Framework Agreements have been signed with all three countries.

<http://world-nuclear-news.org/Articles/Central-Asian-uranium-legacy-set-for-remedial-work>

Kyrgyzstan: New key step to tackle Central Asia's harmful uranium legacy

The Times of Central Asia, April 30, 2019

The stage has been set for the start of remedial work at two uranium legacy sites in Kyrgyzstan, part of a wider plan to deal with the harmful legacy of Soviet-era uranium mining and processing in Central Asia, the European Bank for Reconstruction and Development (EBRD) said on April 29.

<https://www.timesca.com/index.php/news/21112-kyrgyzstan-new-key-step-to-tackle-central-asia-s-harmful-uranium-legacy>

Uzbek Energy Ministry talks on Power Uzbekistan international forum with Azerbaijan's participation

Azernews, April 30, 2019

The Power Uzbekistan forum will allow Uzbekistan to discuss a number of areas of cooperation with partner countries in the field of the fuel and energy complex, among which Azerbaijan occupies a worthy place, a spokesperson of Ministry of Energy of Uzbekistan told Trend in an interview.

On May 15-17, 2019, Uzbekistan will host

the largest International Exhibitions of the energy and oil and gas sectors: Power Uzbekistan and Uzbekistan International Oil & Gas (OGU) Exhibition & Conference. For the first time, Ministry of Energy of Uzbekistan and the Agency Uzatom will provide support to both events. Also for the first time, "nuclear power engineering", which is a new direction for Uzbekistan, will be included in the sections of the International Exhibition "Power Uzbekistan 2019 - Energy, energy saving, nuclear energy, alternative energy sources."

https://www.azernews.az/oil_and_gas/149856.html

From Lab to Field: Indonesian Scientists Develop New Crops for Farmers Using Nuclear Science

Driss Haboudane and Nicole Jawerth, IAEA Department of Nuclear Sciences and Applications, April 24, 2019

Farmers in Indonesia have over the last few years grown enough rice for more than 20 million people using plants developed through the country's plant mutation breeding programme. The programme first took root through collaboration with the IAEA and the Food and Agriculture Organization of the United Nations (FAO) in 1997 and has since grown into a comprehensive partnership network that brings the results of scientific research with nuclear techniques to farmers' fields.

"Nuclear technology in Indonesia has been used in various fields of life, including agriculture," said Suryantoro, the Deputy Chairman of Indonesia's National Nuclear Energy Agency (BATAN). "Through radiation mutation engineering research, BATAN has improved the quality of local crop varieties with the aim that the new improved seeds be widely used by the community

<https://www.iaea.org/newscenter/news/from-lab-to-field-indonesian-scientists-develop-new-crops-for-farmers-using-nuclear-science>

O. World/Misc

Why nuclear is an environmentalist's story

World Nuclear News, April 24, 2019

The nuclear industry must act to end the decades-long demonisation of the most environmentally friendly form of energy and the world's only viable hope against climate change and poverty. This was the message of Michael Shellenberger - the president of research and policy organisation Environmental Progress - to delegates at the XI International Forum Atomexpo 2019 held in Sochi, Russia, last week.

Shellenberger described the public perception of nuclear power as being like the fairy tale Cinderella; that it had been maligned and taken for granted, when in fact it was a precious resource and ought to be celebrated. The 'glass slipper' in the story of nuclear power, he said, is its remarkable energy density.

<http://world-nuclear-news.org/Articles/Why-nuclear-is-an-environmentalists-story>

Will splashy philanthropy cause the biosecurity field to focus on the wrong risks?

Filippa Lentzos, Bulletin of Atomic Scientists, April 25, 2019

Does it matter where research funding comes from? Over 3,000 Google employees and a coalition of tech workers from IBM, Microsoft, and Amazon thought so. In April 2018, they publicly protested Google's Pentagon contract for Project Maven, an effort to develop artificial intelligence to analyze drone footage and identify targets. In an open letter to Google's CEO, the employees wrote, "Building this technology to assist the US Government in military surveillance-and potentially lethal outcomes-is not acceptable." They also highlighted the irreparable damage the contract could do to Google's brand and the company's ability to compete for talent. The Google workers aren't alone. Other tech employees have criticized adapting Microsoft's augmented-reality headsets for

military use and selling Amazon's facial recognition software for surveillance and policing purposes.

<https://thebulletin.org/2019/04/will-splashy-philanthropy-cause-the-biosecurity-field-to-focus-on-the-wrong-risks/#.XMIJbJR5Yc.twitter>

NASA probe detects likely 'marsquake': an interplanetary first

Joey Roulette, Reuters, April 24, 2019

NASA's robotic probe InSight has detected and measured what scientists believe to be a "marsquake," marking the first time a likely seismological tremor has been recorded on another planet, the Jet Propulsion Laboratory in California reported on Tuesday. The breakthrough came nearly five months after InSight, the first spacecraft designed specifically to study the deep interior of a distant world, touched down on the surface of Mars to begin its two-year seismological mission on the red planet. The faint rumble characterized by JPL scientists as a likely marsquake, roughly equal to a 2.5 magnitude earthquake, was recorded on April 6 - the lander's 128th Martian day, or sol.

<https://in.reuters.com/article/space-exploration-mars/nasa-probe-detects-likely-marsquake-an-interplanetary-first-idINKCN1S002Q>

Global military spending at new post-Cold War high, fueled by US, China - think-tank

Reuters, April 29, 2019

Global military expenditure reached its highest level last year since the end of the Cold War, fueled by increased spending in the United States and China, the world's two biggest economies, a leading defence think-tank said on Monday. In its annual report, the Stockholm International Peace Research Institute (SIPRI) said overall global military spending in 2018 hit \$1.82 trillion, up 2.6 percent on the previous year.

That is the highest figure since 1988, when such data first became available as the

Cold War began winding down. U.S. military spending rose 4.6 percent last year to reach \$649 billion, leaving it still by far the world's biggest spender. It accounted for 36 percent of total global military expenditure, nearly equal to the following eight biggest-spending countries combined, SIPRI said.

<https://www.thehindu.com/news/national/many-killed-in-maoist-attack-in-maharashtras-gadchiroli/article27000826.ece>

SpaceX escape engines were test fired before mishap: panel

Joey Roulette, Reuters, April 25, 2019

A NASA safety panel said on Thursday that Saturday's accident on a SpaceX astronaut capsule happened after eight engines were test fired, but offered scant details on what caused the mishap or the extent of the damage. NASA's Aerospace Safety Advisory Panel (ASAP) told reporters Elon Musk's rocket company continues to investigate the cause of the 'anomaly' during a test of engines designed to propel the crew to safety at Cape Canaveral Air Force Station in Florida.

<https://in.reuters.com/article/us-space-spacex/spacex-escape-engines-were-test-fired-before-mishap-panel-idINKCN1S124O>

Nuclear Security, Arms Control and the U.S.-Russia Relationship

Steven Pifer, American Ambassadors Review, Spring 2019

For nearly five decades, Washington and Moscow have engaged in negotiations to manage their nuclear competition. Those negotiations produced a string of acronyms—SALT, INF, START—for arms control agreements that strengthened strategic stability, reduced bloated nuclear arsenals and had a positive impact on the broader bilateral relationship.

That is changing. The Intermediate-range Nuclear Forces (INF) Treaty is headed for demise. The New Strategic Arms Reduction Treaty (New START) has less than two years to run, and the administration of

Donald Trump has yet to engage on Russian suggestions to extend it. Bilateral strategic stability talks have not been held in 18 months.

<https://www.americanambassadorslive.org/post/nuclear-security-arms-control-and-the-u-s-russia-relationship>

Nuclear risks Reduction: The State of Ideas

Wilfred Wan, United Nations Institute for Disarmament Research

In recent years, calls to address the range of risks that could lead to the use of nuclear weapons have become more frequent and more urgently expressed. Nuclear weapon risk reduction has been raised in several multilateral forums including the 2018 session of the United Nations Disarmament Commission, the 2018 Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), and the Secretary-General's Agenda for Disarmament. Discussions in these settings reflect concerns with the deteriorating strategic environment, the fear of greater potential for accidents or miscalculation involving nuclear weapons in crisis situations, and new technological developments that create ambiguity about the circumstances in which nuclear weapons might be used.

<http://www.unidir.org/files/publications/pdfs/nuclear-risk-reduction-the-state-of-ideas-en-767.pdf>

Here's 3 Reasons Nuclear Power Can Help Beat Thanos and Save the Planet

Robbie Hayunga, NEI, April 23, 2019

Unless you've been caught in a time loop, you know that the long-anticipated movie "Avengers: Endgame" premieres in theaters this week. We can finally discover whether Earth's mightiest heroes can save half of humanity. To defeat the most powerful, purple-est villain since Grimace, the Avengers are going to need a lot of help—and I think nuclear energy can provide it.

I grew up watching superhero cartoons and desperately wishing to become Spider-Man in real life, even after three-and-a-half reboots. (Before you ask, my answers are: 1) my favorite Spider-Man is Tom Holland and 2) yes, that “Infinity War” scene nearly broke me). This experience – combined with my time here at the Nuclear Energy Institute – has helped me see that if the Avengers are going to do whatever it takes to win, they need nuclear energy.

<https://www.nei.org/news/2019/avengers-3-reasons-nuclear-power-beat-thanos>

Shifting Nuclear Sands in South Asia: Understanding India’s Counterforce Temptations

Christopher Clary’s interview by Ankit Panda, *The Diplomat*, April 23, 2019

Following a terror attack claimed by the Pakistan-based group Jaish-e-Mohammed in mid-February 2019, India and Pakistan were thrust into their most serious crisis since 2002. Since 2002 – and since the breakout of both countries as nuclear weapons possessors in 1998 – both India and Pakistan have calibrated their nuclear forces and strategies to meet the requirements of deterrence. Christopher Clary, an assistant professor of political science at the Rockefeller College of Public Affairs and Policy at the State University of New York’s University at Albany, and his co-author Vipin Narang, an associate professor of political science at the Massachusetts Institute of Technology, argued in a recent *International Security* article that India, in particular, has over the years developed a set of capabilities that suggest the temptation – if not a political decision – to move toward a nuclear strategy predicated on destroying Pakistan’s nuclear weapons. To discuss their article and other recent developments, including India’s test of an anti-satellite weapon, *The Diplomat*’s Senior Editor Ankit Panda spoke to Clary.

<https://thediplomat.com/2019/04/shifting-nuclear-sands-in-south-asia-understanding-indias-counterforce-temptations/>

Your New START Explainer: The Value of Cooperation on Nuclear Arms Control

Jessica Sleight, *Global Nuclear Zero*, April 22, 2019

The US announcement of its intent to withdraw from the Intermediate-range Nuclear Forces (INF) Treaty marked another notch in the administration’s campaign against international arms control and nonproliferation agreements. With that treaty set to collapse in early August, experts worry the only other treaty limiting US and Russian nuclear arsenals, New START, may be next.

Officially known as “The Treaty between the United States of America and the Russian Federation on Measures for the Further Reduction and Limitation of Strategic Offensive Arms,” New START was signed by Presidents Barack Obama and Dmitry Medvedev on April 8, 2010. The treaty was ratified by the US Senate and Russian parliament and entered into force on February 5, 2011.

<https://www.globalzero.org/updates/your-new-start-explainer-the-value-of-cooperation-on-nuclear-arms-control/>

Seeing the quantum

Rebecca Holmes, *Aeon*, April 24, 2019

The human eye is a surprisingly good photon detector. What can it spy of the line between the quantum and classical worlds? I spent a lot of time in the dark in graduate school. Not just because I was learning the field of quantum optics – where we usually deal with one particle of light or photon at a time – but because my research used my own eyes as a measurement tool. I was studying how humans perceive the smallest amounts of light, and I was the first test subject every time.

I conducted these experiments in a closet-sized room on the eighth floor of the psychology department at the University of Illinois, working alongside my graduate

advisor, Paul Kwiat, and psychologist Ranxiao Frances Wang. The space was equipped with special blackout curtains and a sealed door to achieve total darkness.

<https://aeon.co/essays/an-eye-on-experiments-that-make-quantum-mechanics-visible>

Marking World Book Day with the IAEA's Three Most Popular Publications in 2018

Nathalie Mikhailova, IAEA Department of Nuclear Safety and Security, April 23, 2019

The IAEA makes available nearly 4000 scientific and technical publications for free online, on the wide spectrum of topics the IAEA works on in the peaceful use of nuclear science and technology. These publications are read by technical experts, scientists and students all over the world. In 2018, the IAEA's publications webpages were accessed over one million times.

To mark World Book and Copyright Day and celebrate the role of books as drivers of scientific, technical and cultural progress, here are the three most accessed IAEA publications from last year:

<https://www.iaea.org/newscenter/news/marking-world-book-day-with-the-iaeas-three-most-popular-publications-in-2018>

Papers for International Conference on Effective Nuclear and Radiation Regulatory Systems due 28 May

Susanna Löf, IAEA Department of Nuclear Safety and Security, April 24, 2019

Interested participants have until May 28 to submit a synopsis to present at the IAEA International Conference on Effective Nuclear and Radiation Regulatory Systems, to be held in the Hague, the Netherlands, from 4 to 7 November 2019.

"Robust, independent and effective regulatory systems underpin nuclear safety and security," said Gustavo Caruso, Director of the IAEA Office of Safety and Security Coordination. "This conference is part of the Agency's efforts to enable Member States to learn from each other as they work to fulfil

their national responsibility for nuclear safety and security."

<https://www.iaea.org/newscenter/news/papers-for-international-conference-on-effective-nuclear-and-radiation-regulatory-systems-due-28-may>

P. Op-Ed

A-SAT

It's time to speak out about India's reckless anti-satellite test

Jessica West, The Space Review, April 15, 2019

India used its advanced anti-ballistic missile defence capability to conduct a kinetic anti-satellite test ("Mission Shakti") against one of its own satellites on March 27. India became the fourth state, after the United States, Russia, and China, to demonstrate an ASAT capability and only the third to conduct a direct intercept of an object in space.

Details of the event are still being uncovered, but it is reported that a BMD missile interceptor developed by the Indian Defence Research and Development Organisation was launched from the Abdul Kalam Island launch complex. It then intercepted an Indian satellite, Microsat-R, at an altitude of roughly 300 kilometers. India's Ministry of External Affairs claimed, "The test was fully successful and achieved all parameters as per plans." According to the Indian government, the test makes India a "space power."

<http://www.thespacereview.com/article/3695/1>

ASAT a testimony to Indian technological capabilities: DRDO Chairman

The Hindu, April 28, 2019

The Anti-Satellite Test (ASAT) has demonstrated the capabilities of indigenously-developed Indian technologies to carry out a critical mission with high degree of precision, said G. Satheesh Reddy, Chairman of DRDO, here on Sunday.

All the critical systems, including the software and sensors, were developed by a team of scientists from various specialisations who worked in complete synergy day and night for six months, culminating in the successful launch, he explained. Dr. Reddy was speaking at the 'Technical Meet and Aerospace Luminary Lecture' organised by The Aeronautical Society of India at the DRDL. "The most important challenge during the mission was to ensure that all the systems cohesively responded to the changing dynamics," he said and congratulated all the DRDO labs and team members associated with Mission Shakti. Programme Director U. Rajababu highlighted the mission objectives and the criticalities of Mission Shakti and said the high altitude and high velocity interception pose many technological challenges as high levels of precision was required when relative velocity of the systems involved is around 10 km/sec.

<https://www.thehindu.com/news/national/telangana/asat-a-testimony-to-indian-technological-capabilities-drdo-chairman/article26974437.ace>

India will need pragmatism, diplomatic skill in shaping new rules for regulation of outer space

C. Raja Mohan, *Indian Express*, April 30, 2019

As it looks beyond its first anti-satellite weapon test last month, India needs to come to terms with a number of factors that are transforming the political and economic nature of outer space. Four issues demand India's attention. And all of them call for a reorientation of India's national strategy towards outer space. First is the unfolding drift towards the weaponisation of outer space. Over the last two decades, India has joined other powers in developing space assets for passive military uses of outer space – such as surveillance, targeting and military communication. It now needs to prepare for an outer space that might become an active military theatre.

<https://indianexpress.com/article/opinion/columns/mission-shakti-anti-satellite-weapon-isro-drdo-india-space-missions-5701517/>

INDIA

'Villagers in Madhya Pradesh's Chutka, twice displaced, vow to fight government over proposed nuclear power plant

Manish Chandra Mishra, *First Post*, April 17, 2019

Villagers in Chutka, Mandla district of Madhya Pradesh are hoping to use the power of the ballot in the 2019 Lok Sabha elections to prevent the setting up of a nuclear power plant. Their determination is evident in the many posters tacked to trees which state, "Vote only for the party that cancels the power plant."

<https://www.firstpost.com/india/villagers-in-madhya-pradeshs-chutka-twice-displaced-vow-to-fight-government-over-proposed-nuclear-power-plant-6465561.html>

Modi should know India's status as a nuclear weapon state demands responsible leadership

Shyam Saran, *The Print*, April 23, 2019

Many norms have been transgressed and several thresholds crossed in the ongoing Lok Sabha election campaign, whether in communal and sectarian polarisation of Indians or the politicisation of the armed forces. Now another threshold has been crossed by Prime Minister Narendra Modi with his most recent remarks on India's nuclear weapons delivered in a threatening tone.

It is this China-Pakistan nexus that India needs to confront and seek to neutralise. Pakistan by itself is a side-show and must be treated as such. The level of nuclear and conventional capabilities that India needs to deter China are of a scale which, collaterally, would be more than sufficient to counter any Pakistani threat. China will be happy to keep India tethered in the sub-continent, be reduced to a sub-regional power, forever embroiled in managing Pakistan and, by default, leaving much of our proximate neighbourhood open for steady Chinese penetration, backed by

resources we cannot match. We must not fall into this trap.

<https://theprint.in/opinion/modi-should-know-indias-status-as-a-nuclear-weapon-state-demands-responsible-leadership/225305/>

New Delhi's Indian Ocean security dilemma

Manoj Kumar Mishra, *Asian Times*, April 23, 2019

For years the US, Russia, Britain, France and China were the only powers that possessed the ability to project nuclear weapons power with submarines in the Indian Ocean region, but on March 31, 2016, India joined the fray with its first nuclear-powered ballistic missile-carrying submarine, INS Arihant (SSBN 80), test-firing the K-4 nuclear-capable submarine-launched ballistic missile (SLBM).

The INS Arihant is an indigenously-built nuclear-powered submarine capable of carrying nuclear and conventional warheads with a strike range of up to 3,500 kilometers, providing for an undersea nuclear deterrent or a second-strike capability. The submarine completed its first deterrence patrol on November 5, 2018, which led India's Prime Minister Narendra Modi to emphasize, "In an era such as this, a credible nuclear deterrent is the need of the hour. Today is historic because it marks the completing of the successful establishment of the nuclear triad. India's nuclear triad will be an important pillar of global peace and stability."

<https://www.asiatimes.com/2019/04/opinion/indias-approach-to-the-security-dilemma-in-the-indian-ocean-region/>

India's options as US announces end of Iran waiver

Seema Sirohi, *ORF*, April 24, 2019

The United States' decision to end waivers from Iran sanctions for countries dependent on Iranian oil poses tough political and economic questions for India.

The announcement couldn't have come at a worse time - in the middle of national

elections and before a new government finds its feet. This is bound to upset the current government because whichever way it plays the US decision, it's open to attack by the opposition.

Washington is expected to leave Indian investment in Iran's Chabahar port alone although the exact directives will only be known after May 2 when the current 180-day waiver from the US sanctions ends. US officials will assess the importance of Chabahar being developed by India as opposed to it going into Chinese hands - Iran has signaled it might invite China.

<https://www.orfonline.org/expert-speak/indias-options-as-us-announces-end-of-iran-waiver-50231/>

Indian Carrier's Fire Likely Result of Lax Military Regulation - Chinese Experts

Sputnik News, April 30, 2019

Chinese military experts on Sunday said that India's military culture cannot keep up with its ambitious weapon and equipment development, which might be the reason behind its aircraft carrier's fatal fire on Friday.

A fire broke out at the engine room of India's aircraft carrier *Vikramaditya* while it was entering harbour in Karnataka's Karwar on Friday. The fire killed a naval officer who led the firefighting efforts in the affected compartment, according to a Saturday report by the *Times of India*.

<https://sputniknews.com/analysis/201904301074567728-india-china-military-regulation/>

Order from Chaos: Trump tightens sanctions on Iran's oil exports - How India will respond

Tanvi Madan, *Brookings US*, April 23, 2019

The Trump administration's decision not to extend waivers from Iran sanctions will not be welcome in New Delhi. India

imports over three-quarters of the oil it consumes, and Iran has long featured in the list of its top sources. Washington had previously issued it a waiver, and, since sanctions had gone into effect, India had decreased its imports from Iran.

As a U.S. strategic partner, whose cooperation the Trump administration has sought for its Free and Open Indo-Pacific strategy, India had hoped to get another waiver – even if that required further import reductions on its part. The administration's decision will therefore irk Delhi, particularly since Washington has also imposed sanctions on another of India's top suppliers, Venezuela.

<https://www.brookings.edu/blog/order-from-chaos/2019/04/23/trump-tightens-sanctions-on-irans-oil-exports-how-india-will-respond/>

CHINA

China's upcoming maritime parade not a muscle show

Guo Yuandan and Liu Xuanzun, *Global Times*, April 20, 2019

China's scheduled maritime parade in celebration of the Chinese People's Liberation Army (PLA) Navy's 70th anniversary is a sign of transparency rather than a show of naval prowess, a Chinese military expert said Saturday after foreign media accused China of showing military muscle. Qiu Yanpeng, the deputy commander of the PLA Navy, said at a press conference held ahead of the anniversary on Saturday that the aircraft carrier Liaoning, new nuclear-powered submarines, new destroyers and aircraft will participate in the April 23 fleet review, with some vessels making their public debut.

More than 10 countries will send naval vessels to the parade, and more than 60 countries from five continents will send naval delegations. Qiu also said it is essential to build a strong navy because China was invaded more than 470 times from the sea, which caused deep suffering in the Chinese nation. By comparison, the PLA Navy has never caused any war, turbulence or unsettlement anywhere in the world, Qiu

said. China is determined to pursue peaceful development and will never pursue hegemony, Qiu said.

<http://www.globaltimes.cn/content/1146699.shtml>

Stronger PLA Navy enhances world peace

Global Times, April 22, 2019

The People's Liberation Army (PLA) Navy will hold multinational naval activities from Monday to Thursday to celebrate its 70th anniversary. The opening ceremony was held Monday, and a maritime parade is scheduled on Tuesday in Qingdao, East China's Shandong Province. The PLA Navy is undoubtedly the focus of the world's naval forces. The PLA Navy is a microcosm of China's rapid development. Whatever new warships will be debuted at the parade will attract much attention. Which countries send a delegation to the event would be regarded as a symbol of China's military and diplomatic influence.

Some Western media said China's upcoming maritime parade is a muscle show. This is not surprising. The West still dislikes China's rise. Major countries' navies grew powerful in history because of the need to expand. But the PLA Navy has become powerful because it does not want to be bullied. Although China has disputes with part of the outside world, it has the will to resolve issues peacefully. The world should understand China's military and diplomatic philosophy to really understand China.

<http://www.globaltimes.cn/content/1146973.shtml>

How China should respond to US' Iranian oil request

Global Times, April 23, 2019

China is the biggest buyer of Iranian oil. How Beijing deals with the US demand will attract more attention, given tense China-US relations since last year. We think China should clarify its interests and principles surrounding the purchase of oil

from the Middle East nation and strive to minimize the loss to China's national interests. China needs to safeguard the Iran nuclear agreement with Britain, France, Germany and Russia, and also needs to maintain friendly and cooperative relations with Iran.

China should oppose the hegemonic approach of the US, but it can't take the lead in confronting the US on issues involving Iran. Beijing needs to coordinate with other major powers to respond to US sanctions against Iran. The operational safety of Chinese enterprises should be given priority and they have the right to continue to cooperate with Iran or withdraw, keeping in mind the situation on the ground. China does not want to have a showdown with the US over Iran, nor can Beijing just let Washington do what it wants. There is a need to strengthen coordination among countries. If the issue can be dragged, then let it drag. Otherwise, the issue can be modified. If it cannot be modified, let it be dealt with on a case-by-case basis. On the issue of boycotting US sanctions against Iraq, we cannot disregard principles or interests. This is a time to test wisdom.

<http://www.globaltimes.cn/content/1147057.shtml>

China, Russia bound to further expand collaboration

Li Hui, People's Daily April 23, 2019

The Belt and Road Initiative (BRI), since it was proposed almost six years ago, has witnessed a stretching network of friends, enabling China to forge partnerships all over the world and enjoy great popularity with its "Chinese solutions". Russia, as a significant supporter of the international cooperation under the BRI framework, has witnessed how the BRI has optimized the existing cooperation framework between China and Russia, and thus greatly enriched bilateral relations and broadened bilateral cooperation.

China-Russia cooperation has been yielding new breakthroughs unceasingly. Last year, bilateral trade amounted to an all-time record of \$107.06 billion, representing the

greatest growth among top ten trading partners of China. Bilateral cooperation on major projects in such fields as energy sources, nuclear energy, aviation and space has moved into the fast lane of development.

<http://en.people.cn/n3/2019/0423/c90000-9570999.html>

New missile gap leaves U.S. scrambling to counter China

David Lague, Benjamin Kang Lim, Reuters, April 25, 2019

Chinese President Xi Jinping has elevated his country's missile forces to a level where they pose an unprecedented challenge to the aircraft carriers and bases that form the backbone of American military primacy in Asia, a Reuters special report reveals. Critically, China has forged a monopoly in one class of conventional missiles that enable it to strike at U.S. aircraft carriers off its coast and at bases in Japan or even Guam in the Pacific Ocean. Under a Cold War-era treaty between the U.S. and Russia, neither country has been allowed to develop these weapons – land-based, intermediate-range ballistic and cruise missiles with a range between 500 and 5,500 kilometers (3,418 miles). But China, which isn't a signatory to the treaty, has been deploying these rockets in massive numbers.

<https://www.reuters.com/article/us-china-army-rockets-short-idUSKCN1S11DQ>

Special Report: China's vast fleet is tipping the balance in the Pacific

David Lague, Benjamin Kang Lim, Reuters, April 29, 2019

A generation ago, from mid-1995 into early 1996, China lobbed missiles in the waters around Taiwan as the self-governing island prepared to hold its first fully democratic presidential election. Washington forcefully intervened to support its ally, sending two aircraft carrier battle groups to patrol nearby. The carriers, then as now the spearhead of

American power, intimidated Beijing. The vote went ahead. The missiles stopped.

Today, with tension again running high, Washington still backs Taiwan. Chinese President Xi Jinping on January 2 renewed Beijing's longstanding threat to use force if necessary to restore mainland control over the island. But the United States is now sending much more muted signals of support.

<https://in.reuters.com/article/china-army-navy/special-report-chinas-vast-fleet-is-tipping-the-balance-in-the-pacific-idINKCN1S612U>

China is building an armada

David Lague, Reuters, April 29, 2019

It took time for China's naval shipyards to hit their straps. For about a decade from the turn of this century, they experimented with new designs, in some cases launching just a couple of each new type of warship for evaluation. The yards absorbed foreign technology, imported some key components and developed local know-how. Quality ruled over quantity. Then they started mass production. New hulls cascaded into the water, mainly from the big shipyards at Shanghai, Dalian, Guangzhou and Wuhan.

These yards have been building the full spectrum of warships and support vessels, according to Pentagon estimates, analysis from private Western defense information providers and reports in the official Chinese military media. In 2014, China began building, launched or commissioned more than 60 warships or craft, according to a 2015 report from the U.S. Office of Naval Intelligence.

<https://in.reuters.com/article/china-army-armada/china-is-building-an-armada-idINKCN1S61CY>

China's fear of an American blockade

David Lague, Benjamin Kang Lim, Reuters, April 30, 2019

One of China's greatest fears is the threat of blockade from the United States and its allies in the event of a conflict or crisis, according

to senior Chinese and Western military officials. As the Chinese navy expands its operations into the Indian Ocean, it is also building the capability to protect the sea lanes that carry China's imports of vital oil and raw materials from the Middle East and Africa.

Flotillas of Chinese warships and submarines, often with air support, are also routinely deploying to the Western Pacific on training missions for combat at sea. In 2017, China sent ships to train with the Russian navy in the Baltic Sea.

<https://in.reuters.com/article/china-army-blockade/chinas-fear-of-an-american-blockade-idINKCN1S61CW>

How China is replacing America as Asia's military titan

David Lague, Benjamin Kang Lim, Reuters, April 23, 2019

Chinese President Xi Jinping is refashioning his country's military into a potent fighting force that in some critical areas now surpasses the U.S. armed forces, making an American victory over China in a A scenario considered unthinkable not so long ago in Asia is now possible. According to retired Admiral Gary Roughead, who held the top job in the U.S. Navy, America "could lose" in a regional war with China over Taiwan. "We really are at a significant inflection point in history," said Roughead, who was Chief of Naval Operations until his retirement in 2011.

Intent on challenging American hegemony in Asia, China under Xi has established control over much of the South China Sea, stepped up military maneuvers aimed at pressuring long-time U.S. allies Japan and Taiwan, and for the first time has sufficient firepower to deter American aircraft carriers from sailing too close to its shores.

<https://in.reuters.com/article/china-army-xi-short/how-china-is-replacing-america-as-asias-military-titan-idINKCN1RZ137>

Special Report - New missile gap leaves U.S. scrambling to counter China

David Lague, Benjamin Kang Lim,
Reuters, April 25, 2019

China's powerful military is considered to be a master at concealing its intentions. But there is no secret about how it plans to destroy American At November's biennial air show in the southern city of Zhuhai, the biggest state-owned missile maker, China Aerospace Science and Industry Corporation Ltd, screened an animation showing a hostile "blue force," comprising an aircraft carrier, escort ships and strike aircraft, approaching "red force" territory.

On a giant screen, the animation showed a barrage of the Chinese company's missiles launched from "red force" warships, submarines, shore batteries and aircraft wreaking havoc on the escort vessels around the carrier. In a final salvo, two missiles plunge onto the flight deck of the carrier and a third slams into the side of the hull near the bow.

<https://in.reuters.com/article/uk-china-army-rockets-specialreport/special-report-new-missile-gap-leaves-u-s-scrambling-to-counter-china-idINKCN1S11DF>

Is China the largest opportunity for Britain in a post-Brexit world?

Morag Hobbs, People's Daily, April 28, 2019

As British Prime Minister Theresa May emphasised during her official visit to China last year, after leaving the EU "we - the United Kingdom - will be free to strike our own trade deals," which may be one reason behind the fact that the friendship between the UK and China has ramped up in recent years. Since the Cameron-Osborne government first became very focused on China, the UK has looked east more frequently for manufacturing and engineering services, while China has focused on the UK for financial services. In an interview with People's Daily Online, Lord James Meyer Sassoon, Chairman of the China-Britain Business Council, said that China and the UK are perfect partners.

"China is second to nobody when it comes to the big global construction companies; the engineering skills. The UK is second to no country in having the complete suite of professional services from the design and management of projects from complex engineering solutions through to the legal contracting, risk management through to insurance markets, financing and so on, so the match is really perfect," he said.

<http://en.people.cn/n3/2019/0428/c90000-9573281.html>

PAKISTAN

India's ASAT test

Shirin Naseer, Spearhead Research,
April 26, 2019

Indian Prime Minister Narendra Modi made a televised address on March 27 to announce the successful conduct of India's anti-satellite (ASAT) missile test. The test targeted and destroyed one of India's own satellites operating in the low-Earth orbit (LEO). The exercise dubbed Mission Shakti achieved all of its objectives, and is believed to mark the advent of India's "new space age".

Space programs launched by the Indian authorities have traditionally been concerned with fulfilling the requirements of India's various civilian and development projects. In the last decade however programs have had more national security-related and strategic inclinations. Satellites put in place have increasingly begun catering to India's military communication and surveillance needs. The Indian Navy's first military satellite was launched in the year 2013. This was not only a result of India's growing technological capacity, but was also India's response to growing competition in the region between other spacefaring powers looking to increase influence on the ground by also increasing capabilities to project power in outer space.

<https://spearheadresearch.org/?p=37708>

Foreign nuclear assistance to India and its implications

George Peter, *The Express Tribune*, April 16, 2019

In wake of the provisions of the US-India nuclear deal, which was cleverly and cunningly negotiated by India, the US approached the Nuclear Supplier Group (NSG), and successfully managed to obtain a nuclear waiver for India to conduct nuclear trade with other countries despite the fact that it is a country which is not a signatory to the Nuclear Non-Proliferation Treaty (NPT). Also, India has successfully managed to obtain nuclear fuel assurance from the US. The clauses of the US-India Civil Nuclear Agreement (123 agreement) mandates that the US will support India's endeavours in the development of strategic reserve of nuclear fuel, which would serve as a backup in the event of disruption of the supply of nuclear fuel. Further, the US would also help India in convening a group of friendly supplier countries in an attempt to restore the supply of nuclear fuel, if disrupted. It is pertinent to highlight here that generally 123 agreements, executed by the US, do not contain fuel assurances.

<https://tribune.com.pk/story/1951513/6-foreign-nuclear-assistance-india-implications/>

Nuclear powers and poverty in South Asia

Anjum Sarfraz, *Daily Times*, April 19, 2019

India tested its first nuclear device on May 24, 1974, at Pokharan in its Rajasthan desert. Raja Ramanna, the leader of the team, is said to have informed then prime minister Indira Gandhi that "Buddha Smiles". India continued to vigorously pursue its nuclear programme. On May 11, 1998, it conducted three more nuclear tests at Pokharan about 150 kilometres from its border with Pakistan. The event was named Pokharan-II. The devices denoted were a 15 kilo-ton fission device, a two kilo-ton low-yield one, and a 45 kilo-ton thermonuclear one. Two more tests in sub-kilo-ton range were conducted on May 13. Then prime minister Atal Bihari

Vajpayee proudly announced that India had become the sixth nuclear weapon state, including the home minister, LK Advani, who said Indian forces could cross the Line of Control in Jammu and Kashmir on the pretext of hot pursuit.

<https://dailytimes.com.pk/378329/nuclear-powers-and-poverty-in-south-asia/>

India's space ambitions

Syeda Saiqa Bukhari, *Daily Times*, April 20, 2019

On March 27, 2019 India has tested its first ever Anti-Satellite (ASAT) missile code named as 'Mission Shakti'. India shot down one of its own Low Earth Orbit (LEO) satellite through a ballistic missile and became fourth country in the world after USA, Russia and China having the capability. ASAT weapons are the space weapons which allow a state to attack opponent space assets which disrupt communication channel. Indian ASAT test translates into New Delhi capability which can be used to destroy opponent satellites. The shooting down of its own low orbit satellite with a ground to space missile has made India a 'space power'. This technology effects Intelligence, Reconnaissance and Surveillance (IRS) system of enemy state.

<https://dailytimes.com.pk/378774/indias-space-ambitions/>

Can India or Pakistan Break Deterrence?

Kevin James, *The National Interest*, April 22, 2019

Exploiting Kashmiri disaffection and the transnational jihadist movement, Pakistan is waging a deadly guerrilla war against India in Kashmir. Usually, of course, sponsoring an insurgency in a more powerful neighbouring country would provoke a very costly response (eliminating the incentive to sponsor the insurgency in the first place).

In the case of Kashmir, however, Pakistan has cleverly combined its conventional and

nuclear capabilities in a way that makes it impossible for India to impose such a penalty at a price that India is willing to pay. That's because Pakistan's conventional strength is sufficient to eliminate India's ability to impose significant costs with a low-intensity conventional response, and Pakistan has drawn its nuclear use red lines such that any high-intensity conventional response will lead to the risk of a nuclear war. In short, Pakistan has found a way to make the stability/instability paradox go one way.

<https://nationalinterest.org/blog/buzz/can-india-or-pakistan-break-deterrence-53692>

Indian Irresponsible Behavior as Nuclear Power

Anaya Shahid, *Modern Diplomacy*, April 24, 2019

The debate between nuclear haves and have-nots over safety and security of nuclear material has long been dominated by the evolving discourse on futuristic scenarios particularly the nuclear use in a conflict. Consequently, scholars have been divided into two broader categories; nuclear optimists and nuclear pessimists. Nuclear optimists strongly believe in the deterrence capability of nuclear weapons, which diminishes the conventional power among states. Whereas, nuclear pessimists fear of nuclear war and inadvertent use of nuclear weapon in a conflict.

In this regard, South Asia is termed as one of the volatile regions of the world, where nuclear brinkmanship is probable because of the longstanding historical animosity between India and Pakistan. The onus of instability and volatility in the region rests with India's aspiration for regional hegemon, which seeks domination through coercion and use of power. Its ambitions to join global cartels such as Nuclear Suppliers Group (NSG) without meeting the criteria is self-explanatory of its coercive yet illegitimate policies.

<https://moderndiplomacy.eu/2019/04/24/indian-irresponsible-behavior-as-nuclear-power/>

Nuclear Pakistan: Maintaining Peace of South Asia

Ali Raza, *Modern Diplomacy*, April 26, 2019

In 1994, there was a clear indication and warning that the Indian nuclear and missile technology could be used against Pakistan, when Pirthvi missile was tested by India. These apprehensions were substantiated, when in 1997 India intended to deploy missiles along Pakistan's border. This deployment created a tense condition, and troops from both sides were deployed along the border. Chance of armed conflict had arisen and peace of the entire region came under severe threat.

Following the events of 1994 and 1997, India and Pakistan conducted nuclear tests in 1998. At that time, entire world was shocked of these nuclear explosions. As far as Pakistan is concerned, declaring the nuclear capability was intended to deliver loud and clear message to India that Pakistan had achieved credible deterrence and to preclude India from initiating any action against Pakistan.

<https://moderndiplomacy.eu/2019/04/26/nuclear-pakistan-maintaining-peace-of-south-asia/>

Pakistan's Cold War And How to Win it

Adam Garrie, *Eurasia Future*, April 27, 2019

Pakistan is in the midst of a Cold War situation that many refuse to recognise. While some foolishly scapegoat post-colonial issues as the underlying cause for Pakistan and India's fraught relationship, at a time when both countries are nuclear powers, one must analyse their turgid relations through the prism of a cold war standoff for the simple reason that the standoff exhibits all of the symptoms of a classic cold war rivalry whether it be the prominent US-USSR Cold War or the Sino-Soviet split that occurred during the last 30 years of the 20th century Cold War.

<https://eurasiafuture.com/2019/04/27/pakistans-cold-war-and-how-to-win-it/>

Why India And Pakistan Must Make Peace Not War

The Herald Dawn, April 2019

Abhinandan Varthaman, the Indian pilot whose fighter plane crashed on Pakistani soil late last month, could say that this is not the way villagers in Azad Kashmir treated him. After they saw him descend from the sky with a parachute, they rushed and found him by a stream. Some of them immediately started beating him up and continued doing so until a contingent of the Pakistan Army arrived and rescued him.

The earliest images of the captured Indian pilot showed his face bloodied by the beating he got. A black eye and a swollen cheek were still visible in the images of him being handed over to India on March 1.

<https://herald.dawn.com/news/1398853>

USA

The folly of war with Iran

Jacob Heilbrunn, Spectator, April 23, 2019

Donald Trump continues to show that he is one of the boldest presidents in modern American history. He may also be the nuttiest. His decision to remove waivers on the purchase of oil from Iran has set America on an unwavering course for war with the Middle Eastern state.

Like Franklin Roosevelt, who tried to starve Japan into submission by halting its imports of oil, Trump seems intent on trying to bludgeon Iran into submission by preventing it from exporting any crude. The problem is that the Iranians aren't cracking. Instead, they are likely to double-down. Already they are threatening to shut down the Strait of Hormuz. Trump will be in dire straits if Iran does that. A fifth of the world's crude oil flows through it. The US military has positioned two carrier strike groups near Iran.

<https://spectator.us/folly-war-iran/>

Pressing The Button: How Nuclear-Armed Countries Plan To Launch Armageddon (And What To Do About The U.S.)

Jeffrey Lewis And Bruno Tertrais, War on the Rocks, April 24, 2019

That question appeared on the cover of Fletcher Knebel's bestselling 1965 novel, *Night of Camp David*. Knebel, who also wrote *Seven Days in May*, described a president succumbing to paranoia as those around him struggled to keep him from starting a nuclear war. For obvious reasons, the book was re-released in 2018 in a new edition.

The presidency of Donald Trump has renewed a lingering debate about how much of the terrible responsibility to inflict large-scale nuclear destruction nuclear-armed countries should invest in a single person. The question is not only about Trump, of course. He is a member of a club that also includes Russia's Vladimir Putin, China's Xi Jinping and North Korea's Kim Jong Un – "Rocketman" himself. It is a club that is far more exclusive than the Mar-a-Lago.

<https://warontherocks.com/2019/04/pressing-the-button-how-nuclear-armed-countries-plan-to-launch-armageddon-and-what-to-do-about-the-u-s/>

Outside the Box Thinking for Unusual Nuclear Wastes

Newswise, April 24, 2019

In 1943 on an isolated expanse of desert dotted with green-gray sagebrush, construction crews started building a top secret chemical facility known as T-Plant. It housed the first industrial process to pluck plutonium for the nation's nuclear arsenal from irradiated fuel rods.

Operating T-Plant and similar facilities created radioactive wastes in Washington State, Idaho, and South Carolina. The Cold War waste – approximately 90 million gallons – is in 100-plus interim storage tanks. The best approach to permanently

store the waste, and keep it away from soil and groundwater, is to turn it into a solid material.

https://www.newswise.com/doescience/?article_id=711781&returnurl=aHR0cHM6Ly93d3cubmV3c3dpc2UuY29tL2FydGljbGVzL2xpc3Q=

PM Modi must avoid casual mentions of war games as Nuclear rhetoric is not meant for election speeches

Arun Mitra, National Herald, April 26, 2019

Nuclear rhetoric by the prime minister in his election speech at Barmer on April 21 that India does not have nuclear weapons for Diwali is irresponsible, dangerous and provocative. Counter statement by Mehbooba Mufti that Pakistan does not have these weapons for Eid have brought to the fore how vulnerable situation in our region could be.

The events following Pulwama terrorist violence which martyred 49 CRPF personnel had nearly pushed India and Pakistan to the brink of war. Threat of use of nuclear weapons gave dreadful shiver to the people on both sides. The jingoists on either side of the border took no time calling for destruction of the other.

<https://www.nationalheraldindia.com/opinion/pm-modi-must-avoid-casual-mentions-of-war-games-as-nuclear-rhetoric-is-not-not-meant-for-election-speeches>

Come Inside President Kennedy's Super Secret Nuclear War Bunker

The National Interest, April 26, 2019

In December 1960, the SeaBees – the U.S. Navy's construction force – supposedly began the mundane task of building a munitions depot behind the Coast Guard station on Peanut Island, Florida. Known as "Operation Hotel," the SeaBees actually built a secret nuclear fallout shelter for president-elect John F. Kennedy, who often spent his winters at a nearby estate on Palm Beach.

<https://nationalinterest.org/blog/buzz/come-inside-president-kennedys-super-secret-nuclear-war-bunker-54522>

Prof. Doubts China Would Like Trump's 'Grand Nuclear Deal' Proposal

Sputnik, April 27, 2019

Moscow has welcomed US President Donald Trump's proposal to Russia and China on nuclear disarmament and asked for more details. Alexander Gillespie, professor of international law at the University of Waikato in New Zealand, has spoken with Sputnik about the prospects of Trump's "grand plan's" implementation and the reasons behind the proposal.

<https://sputniknews.com/analysis/201904271074519741-trump-russia-usa-china-nuclear-deal/>

Globalizing the INF Treaty

Dinshaw Mistry, The National Interest, April 28, 2019

In August, the landmark Intermediate-Range Nuclear Forces (INF) Treaty between Russia and the United States will terminate unless both sides can resolve their differences over the accord. The treaty prohibits American and Russian ground-launched ballistic missiles and cruise missiles with ranges between 500 and 5,500 kilometers, and it resulted in the elimination of about 2,700 such missiles. Since 2014, however, the United States has repeatedly noted that Russia had breached the treaty by testing its 9M729 conventional cruise missile to distances beyond 500 kilometers – Russia reportedly now has about one hundred such missiles. The Trump administration has also expressed concerns about INF-type missiles in China and other countries.

Administration officials have kept open the option, even though the chances appear small, of remaining in the INF Treaty if Russia comes back into compliance. They have also suggested bringing other countries into an INF-like treaty. In his State of the Union address, President Donald Trump noted that "Perhaps we can negotiate a different agreement, adding China and others."

This issue was then raised by German chancellor Angela Merkel at the Munich Security Conference. Much earlier, in 2007, Russia had proposed, and the United States issued a joint statement with Russia supporting, a global INF.

<https://nationalinterest.org/feature/globalizing-inf-treaty-54342>

Full interview: Javad Zarif on “Face the Nation”

CBS, April 28, 2019

Margaret Brennan: Minister Zarif, you publicly floated this idea of a prisoner exchange with the U.S. What would that look like?

Foreign Minister Javad Zarif: Well, we’ve done it before. We had a possibility of getting the release of some Iranians who were in U.S. jails or were under probation in the United States. We removed them from that circumstances and- and then some U.S.-Iranians who were in jail in Iran were released. I think we can do it again. We- the administration- the previous administration was trying to engage in that. The new administration initially showed interest. We made an offer in September that we are ready, and we are ready.

<https://www.cbsnews.com/news/full-interview-javad-zarif-on-face-the-nation/>

Donald Trump: Serious about Arms Control?

David Wright, Union of Concerned Scientists, April 29, 2019

President Trump seems to understand a major lesson of the past 70 years of the nuclear age: Unconstrained arms races are dangerous and massively expensive.

The Washington Post reports that Trump “has ordered his administration to prepare a push for new arms-control agreements with Russia and China after bristling at the cost of a 21st-century nuclear arms race.” If one country builds more weapons to feel secure, this can cause other countries to feel less secure and lead them to build more

weapons in response. This cycle is the classic arms race.

<https://allthingsnuclear.org/dwright/trump-serious-about-arms-control>

India and Pakistan Will ‘Never Be Friends’ as U.S. Sits Out Aggressive Nuclear Threats

Ben Brown, CCN, April 29, 2019

As India and Pakistan continue to throw nuclear threats back and forth, a senior Indian government official tasked with diplomacy in external affairs has dampened any hopes for peace between the two nations. India’s minister of state for external affairs V.K Singh said this weekend that India and Pakistan will never be friends. The statement comes after months of tension between the two nuclear neighbors. The military posturing reached a peak last week when India’s prime minister Narendra Modi threatened Pakistan with the “mother of nuclear bombs.”

<https://www.ccn.com/india-pakistan-never-friends-nuclear-threats-us-sidelines>

Global Nuclear Reactor Construction Market (2018) By Manufacturers, Type and Application, With Sales Market Share and Growth Rate Forecasts till 2023

Jonathan Thomas, Norwalk Daily, April 30, 2019

Companies operating in the global Nuclear Reactor Construction market are focusing on merger and acquisitions and new product launches to gain competitive advantage. Growth strategies adopted by these companies are studied in detail in the report. The report also includes several valuable information on the Nuclear Reactor Construction market, derived from various industrial sources.

A nuclear reactor is a device used to initiate and control sustained nuclear chain reactions. Nuclear reactors are

deployed in nuclear power plants to generate electricity and for the propulsion of ships. Heat emitted from nuclear fission is passed to the working fluid, such as water or gas, to run the steam turbines. Nuclear reactors are deployed to generate isotopes utilized for medical & industrial purposes, and to produce weapons-grade plutonium. Some reactors are operated for research purposes only.

<http://norwalkdaily.com/2019/04/30/global-nuclear-reactor-construction-market-2018-by-manufacturers-type-and-application-with-sales-market-share-and-growth-rate-forecasts-till-2023/>

Nuclear Magnetic Resonance Spectrometer (NMR) Market to Set Phenomenal Growth by 2025

Majoreports, April 30, 2019

Global (United States, European Union and China) Nuclear Magnetic Resonance Spectrometer (NMR) Market Research Report 2019-2025 is latest research study released by HTF MI evaluating the market, highlighting opportunities, risk side analysis, and leveraged with strategic and tactical decision-making support. The study provides information on market trends and development, drivers, capacities, technologies, and on the changing capital structure of the Global (United States, European Union and China) Nuclear Magnetic Resonance Spectrometer (NMR) Market. Some of the key players profiled in the study are Bruker, JEOL, Thermo Fisher, Oxford Instruments, Nanalysis, Anasazi, Magritek, Spinlock, Shanghai Huantong & Oxford Instrument.

<https://majoreports.com/nuclear-magnetic-resonance-spectrometer-nmr-market-to-set-phenomenal-growth-by-2025-bruker-jeol-thermo-fisher/48826/>

Senator Richard G. Lugar: An appreciation

William Tobey, Bulletin of Atomic Scientist, April 30, 2019

Sen. Richard Lugar – with his legislative partner, Sen. Sam Nunn – imagined the unimaginable. He championed a program

to provide assistance to military forces in the former Soviet republics holding tens of thousands of nuclear, chemical, and biological weapons aimed at the United States and our allies, shortly after America's existential enemy, the Soviet Union, expired. All told, the Nunn-Lugar cooperative threat reduction program provided more than \$14 billion to, among other things, deactivate 13,300 nuclear warheads, eliminate 1,473 intercontinental ballistic missiles, and destroy almost 40,000 metric tons of chemical agents. The US departments of Defense and Energy also worked with Russia to improve security at 148 sites still holding nuclear weapons or weapons-grade material from Murmansk to Kamchatka.

<https://thebulletin.org/2019/04/senator-richard-g-lugar-an-appreciation/>

EUROPE

Fly me to the moon: Germany eyes slice of lucrative space market

Andrea Shalal, Reuters, April 30, 2019

Facing tough competition from China, the United States and even tiny Luxembourg, Germany is racing to draft new laws and attract private investment to secure a slice of an emerging space market that could be worth \$1 trillion a year by the 2040s. The drive to give Germany a bigger role in space comes as European, Asian and U.S. companies stake out ground in an evolving segment that promises contracts for everything from exploration to mining of outer-space resources. Firms likely to benefit from any future spending rise in Germany include Airbus, which co-owns the maker of Europe's Ariane space rockets, and Bremen-based OHB.

<https://in.reuters.com/article/us-space-exploration-germany-analysis/fly-me-to-the-moon-germany-eyes-slice-of-lucrative-space-market-idINKCN1S406Yn>

RUSSIA

Bad Cop, Mediator or Spoiler: Russia's Role on the Korean Peninsula

Alexander Gabuev, Carnegie Moscow,
April 24, 2019

The summit between Russian President Vladimir Putin and North Korean leader Kim Jong-un in the Russian city of Vladivostok brings Moscow back into the diplomatic game focused on the Korean Peninsula. This symbolic breakthrough aside, however, Russia doesn't have a very strong hand among all the global and regional powers involved in the crisis resolution. The tools Russia has at its disposal are too limited to have an impact on the calculations and behavior of North Korea or the U.S. As asymmetry in the Sino-Russian entente gradually grows in China's favor, Moscow is increasingly receptive to Beijing's agenda and prepared to play bad cop in an unofficial division of labor on the Korean Peninsula. Russia could, however, be an indispensable partner in a broader conversation on security mechanisms in Northeast Asia, including offensive missiles and missile defense systems. The current lack of this broader conversation makes a solution to the North Korean nuclear issue less likely, if not impossible.

<https://carnegie.ru/commentary/78976>

New Directions in Arms Control

Robert Joseph And Eric Edelman, National
Review, April 29, 2019

With the end of the Intermediate-Range Nuclear Forces (INF) Treaty rapidly approaching, public discussion is shifting to the question of whether to extend New START, the 2010 treaty that will soon be the only remaining agreement limiting the size of the U.S. and Russian nuclear arsenals. Under its terms, New START will expire in February 2021 unless both parties agree to an extension of up to five years. Advocates – in the arms-control community, in Congress, and reportedly some in the administration – argue that there is an

urgent need to endorse extension now. Their principal argument is that if New START expires, the entire fabric of the Cold War arms-control structure crafted with the Soviet Union will unravel and ignite a nuclear-arms race. The question of extending New START, however, is far more complex and must be assessed in light of fundamental changes in the geostrategic environment since the treaty was negotiated a decade ago.

<https://www.nationalreview.com/2019/04/arms-control-treaties-russian-chinese-nuclear-forces/>

Putin might be the last best hope for Kim Jong Un

Giorgio Cafiero, TRT World, April 30,
2019

After entering the White House in 2017, President Donald Trump was expected to reject all conventional thinking concerning North Korea. To Trump's credit, he has met face-to-face with Kim Jong Un, first in Singapore (June 2018) and again in Vietnam (February 2019).

As no past US president has met with a head-of-state from the Democratic People's Republic of Korea (DPRK), these meetings broke new ground in bilateral relations. Additionally, Trump's administration has also taken measures to communicate to Pyongyang that Washington is committed to compromise in pursuit of bolstering diplomacy, including the suspension of joint military exercises with South Korea.

<https://www.trtworld.com/opinion/putin-might-be-the-last-best-hope-for-kim-jong-un-26254>

ISRAEL

Israel's New Army Chief Has an Ambitious Plan

Amos Harel, Haaretz, April 18, 2019

Three months into the tenure of Aviv Kochavi as chief of general staff, his plans for the IDF are starting to become clearer. The general outline has been marked out and preliminary steps have already been

taken. But whether the ideas being formulated by the general staff go forward is dependent on others.

<https://www.haaretz.com/israel-news/premium-israel-s-new-army-chief-has-ambitious-plans-1.7137449>

Keep Up The Pressure

Jerusalem Post, April 23, 2019

A standing ovation must be extended to the United States for its continued tough stance against Iran: Secretary of State Mike Pompeo announced this week that the US would, as of early May, stop issuing waivers to the eight countries that are still trading oil with Iran.

“We are going to zero,” Pompeo said at a news conference on Monday, referring to the amount of Iran’s oil exports that the US would tolerate. “How long we remain at zero depends solely on the Islamic Republic of Iran’s senior leaders. We’ve made our demands very clear to the ayatollah and his cronies: end your pursuit of nuclear weapons, stop testing and proliferating ballistic missiles, [and] stop sponsoring and committing terrorism.”

<https://www.jpost.com/Opinion/Keep-up-the-pressure-587708>

Putin Walks Tightrope Between Israel and Iran

Dilip Hiro, Yale global Online, April 25, 2019

During the recent Israeli general election campaign, Donald Trump brazenly tipped the scales in favor of incumbent Benjamin Netanyahu against challenger Benny Gantz. On the eve of the Israeli prime minister’s March 25 visit to Washington, the US president endorsed Israel’s annexation of Syria’s Golan Heights in violation of United Nations resolutions. Netanyahu hailed this as “a miracle.” Then, Trump topped this dramatic move by declaring the Islamic Revolutionary Guard Corp of Iran, a sworn enemy of Israel, a terrorist organization a day before the 9 April polling date.

In between, Russian President Vladimir Putin provided Netanyahu with an electoral gift that captured the public’s imagination. Following his 4 April meeting with Putin in Moscow, Netanyahu announced that the remains of Sergeant Zachary Baumel, missing in action in Syria since 1982, had been returned to Israel. In a country where conscription applies to all Jewish citizens with a few minor exemptions, the news had personal resonance for nearly 80 percent of the population.

<https://yaleglobal.yale.edu/content/putin-walks-tightrope-between-israel-and-iran>

Editor’s Notes: Taking The Fight To The Iranians

Yaakov Katz, The Jerusalem Post, April 25, 2019

In 2003, while the United States was in the throes of building up its military forces in the Persian Gulf ahead of its planned invasion of Iraq, something interesting happened in another country nearby – Iran.

Fearing that they were next in line after the Taliban and Saddam Hussein, the ayatollahs in Tehran decided to do something until then believed to be impossible: completely suspend all nuclear activity, including the enrichment of uranium at Natanz, the construction of the Arak heavy water facility, and the covert weapons program.

<https://www.jpost.com/Opinion/Editors-Notes-Taking-the-fight-to-the-Iranians-587846>

In Arab Media, Increased Discussion Of Imminent Israel-Hizbullah War

H. Varulkar, The Middle East Media Research Institute, April 30, 2019

In recent weeks, there has been an upsurge in discussion in the Arab media, particularly in the Lebanese and Syrian media, of the possibility of war this summer between Israel and Hizbullah, and perhaps even of war across the region.

This is despite the fact that Hizbullah Secretary-General Hassan Nasrallah has reiterated that his organization is not anticipating a war in the near future and Lebanese President Michel Aoun also stated, on April 29, 2019, that war is not imminent.

Numerous factors have contributed to the spike in talk of war, first and foremost the U.S. sanctions on Iran, Syria, and Hizbullah that have exacerbated the economic crises they are already experiencing. Other factors include the April 8, 2019, U.S. designation of Iran's Islamic Revolutionary Guards Corps (IRGC) as a Foreign Terrorist Organization (FTO); U.S. Secretary of State Mike Pompeo's April 22 announcement that from May 3, 2019, the U.S. would not renew sanctions waivers for nations importing Iranian oil; and Iran's threats to close off the Strait of Hormuz.

<https://www.memri.org/reports/arab-media-increased-discussion-imminent-israel-hizbullah-war>

CENTRAL, SOUTH AND SOUTHEAST ASIA

Asia continues to pivot away from coal

Tim Buckley, *Asia Times*, April 26, 2019

The number of thermal coal plants in development pipelines of major Asian countries continues to free-fall, according to new data. The decline poses a warning to the world's biggest exporters of thermal coal – Australia and Indonesia – to check supply.

The latest coal-fired power plant data released by Global Energy Monitor (GEM) in March shows further shrinkage of coal development pipelines of Japan, Taiwan, Malaysia, India, Pakistan, Bangladesh, Vietnam and China. Countries across Asia are shifting away from thermal coal into cleaner renewable-energy options, further validating the prediction of the Institute for Energy Economics and Financial Analysis (IEEFA) that the Asian seaborne thermal coal market is approaching long-term, permanent decline.

<https://www.asiatimes.com/2019/04/opinion/asia-continues-to-pivot-away-from-coal/>

Q. Events organised by the Indian Pugwash Society

- The Indian Pugwash Society and the Institute for Defence Studies and Analyses (IDSA) organised a talk by Ms Elizabeth Minor, Visiting Scholar, Jindal School of International Affairs at O.P. Jindal Global University on '**The Future of Global Nuclear Disarmament**' on **April 24, 2019**. The talk was chaired by Professor Amitabh Mattoo, Professor of Disarmament Studies at Jawaharlal Nehru University.
- The Indian Pugwash Society and the Institute for Defence Studies and Analyses (IDSA) organised a presentation by Dr. G. Balachandran, Consulting Fellow at IDSA and Mr Kapil Patil, Associate Fellow, Vivekananda International Foundation on '**The Future of India's Nuclear Industry**' on **April 25, 2019**. Dr. Ravi B. Grover, Homi Bhabha Chair at the Department of Atomic Energy (DAE) was the discussant. Professor R. Rajaraman, Emeritus Professor of Theoretical Physics at School of Physical Sciences, Jawaharlal Nehru University chaired the presentation.

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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