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- Chandrayaan 2 mission not shelved, just delayed: Here is everything we know
- Chandrayaan-2 launch: How Isro created artificial moon surface to test rover, lander
- ISRO's Chandrayaan-2 launch at 2.43 pm today: Narrow window for second Moon shot
- After Chandrayaan-2, is India planning a third moon trip with Japan?
- Chandrayaan 2: How foreign media reacted to India's moon mission
- Chandrayaan 2: HRD Ministry encourages students to take up courses in aerospace engineering
- Aditya L-1: After Chandrayaan 2, Isro To Pursue India's First Mission To The Sun In 2020
- Meet the IIT Kharagpur alumni who steered India's second moon mission Chandrayaan-2
- Water bounty may await India's moon-bound Chandrayaan-2 mission
- Mann Ki Baat: Narendra Modi lauds Chandrayaan-II operation, development efforts in Jammu and Kashmir; says hate 'will never succeed'
- All parameters of Chandrayaan-2 for landing rover in lunar south pole normal: ISRO



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C. CHINA

- New recoverable satellite to lift off in 2020
- FAST scope to search for planets like Earth
- China masters fatigue-resistant tech for chopper
- US should end pressure on Iran: Beijing
- Chinese radar firm gives a glimpse on future AEW aircraft
- Hainan signs deal on small-scale modular nuclear reactor for clean electricity
- The road to the Red Planet
- China's space lab Tiangong-2 to reenter atmosphere under control
- China slams US on unilateral sanctions
- World's deepest underground laboratory starts new construction in SW China
- China to release new white paper on national defense
- Not difficult to send Chinese onto the moon: lunar probe chief designer chief
- AI to accelerate with global perspective
- China's Chang'e chief wishes India's Chandrayaan-2 landing on the moon a success
- U.S. sanctions Chinese oil buyer over alleged Iran violations
- Chinese company, owner indicted in U.S. on North Korea sanctions charges
- China issues white paper on national defense in new era
- Highland of Scientific Research and Talents Training set in Xi'an
- Defense white paper emphasizes outer space and cyberspace security
- Chang'e-4 new 'name card' for Chinese aerospace
- China welcomes France's offer to mediate Iran nuke issue
- PLA establishes modern weapons, equipment system: white paper
- China will never seek hegemony: defense white paper
- Chinese destroyer arrives in St. Petersburg for Russian Navy Day parade
- US targets China as main competitor in promotional video for new weapon
- China sanctions U.S. arms firms: what's the impact?
- China launches new remote sensing satellites
- Yangjiang nuclear power plant unit 6 gets ready for operation
- Private company makes space debut
- China's Iran oil imports plunge as U.S. sanctions bite
- China says all parties at Vienna nuclear meeting aim to safeguard nuclear deal
- Energy authority rejigs 3 nuclear power plants
- China June rare earth magnet exports to U.S. fall 3.9% from May
- Cambodia says to increase arms purchases from China
- Chinese missile destroyer partakes in Russian naval parade
- JCPOA signatories reaffirm commitment to Iran nuclear deal: Chinese delegate
- Iran's vice president urges China, friendly countries to buy oil
- China successfully tests accurate landing of rocket debris
- China rejects US withdrawal from the INF
- TV documentary on Chinese weaponry to air Thursday
- Shanghai to host world AI conference

D. PAKISTAN

- Scientists save India's moon mission from failure
- India reschedules launch of its moon mission for Monday
- Pak enhancing nuclear capabilities despite a crippling economy: Defence ministry
- India sends unmanned mission to Moon's far side
- India launches historic bid to put spacecraft on Moon

- Need to learn from India, say Pakistanis on Chandrayaan-2
- Nuclear war not option, India must abandon nuclear weapons: PM Imran
- Pakistan aims to send first astronaut into space by 2022
- India strides to space, eyes \$120 mln/year business
- Need to learn from India, say Pakistanis on Chandrayaan-2
- Pakistani astronaut to board Chinese rocket in race with India

E. USA

- US President rejects request for uranium import quota
- Nuclear waste storage resumes at Southern California plant
- Trump says 'not fair' that U.S. can't sell F-35s to Turkey
- U.S., Iran send conflicting signals on their disputes
- New Mexico regulators weigh nuclear power investments
- U.S. removing Turkey from F-35 programme after its Russian missile defence purchase
- U.S. sanctions network selling materials for Iran nuclear programme
- Even as Tensions With Iran Rise Over Seized Ship, U.K. Stays 'Committed' to Nuclear Deal
- Trump: Positive North Korea correspondence, but no time yet for talks
- Trump says it is getting harder for him to want to negotiate with Iran
- Three US firms awarded Mo-99 production funds
- Doosan, NuScale sign agreements for SMR cooperation
- First applications for Diakont's decontamination robot
- U.S. calls for no more North Korean 'provocations,' hopes to resume talks
- Trump's 'maximum pressure' campaign on Iran faces key test
- Calming the Persian Gulf: The experts on resolving the US-Iran standoff
- South Dakota 1950s uranium workers eligible for compensation
- Bill would provide relief for communities with nuke waste
- US denies it plans to quit nuclear test ban treaty
- Washington denies it plans to quit nuclear test ban treaty
- Bolton says 'flawed' New START treaty with Russia unlikely to last past 2021
- SNC-Lavalin and Holtec JV signs first contract

F. EUROPE

- EU works to save unraveling nuclear agreement with Iran
- Italy seizes 800kg missile from far-right sympathisers after raids uncover huge weapons stash
- German renewables deliver more electricity than coal and nuclear power for the first time
- German-Russian relations lauded at bilateral Petersburg Dialogue
- Germany and France condemn Iran's seizure of British tanker
- Britain calls Stena Impero oil tanker seizure 'hostile act' as Iran releases video of capture
- New audio shows UK could not prevent Iran takeover of tanker
- UK to launch European security mission over Iran row
- UK has sent mediator to Iran to seek freeing of seized tanker: senior Iranian official
- France stresses need for Iran to respect nuclear accord
- Diplomats recommit to saving Iran deal, oppose US sanctions
- New video from Iran shows Guard warning away UK warship
- The Latest: Iran's Rouhani seeks closer UK ties with Johnson
- Belgium broke law but can keep nuclear plants open, EU court rules

- NATO chief appeals to Russia ahead of missile pact deadline
- The Latest: Germany won't take part in US-led Gulf mission
- Germany will not join US naval mission in Strait of Hormuz

G. RUSSIA

- Can Russia and America Avoid a New Nuclear Arms Race?
- Second Russian Nuclear Plant Taken Down After Malfunction
- Russia calls on US to store nuclear weapons only on its own territory - diplomat
- China sees no grounds for participation in Russia-US nuclear arms treaty talks
- Kremlin throws weight behind EU effort to boost Iran trade
- Kalinin and Beloyarsk outages due to non-nuclear faults, says Rosenergoatom
- The 1 Way Russia Could Help China Build a Nuclear Powered Aircraft Carrier
- Russia and China sign fuel contract for new Tianwan units
- Russia denies it apologised to South Korea over alleged airspace breach - Ifax
- Iran's steps leave room for keeping nuclear deal - Russia's Deputy Foreign Minister
- Study points to Mayak as source of ruthenium release
- Russian spaceship brings 3 tons of supplies to space station

WEST ASIA

H. IRAN

- Uranium not to pass 4.5% purity for time being: Kamalvandi
- Iran's Zarif says U.S. travel curbs on Iranian diplomats 'inhuman'
- Jahangiri urges Europe to press U.S. to lift cruel sanctions
- Deputy Majlis speaker: Tanker seizure not to affect Iran's JCPOA decisions
- Iran's Khamenei issues new threat to ramp up Iran's nuclear program
- Iran says its missile programme is not negotiable
- Zarif says nuclear bombs won't augment Iran's security
- A U.S. return to JCPOA will help settle current crisis: diplomat
- Iran grain ships stuck in Brazil without fuel due to U.S. sanctions
- Iran's IRGC seizes foreign vessel smuggling fuel
- Iran's foreign minister, U.N. secretary-general meet in New York - IRNA
- Iran floats offer on nuclear inspections; U.S. sceptical
- Iran military says all its drones have returned safely to base: report
- Bolton's nuclear enrichment remarks lack legal validity: Shamkhani
- Iran dismisses rumors Fordow nuclear site is closed
- JCPOA parties to hold emergency meeting on July 28
- Two more Iranian ships may be stranded in Brazil as sanctions bite
- Iran says its seizure of British ship a 'reciprocal' move
- Iran warns West against starting conflict, says not looking for confrontation
- Iran's nuclear measures are legal, says envoy
- Iran is ready to negotiate but not if negotiations mean surrender - Iran president
- Iran defence minister says no Iranian drone has been downed
- Top Khamenei aide says no talks with U.S. under any circumstances
- Second Bushehr nuclear plant foundation laying to begin early August
- Iran says missile tests defensive, needs no one's permission
- Seizure of Iranian tanker is violation of nuclear deal: Araghchi
- Iran intends to restart activities at Arak heavy water nuclear reactor: ISNA news agency
- Iran says a European naval coalition for Gulf would send hostile message - Fars
- Iran says meeting with parties to nuclear deal 'constructive'
- Iran says meeting with parties to 2015 nuclear deal was 'constructive'
- Tehran open to talks if U.S. pays sanctions damages: Mirsalim

- Austria committed to nuclear deal, diplomat says
- Iran says it's prepared for dialogue if Saudi Arabia also ready
- U.S. to renew sanctions waivers for five Iran nuclear programs: Washington Post
- Defence minister says it's 'normal' for Iran to test missiles

I. ISRAEL

- Israel says Arrow-3 missile shield passes U.S. trials, warns Iran
- Israel tests US-backed missile shield over Alaska

J. SAUDI ARABIA

- Zarif reaches out for dialogue with Saudi Arabia, UAE

K. TURKEY

- Turkey removal from F-35 programme not legitimate - Turkish foreign ministry
- Turkey cannot have both F-35 and Russia's S-400: Trump nominee
- Rocket fired from inside Syria wounds five in Turkish border town - governor
- Iran warns West against starting conflict, says not looking for confrontation
- Turkey's first shipment of Russian S-400s complete, second planned for Ankara: officials

EAST ASIA

L. NORTH KOREA

- North Korea says nuclear talks at risk if U.S.-South Korea exercises go ahead
- North Korea: Kim Jong Un inspects new submarine
- One of the missiles North Korea fired was new design: South Korea official
- North Korea tests ballistic missiles, U.S. still hopeful for talks
- North Korea's economy tanks as sanctions, drought bite: South Korea
- North Korea's Kim says missile test a warning to South Korean 'warmongers'
- North Korea fires multiple ballistic missiles
- Flaws seen in Trump's calm response to North Korean missile launches
- North Korea official tells U.S. counterpart talks to begin soon: senior U.S. official
- U.N. Security Council to meet on North Korea missile launches: diplomats
- North Korea tests more missiles despite efforts at diplomatic solutions
- North Korean projectiles were ballistic missiles, flew about 250 km: South Korea
- UN Security Council to meet on North Korea

M. SOUTH KOREA

- US-NK talks likely to resume only after allies' joint drills: ex-minister
- Seoul leaves various possibilities open over Hormuz Strait issue: ministry
- US nuclear-powered attack submarine comes to S. Korean port
- Both missiles North Korea fired flew some 600 km - South Korea military
- NK calls for abrogation of military info-sharing pact between S. Korea, Japan

N. JAPAN

- Japan's Tepco to decommission second Fukushima nuclear station
- Japan says North Korea launched short-range ballistic missiles - Kyodo
- Noted filmmaker in Hiroshima to renew call to ban nuclear weapons
- Japan says North Korean launch didn't reach its territory or EEZ

O. MISC

- U.N. nuclear watchdog chief Amano dies aged 72
- Astronauts hailed as heroes 50 years after historic moon landing
- U.N. nuclear watchdog appoints Romanian diplomat Feruta as interim chief
- U.N. nuclear watchdog's chief plans to step down early: diplomats
- Cybersecurity by Design in Civil Nuclear Power Plants
- Canada launches environmental assessment of Micro Modular Reactor
- IAEA Director General Yukiya Amano passes away
- World's Largest Nuclear Fusion Experiment Clears Milestone
- U-Battery SMR moves to next stage of Canadian assessment

P. OP-ED

India

- 5 Missions in 5 yrs to study Solar System, Black holes
- India-US ties and the Soviet baggage
- 20 years after Kargil War: How India readied nuclear weapons in IAF's Mirage
- Kargil established India's image as a responsible power
- Remembering APJ Abdul Kalam: The Missile Man who vouched for India's Joint family system

Chandrayaan

- Apollo 11 And Chandrayaan-2: Major Moon Stories, Contrasting Lessons For Career Owners

China

- Tiangong-2's controlled re-entry shows China's international responsibility: chief designer
- China invites nations to join in moon exploration
- China, Russia, Europe to jointly explore plan for research station on Moon
- China risk cannot be ignored: expert
- Warning signs in Chinese launches
- China invites others to join moon program
- India 'paranoid' to conduct space war drill with eye on China: analyst
- Tech to help tame descent of rockets

Pakistan

- The Negative Nuclear Signaling And Anti-Pakistan Rhetoric In India's General Election 2019 - OpEd
- Should Pakistan denuclearize, if India does?

USA

- Inside Project A119, the secret US plan to detonate a nuclear bomb on the Moon
- Nevada: Feds should restudy seismic risk at nuke dump site
- Opinion: Detroit debate should address nuclear weapons
- Trump administration will again waive nuclear sanctions on Iran

Russia

- How Russia made USA addicted to its nuclear fuel
- Pillars of nuclear arms control are teetering

West Asia

Iran

- American rulers have created problems for entire world: Larijani
- "We'll see how it goes"
- Demand that the Mideast become a nuclear-weapon-free zone!
- Timeline: Iran's recent clashes with the West over Gulf shipping, nuclear plans

- White House narrative on JCPOA incoherent: analyst
- The different reactions of Arab governments and nations toward the seizure UK tanker

Israel

- Israel touts air defense system to South Korea

East Asia

Japan

- Latest science should apply to anti-quake steps of nuclear plants

Taiwan

- Agreements aim to boost satellite testing in Taiwan
- From moon walk to space wars

Q. THINK TANKS AND REPORTS

- Building the Bridge Commentary on Arms Control to Reduce Violence, Prevent Conflict and Advance Sustainable Development
- The International Atomic Energy Agency Could Improve Priority Setting, Performance Measures, and Funding Stabilization
- Spent Fuel Management: Four Decades of Research
- US Withdraws from INF Treaty August 2, Move Will Undermine US Security
- The biggest nuclear power plants in the US
- Order from Chaos: Iran's threats are an attempt to negotiate
- With Iran, Trump Speaks Loudly But (Fortunately) Carries a Small Stick
- Toward New Negotiations with Iran
- What's in it for China? A Beijing Insider's Surprising Insight on Nuclear Arms Control
- What Is the Status of the Iran Nuclear Agreement?

R. DOCUMENTS

US

- Notice of OFAC Sanctions Actions
- The United States To Impose Sanctions on Chinese Firm Zhuhai Zhenrong Company Limited for Purchasing Oil From Iran
- Notice of OFAC Sanctions Actions
- This Week in Iran Policy: Factsheet
- Notice of OFAC Sanctions Actions
- Secretary Pompeo Renews Nuclear Restrictions on Iran

S. INTERVIEW

- Full Disclosure: Extraterrestrials, No Nuclear War, End of the Deep State?
- Interview: PM Imran talks peace with Taliban, meeting Trump and 'concerns' about Pakistan's nuclear weapons
- Are Russia and America Headed Toward Nuclear War?
- Power generation in India
- France Is Moving Swiftly On Atomic Power Reactors At Jaitapur In Coming Months: French Ambassador Ziegler
- China, Russia and US define world order

A. India

Nuclear Plants Expansion Programme

PIB Delhi, July 17, 2019

Finance Minister's budget speech in Lok Sabha on 29.02.2016 for 2016-17 budget included the following reference to nuclear energy: Budgetary allocation up to ¹ 3,000 crore per annum, together with public sector investments, will be leveraged to facilitate the required investment for this purpose."

The Government has already accorded administrative approval and financial sanction for setting up four units of 700 MW each at Gorakhpur in Haryana and the first two units - GHAVP 1&2 (2X700 MW) are under construction. The process of identification of suitable sites for locating future nuclear power plants is an ongoing activity, carried out by the Standing Site Selection Committee (SSSC) of the Department of Atomic Energy.

<http://pib.nic.in/PressReleaseDetail.aspx?PRID=1579100>

GSLV MkIII-M1 Successfully Launches Chandrayaan-2 spacecraft

PIB Delhi, July 22, 2019

India's Geosynchronous Satellite Launch Vehicle GSLV MkIII-M1, successfully launched the 3840 kg Chandrayaan-2 spacecraft into an earth orbit today. The spacecraft is now revolving round the earth with a perigee (nearest point to Earth) of 169.7 km and an apogee (farthest point to Earth) of 45,475 km. Today's flight marks the first operational flight of the GSLV Mk III.

After a smooth countdown lasting 20 hours, GSLV MkIII-M1 vehicle majestically lifted off from the Second Launch Pad at the Satish Dhawan Space Centre SHAR (SDSC SHAR), Sriharikota in Andhra Pradesh at the scheduled launch time of 1443 Hrs (2:43 pm) Indian Standard Time (IST) with the ignition of its two S200 solid strap-on motors. All the subsequent flight events occurred as scheduled.

<http://pib.nic.in/PressReleaseDetail.aspx?PRID=1579794>

India to buy Russian rocket engines for its space programme: RIA

Reuters, July 22, 2019

India plans to buy rocket engines from Russia for its national space programme, RIA news agency cited Russian Deputy Prime Minister Yury Borisov as saying during a visit to New Delhi on Monday India launched a rocket into space on Monday in an attempt to safely land a rover on the moon, its most ambitious mission yet in the effort to establish itself as a low-cost space power.

<https://in.reuters.com/article/russia-india/india-to-buy-russian-rocket-engines-for-its-space-programme-ria-idINKCN1UH1UB>

New Space India Limited

PIB Delhi, July 24, 2019

The Union Government has already set up New Space India Limited (NSIL), a wholly owned Government of India undertaking/ Central Public Sector Enterprise (CPSE), under the administrative control of Department of Space (DOS) on 06th March 2019 to commercially exploit the research and development work of Indian Space Research Organisation (ISRO) Centres and constituent units of DOS.

NSIL has been incorporated to carry out the following roles and functions as part of its mandate viz. (i) Small Satellite technology transfer to industry, wherein NSIL will obtain license from DOS/ISRO and sub-license it to Industries; (ii) Manufacture of Small Satellite Launch Vehicle (SSLV) in collaboration with Private Sector; (iii) Productionisation of Polar Satellite Launch Vehicle (PSLV) through Indian Industry; (iv) Productionisation and marketing of Space based products and services, including launch and application; (v) Transfer of technology developed by ISRO Centres and constituent units of DOS; (vi) Marketing spin-off technologies and products/services, both in India and abroad; and (vii) any other subject which Government of India deems fit.

<http://pib.nic.in/PressReleaseDetail.aspx?PRID=1580096>

Radiation Technology for Sewage Treatment

PIB Delhi, July 24, 2019

Bhabha Atomic Research Centre (BARC) in collaboration with Amdavad Municipal Corporation (AMC), Ahmedabad has set up a Technology Demonstration Pilot Project "Sewage Sludge Hygienisation Plant" at Shahwadi, Ahmedabad. The plant loaded with 150 kCi of Co-60 was inaugurated in February 2019 and is in continuous operation since then. Another liquid sludge irradiator; Sludge Hygienisation Research Irradiator (SHRI) is operating at Vadodara for radiation treatment of raw sludge containing 3-4% solids since last 30 years. BARC has not set up any sewage plant in Maharashtra.

BARC has given wide publicity to the use of radiation technology for sewage treatment. BARC outreach programmes have been used as an effective platform to dispense information about this technology through oral presentations, animated videos, posters, demonstrations at different universities and institutions. The technology has been also propagated in scientific and public forums through theme meetings, workshops, seminars, newsletters etc. These efforts have resulted in wide coverage of this technology in print and digital media. This information was provided by the Union Minister of State (Independent Charge) Development of North-Eastern Region (DoNER), MoS PMO, Personnel, Public Grievances & Pensions, Atomic Energy and Space, Dr Jitendra Singh in written reply to a question in Lok Sabha today.

<http://pib.nic.in/PressReleaseDetail.aspx?PRID=1580067>

Import of Uranium

PIB Delhi, July 24, 2019

After assessment of long term demand of uranium in the country and supply of uranium from indigenous sources, Government shall decide on import of uranium from prospective suppliers. Government has taken measures to augment domestic uranium supply by state-of-the-art,

integrated, multi-disciplinary exploration in several potential thrust areas of the country.

Uranium Corporation of India Ltd. (UCIL) a Public Sector Undertaking under Department of Atomic Energy, has made a detailed plan in line with Government's vision to achieve self sufficiency in uranium production. Considering the resources already identified, major production centres are planned in Jharkhand, Andhra Pradesh, Karnataka, Telangana, Chattisgarh and Rajasthan.

<http://pib.nic.in/PressReleaseDetail.aspx?PRID=1580065>

Design, Manufacture and Deployment of NavIC Systems

PIB Delhi, July 25, 2019

About 8,900 NavIC SPS receivers were deployed for use by fishermen, Academic Institutes, R&D Organisations, vehicle trackers etc.

The recent developments in connection with NavIC Systems is as follows:

- i. ISRO has developed core technologies required for Standard Positioning Services (SPS) and Restricted Services (RS) services of IRNSS/NavIC.
- ii. In order to miniaturize and provide cost-effective NavIC solution, ISRO is developing various Application Specific Integrated Circuit (ASIC) based modules through industries and in-house projects.

The estimated amount spent towards above mentioned initiatives is approx. '32.50 Cr. This information was provided by the Union Minister of State (Independent Charge) Development of North-Eastern Region (DoNER), MoS PMO, Personnel, Public Grievances & Pensions, Atomic Energy and Space, Dr Jitendra Singh in written reply to a question in Rajya Sabha today.

<http://pib.nic.in/PressReleaseDetail.aspx?PRID=1580252>

Corrected: India's moon mission Chandrayaan-2 lifts off, hopes to probe lunar south pole

P. Ravikumar, Sachin Ravikumar, Reuters, July 25, 2019

India launched a rocket into space on Monday in an attempt to safely land a rover on the moon, its most ambitious mission yet in the effort to establish itself as a low-cost space power. If successful, the \$146 million mission will allow Indian scientists to carry out studies on the presence of water at the moon's south pole, unexplored by any other nation before.

"This mission will offer new knowledge about the Moon," Prime Minister Narendra Modi tweeted, praising the scientists responsible for what he called a fully indigenous mission. China, Russia and the United States are the only other nations to have sent missions to the moon.

<https://in.reuters.com/article/space-exploration-india-moon/corrected-indias-moon-mission-chandrayaan-2-lifts-off-hopes-to-probe-lunar-south-pole-idINKCN1UH0WC>

Achievements in Atomic Energy Sector

PIB Delhi, July 25, 2019

The remarkable achievements in the nuclear power sector during the last three years include:

- i. Setting of World Record in continuous operation of 962 days by Unit-1 of Kaiga Generating Station among nuclear power plants of all technologies.
- ii. Completion of 50 years of safe operation of Units 1&2 of Tarapur Atomic Power Station (TAPS-1&2), which are currently the oldest reactors in operation in the world.
- iii. Addition of a nuclear power capacity of 1000 MW by completion of KKNPP- 2 at Kudankulam, Tamil Nadu.
- iv. First Pour of Concrete (FPC) in KKNPP-3&4 (2X1000 MW) at Kudankulam, Tamil Nadu.

- v. Ground break for KKNPP-5&6(2X1000 MW) at Kudankulam, Tamil Nadu.
- vi. Environmental clearance from MoEF&CC for setting up nuclear power plants at Chutka in Madhya Pradesh.
- vii. Accord of administrative approval and financial sanction of - ten (10) indigenous 700 MW Pressurized Heavy Water Reactors (PHWRs) to be set up in fleet mode & two (02) units of Light Water Reactors (LWRs) being set up in cooperation with Russian Federation.
- viii. Entering into enabling agreements with foreign countries for nuclear power cooperation including supply of fuel.
- ix. During the last three years (i.e. since July 2016), AMD has augmented atomic mineral resources as detailed below.
 1. 80,221 tonne (t) *in-situ* uranium oxide (U_3O_8). The total uranium resources of the country is 3,20,445t *in situ* U_3O_8 (2,71,737 t U).
 2. 108.28 million tonnes beach sand heavy minerals resources, thereby updating the country's beach sand heavy mineral resources to 1173.07 million tonnes.
 3. 3,46,462 tonne Rare Earth Elements Oxide and 19,564t Nb_2O_5 (Niobium Oxide) is estimated in Ambadongar area, Chhota Udepur district, Gujarat.
- x. Uranium Corporation of India Ltd. (UCIL) has commissioned the Tummalapalle Uranium mining and milling project in Andhra Pradesh in January 2017.

<http://pib.nic.in/PressReleaseDetail.aspx?PRID=1580253>

No First Use policy a good position to keep: Dr. Chidambaram

Dinakar Peri, The Hindu July 18, 2019

India's declared No First Use (NFU) policy on nuclear weapons as part of its nuclear doctrine is a "good position" to keep, Dr. R. Chidambaram, one of India's top nuclear scientists, said on Wednesday. "As part of our nuclear doctrine and as a responsible country that is a good position to take and keep. If all countries in the world with nuclear weapons agree to NFU, it is equivalent to global disarmament," said Dr. Chidambaram, former Chairman, Atomic Energy Commission, who is currently the Homi Bhabha Chair Professor at Bhabha Atomic Research Centre (BARC). He was speaking at the third Jasjit Singh memorial lecture organised by the Centre for Air Power Studies.

<https://www.thehindu.com/news/national/no-first-use-policy-a-good-position-to-keep-dr-chidambaram/article28531080.ece>

World's Largest Nuclear Fusion Experiment Clears Milestone

Scientific American, July 24, 2019

A multinational project to build a fusion reactor cleared a milestone yesterday and is now 6 ½ years away from "First Plasma," officials announced. Yesterday, dignitaries attended a components handover ceremony at the construction site of the International Thermonuclear Experimental Reactor in southern France. The ITER project is an experiment aimed at reaching the next stage in the evolution of nuclear energy as a means of generating emissions-free electricity.

The section recently installed – the cryostat base and lower cylinder – paves the way for the installation of the tokamak, the technology design chosen to house the powerful magnetic field that will encase the ultra-hot plasma fusion core.

https://www.scientificamerican.com/article/worlds-largest-nuclear-fusion-experiment-clears-milestone/?fbclid=IwAR0n9_ECQPV8c4WFUI11lqXeZF9l0xz2oEqJxOYXEwONAO5zGhgZiMWWfjBE

Kargil Vijay Diwas: Recounting the peak of Indian military victory 20 years ago

India Today, July 26, 2019

The country will celebrate the 20th anniversary of the Kargil Vijay Diwas today. On this day in 1999, the Kargil War, also known as the Kargil conflict, formally came to an end, with Indian soldiers successfully recapturing mountain heights that had been seized by Pakistani intruders.

The Kargil War was the last time India and Pakistan came to a full-blown armed conflict. The Kargil War was also the first time India and Pakistan got into an armed conflict after becoming nuclear powers. The Kargil War was prompted by the Pakistan Army intruding into India across the Line of Control and capturing strategic mountain peaks. The intrusion was first detected in May 1999, but at that time it was assumed that the intruders were militants or terrorists and not regular Pakistan Army troops.

<https://www.indiatoday.in/india/story/kargil-vijay-diwas-recounting-the-peak-of-indian-military-victory-20-years-ago-1573689-2019-07-26>

Hyderabad connect to Chandrayaan-2!

Joyeeta Basu, Deccan Herald, July 26, 2019

It's probably one of the city's best kept secrets – but the euphoria inducing launch of India's Moon mission, Chandrayaan-2 that hit the headlines across the world – was made by a Hyderabad-based company. Some of the crucial parts of the spacecraft were made by MTAR Technologies in Balanagar, which not only manufactured the core parts for the powerful main rocket engine, but also the core pumps of its cryogenic engines required for take-off.

Srinivas explains that the one major technological advancement of Chandrayaan-2 is its engine, whose overall fuel efficiency is 15 per cent higher than previous rocket engines, allowing the spacecraft to make a series of manoeuvres more easily. "This means that landing near

the South Pole of the Moon can happen even a day earlier than the scheduled date of September 7," he shares.

<https://www.deccanchronicle.com/nation/current-affairs/260719/hyderabad-connect-to-chandrayaan-2.html>

‘Na dabav, na prabhav, na abhav’: PM Modi says India won’t succumb to any pressure in matters of national security

DNA, July 28, 2019

Prime Minister Narendra Modi on Saturday asserted that India will not succumb to any pressure or influence in matters of national security, as he emphasised the importance his government gives to the armed forces. In an address at an event to mark the 20th anniversary of Kargil War, Modi also sent out a strong message to Pakistan against repeat of such misadventures, saying the Indian armed forces had defeated the neighbouring country’s evil designs two decades back. He said conflicts in today’s time have reached space, and the cyber world.

“The Armed Forces must be modernised and it is also our priority. We will not succumb to any pressure or influence in the matters of national security. (Rashtra ki suraksha ke liye na kisike dabav mein kaam hoga, na prabhav mein aur na hi kisi abhav mein). From deep sea to the infinite universe, India will use its competency to its fullest,” he said.

<https://www.dnaindia.com/india/report-na-dabav-na-prabhav-na-abhav-pm-modi-says-india-won-t-succumb-to-any-pressure-in-matters-of-national-security-2776451>

Thailand in talks with India to buy BrahMos cruise missiles

Dinakar Peri, The Hindu, July 31, 2019

The two navies are working closely in the areas of disaster risk management, maritime security safety, information sharing and interoperability

In possibly the first sale of BrahMos supersonic cruise missiles to another country, Thailand is in talks with India for

their purchase, official sources said. A few other countries have also expressed interest in BrahMos but nothing has fructified yet.

<https://www.thehindu.com/news/national/thailand-in-talks-with-india-to-buy-brahmos-cruise-missiles/article28775607.ece>

B. Chandrayaan-2

Chandrayaan 2 mission not shelved, just delayed: Here is everything we know

Firstpost, July 17, 2019

In a dramatic but very anti-climactic turn of events, the Indian Space and Research Organisation (ISRO) called off the much-awaited Chandrayaan 2 launch last night. The mission was cancelled 56 minutes before the planned launch at 2.51 am on 15 July. ISRO send out a tweet saying that the mission had to be cancelled due to a technical snag, but it did not specify anything nor did the ISRO Associate Director (Public Relations Officer) B R Guruprasad say much when he read out a small announcement at 2.40 am saying almost the same things like the tweet.

<https://www.firstpost.com/india/chandrayaan-2-mission-not-shelved-just-delayed-here-is-everything-we-know-7001831.html>

Chandrayaan-2 launch: How Isro created artificial moon surface to test rover, lander

India Today, July 21, 2019

The Indian space agency has done some hard work on the ground so that its moon lander – Vikram – can soft-land safely and rover – Pragyaan – can move around, said a senior retired official. “The surface of the earth and that of the moon are entirely different. So we had to create an artificial moon surface and test our rover and lander,” M. Annadurai, who retired as Director, U.R. Rao Satellite Centre (URSC), formerly ISRO Satellite Centre told IANS.

<https://www.indiatoday.in/science/story/chandrayaan-2-launch-how-isro-created-artificial-moon-surface-to-test-rover-lander-1571883-2019-07-21>

ISRO's Chandrayaan-2 launch at 2.43 pm today: Narrow window for second Moon shot

Amitabh Sinha, The Indian Express, July 22, 2019

Chandrayaan-2 launch at 2.43 pm today: This time, scientists have very little flexibility in terms of time as the suitable slot during which the spacecraft can be launched lasts barely a few minutes. A week after they had to postpone the launch of Chandrayaan-2 less than an hour before lift-off, scientists of the Indian Space Research Organisation (ISRO) will try to make use of an extremely narrow window of opportunity Monday afternoon to make another attempt at sending India's first lander mission to the Moon.

<https://indianexpress.com/article/technology/science/lift-off-at-2-43-pm-today-narrow-window-for-second-moon-shot-5840937/>

After Chandrayaan-2, is India planning a third moon trip with Japan?

Madhumathi D.S., The Hindu, July 22, 2019

After the Chandrayaan-2 mission launch on Monday, is another lunar journey in the offing around 2024 to bring soil and rock samples back from the South Pole of the Moon? The Indian Space Research Organisation (ISRO) has initiated talks on this with Japan Aerospace Exploration Agency (JAXA), as indications show. We first heard about Chandrayaan-3 from the then chiefs of ISRO and JAXA in November 2017 during the Asia Pacific Regional Space Agency Forum APRSAF-24 held in Bengaluru.

<https://www.thehindu.com/news/national/chandrayaan-2-after-chandrayaan-2-is-a-moon-3-sample-return-trip-next-with-japan/article28655993.ece>

Chandrayaan 2: How foreign media reacted to India's moon mission

Times Now News, July 22, 2019

A week after its first launch was cancelled in the last hour due to a technical snag, Chandrayaan 2 moon mission was

successfully blasted off from the Satish Dhawan Space Centre in Sriharikota, Nellore district of Andhra Pradesh. The unmanned Indian moon mission has been aimed to further explore water molecules and Helium-3 on the moon which was earlier reported during its first Chandrayaan mission. Importantly, if the Chandrayaan 2 manages to successfully land on the moon's surface, India will become the fourth country after the US, China and Russia to ever do so. Moreover, it has been sent to explore the South Pole of the moon which no country has ever done before in the past. The lander is expected to break off from the orbiter and gently land on the moon's surface in September.

<https://www.timesnownews.com/india/article/chandrayaan-2-how-foreign-media-reacted-to-indias-moon-mission/457530>

Chandrayaan 2: HRD Ministry encourages students to take up courses in aerospace engineering

India Today, July 23, 2019

Lauding the successful launch of Chandrayaan 2, the HRD Ministry on Monday encouraged students to take up careers in aerospace engineering and said its 'Swayam' portal will offer online courses on the subject from July 29. Lauding the successful launch of Chandrayaan 2, the HRD Ministry on Monday encouraged students to take up careers in aerospace engineering and said its 'Swayam' portal will offer online courses on the subject from July 29.

<https://www.indiatoday.in/education-today/news/story/chandrayaan-2-hrd-ministry-courses-in-aerospace-engineering-divd-1572476-2019-07-23>

Aditya L-1: After Chandrayaan 2, Isro To Pursue India's First Mission To The Sun In 2020

Firstpost, July 25, 2019

After the spectacularly successful launch of India's second mission to the moon, Chandrayaan 2, the Indian Space Research Organisation is now gearing up

for India's first mission to the Sun. The Aditya L-1 mission, which is currently still in its planning stage, could be launched as early as the beginning of 2020, according to previous reports. After NASA's Parker Solar Probe launched in 2018, Aditya-L1 will be the first probe to make observations crucial to better understanding the Sun. The Aditya-L1 mission is ISRO's first planned probe to study the Sun's corona and its atmosphere. It is expected to launch in 2020 on a PSLV rocket from Sriharikota.

<https://www.firstpost.com/tech/science/aditya-l-1-after-chandrayaan-2-isro-to-pursue-indias-first-mission-to-the-sun-in-2020-7053851.html>

Meet the IIT Kharagpur alumni who steered India's second moon mission Chandrayaan-2

India Today, July 25, 2019

It was a week of celebration with India's moonshot Chandrayaan-2 being launched by Indian Space Research Organization (ISRO) from the spaceport at Sriharikota at Andhra Pradesh. And this time too, IIT Kharagpur has a reason to give its traditional tempo shout. Two researchers and IIT Kharagpur alumni – Dr V Narayanan and KC Raghunatha Pillai – were among the noted scientists who played a key role in the successful launch of GSLV MkIII M1 or Chandrayaan-2.

Alumnus Dr V Narayanan, an expert in cryogenic rocket propulsion technology, was responsible for the manufacture of GSLV rocket's cryogenic and liquid engines. And then there is KC Raghunatha Pillai, a rocket specialist who did MTEch in Cryogenic Engineering in 1986 from IIT Kharagpur.

<https://www.indiatoday.in/education-today/news/story/meet-the-iit-kharagpur-alumni-who-steered-india-s-second-moon-mission-chandrayaan-2-1573531-2019-07-25>

Water bounty may await India's moon-bound Chandrayaan-2 mission

The Indian Express, July 27, 2019

India's Chandrayaan-2 mission, which is on its way to the Moon, maybe up for a pleasant

surprise when it lands a rover on the uncharted lunar south pole as latest studies suggest that there may be way more ice water in the region than previously thought. The Moon's south pole region is home to some of the most extreme environments in the solar system: it's unimaginably cold, massively cratered, and has areas that are either constantly bathed in sunlight or in darkness.

<https://indianexpress.com/article/technology/science/water-bounty-may-await-indias-moon-bound-chandrayaan-2-mission-5856426/>

Mann Ki Baat: Narendra Modi lauds Chandrayaan-II operation, development efforts in Jammu and Kashmir; says hate 'will never succeed'

Firstpost, July 28, 2019

During his monthly 'Mann Ki Baat' address, Prime Minister Narendra Modi cited the 'Back to village' programme in Jammu and Kashmir and said that those spreading hate and obstructing development in the state "will never succeed". He also lauded scientists from the Indian Space Research Organisation (ISRO) for successfully launching Chandrayaan-II after suffering a "setback" and said that the two greatest lessons from the mission are "fearlessness and faith".

<https://www.firstpost.com/politics/mann-ki-baat-narendra-modi-lauds-chandrayaan-ii-operation-development-efforts-in-jammu-and-kashmir-says-hate-will-never-succeed-7069091.html>

All parameters of Chandrayaan-2 for landing rover in lunar south pole normal: ISRO

Livemint, July 29, 2019

Spacecraft parameters of India's second moon mission Chandrayaan-2, aimed at landing a rover on the uncharted Lunar South Pole, are "normal", the Indian Space Research Organisation (ISRO) said on Monday, as it successfully raised the craft's orbit around the Earth for the third

time. In a giant leap for the country's ambitious low-cost space programme, ISRO's most powerful three-stage rocket GSLV-MkIII-M1 had launched the spacecraft into the Earth's orbit on July 22 from the spaceport in Andhra Pradesh's Sriharikota.

The agency has planned a total of 15 orbit raising manoeuvres before the 3,850 kilogramme (kg) three-module Chandrayaan-2 comprising an orbiter, lander and rover is brought around the Moon, which is at a distance of nearly four lakh kms from the Earth.

<https://www.liveint.com/science/news/all-parameters-of-chandrayaan-2-for-landing-rover-in-lunar-south-pole-normal-1564409648053.html>

C. China

New recoverable satellite to lift off in 2020

Zhao Lei, China Daily, July 16, 2019

China is developing a new type of recoverable satellite that is reusable and intends to use it for commercial purposes, according to China Aerospace Science and Technology Corp, a State-owned space giant in charge of the program. The company said the new model will be designed to meet growing demand for space-based scientific experiments from a wide range of industries, including space science, agriculture, pharmaceuticals and energy. The first such satellite is scheduled to be launched in 2020.

<http://www.chinadaily.com.cn/a/201907/16/WS5d2cb0a7a3105895c2e7d8e3.html>

FAST scope to search for planets like Earth

China Daily, July 16, 2019

The largest and most sensitive radio telescope ever built will hunt for signals from alien life and search for extrasolar planets - or exoplanets, which have magnetic fields like our planet - within 100 light-years of Earth. Astronomers from countries including China and France recently published their ambitious observation plan using the Five-hundred-meter Aperture Spherical Radio

Telescope (FAST) in the academic journal *Research in Astronomy and Astrophysics*.

Li Di, a researcher at the National Astronomical Observatories of the Chinese Academy of Sciences and chief scientist of FAST, said scientists are more concerned about habitable planets, which should have not only water, a suitable temperature and atmosphere, but also a magnetic field.

<http://www.chinadaily.com.cn/a/201907/16/WS5d2d2a2fa3105895c2e7da3f.html>

China masters fatigue-resistant tech for chopper

Liu Xuanzun, Global Times, July 16, 2019

China recently mastered a new fatigue-resistant technology for helicopter rotors, which could greatly expand the helicopters' capability and service time, a development which military experts said on Tuesday could be of strategic value to China's domestic helicopter industry as the technology could be used on China's future heavy-lift transport helicopters and attack helicopters. During the development of an unidentified helicopter, engineers at Changhe Aircraft Industry (Group) Corporation Ltd under the state-owned Aviation Industry of China (AVIC) found that the newly designed rotor using a titanium alloy failed to pass fatigue tests, China Aviation News, a newspaper affiliated with AVIC, reported on Tuesday.

<http://www.globaltimes.cn/content/1158062.shtml>

US should end pressure on Iran: Beijing

Global Times, July 16, 2019

As the initiator of the current Iranian nuclear tensions, the US should address the concern of the vast majority of the international community and give up the wrong practice of putting extreme pressure on Iran, China's Foreign Ministry said on Tuesday.

Geng Shuang, spokesperson for Chinese Foreign Ministry, made the remarks at a

regular media briefing, one day after Federica Mogherini, EU's foreign affairs and security policy chief, said at an EU foreign ministers meeting in Brussels that they don't view Iran's breaches as significant non-compliance to the nuclear deal.

<http://www.globaltimes.cn/content/1158110.shtml>

Chinese radar firm gives a glimpse on future AEW aircraft

Liu Xuanzun, Global Times, July 17, 2019

Future airborne early warning (AEW) aircraft could become unmanned, interconnected and highly intelligent, and will no longer need the traditional mounted radome, giving their greater aerodynamic and stealth capabilities, said China's top radar firm. Chinese military observers said on Wednesday that China is likely developing such aircraft.

In an article introducing AEW system aircraft written by the 14th Research Institute of China Electronics Technology Group Corporation (CETC) and posted on its public WeChat account on Tuesday, the company not only gave an overview on the history and facts of AEW carrying aircraft around the world, but also shared its vision on how this type of warplane could develop in the future.

<http://www.globaltimes.cn/content/1158198.shtml>

Hainan signs deal on small-scale modular nuclear reactor for clean electricity

Chu Daye, Global Times, July 18, 2019

The Hainan Free Trade Zone in South China will be powered by clean electricity generated by a state-of-the-art small modular nuclear reactor developed by nuclear giant China National Nuclear Corp (CNNC), the company said on Thursday. A Hainan-based expert said the nuclear deal will give the island badly-needed energy at low costs, in a sustainable fashion, and it will power up the internet and information technology sectors the island has tied its

future to. "The company shares a responsibility and has the capacity to provide a green energy engine that will power up Hainan's future growth," CNNC said in a statement sent to the Global Times on Thursday.

<http://www.globaltimes.cn/content/1158378.shtml>

The road to the Red Planet

Zhao Yimeng, China Daily, July 19, 2019

The launch window for a Mars probe appears once every two years, when conditions are favorable for scientists to attempt further exploration of the Red Planet. Several probes are scheduled to be launched next year, signaling probably the most intense period of Martian exploration in history, Pang Zhihao, a spaceflight researcher at the China Academy of Space Technology, told Beijing News. In addition to China's Mars 2020 mission spacecraft, which has yet to be officially named, NASA's 1 metric ton rover, the European Space Agency-Russian ExoMars lander and rover, and orbiters from the United Arab Emirates and India are scheduled to be sent to Mars next year, according to SpaceNews.

Chinese scientists anticipate that the country's first mission to the Red Planet will include orbiting, soft landing and roving on the Martian surface, an unprecedented achievement in the history of space flight.

<http://www.chinadaily.com.cn/a/201907/19/WS5d31195ca310d830563ffdb5.html>

China's space lab Tiangong-2 to reenter atmosphere under control

Xinhua, July 19, 2019

China's space lab Tiangong-2 is scheduled to reenter the Earth's atmosphere Friday night (Beijing time), the China Manned Space Engineering Agency announced. The first orbit control on Tiangong-2 was completed on Thursday. The spacecraft, in normal and stable condition, was operating in an elliptical orbit with the

perigee at 190 km and the apogee at 370 km by 5:30 pm on Friday, said the agency.

http://www.xinhuanet.com/english/2019-07/19/c_138241447.htm

China slams US on unilateral sanctions

Global Times, July 19, 2019

China has made representations to the US and urged the US to correct its wrong practices, China's Foreign Ministry said on Friday, after the US Treasury Department announced sanctions on Chinese companies over the Iranian nuclear issue. Geng Shuang, spokesperson of China's Foreign Ministry, told Friday's media briefing that China resolutely opposes the US' use of its laws to impose unilateral sanctions on other countries, including China, and its so-called "long-arm jurisdiction."

Geng pointed out that the root cause of the current tensions on the Iranian nuclear issue is the US imposition of extreme pressure on Iran through unilateral sanctions and long-arm jurisdiction. He urged the US to truly respond to the concerns of the international community and return to the correct path of maintaining the Joint Comprehensive Plan of Action on nonproliferation, Geng said China is firmly opposed to any form of proliferation activity, and always strictly complies with relevant international obligations.

<http://www.globaltimes.cn/content/1158461.shtml>

World's deepest underground laboratory starts new construction in SW China

Xinhua, July 21, 2019

The world's deepest underground laboratory in southwest China's Sichuan Province started construction on a major new physical research project Saturday, according to the laboratory. The project is among the most important of China's scientific and technological infrastructure push during the 13th Five-Year Plan (2016-2020) period, which aims to focus on cutting-edge research in particle physics and other fields.

The 2,400-meter-deep laboratory, which was put into use in 2010, is the deepest underground laboratory in the world. The lab space expanded to 300,000 cubic meters from 4,000 cubic meters in 2014. A series of dark matter detection experiments conducted by China's top universities including Tsinghua University have been launched at the laboratory.

http://www.xinhuanet.com/english/2019-07/21/c_138245060.htm

China to release new white paper on national defense

China Military Online, July 22, 2019

The white paper on China's National Defense in the New Era will be released on Wednesday at 10 o'clock. The Information Office of China's State Council will hold a press conference at the same time.

http://eng.chinamil.com.cn/view/2019-07/22/content_9564806.htm

Not difficult to send Chinese onto the moon: lunar probe chief designer

Deng Xiaoci, Global Times, July 22, 2019

Chinese scientists are conducting scientific feasibility studies on sending the country's astronauts to the moon, China's lunar probe program chief designer Wu Weiren told the Global Times on Monday. "Sending Chinese people to the moon won't be too much of a problem," said at a press conference ahead of the 4th International Conference on Lunar and Deep Space Exploration held in Zhuhai, South China's Guangdong Province, on Monday. China still has unmanned Chang'e-5, -6, -7, -8 missions coming up until 2030, Wu Yanhua, deputy director of the CNSA said in January. Chang'e-5 will return samples from the moon in a mission scheduled around 2020, Wu told the Global Times. He also said that Chang'e-6 will conduct a similar mission, but with samples from the south pole of the moon.

Whether the Chang'e-6 probe will also land on the far side will depend on the Chang'e-5 sample. Chang'e-7 will comprehensively explore the moon, whereas Chang'e-8 will explore the possibility of building an international lunar research base, the CNSA deputy head said. Chang'e-8 will test 3D printer technology in hopes of assisting future lunar residents. "The landing location and research goals for Chang'e-6 will be later determined, after taking the performance of Chang'e-5 into consideration," Pei said on Monday.

<http://www.globaltimes.cn/content/1158744.shtml>

AI to accelerate with global perspective

Global Times, July 22, 2019

China is set to accelerate the development of artificial intelligence (AI) with a global and forward-thinking perspective, a domestic technology industry leader said. The fast-growing AI sector needs technological breakthroughs and guiding principles to support further development, the expert said. Robin Li Yanhong, CEO of domestic technology giant Baidu, published an article on Monday in the People's Daily on the development of AI, calling for a "strategic, global, forward-looking and ethical" perspective to interpret and foresee the development of AI. Li stated that China needs to work faster to develop the new generation of AI backed up with strong research and development capability.

<http://www.globaltimes.cn/content/1158776.shtml>

China's Chang'e chief wishes India's Chandrayaan-2 landing on the moon a success

Deng Xiaoci, Global Times, July 22, 2019

China's lunar exploration program chief Wu Weiren Monday wished India's landing on the moon "a success despite previous delays," after the South Asian country's successful launch of a rocket carrying its latest generation of lunar probe Chandrayaan-2. Wu made the statement on the sidelines of the 4th International

Conference on Lunar and Deep Space Exploration which kicked off on Monday and is to be concluded on Wednesday in Zhuhai, South China's Guangdong Province.

<http://www.globaltimes.cn/content/1158779.shtml>

U.S. sanctions Chinese oil buyer over alleged Iran violations

Reuters, July 23, 2019

The United States has sanctioned Chinese state-run energy company Zhuhai Zhenrong Co Ltd for allegedly violating restrictions imposed on Iran's oil sector, U.S. Secretary of State Mike Pompeo said in a speech on Monday. "We've said that we will sanction any sanctionable behavior, and we mean it," Pompeo said in a speech in Florida in which he announced the move. It comes amid increased tensions between Iran and the West as well as between the United States and China, which have been engaged in a major trade war.

<https://in.reuters.com/article/usa-iran-china-sanctions/u-s-sanctions-chinese-oil-buyer-over-alleged-iran-violations-idINKCN1UH1UQ>

Chinese company, owner indicted in U.S. on North Korea sanctions charges

Jonathan Stempel, Reuters, July 23, 2019

A Chinese company, its owner and three managers have been indicted on charges of conspiring to evade U.S. sanctions meant to stop North Korean firms from helping Pyongyang to develop nuclear weapons and ballistic missiles, the U.S. Department of Justice said on Tuesday. The indictment was announced as the White House pushes to restart stalled talks aimed at ending Pyongyang's nuclear program, after an aborted February summit between President Donald Trump and North Korean leader Kim Jong Un.

<https://in.reuters.com/article/us-usa-crime-northkorea-charges/chinese-company-owner-indicted-in-u-s-on-north-korea-sanctions-charges-idINKCN1UI2CM>

China issues white paper on national defense in new era

Xinhua, July 24, 2019

China on Wednesday issued a white paper to expound on its defensive national defense policy in the new era and explain the practice, purposes and significance of China's efforts to build a fortified national defense and a strong military. Titled "China's National Defense in the New Era," the white paper was released by the State Council Information Office, with a view to helping the international community better understand China's national defense.

The main body of the white paper was divided into six sections: the international security situation, China's defensive national defense policy in the new era, fulfilling the missions and tasks of China's armed forces in the new era, reform in China's national defense and armed forces, reasonable and appropriate defense expenditure, and actively contributing to building a community with a shared future for mankind. It is the 10th white paper on national defense the Chinese government has issued since 1998

http://www.xinhuanet.com/english/2019-07/24/c_138253180.htm

Highland of Scientific Research and Talents Training set in Xi'an

China Daily, July 24, 2019

The Research Institute of Electrical Engineering of Xi'an Jiaotong University settled on July 23 in China West Science and Technology Innovation Harbor, as a representative of scientific research and talent training for electrical engineering. Its establishment will bring focus to the major needs of energy reform in China, adhere to the concept of "electrical +" development, take solving bottlenecks and key issues in the future development of China's power grid as its core, and build large scientific installations as its means of engagement. Electrical engineering studies the scientific and technological problems in energy and electricity. It involves the fields of the environment, space, ocean, daily life and

national defense. It is the core in the field of modern science and technology.

http://www.chinadaily.com.cn/edu/2019-07/24/content_37494949.htm

Defense white paper emphasizes outer space and cyberspace security

Zhao Lei, China Daily, July 24, 2019

The new white paper described outer space as a critical domain in international strategic competition and said its security is strategically significant to national and social development. With its goal of developing outer space for peaceful purposes, China actively took part in international cooperation in outer space, it said.

It listed cyberspace security as a "key area for national security, economic growth and social development" and said China is facing severe security threats from cyberspace. It said the Chinese military has been accelerating the construction of cyberspace forces and making all-out efforts to build defensive measures and capabilities commensurate to China's international status. It would continue to strengthen the country's "internet border defense", detect and fight cyberspace invasion, and ensure information is secure. "(The military) firmly safeguards the national cyberspace sovereignty, information security and social stability," the white paper said.

<http://www.chinadaily.com.cn/a/201907/24/WS5d3801c6a310d83056400c49.html>

Chang'e-4 new 'name card' for Chinese aerospace

Deng Xiaoci, Global Times, July 24, 2019

China's lunar probe Chang'e-4 which carries a China-Germany hybrid scientific research payload and successfully landed on the far side of the moon stands as a "shining name card for Chinese aerospace development," said the payload project manager of the German side on Tuesday. Yu Jia, of the payload developer at Kiel

University, made the statement to Global Times on the sidelines of the 4th International Conference on Lunar and Deep Space Exploration in Zhuhai, South China's Guangdong Province. In a bid to assess and prepare for future human activities on the moon, the payload Lunar Lander Dosimetry and Neutron (LND) instrument aboard Chang'e-4 is mainly tasked to study the two most harmful radioactive elements to human bodies, said Zhang Shenyi, the LND primary investigator on the Chinese side and an employee of the Chinese Academy of Sciences' National Space Science Center.

Zhang said the payload has been successfully transmitting data back to the Earth as planned. "The data analysis work has been carried out by the Chinese and German scientists and the results will be made public soon," he said. For the first time for humanity, Chang'e-4 landed on the dark side of the moon. The probe is also the first Chinese lunar probe to carry international payloads. Yu referred to the LND as a "Chinese-Germany hybrid" during his speech at the LDSE sessions. The LND combines China's efficiency with Germany's process design capability, Yu noted, and success could not be achieved without either.

<http://www.globaltimes.cn/content/1158936.shtml>

China welcomes France's offer to mediate Iran nuke issue

Global Times, July 24, 2019

China is willing to work with France to push forward the political and diplomatic settlement of the Iranian nuclear issue, China's Foreign Ministry said Tuesday. Hua Chunying, spokesperson of China's Foreign Ministry, told a regular media briefing on Tuesday that China appreciates France's efforts to de-escalate the current Iranian nuclear tensions. Recently, French President Emmanuel Macron carried out diplomatic mediation on the Iranian nuclear issue and maintained close communication with leaders of the US, Iran, Russia and other countries to push forward dialogue to ease

the tensions. Hua said that the root cause of the current Iranian nuclear tensions is the US' imposition of extreme pressure on Iran. "It's imperative for the US to abandon its wrong practices of exerting extreme pressure on Iran and avoid obstructing the implementation of the Joint Comprehensive Plan of Action [JCPOA]. The US should respect the legitimate rights of relevant parties, address each other's concerns on the basis of mutual respect and equal dialogue," Hua said.

<http://www.globaltimes.cn/content/1158927.shtml>

PLA establishes modern weapons, equipment system: white paper

Liu Xuanzun, July 24, 2019

The Chinese military is establishing a modernized weaponry and equipment system by commissioning the likes of Type 15 tanks, Type 052D destroyers, J-20 fighters and DF-26 intermediate and long-range ballistic missiles, according to a white paper issued by defense ministry on Wednesday. The weapons mentioned in the white paper are some of China's newest and are world-class, military observers said. The weapons listed in the white paper are likely already crucial parts of the Chinese military's arsenal and are combat-ready, they said.

The Type 15 tank is a lightweight tank capable of operating in rough terrain such as high altitude plateaus and mountainous areas, and can also be useful in landing missions, experts told the Global Times. The Type 052D guided missile destroyer is considered the "Chinese Aegis" due to its outstanding detection and air defense capabilities. Considered one of the world's best fighter jets, the J-20 is stealth-capable that could rival the US' F-22. The DF-26 missile has been dubbed the anti-ship ballistic missile, which can destroy moving mid-sized to large vessels including aircraft carriers, providing strong strategic deterrence to potential enemies, experts said.

<http://www.globaltimes.cn/content/1159002.shtml>

China will never seek hegemony: defense white paper

Liu Xuanzun and Leng Shumei, Global Times, July 24, 2019

China unveiled on Wednesday its first comprehensive defense white paper since the 18th National Congress of the Communist Party of China and the start of China's latest military reform. It shows that the Chinese military is a force of peace determined to safeguard the country's sovereignty and peaceful development, and its development will never lead to hegemony.

By December 2018, the PLA had attended 24 UN peacekeeping operations and dispatched more than 39,000 peacekeeping military personnel, including 13 who sacrificed their lives in the frontline. China has also trained more than 1,500 peacekeeping personnel for dozens of countries, according to the white paper. China started to dispatch ships to the Gulf of Aden and waters off the coast of Somali to provide escort services since 2008. In the past decade, the Chinese navy has sent more than 100 military ships and 26,000 military personnel to escort about 6,600 Chinese and foreign ships, and rescued, protected and helped over 70 ships in distress, it said.

<http://www.globaltimes.cn/content/1158973.shtml>

Chinese destroyer arrives in St. Petersburg for Russian Navy Day parade

Lu Jinbo, China Military Online, July 24, 2019

The guided-missile destroyer Xi'an (Hull 153) attached to the 32nd escort taskforce of the Chinese PLA Navy arrived in St. Petersburg on July 24, being prepared to take part in the celebration activities of the Russian Navy Day. After it docked at the Neva River, Mr. Zhang Wei, acting consul general of the Chinese Consulate-General in St. Petersburg hosted a welcome ceremony at the port with representatives from Russian Western Military District, the Government of St. Petersburg, China-funded enterprises, and local overseas Chinese. Zhao Weidong,

commanding officer of the taskforce, spoke to the local media that the visit of the guided-missile destroyer Xi'an (Hull 153) fully demonstrated the friendship between Chinese and Russian navies. During the visit, the naval vessel will not only participate in the celebration activities, but will also be open to local civilians in St. Petersburg.

http://english.chinamil.com.cn/view/2019-07/25/content_9568947.htm

US targets China as main competitor in promotional video for new weapon

Zhang Jie and Ma Jun, Global Times, July 25, 2019

US missile maker Raytheon Co. provoked China with a promotional video in which the company showcases new defense technologies to defeat enemy missiles and other threats including China-made missiles. Chinese experts said that showed the US was targeting China as its major opponent and was likely to lead to a boycott by Chinese buyers. Developed jointly with the US Defense Advanced Research Projects Agency, the company's MAD-FIRES interceptor looks effective in the video released through the company's Twitter account on Tuesday. The video shows the weapons stopping missiles from a warship similar to China's Type 052C destroyer and an aircraft like the H-6K bomber. Observers noted the enemy submarine in the video looks similar to Russian-made Kilo-class submarines, which have been purchased by China.

<http://www.globaltimes.cn/content/1159224.shtml>

China sanctions U.S. arms firms: what's the impact?

China Military Online, July 26, 2019

In a historic first, China announced earlier this month that it will cut ties with U.S. companies involved in arms sales to Taiwan. On July 8, the U.S. State Department approved two arms sales to Taiwan including 108 M1A2T Abrams

tanks, 250 Stinger missiles, 16 M1070A1 heavy equipment transporters and related equipment worth 2.22 billion U.S. dollars. According to the Pentagon, the sales will involve up to 30 U.S. government and 15 contractor representatives. Companies named as main contractors to build these weapons are General Dynamics, Raytheon, BAE Systems and Oshkosh. The proposed deals came at a touchy time as China-U.S. relations are already being tested on multiple fronts. The Trump administration once again challenged China's bottom line in an apparent show of support for Taiwan leader Tsai Ing-wen, who was on a trip to North America.

U.S. arms sales to Taiwan have always been understood as a provocation and met with strong opposition from China. This time, defense experts say, China decided to retaliate because it has had enough. "The U.S. has stepped up all-round pressure on China, and now it is openly supporting separatist forces. China has been putting up with it for too long," said Professor Su Shiwei, a researcher at Fudan Development Institute.

http://english.chinamil.com.cn/view/2019-07/26/content_9569462.htm

China launches new remote sensing satellites

Xinhua, July 26, 2019

China successfully sent a group of new remote sensing satellites into orbit from the Xichang Satellite Launch Center in southwest China's Sichuan Province on Friday. The satellites, belonging to the Yaogan-30 family, were launched by a Long March-2C carrier rocket at 11:57 a.m. (Beijing Time). The satellites have entered the planned orbits, and will be used for electromagnetic environment detection and related technological tests. Friday's launch was the 308th mission of the Long March rocket series.

http://www.xinhuanet.com/english/2019-07/26/c_138259969.htm

Yangjiang nuclear power plant unit 6 gets ready for operation

Zheng Xin, China Daily, July 26, 2019

After all six units of Yangjiang nuclear power plant are put into operation, the annual energy output of the plant should reach 48 billion kilowatt hours, equivalent to 15.6 million metric tons of coal being burned. This will reduce carbon dioxide emissions by 38.28 million tons, sulfur dioxide by 370,000 tons and nitric oxide by 240,000 tons, said CGN, one of China's biggest nuclear power operators. "A gradual acceleration of reactors approvals is expected as nuclear energy is absolutely key to cut the nation's reliance on fossil fuel power generation," said Joseph Jacobelli, an independent energy analyst and Asia-Pacific CEO of clean energy producer Joule Power. "It is believed the number of reactors will sharply increase with new domestic nuclear technologies."

http://www.chinadaily.com.cn/regional/2019-07/26/content_37495647.htm

Private company makes space debut

Zhao Lei, China Daily Global, July 26, 2019

A private Chinese company used its own carrier rocket to send two satellites and several experimental payloads into space on Thursday, marking the first orbital mission carried out by the country's private-sector space industry. The SQX-1 Y1 solid-fuel carrier rocket, the first in the SQX-1 series, blasted off at 1 pm, from a launchpad at Jiuquan Satellite Launch Center in Northwest China's Gobi Desert.

Nearly 15 minutes after ignition, the 25-meter-tall rocket successfully placed the two satellites - one from State-owned defense conglomerate China Aerospace Science and Industry Corp and the other from the Beijing Institute of Technology - into a low-Earth orbit about 300 kilometers above the ground. The mission's success is considered by experts to be a new milestone in China's space industry as it showed that after previous failed attempts, a Chinese private enterprise has finally

succeeded in conducting an orbital launch - a threshold for any serious newcomer in the global space sphere that had only been crossed by the United States' SpaceX before Thursday.

http://www.chinadaily.com.cn/global/2019-07/26/content_37495613.htm

China's Iran oil imports plunge as U.S. sanctions bite

Reuters, July 27, 2019

China's crude oil imports from Iran sank almost 60% in June from a year earlier, Chinese customs data showed on Saturday, following the end of a waiver on U.S. sanctions at the start of May. Crude shipment from Iran were 855,638 tonnes last month, or 208,205 barrels per day (bpd), data from the General Administration of Customs showed. That compared with 254,016 bpd in May. According to Refinitiv Oil Research assessments, a total of 670,000 tonnes, or about 163,000 bpd, of Iranian crude oil was discharged in June at Tianjin in north China and Jinzhou in the northeast. Refinitiv Oil Research also showed another 430,000 tonnes of Iranian crude oil was discharged in July at Jinzhou and Huizhou in south China. All the discharged vessels are operated by National Iranian Tanker Company.

<https://www.reuters.com/article/us-china-economy-trade-crude/chinas-iran-oil-imports-plunge-as-u-s-sanctions-bite-idUSKCN1UM0CB>

China says all parties at Vienna nuclear meeting aim to safeguard nuclear deal

Reuters, July 28, 2019

All parties to the 2015 nuclear deal with Iran want to safeguard the accord and strongly oppose Washington's decision to unilaterally re-impose sanctions on Tehran, the head of the Chinese delegation said after a meeting of the pact members. The remaining parties to the deal - Britain, France, Germany, Russia, China, the EU and Iran - met for emergency talks in Vienna called in response to an escalation in tensions between Iran and the West in the past month that included

confrontations at sea and Tehran's breaches of the accord. "All sides have expressed their commitment to safeguard the JCPOA and to continue to implement the JCPOA in a balanced manner," Fu Cong, director general of the Department of Arms Control at China's Foreign Ministry told journalists after the meeting in Vienna. "All sides have expressed their strong opposition against the U.S. unilateral imposition of sanctions," he added.

<https://www.reuters.com/article/us-mideast-iran-china/china-says-all-parties-at-vienna-nuclear-meeting-aim-to-safeguard-nuclear-deal-idUSKCN1UN0IR>

Energy authority rejigs 3 nuclear power plants

Wang Qi, Global Times, July 28, 2019

China's National Energy Administration disclosed Thursday that it has approved three nuclear power projects in three coastal cities after a three-year hiatus. Chinese industry insiders said the new technology with the world's highest safety level and efficiency will be applied to those projects. Hualong One technology, an independently developed third generation of Chinese nuclear technology, is expected to take China's nuclear technology above world level by 2020, they said. One of the three newly approved projects based in Rongcheng county of East China's Shandong Province is already under construction, reported Shanghai-based news portal thepaper.cn.

The Chinese mainland had 45 nuclear power units in commercial operation, with an installed capacity of 45,895 megawatts of electricity, according to data released March 31 by the China Nuclear Energy Association.

<http://www.globaltimes.cn/content/1159507.shtml>

China June rare earth magnet exports to U.S. fall 3.9% from May

Reuters, July 29, 2019

China's exports of rare earth magnets to the United States fell 3.9% in June from

the previous month, customs data showed on Saturday, as concerns persist that Beijing will curb supply of rare earth products as part of its trade war with Washington. The latest data came after U.S. President Donald Trump on Monday told the Pentagon to find better ways to procure samarium-cobalt rare earth permanent magnets, used in specialty motors, warning that the country's defense would suffer without adequate stockpiles.

China is the world's dominant producer of rare earth magnets, which are widely used in medical devices and consumer electronics as well as defense, although Trump in August 2018 signed a policy bill banning their purchase from China for military use in the 2019 fiscal year. China's exports to the United States of permanent rare earth magnets, or rare earth material that will be turned into permanent magnets, came in at 414,100 kg, or around 414 tonnes last month, the data from the General Administration of Customs showed.

<https://www.reuters.com/article/us-china-economy-trade-rareearths/china-june-rare-earth-magnet-exports-to-u-s-fall-3-9-from-may-idUSKCN1UM0CT>

Cambodia says to increase arms purchases from China

Reuters, July 29, 2019

Cambodia's military ties with ally China have been under increased scrutiny after concerns expressed by the United States and a report - denied by Hun Sen - of a secret deal to allow Chinese forces to use a Cambodian naval base. Hun Sen said the \$40 million to be spent by Cambodia was in addition to a total of \$290 million already given by China for modernizing the forces. He spoke during a visit to a Chinese-funded stadium in the capital Phnom Penh. Hun Sen said weapons being purchased included tens of thousands of guns to replace old stock and they were already being shipped. "I want to strengthen the army," Hun Sen said in a speech broadcast live on Facebook.

<https://www.reuters.com/article/us-china-cambodia/cambodia-says-to-increase-arms-purchases-from-china-idUSKCN1UO0HS>

Chinese missile destroyer partakes in Russian naval parade

Xinhua, July 29, 2019

Chinese missile destroyer "Xi'an" of the 32nd Chinese naval escort fleet participated in a military parade here marking Russia's Navy Day on Sunday. Russian President Vladimir Putin reviewed the Chinese warship along with Russian vessels and an Indian frigate on the sea near Kronshtadt islet off the shore of St. Petersburg. The audience stood up cheering and applauding when the Chinese missile destroyer with its sailors in full dress lining up on the deck passed them. A total of 12 Russian warships and submarines as well as dozens of aircraft took part in the parade.

http://www.xinhuanet.com/english/2019-07/29/c_138265283.htm

JCPOA signatories reaffirm commitment to Iran nuclear deal: Chinese delegate

Xinhua, July 29, 2019

The remaining Iran nuclear deal signatories reaffirmed their commitment to the Joint Comprehensive Plan of Action (JCPOA) and criticized the United States for its unilateral sanctions during a meeting here on Sunday, according to a Chinese delegate. "I have two take-away messages from today's meeting," said Fu Cong, director general of the Department of Arms Control at the Chinese Foreign Ministry, at a press conference following the meeting. "First, all sides have expressed their commitment to safeguard the JCPOA and to continue to implement the JCPOA in an objective manner, and a balanced manner."

"The second point I take away from the meeting is that all sides have expressed their strong opposition against the U.S. unilateral imposition of sanctions, especially the extraterritorial application of the sanctions, and they also expressed support and appreciation of China's efforts to implement the JCPOA, in particular China's effort to maintain

normal trade and oil relations with Iran," Fu said. Iran's senior nuclear negotiator Abbas Araqchi called the talks "constructive." "Discussions were good. I cannot say that we resolved everything. I can say there are lots of commitments," Araqchi added.

http://www.xinhuanet.com/english/2019-07/29/c_138265285.htm

Iran's vice president urges China, friendly countries to buy oil

Reuters, July 29, 2019

Iranian Vice President Eshaq Jahangiri called on China and other countries friendly with Iran on Monday to buy more Iranian oil, the oil ministry news website SHANA reported, as Chinese imports plunged after U.S. sanctions took effect. "Even though we are aware that friendly countries such as China are facing some restrictions, we expect them to be more active in buying Iranian oil," SHANA quoted Jahangiri as telling visiting senior Chinese diplomat Song Tao. China's crude oil imports from Iran sank almost 60% in June from a year earlier, Chinese customs data showed on Saturday, following the end of a waiver on U.S. sanctions at the start of May.

<https://www.reuters.com/article/us-mideast-iran-oil-china/irans-vice-president-urges-china-friendly-countries-to-buy-oil-idUSKCN1UO1J2>

China successfully tests accurate landing of rocket debris

Xinhua, July 29, 2019

China has successfully tested the technology that can accurately control the landing site of falling rocket parts, making progress toward reusable launch vehicles in the future, China Aerospace Science and Technology Corporation (CASC) said on Sunday.

The CASC said that the test was carried out following a Long March-2C rocket launched on Friday, and focused on grid fins which are like "wings" on rocket core part to increase precision in control of its landing location. According to experts from the CASC, the rocket's flight trajectory is

designed to avoid densely populated areas. But after completing the mission, the rocket debris falls under no control with a wide range of landing points which sometimes involve inhabited areas. In order to ensure the safety of people's lives and property, the currently practice is to evacuate people to the safety zone before each mission, which is not only inconvenient for the local people, but increases the cost and task difficulty.

http://www.xinhuanet.com/english/2019-07/29/c_138265259.htm

China rejects US withdrawal from the INF

Global Times, July 30, 2019

China on Tuesday opposed the creation of a multilateral nuclear missile treaty in place of the US-Russia Intermediate-Range Nuclear Forces (INF) Treaty, saying the US should first disarm its nuclear arsenal. "The [INF] treaty is a bilateral pact between the US and Russia. Turning it into a multilateral one involves complex issues which concern many countries," said Chinese Foreign Ministry spokesperson Hua Chunying at Tuesday's media briefing.

"The Chinese side does not give its consent," Hua said. Hua's comments came after Japanese Foreign Minister Taro Kono suggested creating a new multilateral structure to replace the INF. In February, the US said it would quit the INF treaty. Kono's suggestion does not save the INF treaty, but instead allows the US to unilaterally withdraw from the deal, Hua said. "Japan should ask the US not to back out of the treaty if Tokyo genuinely cares about regional security," she said.

China supports the complete prohibition and thorough destruction of nuclear weapons, but nuclear disarmament should follow the principle of no security derogation of all countries, Hua noted. The US is the world's largest nuclear weapon state and has a prior responsibility for nuclear disarmament, Hua said. "The US should further reduce nuclear weapons and create conditions for other

countries to participate in nuclear disarmament negotiations.”

<http://www.globaltimes.cn/content/1159764.shtml>

TV documentary on Chinese weaponry to air Thursday

Xinhua, July 31, 2019

A TV documentary about Chinese weaponry and military equipment will be aired starting Aug. 1, China's Army Day. The documentary was co-produced by the State Administration of Science, Technology and Industry for National Defence and China Central Television (CCTV). It will be broadcast at prime time on CCTV 9, the documentary channel of state TV.

The documentary is comprised of five episodes, telling of the development of China's first hydrogen bomb, an amphibious armored vehicle, a military attack helicopter, a type of rifle and a frigate, according to its producers Monday. Focusing on people behind these military projects, the filming team has interviewed over 180 people in more than 30 military institutions across China. The documentary will display their spirit of self-reliance, hard work, dedication and innovation, a staff member of its production team said.

http://www.xinhuanet.com/english/2019-07/31/c_138270600.htm

Shanghai to host world AI conference

Xinhua, July 31, 2019

China's economic hub Shanghai will hold the 2019 World Artificial Intelligence Conference (WAIC) in late August. Open from August 29 to 31, this year's event will focus on a connected intelligent world enabled by the development of AI technologies, according to the Shanghai municipal government. There will be two summit forums, where governors, representatives from international organizations, leading scientists and entrepreneurs discuss the development of the AI industry to seek high quality development, application and governance.

Ten sub-forums will also be held covering topics such as intelligent algorithm, chip and smart hardware, autonomous driving and AI+5G. The WAIC will cover an exhibition area of 17,000 square meters for innovative applications related to industrial ecology, AI urban application, autonomous driving and frontier technologies.

<http://www.chinadaily.com.cn/a/201907/31/WS5d4130a7a310d83056401fea.html>

D. Pakistan

Scientists save India's moon mission from failure

Dawn, July 17, 2019

The launch of Chandrayaan-1 last fall put India in an elite group to have lunar missions along with the US, Russia, the European Space Agency, Japan and China.

The sensor helps the \$80 million satellite stay oriented so its cameras and other recording equipment are constantly aimed at the lunar surface. Without the sensor, the mission is useless, Satish said. The ISRO team then resorted to using other systems such as an antenna mechanism and gyroscope to make sure the satellite was looking at the moon, Satish told The Associated Press in a telephone interview. The orbit was raised to 120 miles.

<https://www.dawn.com/news/935754>

India reschedules launch of its moon mission for Monday

Pakistan Today, July 18, 2019

India's space agency said it will launch a spacecraft to the south pole of the moon on Monday after an aborted effort this week.

The Indian Space Research Organisation said that the Chandrayaan-2 launch is now rescheduled at 2:43 pm on Monday. It said on Thursday that an expert committee identified the root cause of the previous technical snag and all corrective actions were now implemented.

The mission was called off less than an hour before liftoff of the 640-ton, 14-story rocket launcher on Monday.

<https://www.pakistantoday.com.pk/2019/07/18/india-reschedules-launch-of-its-moon-mission-for-monday/>

Pak enhancing nuclear capabilities despite a crippling economy: Defence ministry

India Today, July 18, 2019

Pakistan's expansion of its nuclear capabilities despite a crippling economy is being closely watched by India's security establishment which found a mention in the annual report of the Ministry of Defence, released on Thursday.

Pakistan's expansion of its nuclear capabilities despite a crippling economy is being closely watched by India's security establishment which found a mention in the annual report of the Ministry of Defence, released on Thursday.

<https://www.indiatoday.in/india/story/pak-enhancing-nuclear-capabilities-despite-a-crippling-economy-defence-ministry-1570968-2019-07-18>

India sends unmanned mission to Moon's far side

Dawn, July 22, 2019

India's space agency launched an unmanned spacecraft to the far side of the Moon on Monday, a week after aborting the mission due to a technical problem.

Scientists at the mission control center burst into applause as the rocket lifted off in clear weather as scheduled at 2:43pm on Monday, a day after scientists celebrated the 50th anniversary of the Apollo 11 mission that put American astronauts on the Moon.

<https://www.dawn.com/news/1495548>

India launches historic bid to put spacecraft on Moon

The Express Tribune, July 22, 2019

India launched a bid to become a leading space power on Monday, sending up a

rocket to put a craft on the surface of the Moon in what it called a "historic day" for the nation.

Chandrayaan-2 – or Moon Chariot 2 – took off on time at 2:43 pm (0913 GMT) from the Satish Dhawan Space Centre on an island off the coast of Andhra Pradesh state.

Applause broke out in the mission control room as the rocket blasted off into the grey skies over the Indian Ocean and mission control announced that the orbiter had broken away from the rocket with no problem.

<https://tribune.com.pk/story/2018775/8-india-launches-historic-bid-put-spacecraft-moon/>

Need to learn from India, say Pakistanis on Chandrayaan-2

Dawn, July 23, 2019

India launched a rocket into space on Monday in an attempt to safely land a rover on the moon, its most ambitious mission yet in the effort to establish itself as a low-cost space power.

If successful, the \$146 million mission will allow Indian scientists to carry out studies on the presence of water at the moon's south pole, unexplored by any other nation before.

"This mission will offer new knowledge about the Moon," Prime Minister Narendra Modi tweeted, praising the scientists responsible for what he called a fully indigenous mission.

<https://www.dawn.com/news/1495718>

Nuclear war not option, India must abandon nuclear weapons: PM Imran

Radio Pakistan, July 23, 2019

Prime Minister Imran Khan has said nuclear war is not an option and India must abandon its nuclear weapons. In an interview with Fox News in Washington, he said if India complies with this demand Pakistan will also not use nuclear weapons.

He said Pakistan has a comprehensive and effective nuclear command and control system.

Imran Khan said the armed forces of Pakistan are professional forces and are fully capable of dealing with every challenge. Prime Minister said the United States is the only country which can play a role of mediator between India and Pakistan to resolve the issue of Kashmir. He said that prisoner swap issue could be discussed with the United States. He said Pakistan and the United States were important allies in the war on terror and both the countries suffered loss due to mistrust in the past.

<http://www.radio.gov.pk/23-07-2019/nuclear-war-not-option-india-must-abandon-nuclear-weapons-pm-imran>

Pakistan aims to send first astronaut into space by 2022

Reuters, July 25, 2019

Pakistan said on Thursday it aims to send its first astronaut into space by 2022 and will begin selecting candidates next year. Neighbour and long-time rival India put its first astronaut into space in 1984 as part of a Soviet-led mission. It launched a rocket into space on Monday in an attempt to safely land a rover on the moon, its most ambitious mission yet. Pakistan's program, announced 50 years after the U.S. Apollo 11 mission put the first man on the moon, marks a new departure after focusing on developing communication satellites.

"This will be the biggest space event of our history," Science and Technology Minister Chaudhry Fawad Hussain said in a tweet. A selection committee would begin choosing candidates in February, he said. Pakistan's National Space Agency SUPARCO (Space and Upper Atmosphere Research Commission) was set up in 1961. It launched its first communication satellite 50 years later with help from a subsidiary of China Aerospace and Technology Corporation.

<https://in.reuters.com/article/us-space-pakistan/pakistan-aims-to-send-first-astronaut-into-space-by-2022-idINKCN1UK1PI>

India strides to space, eyes \$120 mln/year business

Dawn, July 26, 2019

Indian Space Research Organisation scientists monitor the data coming in from Chandrayaan-1 at their operation control room in Bangalore. ISRO has signed a Memorandum of Understanding (MoU) with 26 countries for launching satellites and joint research work. India's space agency plans to double its revenues to \$120 million a year by increasing satellite launches to claim a bigger chunk of the global space business, the head of its space agency said on Friday.

Last April, India sent 10 satellites into orbit from a single rocket, signalling its intention to expand into that business. It also dispatched its first unmanned moon mission last October to join the Asian space race in the footsteps of rival China, Reuters reported.

<https://www.dawn.com/news/935182>

Need to learn from India, say Pakistanis on Chandrayaan-2

India Today, July 28, 2019

India's successful launch of the Chandrayaan-2 Moon mission on July 22 earned appreciation from people from across the world including Pakistan, with many saying that India's achievement offers its neighbour an opportunity to learn. On July 22, the Chandrayaan-2 was injected into an elliptical orbit of 170x45,475 km by India's heavylift rocket Geosynchronous Satellite Launch Vehicle-Mark III (GSLV Mk III) in a textbook style.

<https://www.indiatoday.in/science/story/chandrayaan2-isro-moon-mission-india-pakistan-1574339-2019-07-28>

Pakistani astronaut to board Chinese rocket in race with India

Farhan Bokhari, Nikkei Asian Review, July 29, 2019

Pakistan's Prime Minister Imran Khan has given the go-ahead for the country to send its first astronaut into space on board a

Chinese spacecraft, the country's minister for science has told the Nikkei Asian Review.

"We have had ongoing cooperation with China for years in this area. Now we have set ourselves a target of sending Pakistan's first astronaut to space in 2022," said Fawad Chaudhary.

Preparations for the mission, which will begin next year, have renewed discussion in the nuclear-armed South Asian country over the extent to which Pakistan can enter the Space Age along with its main rival, India. Independent analysts say India's space program is far more advanced than Pakistan's, as Delhi has successfully launched its own spacecraft.

<https://asia.nikkei.com/Politics/International-relations/Pakistani-astronaut-to-board-Chinese-rocket-in-race-with-India>

E. USA

US President rejects request for uranium import quota

World Nuclear News, July 16, 2019

Uranium imports do not threaten the national security of the USA, President Donald Trump has decided in his response to the Uranium Miners' Section 232 Petition. He did however call for a "fuller analysis" of national security considerations with respect to the entire nuclear fuel supply chain.

In their filing of January 2018, two mining companies, Ur-Energy USA and Energy Fuels Resources, had contended that imports are pushing US uranium production to the brink of collapse, and asked the Trump administration to impose a quota requiring that 25% of domestic uranium consumption be met by US producers.

<https://www.world-nuclear-news.org/Articles/US-President-rejects-uranium-import-restrictions>

Nuclear waste storage resumes at Southern California plant

AP News, July 16, 2019

Crews have resumed moving radioactive waste into ground storage at the now-closed San Onofre Nuclear Generating Station in

Southern California, nearly a year after a 50-ton canister got stuck.

The San Diego Union-Tribune says workers began moving a canister Monday afternoon from a building where it had sat since August.

Southern California Edison, which operated the plant, says the canister will be lowered into a storage cavity. Another 43 canisters will follow.

<https://www.apnews.com/50cac8bbb7a8491b9380237a7a7d6459>

Trump says 'not fair' that U.S. can't sell F-35s to Turkey

Jeff Mason, Phil Stewart, July 17, 2019

-U.S. President Donald Trump said on Tuesday it is "not fair" to either Turkey or the United States that Washington cannot sell Ankara billions of dollars worth of F-35 fighter jets after it bought a Russian air defence system. Turkey started taking delivery of Russia's S-400 air defence system last week in defiance of U.S. warnings that doing so would mean the Pentagon would kick it out of the F-35 stealth fighter programme and that it could be subject to sanctions.

<https://in.reuters.com/article/usa-turkey-trump/trump-says-not-fair-that-u-s-cant-sell-f-35s-to-turkey-idINKCN1UB2DI>

U.S., Iran send conflicting signals on their disputes

Jeff Mason, Parisa Hafezi, Reuters, July 17, 2019

Iran and the United States sent mixed signals on Tuesday about resolving their disputes as Iran's supreme leader threatened to further breach the 2015 nuclear deal while the U.S. president cited "a lot of progress." Tensions have risen since U.S. President Donald Trump last year abandoned the major powers' nuclear deal with Iran under which Tehran agreed to curtail its nuclear programme in return for the lifting of global sanctions crippling its economy.

<https://in.reuters.com/article/mideast-iran/u-s-iran-send-conflicting-signals-on-their-disputes-idINKCN1UB109>

New Mexico regulators weigh nuclear power investments

Susan Montoya Bryan, AP News, July 18, 2019

It will be up to New Mexico regulators how to address concerns surrounding decisions by the state's largest electric utility to reinvest in a nuclear power plant in neighboring Arizona.

The Public Regulation Commission heard oral arguments Wednesday from Public Service Co. of New Mexico, environmental groups and others. It's unclear how soon the commission could make a decision on how to proceed.

The case was sent back to regulators after the New Mexico Supreme Court in May upheld an earlier finding by the commission that PNM's investments in the Palo Verde Nuclear Generating Station were imprudent as no financial analysis was done.

<https://www.apnews.com/d77365e8b0a44e0f8639548a371ff161>

U.S. removing Turkey from F-35 programme after its Russian missile defence purchase

Idrees Ali, Phil Stewart, Reuters, July 18, 2019

The United States said on Wednesday that it was removing Turkey from the F-35 fighter jet programme, a move that had been long threatened and expected after Ankara began accepting delivery of an advanced Russian missile defence system last week. The first parts of the S-400 air defence system were flown to the Murted military air base northwest of Ankara on Friday, sealing Turkey's deal with Russia, which Washington had struggled for months to prevent.

"The U.S. and other F-35 partners are aligned in this decision to suspend Turkey from the programme and initiate the process to formally remove Turkey from the programme," said Ellen Lord, the under secretary of defence for acquisition and sustainment. "The United States is spending between \$500 and \$600 million in non-

recurring engineering in order to shift the supply chain," she said.

<https://in.reuters.com/article/turkey-security-usa/u-s-removing-turkey-from-f-35-programme-after-its-russian-missile-defence-purchase-idINKCN1UC2DT>

U.S. sanctions network selling materials for Iran nuclear programme

Reuters, July 19, 2019

The United States on Thursday imposed sanctions on an international network of companies and their agents it said were involved in the procurement of materials for Iran's nuclear programme. They are the first punitive steps by Washington since Tehran announced earlier this month it would increase its levels of enriched uranium that can be used for bomb fuel. Tehran announced on July 1 that it had amassed more low-enriched uranium than permitted under its 2015 nuclear deal with world powers, marking its first major step beyond the terms of the pact since the United States withdrew more than a year ago.

<https://in.reuters.com/article/mideast-iran-usa-sanctions/u-s-sanctions-network-selling-materials-for-iran-nuclear-programme-idINKCN1UD2RM>

Even as Tensions With Iran Rise Over Seized Ship, U.K. Stays 'Committed' to Nuclear Deal

David D. Kirkpatrick, The New York Times, July 22, 2019

Britain took new steps on Monday to distance itself from the Trump administration's escalating confrontation with Iran, even while pushing for the release of an oil tanker seized by Tehran three days earlier. British efforts to bolster maritime security in the Persian Gulf "will not be part of the U.S. maximum pressure policy on Iran," Foreign Minister Jeremy Hunt said after an emergency cabinet meeting about the tanker. Mr. Hunt's pointed statement was the first indication that a broad disagreement over Iran still

persists between the two allies despite the Iranian seizure of the British-flagged tanker on Friday.

<https://www.nytimes.com/2019/07/22/world/middleeast/iran-us-spies-arrested.html>

Trump: Positive North Korea correspondence, but no time yet for talks

Roberta Rampton, David Brunnstrom, Reuters, July 22, 2019

U.S. President Donald Trump said on Monday his administration had very positive correspondence recently with North Korea, but the two sides have yet to set a time to restart talks aimed at ending Pyongyang's nuclear programme.

Asked at the White House if a new round of talks had been scheduled with North Korea, Trump said: "No, we just have a very good relationship and probably they would like to meet, and we'll see what happens. "There was a little correspondence recently. We had very positive correspondence with North Korea. Again there's no nuclear testing, there's no missile testing, there's no nothing. "I think we will, yeah, at a certain point ... When they're ready, we'll be ready," Trump said.

<https://in.reuters.com/article/northkorea-usa-trump/trump-positive-north-korea-correspondence-but-no-time-yet-for-talks-idINKCN1UH235>

Trump says it is getting harder for him to want to negotiate with Iran

Reuters, July 23, 2019

U.S. President Donald Trump said on Monday that it is getting harder for him to want to make a deal with Iran and said the situation could go either way very easily. Trump made the comments to reporters at the White House amid heightened tensions between Tehran and Western powers. Iran said earlier on Monday it had captured 17 U.S. spies and sentenced some to death, but Trump denied the reports. The United States withdrew from the Iran nuclear deal, formally known as the Joint Comprehensive

Plan of Action, and reimposed sanctions on the country in May 2018. Trump said the agreement did not go far enough.

<https://in.reuters.com/article/mideast-iran-trump/trump-says-it-is-getting-harder-for-him-to-want-to-negotiate-with-iran-idINKCN1UH21T>

Three US firms awarded Mo-99 production funds

World Nuclear News, July 23, 2019

The US Department of Energy's National Nuclear Security Administration (NNSA) has awarded cooperative agreements for the production of molybdenum-99 to three US companies. The announcement came as one of the companies - Shine Medical Technologies - submitted an application to the Nuclear Regulatory Commission (NRC) to produce medical isotopes at its new production facility in Janesville, Wisconsin.

The isotope technetium-99m (which is the daughter isotope of Mo-99) is used in over 40,000 procedures in the USA per day. However, for 30 years prior to 2018, the USA had not produced Mo-99 and currently imports much of its requirements. Since 2009, the NNSA has been working with commercial partners to accelerate the establishment of a domestic Mo-99 supply network. In 2018, one of those partners, NorthStar Medical Radioisotopes, received Food & Drug Administration (FDA) approval for manufacture of its domestic, non-uranium Mo-99, the RadioGenix System (technetium 99m generator) and Tc 99m produced by the RadioGenix System. With its partner MURR, NorthStar is the first domestic producer of Mo-99. Since FDA approval, NorthStar has started to supply customers, becoming the first US producer of Mo-99 in more than three decades, as well as offering a novel new approach to the generation of Tc-99m.

<https://www.world-nuclear-news.org/Articles/Three-US-companies-awarded-funds-for-Mo-99-product>

Doosan, NuScale sign agreements for SMR cooperation

World Nuclear News, July 23, 2019

South Korea's Doosan Heavy Industries & Construction (DHIC) yesterday signed the 'business collaboration agreement' with US small modular reactor developer NuScale Power for supply of NuScale Power Modules and other equipment. Doosan also signed the 'unit purchase agreement' through which it will make a cash equity investment in NuScale with Korean financial investors.

The signing of the agreements follows a memorandum of understanding between the two companies in April for strategic cooperation to support deployment of the NuScale Power Module worldwide. DHIC and NuScale plan to close their transaction on 31 July.

<http://world-nuclear-news.org/Articles/Doosan,-NuScale-sign-agreements-for-SMR-cooperatio>

First applications for Diakont's decontamination robot

World Nuclear News, July 26, 2019

Diakont of the USA provided cleaning and decontamination services using its new underwater robotic decontamination systems at four undisclosed nuclear power plants during early 2019, cleaning refuelling cavities, dryer-separator pools, and a suppression pool.

The provider of refuelling services and tooling to the nuclear industry launched underwater robotic cleaning and decontamination services for light water reactor refuelling and other cavities in October 2016.

The Carlsbad, California-based company said nuclear power plant operators have historically conducted cleaning and decontamination of these surfaces manually, after draining water from the space. However, this is a slow process and can result in excessive personnel dose exposure, it says.

<http://world-nuclear-news.org/Articles/First-applications-for-Diakonts-decontamination-r>

U.S. calls for no more North Korean 'provocations,' hopes to resume talks

Reuters, July 26, 2019

The United States on Thursday urged North Korea to refrain from further provocations after the communist country test-fired two new short-range ballistic missiles and said it still hoped for a resumption of working-level talks on North Korea's denuclearization. "We want to have diplomatic engagement with the North Koreans," State Department spokeswoman Morgan Ortagus told a news briefing when asked about the latest missile tests. "We urge no more provocations." Ortagus said Secretary of State Mike Pompeo would travel to Thailand, Australia and Micronesia from July 30-Aug. 6, but she had no meetings with the North Koreans to announce.

<https://in.reuters.com/article/northkorea-usa/us-calls-for-no-more-north-korean-provocations-hopes-to-resume-talks-idINKCN1UK2SE>

Trump's 'maximum pressure' campaign on Iran faces key test

Matthew Lee, AP News, July 27, 2019

President Donald Trump's "maximum pressure" campaign against Iran is at a crossroads.

His administration is trying to decide whether to risk stoking international tensions even more by ending one of the last remaining components of the 2015 nuclear deal. The U.S. faces a Thursday deadline to decide whether to extend or cancel sanctions waivers to foreign companies working on Iran's civilian nuclear program as permitted under the deal.

Ending the waivers would be the next logical step in the campaign and it's a move favored by Trump's allies in Congress who endorse a tough approach to Iran. But it also would escalate tensions with Iran and with some European allies, and two officials say a divided administration is likely to keep the waivers

afloat with temporary extensions. The officials spoke on condition of anonymity to discuss internal deliberations.

<https://www.apnews.com/e6bd6334ff4148f2985de059f93dc390>

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<https://www.apnews.com/e6bd6334ff4148f2985de059f93dc390>

Calming the Persian Gulf: The experts on resolving the US-Iran standoff

John Mecklin, Bulletin of Atomic Scientists, July 29, 2019

The US decision to withdraw from the Iran nuclear deal (known officially as the Joint Comprehensive Plan of Action, or JCPOA) has created an increasingly tense situation throughout the Middle East. After withdrawing from the JCPOA, the United States has embarked on a "maximum pressure" campaign that includes economic sanctions aimed at restricting trade with Iran

by US firms and by companies of other signatories to the JCPOA. This campaign has negatively affected the Iranian economy and been met by Iranian countermeasures, including moves to increase uranium enrichment above levels dictated by the JCPOA, the downing of an American drone, and the seizure of a British oil tanker, apparently in response to the seizure of an Iranian tanker suspected of violating European Union sanctions.

As the situation now stands, the United States is demanding that Iran enter new negotiations on its nuclear program, its ballistic missile program, and a host of activities that US officials contend undermine peace across the Middle East. Iran has declined to negotiate, claiming that the United States violated the nuclear agreement, even though Iran was in compliance with its terms. Representatives of Iran and the five other remaining parties to the JCPOA—Britain, France, Germany, Russia, and China—met in Vienna on Sunday in an attempt to keep the deal alive.

<https://thebulletin.org/2019/07/calming-the-persian-gulf-the-experts-on-resolving-the-us-iran-standoff/>

South Dakota 1950s uranium workers eligible for compensation

AP News, July 29, 2019

People who became sick after being exposed to toxic materials while working at a South Dakota uranium ore-buying station more than 60 years ago may qualify for compensation under a federal program.

The federal Energy Employees Occupational Illness Compensation program is ready to compensate those who worked at the American Smelting and Refining Co., and Lucius Pitkin Inc. station in Edgemont from 1952 to 1956, or their surviving family members, the Rapid City Journal reported.

<https://www.apnews.com/9ca55a350e18461eaf8f5a540ce96af3>

Bill would provide relief for communities with nuke waste[R1]

AP News, July 29, 2019

Wiscasset would collect more than \$8 million for storing radioactive waste from Maine Yankee under a proposal in Congress.

Republican Sen. Susan Collins of Maine and Democratic Sen. Tammy Duckworth of Illinois are sponsoring the proposal that would provide financial relief to communities stuck with nuclear waste.

Maine Yankee ceased operations in 1996 after the company's board opted to close the nuclear power plant rather than invest in costly improvements.

The federal government has failed to live up to its obligation for a building repository for highly radioactive waste. That means sixty-four containers of highly radioactive fuel rods continue to be stored indefinitely on the site.

<https://www.apnews.com/63ea599fb257436aa222be8b90334d09>

Washington denies it plans to quit nuclear test ban treaty

Tom Miles, Reuters, July 30, 2019

The United States, which plans to exit a major arms control agreement later this week, denied a Russian accusation on Tuesday that it was also planning to quit the international treaty that bans the testing of nuclear weapons. A Russian envoy told a disarmament conference in Geneva that Washington intended to quit the Comprehensive Nuclear-Test Ban Treaty (CTBT) on the pretext that Moscow was violating it first.

"It would appear that through propaganda around false claims about Russia's compliance there are attempts to prepare international opinion for a U.S. exit from the CTBT and then to blame Russia again for everything," Russia's deputy envoy in Geneva, Andrey Belousov, told the Conference on Disarmament.

<https://in.reuters.com/article/russia-usa-missiles/washington-denies-it-plans-to-quit-nuclear-test-ban-treaty-idINKCN1UP189>

Bolton says 'flawed' New START treaty with Russia unlikely to last past 2021

Russian Times, July 31, 2019

Having dismantled two of the three pillars of nuclear non-proliferation, the US now apparently wants to let the last one crumble as well. National Security Advisor John Bolton has said the New START is unlikely to be extended.

Bolton, a notoriously hawkish Trump adviser, was addressing the Young America's Foundation 41st annual National Conservative Student Conference on Tuesday, when he unleashed his scathing criticism on the New START struck under the Obama administration.

Calling the landmark agreement "flawed from the beginning," Bolton said that the deal failed to cover short-range tactical nuclear weapons and "Russian delivery systems," without referring to any military hardware in particular.

<https://www.rt.com/news/465438-new-start-bolton-dismantle/>

SNC-Lavalin and Holtec JV signs first contract

World Nuclear News, July 31, 2019

Comprehensive Decommissioning International (CDI), the joint venture company between SNC-Lavalin and Holtec International, has won its first commercial contract. Under the contract, which it said is worth "hundreds of millions of dollars", CDI will be responsible for decommissioning, demolishing and cleaning up the site of the Oyster Creek nuclear power plant in New Jersey, USA.

The US Nuclear Regulatory Commission (NRC) approved the transfer of the Oyster Creek licence from Exelon to Holtec in June and plant ownership was transferred on 1 July. CDI says it will be able to start work at the site this year and that it will take less than 10 years to complete thanks to the technologies it will be using and to the

fact about 200 former Exelon employees have joined its team.

<http://world-nuclear-news.org/Articles/SNC-Lavalin-and-Holtec-JV-signs-first-contract>

F. Europe

EU works to save unraveling nuclear agreement with Iran

Raf Casert, AP News, July 15, 2019

European Union nations threw their diplomatic weight behind the unraveling Iran nuclear deal on Monday, trying to rescue the pact from collapsing under U.S. pressure. The 28 EU foreign ministers insisted that recent Iranian actions surpassing uranium enrichment thresholds set by the 2015 deal did not necessarily condemn the whole agreement. "We note that technically all the steps that have been taken – and that we regret have been taken – are reversible. So we hope and we invite Iran to reverse the steps," said EU foreign policy chief Federica Mogherini. "The deviations are not significant enough to think that Iran has definitively broken the agreement," said Spanish Foreign Minister Josep Borrell, who is in line to succeed Mogherini this fall.

The EU currently has few direct measures for offsetting U.S. economic sanctions against Tehran that have crippled the country's economy, and the bloc faces U.S. threats to target any EU companies that attempt to trade with Iran. Noting that Iran was "still a good year away" from potentially developing a nuclear bomb, British Foreign Secretary Jeremy Hunt said there was still a "small window to keep the deal alive." Even if Britain, France, Germany and the rest of the EU held out a helping hand to Iran, the diplomatic puzzle was made more difficult Monday when France's foreign ministry said a researcher with dual French-Iranian nationality had been arrested in Iran.

<https://www.apnews.com/7e818ece88a44ce6a238a75c80f64948>

Italy seizes 800kg missile from far-right sympathisers after raids uncover huge weapons stash

South China Morning Post, July 16, 2019

Machine guns, rocket launchers, Neo-Nazi propaganda and Hitler memorabilia were also found. Three arrested, including former neo-fascist political candidate Fabio Del Bergiolo, who had planned to sell missile for US\$529,000. Italian police seized an air-to-air missile, machine guns and rocket launchers during raids sparked by an investigation into far-right extremist groups on Monday, a huge haul of weapons that authorities said was almost without precedent. Police arrested three people, including Fabio Del Bergiolo, 50, a former candidate for the neo-fascist Forza Nuova party, whose home was found to contain a huge stash of arms as well as neo-Nazi propaganda and Hitler memorabilia.

"During the operation, an air-to-air missile in perfect working order and used by the Qatari army was seized," police said of the 800kg Matra missile. They also found automatic assault rifles that they described as "latest generation" among the cache. Some of the items, including a large arsenal of weapons, seized in raids on neo-Nazi sympathisers in Turin on Monday. "This is a significant seizure, with few precedents in Italy," said Turin police commissioner Giuseppe De Matteis. The missile, is 3.54 metres (more than 11 feet) long and was made in France. Del Bergiolo had been hoping to sell it for •470,000 (US\$529,000), according to Italian media reports.

The missile was "without explosive charge, but re-armable by people specialised in the field", police said. "For now, nothing leads us to suspect" an active plot to use the weapons, said counterterrorism official Eugenio Spina. It is extremely dangerous and risky to turn it into a missile to fire from the ground, unless you have good engineers and equipment

Missile expert who asked not to be named. The Mantra Super 530 F was a

modernisation of the R530 missile that went into service in 1980, and has a range of 25km (15 miles), with an explosive charge of 30kg.

<https://www.scmp.com/news/world/europe/article/3018731/italy-seizes-800kg-missile-far-right-sympathisers-after-raids>

German renewables deliver more electricity than coal and nuclear power for the first time

DW, July 16, 2019

In Germany, sun, wind, water and biomass have so far produced more electricity in 2019 than coal and nuclear power combined. But it's a snapshot of a special market situation and might not be a long-term trend. In Lippendorf, Saxony, the energy supplier EnBW is temporarily taking part of a coal-fired power plant offline. Not because someone ordered it – it simply wasn't paying off. Gas prices are low, CO2 prices are high, and with many hours of sunshine and wind, renewable methods are producing a great deal of electricity. And in the first half of the year there was plenty of sun and wind.

The result was a six-month period in which renewable energy sources produced more electricity than coal and nuclear power plants together. For the first time 47.3% of the electricity consumers used came from renewable sources, while 43.4% came from coal-fired and nuclear power plants. In addition to solar and wind power, renewable sources also include hydropower and biomass. Gas supplied 9.3% while the remaining 0.4% came from other sources, such as oil, according to figures published by the Fraunhofer Institute for Solar Energy Systems in July.

<https://www.dw.com/en/german-renewables-deliver-more-electricity-than-coal-and-nuclear-power-for-the-first-time/a-49606644>

German-Russian relations lauded at bilateral Petersburg Dialogue

DW, July 18, 2019

Maas and Lavrov also discussed the Iran nuclear deal, which was signed by eight

countries including Russia and Germany, and was hobbled after the US dropped out in May 2018. The German minister pointed out that Berlin still adheres to the deal, and that the US withdrawal was “unexplained.” “No one wants to see escalation in the region,” said Maas. Lavrov called the nuclear deal a “breakthrough” for the region, and accused the US of violating international law by dropping out, but urged Germany and the EU to take a “more principled” stance on the issue.

“All of the participants need to be involved in the process of helping implement and maintain the plan of action,” said Lavrov. The EU has been trying to salvage the nuclear deal, but has been unable to circumvent the crippling effect of US sanctions on Iran's economy. Iran has responded by enriching more uranium. Maas said on Thursday that Iran's actions were not acceptable.

<https://www.dw.com/en/german-russian-relations-lauded-at-bilateral-petersburg-dialogue/a-49636855>

Germany and France condemn Iran's seizure of British tanker

DW, July 20, 2019

Germany and France have expressed “solidarity” with the United Kingdom after Iran's seizure of the Stena Impero. The incident came amid deteriorating diplomatic relations between Iran and several Western powers. Germany and France on Saturday denounced Iran's seizure of a British-flagged tanker in the Strait of Hormuz and called on the country to release the vessel immediately. “This is an unjustifiable interference in commercial shipping that dangerously escalates an already tense situation,” the German Foreign Office wrote on Twitter. France's Foreign Ministry said it “strongly condemned” the seizure and expressed its “full solidarity with the United Kingdom,” according to the Reuters news agency.

<https://www.dw.com/en/germany-and-france-condemn-irans-seizure-of-british-tanker/a-49665532>

Britain calls Stena Impero oil tanker seizure 'hostile act' as Iran releases video of capture

DW, July 20, 2019

London has denounced Iran's seizure of a British-flagged oil tanker in the Gulf as a "hostile act." German Foreign Minister Heiko Maas says Europe is trying to prevent an "uncontrollable military escalation." UK warship warned Iranian forces against seizing tanker. A phone call between the top British and Iranian diplomats has failed to defuse the escalating crisis in the Strait of Hormuz following the seizure of a British oil tanker and the impounding of an Iranian supertanker.

British Foreign Secretary Jeremy Hunt wrote on Twitter late Saturday that during the call he had "expressed extreme disappointment" to his Iranian counterpart, Foreign Minister Mohammad Javad Zarif, for not de-escalating the situation.

<https://www.dw.com/en/britain-calls-stena-impero-oil-tanker-seizure-hostile-act-as-iran-releases-video-of-capture/a-49676942>

New audio shows UK could not prevent Iran takeover of tanker

Gregory Katz And Aya Batrawy, AP News, July 21, 2019

The release Sunday of an audio recording has shed new light on the seizure of a British-flagged tanker at the hands of Iran's Revolutionary Guard as tensions flare in the strategic Strait of Hormuz. The audio released by maritime security risk firm Dryad Global shows that a British frigate was too far away from the targeted tanker to keep it from being diverted into an Iranian port despite U.K. efforts to keep it from being boarded. On the recording, a stern-voiced British naval officer insists that the U.K.-flagged oil tanker Stena Impero must be allowed to sail through the Strait of Hormuz even as Iranian paramilitary forces demand — successfully — that the vessel change course.

The audio shows how Britain's once mighty Royal Navy was unable to prevent the ship's seizure, which has been condemned by

Britain and its European allies as they continue to call for a reduction of tensions in the vital waterway.

<https://www.apnews.com/3079b05145e0442b912f270e0a9380b8>

UK to launch European security mission over Iran row

DW, July 22, 2019

The British government has said it will create a new mission with European allies amid rising tensions with Iran in the Strait of Hormuz. The foreign secretary said Britain "will always defend" freedom of navigation. British Foreign Secretary Jeremy Hunt on Monday said the government will seek to establish a new force with European allies to guarantee maritime security in the Strait of Hormuz.

"We do not seek confrontation. We have taken every available opportunity to deescalate the situation," Hunt said. "Freedom of navigation is a principle that Britain and its allies will always defend. Since May, several oil tankers and transport ships have been attacked in the Persian Gulf, Strait of Hormuz and Gulf of Oman, with Western countries blaming Iranian forces for the attacks. Hunt did not detail which countries would form part of the mission but said the UK would "take appropriate action to support the safe passage of vessels" through the strategic waterway. However, Hunt had discussed tensions in the region with German Foreign Minister Heiko Maas and his French counterpart, Jean-Yves Le Drian, a day before.

But the foreign minister stopped short of linking Monday's plans with the US' "maximum pressure" policy on Iran, saying: "We remain committed to preserving the Iran nuclear agreement." Instead, he said the UK and others "will discuss later this week the best way to complement this with recent US proposals in this area."

<https://www.dw.com/en/uk-to-launch-european-security-mission-over-iran-row/a-49701466>

UK has sent mediator to Iran to seek freeing of seized tanker: senior Iranian official

Reuters, July 24, 2019

Britain has sent a mediator to Iran to discuss the freeing of a British-flagged tanker seized by the Islamic Republic last week, the head of the Supreme Leader's office said on Wednesday, according to the semi-official Tasnim news site. Tensions have spiked between Iran and Britain since the Islamic Republic last Friday seized the tanker, Stena Impero, saying it had collided with a fishing vessel.

Mohammad Mohammadi-Golpayegani provided no details about the British mediator's trip but made an ironic reference to Britain's involvement during colonial times in Iranian affairs. "A country that at one time appointed ministers and lawyers in Iran has reached a point where they send a mediator and plead for their ship to be freed," Mohammadi-Golpayegani said, according to Tasnim.

<https://www.reuters.com/article/us-mideast-iran-tanker-mediator/uk-has-sent-mediator-to-iran-to-seek-freing-of-seized-tanker-senior-iranian-official-idUSKCN1UJ0TA>

France stresses need for Iran to respect nuclear accord

Elaine Ganley, AP News, July 24, 2019

French authorities in a meeting Tuesday with an Iranian envoy stressed the need for Tehran to quickly respect the 2015 nuclear accord it has breached and "make the needed gestures" to deescalate mounting tensions in the Persian Gulf region. A statement by the French Foreign Ministry said Seyed Abbas Araghchi gave a message to President Emmanuel Macron from Iranian leader Hassen Rouhani. Macron and Rouhani spoke last Thursday.

Foreign Minister Jean-Yves Le Drian, who met with Araghchi, is working with European partners on an observation mission to ensure maritime security in the Gulf, where tensions have mounted after Iran's seizure last Friday of a U.K.-flagged oil tanker. Le Drian made no mention of a

Europe-led "maritime protection mission" announced a day earlier by his British counterpart, Jeremy Hunt, offering instead what seems to be a softer version. France is working "at this moment on a European initiative" with Britain and Germany, he told lawmakers, without elaborating. "This vision is the opposite of the American initiative, which is ... maximum pressure" against Iran.

<https://www.apnews.com/d10a8e4d5c6e45b6ad3164793458794d>

Diplomats recommit to saving Iran deal, oppose US sanctions

Kiyoko Metzler, AP News, July 29, 2019

Diplomats from Iran and five world powers recommitted Sunday to salvaging a major nuclear deal amid mounting tensions between the West and Tehran since the U.S. withdrew from the accord and reimposed sanctions. Representatives of Iran, Germany, France, Britain, China, Russia and the European Union met in Vienna to discuss the 2015 agreement that restricts the Iranian nuclear program.

"The atmosphere was constructive, and the discussions were good," Iranian Deputy Foreign Minister Seyed Abbas Araghchi told reporters after the meeting ended. "I cannot say that we resolved everything" but all the parties are still "determined to save this deal," he added.

<https://www.apnews.com/5b3fc37ddfa8471bba8c58d2431e62a5>

New video from Iran shows Guard warning away UK warship

Amir Vahdat And Aya Batrawy, AP News, July 29, 2019

In new video and audio released Monday, an Iranian Revolutionary Guard officer is heard telling a British warship not to interfere or put their "life in danger" as the paramilitary force, using speedboats and a helicopter, seized a U.K.-flagged commercial vessel in the Strait of Hormuz earlier this month. The video includes a shot apparently filmed on the day of the July 19 incident from above the British

warship Foxtrot 236 that was in the vicinity of the U.K.-flagged Stena Impero, showing the British navy unable to prevent Iran's seizure of the ship in the critical waterway. It also offers new glimpses into the tense exchange that took place between the British Navy and the Iranian Guard during the seizure.

<https://apnews.com/d446b1f8cf2f447f9a35e120520245bc>

The Latest: Iran's Rouhani seeks closer UK ties with Johnson

AP News, July 29, 2019

Iranian President Hassan Rouhani has penned an open letter to Britain's new prime minister, saying he hopes the countries' diplomatic ties will be stronger under Boris Johnson's leadership.

In the letter published Sunday on Rouhani's website, the Iranian president congratulated Johnson on becoming prime minister Wednesday. Rouhani said he hoped Johnson's "only one visit to Tehran" while serving as U.K. foreign secretary in 2017 and now his tenure as prime minister lead to a "further deepening of bilateral and multilateral relations. Johnson took office on Wednesday amid a spike in tensions in the Persian Gulf and a diplomatic standoff between Britain and Iran. Iran seized a British-flagged tanker in the Strait of Hormuz this month after the British navy helped seize an Iranian supertanker loaded with crude oil near Gibraltar.

<https://www.apnews.com/de45fa9d9d1148a0bb3d2c044289fcb4>

Belgium broke law but can keep nuclear plants open, EU court rules

DW, July 29, 2019

Belgium's self-imposed deadline for giving up nuclear power is not far off. Environmentalists look forward to the end of the atomic era, but not everyone thinks the country is ready to change course. The European Union's top court ruled on Monday that Belgium can continue to run two aging nuclear reactors, despite breaking EU law by not carrying out the necessary

environmental audits. By failing to carry out the environmental assessments before prolonging the life of Doel 1 and 2 nuclear reactors near the northern port city of Antwerp, Belgium infringed EU law, the court ruled.

However, the plants could stay open provisionally, the European Court of Justice (ECJ) said: "Where there is a genuine and serious threat of an interruption to electricity supply." More than half of Belgium's electricity is generated by nuclear power with reactors in Doel and in Tihange, in the east, near the border with Germany. But a 2003 law says the country's last reactor must shut down by December 1, 2025. The grid operator Elia has warned of a "serious crisis" if the government doesn't act to fill gaps in production. Despite recent technical hitches, some think Belgium has no choice but to keep its nuclear plants running.

<https://www.dw.com/en/belgium-broke-law-but-can-keep-nuclear-plants-open-eu-court-rules/a-49787150>

NATO chief appeals to Russia ahead of missile pact deadline

AP News, July 31, 2019

NATO Secretary General Jens Stoltenberg is appealing to Russia to comply with a key Cold War-era missile treaty just days before a U.S. deadline to do so expires, but he says the end of the landmark European security pact appears imminent. In February, the United States began withdrawing from the Intermediate-Range Nuclear Forces treaty it agreed in 1987 with the then Soviet Union, blaming Moscow for developing missiles that do not comply with it. Russia has until Friday to destroy the new missiles. Stoltenberg said Wednesday that "we see the demise of the INF treaty," but he added that "we still call on Russia to come back into compliance and to save the treaty." He told reporters that NATO "will do what is necessary to have credible deterrence and defense."

<https://www.apnews.com/2e5086d620e34e4f9738387d4bb89cce>

The Latest: Germany won't take part in US-led Gulf mission

AP News, July 31, 2019

Germany's foreign minister is ruling out his country's participation in a proposed U.S.-led mission to protect maritime traffic in the Persian Gulf area. The U.S. recently asked allies to contribute to a mission to secure maritime traffic through the Strait of Hormuz, a critical oil shipping corridor, in the wake of increased Iranian aggression in the area. Germany had already expressed skepticism, saying that priority must be given to de-escalation of tensions and diplomatic efforts. But the dpa news agency reported on Wednesday that Foreign Minister Heiko Maas has now ruled out participation altogether.

<https://www.apnews.com/80a11edbff7f46a8bb88fe66e00c0c08>

Germany will not join US naval mission in Strait of Hormuz

DW, July 31, 2019

Foreign Minister Heiko Maas said Germany will not be taking part in a US-led mission to secure oil tanker ships sailing near Iran. The US ambassador in Berlin slammed the decision, saying Germany has responsibilities. Germany will not participate in a naval mission in the Strait of Hormuz that is led by the United States, Foreign Minister Heiko Maas said on Wednesday. "Germany will not take part in the sea mission presented and planned by the United States," Maas told reporters during a trip to Poland. The German government said it remains in close consultation with France and the UK over a European approach to the freedom of navigation crisis in the Persian Gulf.

But US Ambassador to Germany Richard Grenell condemned the decision and called on Berlin to step up. "Germany is the biggest economic power in Europe," he told the Augsburg Allgemeine newspaper. "This success brings global responsibilities." "America has sacrificed a lot to help Germany remain part of the West," Grenell

said, adding that Americans were paying billions of dollars to keep 34,000 soldiers stationed in Germany.

<https://www.dw.com/en/germany-will-not-join-us-naval-mission-in-strait-of-hormuz/a-49835380>

G. Russia

Can Russia and America Avoid a New Nuclear Arms Race?

David Axe, National Interest Blog, July 16, 2019

Delegations from the United States and Russia plan to meet in Geneva in mid-July 2019 to begin discussing a possible extension of the New START treaty, one of the major arms-control accords limiting the size and power and the U.S. and Russian nuclear arsenals.

The 2010 treaty restricts both the United States and Russia to 1,550 deployed strategic nuclear warheads on a maximum of 700 deployed intercontinental ballistic missiles and strategic bombers.

<https://nationalinterest.org/blog/buzz/can-russia-and-america-avoid-new-nuclear-arms-race-67427>

Second Russian Nuclear Plant Taken Down After Malfunction

The Moscow Times, July 18, 2019

Three units have been unplugged at a nuclear power plant in Russia after a short circuit, less than a week after another nuclear plant unit was briefly taken down in the country over an unspecified malfunction.

Russia operates 10 nuclear power plants, including the four-reactor Kalinin plant 350 kilometers northwest of Moscow, according to the London-based World Nuclear Association.

<https://www.themoscowtimes.com/2019/07/18/second-russian-nuclear-plant-taken-down-after-malfunction-a66464>

Russia calls on US to store nuclear weapons only on its own territory – diplomat

TASS News Agency, July 18, 2019

Russia calls on the United States to deploy nuclear weapons only on its own territory, Russia's Permanent Representative to international organizations in Vienna Mikhail Ulyanov said on Wednesday.

"Russia deploys and stores its nuclear weapons exclusively on its own territory. We call on the US and NATO to do the same," Ulyanov wrote on his official Twitter account.

<https://tass.com/world/1069119>

China sees no grounds for participation in Russia-US nuclear arms treaty talks

TASS News Agency, July 18, 2019

The Chinese government welcomes the upcoming talks between Russia and the US on the possibility of signing a new nuclear arms treaty, however, so far, it sees no grounds for China's participation in these talks, Chinese Foreign Ministry Spokesman Geng Shuang stated during Tuesday's briefing in response to a TASS request for comment on the upcoming Russia-US consultations.

"Russia and the US are the world's biggest nuclear powers. The fact that they plan to discuss arms control is a very good event," he noted. The diplomat added that Russia and the US must continue to reduce their nuclear inventory in a verifiable and irreversible manner. "This will provide conditions for nuclear disarmament. I am confident that in this way, Russia and the US can send a positive signal to the whole world," Geng Shuang added.

<https://tass.com/world/1068769>

Kremlin throws weight behind EU effort to boost Iran trade

Henry Foy and Demetri Sevastopulo, Financial Times, July 18, 2019

Russia has signalled its willingness to join an EU payments channel designed to

circumvent US sanctions banning trade with Iran and has called on Brussels to expand the new mechanism to cover oil exports. Moscow's involvement in the channel, known as Instex, would mark a significant step forward in attempts by the EU and Russia to rescue a 2015 Iran nuclear deal that has been unravelling since the Trump administration abandoned it last year. "Russia is interested in close co-ordination with the European Union on Instex," the Russian foreign ministry told the Financial Times. "The more countries and continents involved, the more effective will the mechanism be as a whole."

<https://www.ft.com/content/3aa3e7ee-a8b7-11e9-984c-fac8325aaa04>

Kalinin and Beloyarsk outages due to non-nuclear faults, says Rosenergoatom

World Nuclear News, July 19, 2019

Russia's Rosenergoatom has explained the recent unplanned shutdowns at its Kalinin and Beloyarsk nuclear power plants, which have attracted media interest. Rosenergoatom, which is the nuclear power plant operator subsidiary of state nuclear corporation Rosatom, said both incidents were caused by electrical faults unrelated to the nuclear equipment.

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<http://world-nuclear-news.org/Articles/Kalinin-and-Beloyarsk-outages-due-to-non-nuclear-f>

The 1 Way Russia Could Help China Build a Nuclear Powered Aircraft Carrier

Robert Farley, National Interest Blog, July 20, 2019

It appears that China is relying on Russian know-how and experience to develop the

reactor for its first nuclear aircraft carrier. As the South China Morning Post reports, China appears to be studying the nuclear reactors on Russia's largest icebreakers, an approach that the Soviet Union also took when it planned to build nuclear carriers in the 1980s. Specifically, Russia has invited China to bid on the construction of a new class of nuclear icebreaker, necessarily requiring the development of surface-ship based reactors. This approach stands in contrast to how the United States and France developed nuclear reactors for their largest carriers, but probably represents the best choice for China at this point.

<https://nationalinterest.org/blog/buzz/1-way-russia-could-help-china-build-nuclear-powered-aircraft-carrier-67922>

Russia and China sign fuel contract for new Tianwan units

World Nuclear News, July 23, 2019

TVEL, the nuclear fuel manufacturer subsidiary of Russia's Rosatom, has signed a supply contract for units 7 and 8 of the Tianwan nuclear power plant in China's Jiangsu province. The customers are Suneng Nuclear Power Corporation and China Nuclear Energy Industry Corporation, which are both subsidiaries of China National Nuclear Corporation (CNNC).

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<https://www.world-nuclear-news.org/Articles/Russia-and-China-sign-fuel-contract-for-new-Tianwa>

Russia denies it apologised to South Korea over alleged airspace breach - Ifax

Reuters, July 24, 2019

Russia's embassy in Seoul on Wednesday denied that Moscow had formally

apologised to South Korea over an alleged airspace violation during a joint air patrol with China the previous day, the Interfax news agency reported. South Korea on Tuesday accused a Russian military aircraft of entering its airspace over a disputed island during a long-range joint air patrol by Russian and Chinese aircraft.

Seoul said earlier on Wednesday that an unidentified Russian military attache working in the South Korean capital had expressed deep regret and blamed an equipment malfunction for the incident.

<https://in.reuters.com/article/southkorea-russia-aircraft-denial/russia-denies-it-apologised-to-south-korea-over-alleged-airspace-breach-ifax-idINKCN1UJ0ZS>

Iran's steps leave room for keeping nuclear deal - Russia's Deputy Foreign Minister

TASS News Agency, July 28, 2019

Russia is going to insist at the coming meeting of the joint commission on the implementation of the Iranian nuclear deal that the reduction of Iran's obligations still leaves the room for saving the deal, Deputy Foreign Minister Sergei Ryabkov said in an interview with TASS.

The meeting of the commission at the level of political directors will be held on Sunday, he added.

"We will discuss the schedule of a possible complication of the situation in connection with the steps the Iranians announced earlier. We will insist in our national capacity that the selective and reversible nature of the measures announced by the Iranians leaves enough room for a political and diplomatic maneuver," he said.

<https://tass.com/politics/1070697>

Study points to Mayak as source of ruthenium release

World Nuclear News, July 30, 2019

A used fuel reprocessing plant in the southern Urals region of Russia is the most likely source of a release of the isotope

ruthenium-106 detected across Europe in late 2017, a study has concluded. No incident has, however, been reported at the Mayak facility or any other Russian nuclear facility and Rosatom has always maintained this.

Very small quantities of ruthenium-106 - a fission product from the nuclear industry and a radionuclide used in medicine - were detected in several European countries between late September and early October 2017. Early investigations suggested the contaminated air masses measured in Europe originated from the southern regions of the Urals. However, an international commission appointed by Russia to investigate the release met for the second time in April 2018 and concluded available data did not provide sufficient information to verify the emission originated from any of the activities assumed to have caused the release.

<http://world-nuclear-news.org/Articles/Study-points-to-Mayak-as-source-of-ruthenium-relea>

Russian spaceship brings 3 tons of supplies to space station

AP News, July 31, 2019

An unmanned Russian spaceship carrying tons of supplies to the International Space Station has docked with the orbiting laboratory.

The Progress 73 cargo ship blasted off atop a Soyuz rocket at 1210 GMT Wednesday from the Russian space complex in Baikonur, Kazakhstan, and docked with the ISS about 3 ½ hours later after two orbits.

The Progress is carrying about 3 tons (2.7 metric tons) of food, fuel and supplies to the space station, which currently has six astronauts aboard.

Those on the space station now include Nick Hague, Christina Koch and Andrew Morgan of the United States, Russians Alexander Skvortsov and Alexey Ovchinin and Luca Parmitano of Italy.

<https://www.apnews.com/9fd87c61cb70444e9914e483473dd33b>

West Asia

Iran

Uranium not to pass 4.5% purity for time being: Kamalvandi

Tehran Times, July 16, 2019

Behrooz Kamalvandi, spokesman for the Atomic Energy Organization of Iran (AEOI), said on Tuesday that for the time being, Iran will not pass uranium enrichment above 4.5 percent purity. "We are not supposed to pass enrichment above 4.5 percent purity. We remain at this level for the time being. Enrichment is like high speed rail whose next station after 4.5 percent is 20 percent," Kamalvandi stated. He added, "For the time being, the country does not need enrichment at 20 percent purity."

On Monday, Kamalvandi said Tehran's decision to reduce its commitments to the 2015 nuclear pact was not made out of stubbornness, rather it aims to give a "chance to diplomacy".

<https://www.tehrantimes.com/news/438223/Uranium-not-to-pass-4-5-purity-for-time-being-Kamalvandi>

Iran's Zarif says U.S. travel curbs on Iranian diplomats 'inhuman'

Michelle Nichols, Reuters, July 16, 2019

Iran's Foreign Minister Mohammad Javad Zarif said on Wednesday that tight U.S. travel restrictions on Iranian diplomats and their families living in New York are "basically inhuman." The diplomats are subject to the same rules imposed by the United States on Zarif, who arrived on Sunday amid heightened tensions between the two countries.

They may only travel between the United Nations, the Iranian U.N. mission, the Iranian U.N. ambassador's residence and John F. Kennedy airport. There is also a carve-out for the six blocks surrounding Queensboro Plaza in Long Island City in the borough of Queens, though it was not immediately clear why.

<https://www.reuters.com/article/us-mideast-iran-usa-un/irans-zarif-says-us-travel-curbs-on-iranian-diplomats-inhuman-idUSKCN1UC1ZQ>

Jahangiri urges Europe to press U.S. to lift cruel sanctions

Tehran Times, July 16, 2019

Vice President Es'haq Jahangiri on Tuesday urged Europe to put pressure on the United States to remove its anti-Iran "cruel sanctions" instead of holding futile meetings and mounting pressure on Tehran to salvage the 2015 nuclear agreement.

"Instead of holding meetings and putting pressure on Iran, the European countries had better pressure the U.S. into lifting the cruel sanctions against the Iranian nation," said Jahangiri, speaking at a conference in Tehran. He reminded the parties to the Joint Comprehensive Plan of Action (JCPOA) that the only way to save the multinational agreement is to honor their commitments, Tasnim reported. The vice president also said after the U.S. withdrawal from the JCPOA, Iran waited for one year before reducing its nuclear commitments.

<https://www.tehrantimes.com/news/438220/Jahangiri-urges-Europe-to-press-U-S-to-lift-cruel-sanctions>

Deputy Majlis speaker: Tanker seizure not to affect Iran's JCPOA decisions

Tehran Times, July 16, 2019

Deputy Majlis speaker Abdolreza Mesri has said Britain's seizure of an Iranian oil tanker in Gibraltar will not dissuade Tehran from reducing its nuclear undertakings in response to the West's disloyalty.

The oil tanker was seized on July 4 in an operation involving British Royal Marines. It was captured under the allegation that it was carrying crude oil to Syria in breach of EU sanctions. Royal Gibraltar Police arrested the captain and his deputy on Thursday, while two second officers of the Grace 1 tanker were held on Friday. According to Press TV, Spain, which challenges the British ownership of Gibraltar, has said the seizure was prompted by a U.S. request to Britain and appeared to have taken place in Spanish waters.

Iran has condemned the seizure as "maritime piracy," vowing to employ all its

political and legal capacities to secure the release of the vessel. Top Iranian figures have called for retaliatory measures against the British government. Secretary of the Expediency Council Mohsen Rezaee has proposed that Iran should seize a British oil tanker if London doesn't release the tanker.

<https://www.tehrantimes.com/news/438221/Deputy-Majlis-speaker-Tanker-seizure-not-to-affect-Iran-s-JCPOA>

Iran's Khamenei issues new threat to ramp up Iran's nuclear program

Arab News, 17 July 2019

Iran vowed on Tuesday to ramp up its nuclear program and repeated threats of retaliation against the UK for seizing an illegal Iranian oil shipment to Syria. Since the beginning of July, Tehran has been escalating breaches of its commitments under the Joint Comprehensive Plan of Action (JCPOA), the 2015 deal to curb its nuclear program in return for an easing of sanctions.

Increasing its enrichment of uranium is an attempt by Tehran to pressure Britain, France and Germany – the European signatories to the JCPOA – into finding a way round crippling US sanctions imposed by President Donald Trump after he withdrew from the deal last May. "We have started to reduce our commitments and this trend shall continue," Iran's supreme leader Ayatollah Ali Khamenei said on Tuesday. "Europe made 11 commitments, none of which they abided by. We abided by our commitments and even beyond them. Now that we've begun to reduce our commitments, they oppose it. How insolent!"

<http://www.arabnews.com/node/1526416/middle-east>

Iran says its missile programme is not negotiable

July 17, 2019

On Tuesday said its ballistic missile programme was not up for negotiation after U.S. Secretary of State Mike Pompeo

told a White House cabinet meeting that Iran had signalled it was prepared to negotiate about it.

"Iran's missiles ... are absolutely and under no condition negotiable with anyone or any country, period," Alireza Miryousefi, spokesman for the Iranian mission at the United Nations, wrote on Twitter.

<https://in.reuters.com/article/mideast-iran-missiles-denial/iran-says-its-missile-programme-is-not-negotiable-idINKCN1UB2E7>

Zarif says nuclear bombs won't augment Iran's security

Tehran Times, July 17, 2019

Iranian Foreign Minister Mohammad Javad Zarif has rejected the allegation that Iran has nuclear bomb ambitions, saying acquiring nuclear weapons would not augment Iran's security. In an interview with BBC HardTalk's Zeinab Badawi broadcast on Tuesday, Zarif said If Iran wanted to build nuclear weapons it would have built it a long time ago. "We do not want to build the bomb because we believe that a nuclear bomb will not augment our security," he maintained.

"If the Europeans are serious about a nuclear weapons-free Middle East, there's somewhere else that they need to be looking and that's Israel where they have at least 200 nuclear warheads," he said. On the possibility of a war between Iran and the U.S. under President Donald Trump, Zarif said, "I accept that President Trump does not want war but I know that there are people in his administration who are crazy with war who search for war." "I don't think I need to mention, the President Trump himself has mentioned," he said when the BBC reporter asked if he meant U.S. national security adviser John Bolton. On a recent downing of an American drone by Iranian military in the Persian Gulf, he said, "We are protecting our territorial waters."

Zarif also said the U.S. is engaged in an economic war against Iran and that certain countries help the U.S. in its war against the Islamic Republic. "There are countries that are providing the United States with logistical supports with the reconnaissance,

that means that they are participating in that war," he added. "If there is a war then I do not think anybody will be safe in our region but let us all try to avoid war," he reiterated.

<https://www.tehrantimes.com/news/438269/Zarif-says-nuclear-bombs-won-t-augment-Iran-s-security>

A U.S. return to JCPOA will help settle current crisis: diplomat

Tehran Times, July 17, 2019

"The Islamic Republic of Iran has always sought peaceful solutions. We have never been interested in war, tension and intensification of crisis. We have always believed in peaceful solutions which can be realized if the U.S. returns to the JCPOA," Ambassador Masjedi told Aljazeera, ISNA reported on Wednesday. He added, "The peaceful way to peacefully settle this crisis is a U.S. return to the JCPOA and termination of sanctions and pressure and the economic war against Iran." Washington has no other choice, because Iran negotiates with no one under sanctions and pressure, the ambassador remarked.

In an interview with NBC News aired on Tuesday, Iranian Foreign Minister Mohammad Javad Zarif said the room for negotiations is "wide open" if U.S. President Donald Trump lifts sanctions against Iran. "The U.S. has always had sanctions on Iran, it's unfortunately addicted to sanctions, but there have been sanctions that have been imposed since President Trump came to office. Once those sanctions are lifted then room for negotiations is wide open," he said. Zarif added, "We are at the bargaining table. It is the United States that left the bargaining table. And they're always welcome to return. Provided that they are willing to live by. The U.S. can go back to implementing its obligations and come back to the bargaining table."

<https://www.tehrantimes.com/news/438254/A-U-S-return-to-JCPOA-will-help-settle-current-crisis-diplomat>

Iran grain ships stuck in Brazil without fuel due to U.S. sanctions

Roberto Samora, Marta Nogueira, Marcelo Teixeira, Reuters, July 19, 2019

Two Iranian vessels have been stranded for weeks at Brazilian ports, unable to head back to Iran due to lack of fuel, which state-run oil firm Petrobras refuses to sell them due to sanctions imposed by the United States. The vessels Bavand and Termeh came to Brazil a couple months ago carrying urea, a petrochemical product used as fertilizer. They were expected to load corn and return to Iran, but lacked enough fuel for the trip, the port operator in Paranaguá told Reuters.

<https://in.reuters.com/article/us-brazil-iran-sanctions/iran-grain-ships-stuck-in-brazil-without-fuel-due-to-u-s-sanctions-idINKCN1UD2QK>

Iran's IRGC seizes foreign vessel smuggling fuel

Tehran Times, July 19, 2019

The Islamic Revolution Guards Corps (IRGC) said on Thursday it had seized a foreign oil vessel in the Persian Gulf that was smuggling one million liters of Iranian fuel. In a statement on Thursday, the IRGC Navy said the foreign ship was captured on July 14 by military boats patrolling the first naval Zone in the Persian Gulf on an anti-smuggling mission.

The incident occurred south of Iran's Larak Island, the statement said. The "surprise operation" was carried out after the IRGC naval forces made sure the ship was smuggling fuel, it added. The IRGC said the ship had loaded the fuel from Iranian dhows and was about to hand it over to other foreign vessels in farther waters. The vessel, which had 12 foreign crewmembers aboard at the time of the seizure, is capable of carrying two million liters of fuel.

<https://www.tehrantimes.com/news/438285/Iran-s-IRGC-seizes-foreign-vessel-smuggling-fuel>

Iran's foreign minister, U.N. secretary-general meet in New York - IRNA

Reuters, July 19, 2019

Iranian Foreign Minister Mohammad Javad Zarif met with United Nations Secretary-General Antonio Guterres in New York on Thursday and discussed the Iranian tanker seized by the British Navy, a report by Iran's state news agency IRNA said.

<https://in.reuters.com/article/mideast-iran-un/irans-foreign-minister-u-n-secretary-general-meet-in-new-york-irna-idINKCN1UD37J>

Iran floats offer on nuclear inspections; U.S. sceptical

Arshad Mohammed, Steve Holland, Reuters, July 20, 2019

Iran on Thursday signalled a willingness to engage in diplomacy to defuse tensions with the United States with a modest offer on its nuclear programme that met immediate scepticism in Washington. Iran's foreign minister told reporters in New York that Iran could immediately ratify a document prescribing more intrusive inspections of its nuclear programme if the United States abandoned its economic sanctions, media organizations reported.

The document, known as the Additional Protocol, gives U.N. inspectors from the International Atomic Energy Agency (IAEA) more tools to verify that a nuclear programme is peaceful. While U.S. officials suggested they viewed the idea as a non-starter, analysts said it could provide an opening for U.S. President Donald Trump's administration to pursue diplomacy.

<https://in.reuters.com/article/mideast-iran-usa-zarif/iran-floats-offer-on-nuclear-inspections-u-s-sceptical-idINKCN1UD31A>

Iran military says all its drones have returned safely to base: report

Reuters, July 20, 2019

Iran's top military spokesman said all the country's drones had returned safely to base, the semi-official Tasnim news agency reported, after President Donald Trump said a U.S. Navy ship had "destroyed" one. "All drones belonging to Iran in the Persian Gulf and the Strait of Hormuz ... returned safely to their bases after their mission of identification and control, and there is no report of any operational response by USS Boxer," Abolfazl Shekarchi, a senior armed forces spokesman, was quoted as saying by Tasnim. Trump said on Thursday that the drone had flown to within 1,000 yards (914 metres) of the U.S. warship Boxer and had ignored "multiple calls to stand down" in the latest episode to stir tensions in the Gulf.

<https://in.reuters.com/article/mideast-iran-drones-spokesman/iran-military-says-all-its-drones-have-returned-safely-to-base-report-idINKCN1UE0MM>

Bolton's nuclear enrichment remarks lack legal validity: Shamkhani

Tehran Times, July 20, 2019

Ali Shamkhani, secretary of Iran's Supreme National Security Council, has said that U.S. National Security Adviser John Bolton's remarks that Iran should not be allowed to enrich uranium "have no legal credibility". Bolton tweeted on Thursday that Iran should not have been allowed to maintain enrichment capabilities in the 2015 nuclear deal, known as the Joint Comprehensive Plan of Action. "One of the worst mistakes of the Iran deal, now on full display, was allowing Iran to maintain enrichment capabilities. There should be no enrichment for Iran. Maximum pressure continues until Iran abandons its nuclear ambitions & malign activities," Bolton tweeted. Shamkhani said, "Remarks made by the U.S. national security adviser in which he denies Iran's rights to enrich uranium are symbols of falsity, unilateralism and

violation of international norms and lack any legal credibility."

He noted that any country which is a signatory to the Non-Proliferation Treaty is legally entitled to enrich uranium for peaceful purposes. He added that Iran's right to enrich uranium has been recognized in the JCPOA and also in the 2231 resolution of the UN Security Council. The security chief added if this right was not recognized Iran would have not entered nuclear talks which produced the JCPOA.

<https://www.tehrantimes.com/news/438369/Bolton-s-nuclear-enrichment-remarks-lack-legal-validity-Shamkhani>

Iran dismisses rumors Fordow nuclear site is closed

Tehran Times, July 20, 2019

Behrooz Kamalvandi, spokesman for the Atomic Energy Organization of Iran (AEOI), has dismissed reports of closure of Iran's Fordow nuclear site, saying the facility is being used for research on vacuum systems used to enrich uranium. The Fordow facility is open, and research and development activities on vacuum valves used for enriching uranium is being carried out there, Kamalvandi said on Saturday, according to Tasnim.

"The vacuum valves are utilized in complicated nuclear industries, and American nuclear analyst David Albright has also acknowledged the progress of this technology (in Iran) is his recent report," he added. Last year, Kamalvandi said there will be no change to the Fordow nuclear plant as long as the 2015 nuclear deal, known as the Joint Comprehensive Plan of Action, is preserved. Part of the JCPOA, the official name for the 2015 nuclear deal, states: "Iran will convert the Fordow facility into a nuclear, physics and technology centre."

<https://www.tehrantimes.com/news/438359/Iran-dismisses-rumors-Fordow-nuclear-site-is-closed>

JCPOA parties to hold emergency meeting on July 28

Tehran Times, July 22, 2019

The Iranian Foreign Ministry announced on Monday that the remaining parties to the JCPOA - the official name for the 2015 nuclear deal - will hold an emergency joint commission meeting in Vienna on July 28. Foreign Ministry spokesman Abbas Mousavi said the meeting will be attended by foreign ministry political directors and Helga Schmid, secretary general of the European External Action Service (EEAS).

The remaining parties to the agreement are Iran, Germany, France, Britain, China and Russia. The U.S. left the agreement in May 2018 and reimposed sanctions on Iran. The meeting is taking place as Iran is limiting its nuclear commitments in retaliation for the U.S. exit of the deal and a failure by the remaining parties to protect Iran from Washington's sanctions. Mousavi said the JCPOA signatories believe that it is a proper decision to hold such a meeting prior to the meeting of the foreign ministers.

<https://www.tehrantimes.com/news/438472/JCPOA-parties-to-hold-emergency-meeting-on-July-28>

Two more Iranian ships may be stranded in Brazil as sanctions bite

Marcelo Teixeira, Reuters, July 21, 2019

Two more Iranian bulk carriers that came to Brazil carrying urea and were expected to return home with corn could be left without enough fuel, as Brazilian state oil firm Petrobras refuses to provide them with bunker fuel due to U.S. sanctions.

Ship tracking data shows that Panamax-type vessels MV Delruba and Ganj, currently located near the Imbituba port in southern Brazil, were scheduled to run the same route as two other Iranian vessels, Bavand and Termeh, whose refueling problems Reuters reported on Thursday.

<https://in.reuters.com/article/brazil-iran-sanctions-ships/two-more-iranian-ships-may-be-stranded-in-brazil-as-sanctions-bite-idINKCN1UE2PU>

Iran says its seizure of British ship a 'reciprocal' move

Amir Vahdat and Aya Batrawy, AP News, July 21, 2019

Iran's seizure of a British oil tanker was a response to Britain's role in impounding an Iranian supertanker first, senior officials said Saturday, as newly released video of the incident showed Iranian commandos in black ski masks and fatigues rappelling from a helicopter onto the vessel in the strategic Strait of Hormuz.

The seizure prompted condemnation from the U.K. and its European allies as they continue to call for a de-escalation of tensions in the critical waterway. U.K. Foreign Secretary Jeremy Hunt said Britain's response "will be considered but robust." In comments on Twitter on Saturday, he said he spoke with Iran's foreign minister and expressed extreme disappointment that the Iranian diplomat had assured him Iran wanted to de-escalate the situation but "they have behaved in the opposite way."

<https://www.apnews.com/6c36f5aa1ba942569e5efcfd48e33324>

Iran warns West against starting conflict, says not looking for confrontation

Reuters, July 23, 2019

Iran's foreign minister warned the West on Monday against "starting a conflict," saying it was not seeking confrontation after its military seized the British-flagged tanker Stena Impero in the Strait of Hormuz last week.

London described the seizure of the Stena Impero as "state piracy" and on Monday called for a European-led naval mission to ensure safe shipping through the Strait of Hormuz. Speaking in Nicaragua, Foreign Minister Mohammad Zarif said Iran had taken measures against the ship to implement international law, not in retaliation for the British capture of an Iranian tanker two weeks earlier in Gibraltar.

<https://in.reuters.com/article/iran-nicaragua/iran-warns-west-against-starting-conflict-says-not-looking-for-confrontation-idINKCN1UH29J>

Iran's nuclear measures are legal, says envoy

Tehran Times, July 24, 2019

The Iranian Ambassador to Belarus, Mostafa Oveisi, has described as "legal" Iran's actions with regard to reduction of its commitments to the Joint Comprehensive Plan of Action (JCPOA), commonly known as the Iran nuclear deal.

Paragraph 36 provided a mechanism to resolve disputes and allows one side, under certain circumstances, to stop complying with the deal if the other side is out of compliance. Ambassador Oveisi said Iran has not violated the JCPOA. "All of Iran's actions are according to the non-proliferation treaty (NPT), and therefore none of the international organizations should be worried about it," IRNA quoted him as saying on Tuesday, citing Sputnik. He emphasized that it was not Iran that withdrew from the JCPOA, since the IAEA has confirmed Iran's compliance with the deal on several occasions.

All of Iran's actions are based on the NPT and monitored by the IAEA, the envoy said, adding, "Iran is politically acting peacefully and there should not be a concern for international organizations." "On the contrary, the world has to fear the policies of countries that have already used nuclear weapons against other people in the world and are trying to dominate the entire world." Oveisi further stressed that if the other signatories to the JCPOA abide by their commitments, Iran can re-implement all of its commitments to the 2015 accord.

<https://www.tehrantimes.com/news/438540/Iran-s-nuclear-measures-are-legal-says-envoy>

Iran is ready to negotiate but not if negotiations mean surrender - Iran president

Reuters, July 24, 2019

Iran is ready for "just" negotiations but not if they mean surrender, Iran's President Hassan Rouhani said on Wednesday, without saying what talks he had in mind.

Rouhani seemed to be referring to possible negotiations with the United States. U.S. President Donald Trump withdrew from a landmark 2015 nuclear deal with Iran last year but has said he is willing to hold talks with the Islamic Republic.

"As long as I have the responsibility for the executive duties of the country, we are completely ready for just, legal and honest negotiations to solve the problems," Rouhani said, according to his official website.

"But at the same time we are not ready to sit at the table of surrender under the name of negotiations."

<https://in.reuters.com/article/mideast-iran-president/iran-is-ready-to-negotiate-but-not-if-negotiations-mean-surrender-iran-president-idINKCN1UJ0UV>

Iran defence minister says no Iranian drone has been downed

Reuters, July 24, 2019

No Iranian drone has been brought down, the ISNA news agency quoted Iran's Defence Minister Amir Hatami on Wednesday as saying, after the U.S. military said it taken action against two Iranian drones in the past week. The United States said last Thursday that a Navy ship had "destroyed" an Iranian drone in the Strait of Hormuz after the aircraft threatened the vessel, but Iran said it had no information about losing a drone.

On Tuesday the U.S. military said one of its ships had taken defensive action against a second Iranian drone in the Strait of Hormuz last week, but did not see the drone go into the water. "We showed the body of the (U.S.) drone that we brought down," Hatami said, according to ISNA. "If anyone claims they brought down our drone, show it. No drone from the Islamic Republic of Iran has been brought down."

<https://in.reuters.com/article/mideast-iran-tanker-drones/iran-defence-minister-says-no-iranian-drone-has-been-downed-idINKCN1UJ13E>

Top Khamenei aide says no talks with U.S. under any circumstances

Babak Dehghanpisheh, Nafisa Eltahir, Reuters, July 25, 2019

The top military adviser to Iran's Supreme Leader Ayatollah Ali Khamenei said on Wednesday that Tehran would not negotiate with the United States under any circumstances, an apparent hardening of its position as the Gulf tanker crisis escalates. The Swedish operator of a British-flagged oil tanker seized by Iran in the Gulf last week said it had been able to speak to crew members and all 23 of them were safe.

"We had direct contact with the crew on board the vessel last night by telephone and they're all okay and in good health and they're getting good cooperation with the Iranians on board," Stena Bulk spokesman Pat Adamson said. The company said it had no evidence that the ship had been involved in a collision, one of the reasons Iran has cited for sending commandos to capture it last Friday.

<https://in.reuters.com/article/mideast-iran/top-khamenei-aide-says-no-talks-with-u-s-under-any-circumstances-idINKCN1UJ29V>

Second Bushehr nuclear plant foundation laying to begin early August

Tehran Times, July 26, 2019

Iran will begin to implement the foundation-laying phase at the second Bushehr nuclear power plant in early August, head of the Atomic Energy Organization of Iran announced on Friday. Ali Akbar Salehi said that if the construction goes as planned, the power plant will be ready to go on grid in six years. The third Bushehr power plant will be ready in eight years, he added. According to the official, the first Bushehr power plant currently provides for 2.7 percent of Iran's electricity output.

The Russian-built 1,000-megawatt nuclear power plant in Bushehr, southern Iran, started operating in 2011 and reached its full capacity the following year. In 2014, Russia signed a cooperation contract with

Iran to help build the second and third Bushehr reactors, which are scheduled for launch in 2024 and 2026, respectively. Salehi also commented on the reconstruction of the Arak heavy water nuclear reactor.

<https://www.tehrantimes.com/news/438592/Second-Bushehr-nuclear-plant-foundation-laying-to-begin-early>

Iran says missile tests defensive, needs no one's permission

Reuters, July 27, 2019

Iran said on Saturday missile tests were part of its defensive needs and were not directed against any country, after Washington said Tehran had test-fired a medium-range missile. A U.S. defence official said Iran tested what appeared to be a medium-range ballistic missile on Wednesday that travelled about 1,000 km (620 miles), adding that the test did not pose a threat to shipping or U.S. personnel in the region.

"An informed source at the armed forces staff said Iran's missile tests are natural within its defensive needs. This missile capacity is not against any country, and only aims to respond to possible aggression," Iranian news agencies reported.

<https://in.reuters.com/article/mideast-iran-missiles/iran-says-missile-tests-defensive-needs-no-ones-permission-idINKCN1UM0D3>

Seizure of Iranian tanker is violation of nuclear deal: Araghchi

Tehran Times, July 28, 2019

Iranian Deputy Foreign Minister for Political Affairs Abbas Araghchi said on Sunday that seizure of a supertanker carrying the Iranian oil is a violation of the 2015 nuclear deal, known as the JCPOA. Speaking prior to a meeting of the joint commission of the JCPOA in Vienna, he said that the signatories to the nuclear deal should not prevent Iran's oil export. Britain captured a supertanker carrying the Iranian oil on July 4 by claiming that it was transporting oil to Syria in violation of the

EU sanctions. Iran has dismissed claims the tanker was carrying oil for Syria and said technically it is impossible for the supertanker to anchor in Syria's ports.

Foreign Minister Mohammad Javad Zarif has called on Britain not to be part of the United States' "economic terrorism" against Iran. The United States, which withdrew from the 2015 nuclear deal in May 2018, has introduced the harshest ever sanctions against Iran. Trump himself has called the sanctions against Iran an "economic war". Under the nuclear deal, Iran agreed to put limits on its nuclear activities in exchange for normal economic ties including oil export.

<https://www.tehrantimes.com/news/438687/Seizure-of-Iranian-tanker-is-violation-of-nuclear-deal-Araghchi>

Iran intends to restart activities at Arak heavy water nuclear reactor: ISNA news agency

Reuters, July 28, 2019

The head of Iran's Atomic Energy Organization, Ali Akbar Salehi, told lawmakers on Sunday that Iran will restart activities at the Arak heavy water nuclear reactor, the ISNA news agency reported. ISNA cited a member of parliament who attended the meeting. Heavy water can be employed in reactors to produce plutonium, a fuel used in nuclear warheads.

Iran stopped complying in May with some commitments in the 2015 nuclear deal that was agreed with global powers, after the United States unilaterally withdrew from the accord in 2018 and re-introduced sanctions on Tehran.

<https://in.reuters.com/article/mideast-iran-nuclear/iran-intends-to-restart-activities-at-arak-heavy-water-nuclear-reactor-isna-news-agency-idINKCN1UN06O>

Iran says a European naval coalition for Gulf would send hostile message - Fars

Reuters, July 28, 2019

European countries forming a naval coalition for the Gulf would send a hostile message,

Iranian government spokesman Ali Rabiei said on Sunday, according to the semi-official Fars news agency. France, Italy and Denmark gave initial support for a British plan for a European-led naval mission to ensure safe shipping through the Strait of Hormuz, proposed after Iran's seizure of a British-flagged tanker, three senior EU diplomats said last week.

"What you've heard, that they want to send a European fleet to the Persian Gulf sends a hostile message, is provocative and will increase tension," Rabiei said.

<https://in.reuters.com/article/mideast-iran-gulf-coalition/iran-says-a-european-naval-coalition-for-gulf-would-send-hostile-message-fars-idINKCN1UN08S>

Iran says meeting with parties to nuclear deal 'constructive'

Kirsti Knolle, Reuters, July 28, 2019

An emergency meeting with parties to Iran's 2015 nuclear deal was constructive but there are unresolved issues and Tehran will continue to reduce its nuclear commitments if Europeans fail to salvage the pact, Iranian official Abbas Araqchi said on Sunday.

"The atmosphere was constructive. Discussions were good. I cannot say that we resolved everything, I can say there are lots of commitments," Araqchi, the senior Iranian nuclear negotiator, told reporters after the meeting in Vienna.

Parties to the agreement - Britain, Germany and France plus Russia and China - met Iranian officials for talks called in response to an escalation in tensions between Iran and the West that included confrontations at sea and Tehran's breaches of the nuclear accord.

"As we have said, we will continue to reduce our commitments to the deal until Europeans secure Iran's interests under the deal," Araqchi said.

The parties have been trying to salvage the pact since the United States withdrew from it in May 2018 and re-imposed and

toughened sanctions on Iran, crippling an already weak economy.

<https://in.reuters.com/article/mideast-iran/iran-says-meeting-with-parties-to-nuclear-deal-constructive-idINKCN1UN0DS>

Iran says meeting with parties to 2015 nuclear deal was 'constructive'

Reuters, July 28, 2019

An emergency meeting with parties to the 2015 Iran nuclear deal was "constructive", the nation's senior nuclear negotiator Abbas Araqchi said after the talks in Vienna.

"The atmosphere was constructive. Discussions were good. I cannot say that we resolved everything, I can say there are lots of commitments," Araqchi told Reuters.

The parties met in Vienna for talks called in response to an escalation in tensions between Iran and the West that included confrontations at sea and Tehran's breaches of the accord.

<https://in.reuters.com/article/mideast-iran-araqchi/iran-says-meeting-with-parties-to-2015-nuclear-deal-was-constructive-idINKCN1UN0FR>

Tehran open to talks if U.S. pays sanctions damages: Mirsalim

Tehran Times, July 30, 2019

Former presidential candidate Mostafa Mirsalim says Iran is open to talks with the U.S. only if the U.S. compensates for the damage it inflicted on Iran through sanctions.

Speaking with the Mehr news agency on Tuesday, Mirsalim criticized Foreign Minister Mohammad Javad Zarif for saying Iran would enter negotiations if the U.S. lifts sanctions. "Lifting the sanctions is not enough and the U.S. also must compensate for the damage it has inflicted on Iran, if there is going to be negotiation between Iran and the U.S.," he suggested. After the U.S. withdrawal from the 2015 Iran nuclear deal in May 2018, the Trump administration has imposed several rounds of sanctions against Iran, which include a total ban on Iran's oil exports.

<https://www.tehrantimes.com/news/438761/Tehran-open-to-talks-if-U-S-pays-sanctions-damages-Mirsalim>

Austria committed to nuclear deal, diplomat says

Tehran Times, July 30, 2019

The Austrian Ambassador to Tehran, Stefan Scholz, said on Tuesday that Vienna is committed to the 2015 nuclear deal, known as the Joint Comprehensive Plan of Action. During a meeting with the governor of Gorgan, Scholz said, "All the people of Iran have the right to enjoy economic benefits of the JCPOA." Britain, France, Germany, Russia, China, and Iran have been trying to salvage the pact since the U.S. withdrew from it in May 2018 and returned sanctions and imposed new ones. However, Europeans' efforts to protect trade with Iran against the U.S. sanctions have yielded nothing concrete so far.

"The atmosphere was constructive. Discussions were good. I cannot say that we resolved everything, I can say there are lots of commitments," the senior nuclear negotiator told Reuters. Helga Schmid, secretary general of the European External Action Service (EEAS), also issued a statement on Sunday saying that "participants reaffirmed their continued commitment to preserving the JCPOA." She also said, "They recalled that both nuclear commitments and sanctions-lifting are essential parts of the agreement."

<https://www.tehrantimes.com/news/438767/Austria-committed-to-nuclear-deal-diplomat-says>

Iran says it's prepared for dialogue if Saudi Arabia also ready

Reuters, July 31, 2019

Iran is prepared for dialogue if Saudi Arabia is also ready, Iranian Foreign Minister Mohammad Javad Zarif was quoted as saying on Wednesday. Tensions have spiked between Iran and Saudi Arabia, arch-rivals for predominance in the Middle East, since Riyadh accused the Islamic Republic of carrying out attacks that damaged six oil tankers in the Gulf. Tehran has denied the allegation.

"If Saudi Arabia is ready for dialogue, we are always ready for dialogue with our neighbours," Zarif was quoted as saying by the IRIB news agency. "We have never closed the door to dialogue with our neighbours and we will never close the door to dialogue with our neighbours."

The attacks on the oil tankers came as the United States, Saudi Arabia's major big power ally, toughened sanctions on Iran in an attempt to force it into negotiations on stricter limits to its nuclear activity and curbs on its ballistic missile programme.

<https://in.reuters.com/article/mideast-iran-saudi-arabia/iran-says-its-prepared-for-dialogue-if-saudi-arabia-also-ready-idINKCN1UQ188>

U.S. to renew sanctions waivers for five Iran nuclear programs: Washington Post

Tehran Times, July 31, 2019

According to the Washington Post, the decision will upset Iran hawks in Washington and be welcomed by Russia, China, European allies and the Iranian leadership. The issue is emblematic of the tension inside the administration over the implementation of President Trump's "maximum pressure" policy.

In an Oval Office meeting last week, Trump sided with Treasury Secretary Steven Mnuchin, who argued that the administration should again renew sanctions waivers related to five separate parts of Iran's nuclear program. Mnuchin prevailed over the objections of Secretary of State Mike Pompeo and national security adviser John Bolton, according to six administration officials. Pompeo, who is the lead official on the issue, will nevertheless support Trump's decision when it is announced later this week. Mnuchin, these six officials said, argued to Trump that if the sanctions were not again waived as required by law by Aug. 1, the United States would have to sanction Russian, Chinese and European firms that are involved in projects inside Iran that were established as part of the 2015 nuclear deal.

<https://www.tehrantimes.com/news/438796/U-S-to-renew-sanctions-waivers-for-five-Iran-nuclear-programs>

Defence minister says it's 'normal' for Iran to test missiles

Reuters, July 31, 2019

Iran's defence minister said on Wednesday it was "normal" for the country to test missiles as part of its defence research, Iranian media reported, after Washington said Tehran had test-fired a medium-range missile last week.

Brigadier General Amir Hatami stopped short of explicitly confirming the test. A U.S. defence official said last week Iran had launched what appeared to be a medium-range ballistic missile that travelled some 1,000 km (620 miles), and added that the test by Washington's arch-foe in the Middle East posed no threat to shipping or U.S. personnel in the region.

"Such things are normal across the world," Hatami was quoted by the semi-official news agency ISNA as saying, after being asked about the reported missile test. "The research programmes of the armed forces are drawn up and carried out every year...including missile tests."

<https://in.reuters.com/article/mideast-iran-missiles/defence-minister-says-its-normal-for-iran-to-test-missiles-idINKCN1UQ140>

H. Israel

Israel says Arrow-3 missile shield passes U.S. trials, warns Iran

Dan Williams, Reuters, July 28, 2019

Israel's U.S.-backed Arrow-3 ballistic missile shield has passed a series of live interception tests over Alaska, Prime Minister Benjamin Netanyahu said on Sunday, casting the achievement as a warning to Iran. Jointly manufactured by U.S. firm Boeing Co, Arrow-3 is billed as capable of shooting down incoming missiles in space, an altitude that would destroy any non-conventional warheads safely. It passed its first full interception test over the Mediterranean Sea in 2015 and was deployed in Israel in 2017.

"The performance was perfect - every hit a bull's eye," Netanyahu, who doubles as

defence minister, said in a statement announcing the three secret tests. Israel views the Arrow-3 as a bullwark against the ballistic missiles fielded by Iran and Syria. Iran has been locked in a spiralling confrontation with the United States over its nuclear programme and missile projects.

<https://in.reuters.com/article/israel-usa-missiles/israel-says-arrow-3-missile-shield-passes-u-s-trials-warns-iran-idINKCN1UN08Y>

Israel tests US-backed missile shield over Alaska

DW News, July 28, 2019[R1]

Israel and the United States say they have successfully tested the Arrow 3 missile defense system. Israel intends to use the jointly developed interceptor system to defend against missiles potentially fired from Iran.

Israel said on Sunday that it had carried out a series of successful live interception tests of its Arrow 3 ballistic missiles over the US state of Alaska.

<https://www.dw.com/en/israel-tests-us-backed-missile-shield-over-alaska/a-49775405>

I. Saudi Arabia

Zarif reaches out for dialogue with Saudi Arabia, UAE

Saudi Gazette, July 31, 2019

Iran is prepared for dialogue if Saudi Arabia is also ready, Iranian Foreign Minister Mohammad Javad Zarif said on Wednesday, according to the IRIB news agency.

Tensions have spiked between Iran and Saudi Arabia since Riyadh accused the Islamic Republic of carrying out attacks that damaged six oil tankers in the Gulf, an allegation Tehran has denied.

“If Saudi Arabia is ready for dialogue, we are always ready for dialogue with our neighbors,” Zarif said. “We have never closed the door to dialogue with our neighbors and we will never close the door to dialogue with our neighbors.”

Zarif also said Iran could hold similar talks with the United Arab Emirates (UAE), a close ally of the Saudis, adding, “If they change their policies it is a very good opportunity for dialogue”.

Iran had maritime security talks on Tuesday with the UAE in an apparent bid to calm tensions in the Gulf, though a Gulf Arab official described the discussions as routine and technical.

<http://www.saudigazette.com.sa/article/573666/World/Mena/Zarif-reaches-out-for-dialogue-with-Saudi-Arabia-UAE>

J. Turkey

Turkey removal from F-35 programme not legitimate - Turkish foreign ministry

Reuters, July 16, 2019

Turkey’s removal from the F-35 fighter jet programme over its purchase of Russia’s S-400 defence system is not based on a legitimate reason and does not suit ally spirit, the Turkish foreign ministry said on early on Thursday.

In a statement, the foreign ministry called on the United States to return from what it characterized as a mistake, saying it would harm strategic ties between two NATO allies.

<https://in.reuters.com/article/turkey-security-usa-foreignministry/turkey-removal-from-f-35-programme-not-legitimate-turkish-foreign-ministry-idINKCN1UC2PB>

Turkey cannot have both F-35 and Russia’s S-400: Trump nominee

Reuters July 17, 2019

U.S. President Donald Trump’s nominee to become the next secretary of defense restated that Turkey cannot have the F-35 advanced stealth fighter jet and Russia’s S-400 air defense system, which Moscow started delivering last week.

“The policy that I have communicated to my counterpart, if confirmed, (Turkey’s) defense minister is that you can either have

the S-400 or you can have the F-35, you cannot have both," said Army Secretary Mark Esper, testifying at his confirmation hearing on Tuesday before the Senate Armed Services Committee.

"Acquisition of the S-400 fundamentally undermines the capabilities of the F-35 and our ability to retain that over-match in the skies going forward."

<https://in.reuters.com/article/usa-turkey-security-f35/turkey-cannot-have-both-f-35-and-russias-s-400-trump-nominee-idINKCN1UB1X1>

Rocket fired from inside Syria wounds five in Turkish border town - governor

Reuters, July 23, 2019

Five people were lightly wounded after one of two rockets thought to be fired from within Syria landed on a house in a Turkish border town on Monday night, the provincial governor's office said.

The Defence Ministry said on Twitter that Turkish forces had responded to the rocket fire and had hit seven targets on the Syrian side of the border.

The precise origin of the rockets or who fired them was not immediately clear.

The five people wounded were taken to a hospital and were being treated, Sanliurfa governor's office said in a statement.

<https://in.reuters.com/article/syria-security-turkey-rocket/rocket-fired-from-inside-syria-wounds-five-in-turkish-border-town-governor-idINKCN1UH2DD>

Iran warns West against starting conflict, says not looking for confrontation

Reuters, July 23, 2019

Iran's foreign minister warned the West on Monday against "starting a conflict," saying it was not seeking confrontation after its military seized the British-flagged tanker

Stena Impero in the Strait of Hormuz last week.

London described the seizure of the Stena Impero as "state piracy" and on Monday called for a European-led naval mission to ensure safe shipping through the Strait of Hormuz.

Speaking in Nicaragua, Foreign Minister Mohammad Zarif said Iran had taken measures against the ship to implement international law, not in retaliation for the British capture of an Iranian tanker two weeks earlier in Gibraltar.

<https://in.reuters.com/article/iran-nicaragua/iran-warns-west-against-starting-conflict-says-not-looking-for-confrontation-idINKCN1UH29J>

Turkey's first shipment of Russian S-400s complete, second planned for Ankara: officials

Reuters, July 25, 2019

The first shipment of Russian S-400 defence systems to Turkey has been completed and a second shipment is now being planned to arrive in Ankara, Turkish military officials said on Thursday.

Turkey began accepting delivery of the S-400s earlier this month in a move that has strained ties with its NATO ally, the United States.

In response, Washington suspended Ankara from the F-35 jet programme over security concerns and has warned of possible U.S. sanctions, but Turkey has so far dismissed the warnings.

On Thursday, the officials said Turkey was still engaged in talks with U.S. officials to procure the Patriot defence system, which Washington had offered as an alternative to the S-400s. They also said France would deploy one SAMP-T battery, a missile defence system developed by the Franco-Italian EUROSAM consortium, along the southern Turkish border.

East Asia

K. North Korea

North Korea says nuclear talks at risk if U.S.-South Korea exercises go ahead

Reuters, July 16, 2019

The United States looks set to break a promise not to hold military exercises with South Korea, putting talks aimed at getting North Korea to abandon its nuclear weapons at risk, the North Korean Foreign Ministry said on Tuesday.

U.S. President Donald Trump, who said he agreed to a resumption of stalled working-level talks with North Korea in a surprise meeting with its leader Kim Jong Un last month, appeared unperturbed, reiterating that he did not feel pressed to conclude a quick deal.

<https://in.reuters.com/article/northkorea-usa-drills/north-korea-says-nuclear-talks-at-risk-if-u-s-south-korea-exercises-go-ahead-idINKCN1UB0RR>

North Korea: Kim Jong Un inspects new submarine

DW, July 23, 2019

Analysts say the size of the new submarine suggests it has been designed to potentially carry ballistic missiles. North Korea has claimed to have tested submarine-launched ballistic missiles in the past. North Korean leader Kim Jong Un inspected a newly built submarine facility on Tuesday, prompting speculation of renewed development of a submarine-launched ballistic missile (SLBM) program.

During the visit, he ordered officials to further bolster national military capabilities, according to state media. Kim reportedly expressed "great satisfaction" with the vessel upon being briefed about its operational and tactical data and weapon systems, stressing the "need to steadily and reliably increase the national defense capability by directing big efforts to the development of the naval weapons and equipment such as submarine." It was not

revealed where the inspection took place, but the Korean Central News Agency (KCNA) reported the submarine's operational deployment "is near at hand."

<https://www.dw.com/en/north-korea-kim-jong-un-inspects-new-submarine/a-49712500>

One of the missiles North Korea fired was new design: South Korea official

Reuters, July 25, 2019

At least one of the two missiles North Korea test fired on Thursday was a newly developed design and flew some 690 km (428 miles), an official at South Korea's defence ministry told Reuters.

The other missile travelled about 430 km (267 miles) before coming down in the sea off North Korea's east coast, the official said, adding that a detailed analysis was being done to verify if the two missiles were the same model.

<https://in.reuters.com/article/northkorea-missiles-test/one-of-the-missiles-north-korea-fired-was-new-design-south-korea-official-idINKCN1UK0FU>

North Korea tests ballistic missiles, U.S. still hopeful for talks

Hyonhee Shin, David Brunnstrom, Reuters, July 26, 2019

Reuters, July 25, 2019 SEOUL/WASHINGTON (Reuters) - North Korea test-fired two new short-range ballistic missiles on Thursday, South Korean and U.S. officials said, its first missile test since Kim Jong Un and U.S. President Donald Trump agreed to revive denuclearization talks last month.

The U.S. State Department urged Pyongyang to refrain from further provocations and said it still hoped for a resumption of the working-level talks stalled since a failed summit in Hanoi in February.

U.S. Secretary of State Mike Pompeo said Washington continued to see a diplomatic

way forward and anticipated new talks “in a couple of weeks.”

<https://in.reuters.com/article/northkorea-projectile/north-korea-tests-ballistic-missiles-u-s-still-hopeful-for-talks-idINKCN1UJ30C>

North Korea’s economy tanks as sanctions, drought bite: South Korea

Choonsik Yoo, Reuters, July 26, 2019

North Korea’s economy shrank in 2018 for a second straight year, and by the most in 21 years, as it was battered by international sanctions aimed at stopping its nuclear program and by drought, South Korea’s central bank said on Friday.

North Korea’s gross domestic product (GDP) contracted by 4.1% last year in real terms, the worst since 1997 and the second consecutive year of decline after a 3.5% fall in 2017, the South’s Bank of Korea estimated.

North Korea does not disclose any statistics on its economy. The South Korean central bank has been publishing its estimates since 1991, based on information from various sources including the South’s foreign trading agencies.

<https://in.reuters.com/article/us-northkorea-economy-gdp/north-koreas-economy-tanks-as-sanctions-drought-bite-south-korea-idINKCN1UL08G>

North Korea’s Kim says missile test a warning to South Korean ‘warmongers’

Joyce Lee, Josh Smith

Reuters, July 26, 2019

North Korea said on Friday its latest missile launch was a warning to South Korean “warmongers” to stop importing weapons and conducting joint military drills, a message analysts said was also aimed at the United States.

North Korean leader Kim Jong Un personally watched the test-fire of two short-range ballistic missiles on Thursday, the first test since Kim

met with U.S. President Donald Trump last month and agreed to revive denuclearisation talks.

The missile test raises doubts about the revival of denuclearisation talks, which stalled after the collapse of a second summit between Kim and Trump in Hanoi in February.

<https://in.reuters.com/article/northkorea-missiles/north-koreas-kim-says-missile-test-a-warning-to-south-korean-warmongers-idINKCN1UK330>

North Korea fires multiple ballistic missiles

DW, July 30, 2019

North Korea has fired two short-range ballistic missiles, according to South Korean military’s Joint Chiefs of Staff. It is the second North Korean ballistic missile test in less than a week. People watch a TV showing a file image of North Korea’s missile launch during a news program at the Seoul Railway Station in Seoul. North Korea fired two short-range ballistic missiles from Wonsan city off the country’s east coast, South Korea’s Joint Chiefs of Staff said Wednesday.

The two missiles flew about 250 kilometers (155 miles) and reached a height of 30 kilometers, Joint Chiefs of Staff said. “We stress a series of missile launches do not help ease tensions in the Korean Peninsula and urge the North to refrain from such acts,” a Joint Chiefs of Staff statement said. The missiles appeared to be different from those launched in previous tests, Yonhap reported. It did not elaborate. Japanese Prime Minister Shinzo Abe said the launches were “no threat to Japanese national security.” Defense Minister Takeshi Iwaya said: “It is extremely regrettable that North Korea continues firing the missiles that violate the U.N. resolutions.” The US military said it was monitoring reports of a missile test.

<https://www.dw.com/en/north-korea-fires-multiple-ballistic-missiles/a-49817575>

Flaws seen in Trump's calm response to North Korean missile launches

David Brunnstrom, Steve Holland, Reuters, July 27, 2019

U.S. President Donald Trump on Friday played down North Korea's latest launch of short-range ballistic missiles, calling them "very standard," a response some analysts said exposed flaws in his approach to Pyongyang and ignored the threat posed to allies Japan and South Korea as well as the U.S. troops they host.

North Korea said Thursday's launches were a warning to South Korean "warmongers" to stop importing weapons and conducting joint military drills, a message that analysts said was also aimed at the United States.

<https://in.reuters.com/article/northkorea-missiles-usa-trump/flaws-seen-in-trumps-calm-response-to-north-korean-missile-launches-idINKCN1UL2M8>

North Korea official tells U.S. counterpart talks to begin soon: senior U.S. official

Roberta Rampton, Reuters, July 30, 2019

A North Korean official told a White House National Security Council counterpart last week that working-level talks to revive denuclearisation negotiations with North Korea would start very soon, a senior U.S. administration official said on Tuesday.

There were no details provided to reporters on when such talks would occur. U.S. Secretary of State Mike Pompeo has appeared hopeful of a diplomatic way forward despite North Korea test-firing two new short-range ballistic missiles on July 25.

Pompeo and North Korean Foreign Minister Ri Yong Ho had been expected to meet on the sidelines of a Southeast Asia security forum in Bangkok this week, but Ri cancelled his trip to the conference, a diplomatic source said.

<https://in.reuters.com/article/northkorea-nuclear-usa/north-korea-official-tells-u-s-counterpart-talks-to-begin-soon-senior-u-s-official-idINKCN1UP27Z>

U.N. Security Council to meet on North Korea missile launches: diplomats

Reuters, July 31, 2019

Britain, Germany and France have asked the United Nations Security Council to meet behind closed-doors on Thursday on North Korea's latest missile launches, diplomats said.

North Korea fired two short-range ballistic missiles early on Wednesday, the South Korean military said, only days after Pyongyang launched two similar missiles intended to pressure South Korea and the United States to stop upcoming military drills. U.N. Secretary-General Antonio Guterres believed the missile launches were "just another reminder of the importance of restarting talks on the denuclearization of the Korean Peninsula," U.N. spokesman Stephane Dujarric told reporters.

<https://in.reuters.com/article/northkorea-missiles-un/u-n-security-council-to-meet-on-north-korea-missile-launches-diplomats-idINKCN1UQ2C9>

North Korea tests more missiles despite efforts at diplomatic solutions

Josh Smith, Hyonhee Shin, Reuters, July 31, 2019

North Korea fired two short-range ballistic missiles early on Wednesday, the South Korean military said, only days after it launched two similar missiles intended to pressure South Korea and the United States to stop upcoming military drills.

The firings follow launches on July 25, North Korea's first missile tests since leader Kim Jong Un and U.S. President Donald Trump met on June 30 and agreed to revive stalled denuclearisation talks.

The series of missile tests raises the stakes for U.S. and South Korean diplomats criss-crossing the region this week in the hope of restarting talks aimed at persuading Pyongyang to give up its nuclear weapons and ballistic missile programmes.

<https://in.reuters.com/article/northkorea-missiles-southkorea/north-korea-tests-more-missiles-despite-efforts-at-diplomatic-solutions-idINKCN1UP2FS>

North Korean projectiles were ballistic missiles, flew about 250 km: South Korea

Reuters, July 31, 2019

The unidentified projectiles launched by North Korea early on Wednesday were ballistic missiles that flew about 250 km (155 miles), South Korea's Joint Chiefs of Staff said. The projectiles appeared to be a different type to previous launches, minister Jeong Kyeong-doo said, according to South Korean news agency Yonhap. Japan's defence minister said any ballistic missile launch by North Korea would violate United Nations resolutions, Japan's Kyodo news agency reported.

<https://in.reuters.com/article/northkorea-missiles-southkorea-range/north-korean-projectiles-were-ballistic-missiles-flew-about-250-km-south-korea-idINKCN1UQ00B>

UN Security Council to meet on North Korea

DW, July 31, 2019

North Korea has conducted two ballistic missile tests in less than a week, in violation of UN resolutions. The missile tests come as the US and North Korea are trying to restart stalled denuclearization talks.

The UN Security Council will meet Thursday behind closed doors at the request of the United Kingdom, France and Germany, to discuss recent North Korean ballistic missile launches, diplomats said. North Korea fired two short-range ballistic missiles, South Korea's military said Wednesday, the second such test in less than a week. UN Security Council resolutions prohibit Pyongyang from ballistic missile tests.

North Korea's state media agency, KCNA, said Thursday that leader Kim Jong Un supervised the test of a "newly developed large-caliber multiple launch guided rocket system" the day before. It reported the system would "play a main role in ground military operations" and create "inescapable distress to the forces becoming a fat target of the weapon." The report contradicted the South's military assessment that the North

tested two short-range ballistic missiles that flew about 250 kilometers (155 miles) at a height of 30 kilometers.

<https://www.dw.com/en/un-security-council-to-meet-on-north-korea/a-49838405>

L. South Korea

US-NK talks likely to resume only after allies' joint drills: ex-minister

Yonhap, Korea Herald, July 18, 2019

Working-level nuclear talks between the United States and North Korea will likely resume only after the planned joint military exercises between South Korea and the US are over, a former unification minister has said. Jeong Se-hyun made the remark during a meeting with reporters on Wednesday, following Pyongyang's warning earlier this week that it will decide whether to open the working-level talks after "keeping watch over the US move," criticizing the allies' joint military exercises slated for next month.

http://www.koreaherald.com/view.php?ud=20190718000264&ACE_SEARCH=1

Seoul leaves various possibilities open over Hormuz Strait issue: ministry

Yonhap, Korea Herald, July 22, 2019

South Korea is closely monitoring the situation in waters off Iran, including the US' possible request for its troops dispatch to the region, the defense ministry said Monday. The United States has been asking its allies to join a military coalition to ensure freedom of navigation in the Strait of Hormuz amid heightened tensions between Washington and Tehran.

"So far, we have not received any official requests from the US side over the possible dispatch of our troops," Col. Roh Jaechon, the deputy ministry spokesman, told a regular briefing. "South Korea is keeping a close tab on the situation in the Strait of Hormuz while opening various possibilities in consideration of potential

impacts the matter could have on our side," he added. Another official said that the ministry "is reviewing diverse options and measures with regards to the issue."

http://www.koreaherald.com/view.php?ud=20190722000663&ACE_SEARCH=1

US nuclear-powered attack submarine comes to S. Korean port

Yonhap, Korea Herald, July 26, 2019

A US nuclear-powered attack submarine is visiting a South Korean port, government sources said Friday, amid heightened tensions following North Korean missile tests. The 6,900-ton USS Oklahoma City arrived at the southern port of Busan on Thursday, they said, to replenish supplies and have its crew rest. The submarine is reportedly scheduled to depart next week.

The port call came on the same day that North Korea launched two missiles from Hodo Peninsula near the North's eastern coastal town of Wonsan. The Los Angeles-class submarine is the second US Navy ship to be named for the US city of Oklahoma City. It was commissioned on July 9, 1988 and its home port is on Guam.

http://www.koreaherald.com/view.php?ud=20190726000602&ACE_SEARCH=1

Both missiles North Korea fired flew some 600 km - South Korea military

Reuters, July 27, 2019

Both of the missiles North Korea fired on Thursday flew some 600 km (373 miles), an official at South Korea's defence ministry said, citing a joint assessment of the launches with the United States. The missiles appear to have been a new type of short-range ballistic missile, with similar characteristics to Russia's SS-26 Iskander missile, the official told Reuters on Friday. The South Korean military initially said that the first missile flew 430 km (267 miles) and the other one 690 km (428 miles) before falling into the sea off the east coast.

<https://in.reuters.com/article/northkorea-missiles-southkorea/both-missiles-north-korea-fired-flew-some-600-km-south-korea-military-idINKCN1UL06P>

NK calls for abrogation of military info-sharing pact between S. Korea, Japan

Yonhap, Korea Herald, July 31, 2019

North Korea said Wednesday a military information-sharing pact between South Korea and Japan must be abolished since it contains Tokyo's ambition to reinvade the Korean Peninsula. The Korean Central News Agency (KCNA), Pyongyang's official mouthpiece, said that the General Security of Military Information Agreement (GSOMIA) should be scrapped immediately since it is a "war-inciting, peace-destroying agreement."

The deal, signed by Seoul and Tokyo in 2016, is designed to facilitate the sharing of confidential military information to better counter evolving nuclear and missile threats from North Korea. "The agreement is just a risky one representing the wild ambition of the politicians of the island country to occupy the Korean peninsula and furthermore put the whole region under control," the KCNA said.

http://www.koreaherald.com/view.php?ud=20190731000803&ACE_SEARCH=1

M. Japan

Japan's Tepco to decommission second Fukushima nuclear station

Aaron Sheldrick, Reuters, July 24, 2019

Tokyo Electric Power said on Wednesday it plans to decommission its Fukushima Daini nuclear station, located a few miles south of the bigger Fukushima Daiichi plant where three reactors melted down after an earthquake and tsunami in 2011.

Scrapping the reactors could mean Japanese nuclear operators would decommission 21 units, or nearly 40% of their pre-disaster fleet, saddling them with billions of dollars of costs to dismantle and decontaminate the facilities.

Before the March 2011 tsunami, nuclear power served about 30% of Japan's electricity requirements. The nuclear station shutdown forced Japan to use

record quantities of imported thermal coal and liquefied natural gas to replace the lost generation capacity.

<https://in.reuters.com/article/us-japan-nuclear-tepco-decommissioning/japans-tepco-to-decommission-second-fukushima-nuclear-station-idINKCN1UJ06O>

Japan says North Korea launched short-range ballistic missiles - Kyodo

Reuters, July 25, 2019

The two projectiles launched by North Korea early on Thursday were short-range ballistic missiles, a Kyodo report citing a Japanese government source said.

The source said the missiles did not reach Japan's exclusive economic zone (EEZ) and had no impact on Japan's national security, Kyodo reported.

Reporting by Chang-Ran Kim; Editing by Sam Holmes

<https://in.reuters.com/article/northkorea-projectile-japan/japan-says-north-korea-launched-short-range-ballistic-missiles-kyodo-idINKCN1UJ38D>

Noted filmmaker in Hiroshima to renew call to ban nuclear weapons

Tomoyo Hatta, The Asahi Shimbun, July 27, 2019

Acclaimed film director Nobuhiko Obayashi visited the Memorial Peace Park here July 26 to pray for repose of victims of the city's 1945 atomic bombing.

The latest work by the octogenarian filmmaker, who was born in Onomichi, Hiroshima Prefecture, is themed on war and the atomic bombing of Hiroshima.

"It triggered my hunger for knowledge on the reality of nuclear weapons," Obayashi said after visiting the Hiroshima Peace Memorial Museum located in the park.

Obayashi, who has been battling terminal cancer, rose up from his wheelchair with a helper's assistance and joined his hands in prayer in front of a museum display of personal effects of atomic bomb victims.

"Let's stop the use of nuclear weapons. We have no other option," Obayashi told reporters.

Obayashi made the visit ahead of his attendance at this International Symposium for Peace, "The Road to Nuclear Weapons Abolition," which got under way in Hiroshima on July 27.

<http://www.asahi.com/ajw/articles/AJ201907270020.html>

Japan says North Korean launch didn't reach its territory or EEZ

Reuters, July 31, 2019

The Japanese Ministry of Defence said no ballistic missiles had reached Japan's territory or its exclusive economic zone after North Korea fired several unidentified projectiles on Wednesday. No immediate impact was seen on Japan's security following the launch, the ministry said in a statement.

<https://in.reuters.com/article/northkorea-missiles-southkorea-japan/japan-says-north-korean-launch-didnt-reach-its-territory-or-eez-idINKCN1UP2NK>

N. Misc

U.N. nuclear watchdog chief Amano dies aged 72

Francois Murphy, Reuters, July 22, 2019

U.N. nuclear watchdog chief Yukiya Amano has died, the International Atomic Energy Agency said on Monday, the day he had been expected to announce he would step down early because of an illness that had visibly weakened him over the past year.

The 72-year-old Japanese diplomat had held the position of IAEA director general since 2009, taking over from Mohamed ElBaradei and steering the U.N. agency through a period of intense diplomacy over Iran's nuclear programme while seeking in vain to return to North Korea.

His death coincides with a sharp escalation of tensions between Iran and the West following Washington's decision last year

to quit a 2015 international deal that curbed Tehran's nuclear programme in return for an easing of economic sanctions.

<https://in.reuters.com/article/nuclear-iaea-amano/u-n-nuclear-watchdog-chief-amano-dies-aged-72-idINKCN1UH0LA>

Astronauts hailed as heroes 50 years after historic moon landing

Joey Roulette, Reuters, July 21, 2019

Capping a week of celebrations over the historic Apollo 11 mission, Vice President Mike Pence joined astronaut Buzz Aldrin on Saturday at the launch pad in Florida that sent the moonwalker and his two crew mates to space for humankind's first steps on the lunar surface 50 years ago.

Pence joined NASA Administrator Jim Bridenstine and Aldrin, the second man to walk on the moon behind his fellow astronaut Neil Armstrong, at NASA's Kennedy Space Center for a ceremony commemorating the 50th anniversary of the moon landing that enthralled people around the world in 1969.

<https://in.reuters.com/article/space-exploration-moon/astronauts-hailed-as-heroes-50-years-after-historic-moon-landing-idINKCN1UG022>

U.N. nuclear watchdog appoints Romanian diplomat Feruta as interim chief

Reuters, July 25, 2019

Romanian diplomat Cornel Feruta will head the International Atomic Energy Agency (IAEA) until member states agree on a permanent successor to deceased Director General Yukiya Amano, the United Nations' nuclear watchdog said on Thursday.

The IAEA announced on Monday that Amano had died, leaving the agency with a leadership vacuum at a time of rising tensions between Iran and the West following Washington's decision last year to quit a 2015 international deal that curbed Tehran's nuclear programme in return for an easing of economic sanctions.

U.S. President Donald Trump has reimposed sanctions on Iran and the fate of

the landmark deal, which the IAEA has been overseeing, is unclear.

"The Board of Governors has decided to designate Mr Cornel Feruta as acting Director General until a Director General assumes office," the IAEA said on Thursday.

<https://in.reuters.com/article/nuclear-iaea/u-n-nuclear-watchdog-appoints-romanian-diplomat-feruta-as-interim-chief-idINKCN1UK1R4>

U.N. nuclear watchdog's chief plans to step down early: diplomats

Reuters, July 17, 2019

U.N. nuclear watchdog chief Yukiya Amano plans to step down early, in March of next year, because of an unspecified illness that has visibly weakened him over the past year, diplomats who follow his agency's work said on Wednesday.

Amano, a 72-year-old Japanese diplomat, was reappointed in 2017 to a third four-year term in charge of the International Atomic Energy Agency, until Nov. 30, 2021.

<https://in.reuters.com/article/un-iaea-chief/u-n-nuclear-watchdogs-chief-plans-to-step-down-early-diplomats-idINKCN1UC1FW>

Cybersecurity by Design in Civil Nuclear Power Plants

Chatham House UK, July 24 2019

Cyberattacks are increasingly challenging critical national infrastructure. This paper considers the security by design approach for civil nuclear power plants and analyses areas of risk and opportunities for the nuclear industry.

The application of 'security by design' in nuclear new builds could provide operators with the opportunity to establish a robust and resilient security architecture at the beginning of a nuclear power plant's life cycle. This will enhance the protection of the plant and reduce the need for costly security improvements during its operating life. Security by design cannot

fully protect a nuclear power plant from rapidly evolving cyberattacks, which expose previously unsuspected or unknown vulnerabilities. Careful design of security systems and architecture can – and should – achieve levels of protection that exceed current norms and expectations.

<https://www.chathamhouse.org/publication/cybersecurity-design-civil-nuclear-power-plants>

Canada launches environmental assessment of Micro Modular Reactor

World Nuclear News, July 17, 2019

The Canadian government has issued the notice of commencement of an environmental assessment for a small modular reactor project proposed by Global First Power (GFP) with support from Ultra Safe Nuclear Corporation (USNC) and Ontario Power Generation (OPG). The companies describe the move as a significant “first” for the Canadian nuclear industry.

The Micro Modular Reactor is a 15 MW thermal, 5 MW electrical high-temperature gas reactor, drawing on operational experience from reactors developed by China, Germany, Japan and the USA. According to World Nuclear Association information, the reactor uses fuel in prismatic graphite blocks and has a sealed transportable core. The reactor completed the first phase of the Canadian Nuclear Safety Commission pre-licensing vendor design review process in January.

<https://www.world-nuclear-news.org/Articles/Canada-launches-environmental-assessment-of-Micro>

IAEA Director General Yukiya Amano passes away

World Nuclear News, July 22, 2019

The International Atomic Energy Agency (IAEA) announced today the passing of its director general, Yukiya Amano. His term in office was due to end in late 2021, but Amano, who was 72, had been planning to step down from the post, which he had held for almost ten years, the agency said.

Amano became IAEA director general on 1 December 2009. In September 2017 he was appointed to serve a third four-year term and was set to stay until the end of November 2021. Today the IAEA Secretariat issued a statement announcing his passing “with deepest sadness”.

<http://world-nuclear-news.org/Articles/IAEA-Director-General-Yukiya-Amano-passes-away>

World’s Largest Nuclear Fusion Experiment Clears Milestone

Nathanial Gronewold, Scientific American, July 24, 2019

A multinational project to build a fusion reactor cleared a milestone yesterday and is now 6 ½ years away from “First Plasma,” officials announced.

Yesterday, dignitaries attended a components handover ceremony at the construction site of the International Thermonuclear Experimental Reactor in southern France. The ITER project is an experiment aimed at reaching the next stage in the evolution of nuclear energy as a means of generating emissions-free electricity.

The section recently installed – the cryostat base and lower cylinder – paves the way for the installation of the tokamak, the technology design chosen to house the powerful magnetic field that will encase the ultra-hot plasma fusion core.

<https://www.scientificamerican.com/article/worlds-largest-nuclear-fusion-experiment-clears-milestone/>

U-Battery SMR moves to next stage of Canadian assessment

World Nuclear News, July 30, 2019

The Urenco-led U-Battery consortium has completed the first stage of Canadian Nuclear Laboratories’ (CNL) invitation to site a first-of-a-kind small modular reactor (SMR) at the Chalk River site. It is the fourth reactor design to do so.

The U-Battery consortium has now been invited to enter the Due Diligence stage -

the second of CNL's four-stage process - in which CNL will evaluate the proposed design, assess its financial viability and review the necessary national security and integrity requirements. The reactor is also progressing through the UK's Advanced Modular Reactor Programme.

U-Battery General Manager Steve Threlfall said the consortium was a "step closer" to establishing a first-of-a-kind SMR at Chalk River. "We are entering the energy sector at a critical time in Canada's energy transformation, and U-Battery has the potential to drive significant regional economic benefits across Canada while addressing urgent climate change needs," he said.

<http://www.world-nuclear-news.org/Articles/U-Battery-SMR-moves-to-next-stage-of-Canadian-asse>

O. Op-Ed

India

5 Missions in 5 yrs to study Solar System, Black holes

Kalyan Ray, Deccan Herald, July 19, 2019

Moving beyond Chandrayaan-2, Indian Space Research Organisation plans to launch five astronomy missions in the next five years to explore the deep space. ISRO would send spacecraft to the Sun, Venus and Mars besides launching a unique probe to study cosmic monsters like Black Holes.

<https://www.deccanherald.com/national/5-missions-in-5-yrs-to-study-solar-system-black-holes-748212.html>

India-US ties and the Soviet baggage

KP Nayar, The Tribune, July 19, 2019

Till about a decade ago, India and the US were talking to each other on 38 platforms. Now they are talking at one another. Such difficulties have been compounded by a tendency in India to run down Trump and view him as a bull in the global diplomatic China shop. But there is hope as the new

External Affairs Minister, S Jaishankar, does not believe in demonising Trump.

Till about a decade ago, India and the US were talking to each other on 38 platforms. Now they are talking at one another. Such difficulties have been compounded by a tendency in India to run down Trump and view him as a bull in the global diplomatic China shop. But there is hope as the new External Affairs Minister, S Jaishankar, does not believe in demonising Trump.

<https://www.tribuneindia.com/news/comment/india-us-ties-and-the-soviet-baggage/804202.html>

20 years after Kargil War: How India readied nuclear weapons in IAF's Mirage

Sushant Singh, Indian Express, July 21, 2019

Barely a year after India and Pakistan officially went nuclear with the Pokharan-2 tests in May 1998, India was posed with the unenviable challenge of possible use of nuclear weapons in case of an unintended escalation during the Kargil War. With no experience to fall back upon, it was in the heat of the conflict that India conjured up a 'primitive' air delivery system for nuclear weapons on Mirage-2000 fighter jets of the Indian Air Force (IAF).

Advertising

With the war being limited to the Indian side of the Line of Control (LoC), use of a nuclear weapon was highly unlikely, but the need to be prepared for any contingencies was incumbent upon New Delhi. Although India conducted five nuclear tests in May 1998 to become a declared nuclear power, the structures and processes for development, deployment and employment of nuclear forces were still being put in place.

<https://indianexpress.com/article/india/india-pakistan-kargil-war-air-force-mirage-fighter-jets-5839794/>

Kargil established India's image as a responsible power

Shankti Sinha, Hindustan Times, July 21, 2019

If there is one moment in history that signalled India's acceptance as a responsible and weighty power, it was the Kargil war. The Kargil war was exceptional in many ways. Atal Bihari Vajpayee had led the Bharatiya Janta Party (BJP) and its allies to power in early 1998. He soon took two extremely controversial steps that had a direct bearing on the Kargil war.

The first was the series of nuclear tests conducted in May 1998, making India formally a nuclear weapons power. While the country welcomed the tests, the world was stunned. The subsequent Pakistani tests confirmed the worst suspicions of the West that South Asia was now dangerously sliding into a worst-case scenario of nuclear Armageddon. Both the countries were hit with harsh sanctions, and a veritable war of words broke out, primarily directed at India as the supposed initiator of an arms race. India's stand – that it was forced to test because the Sino-Pak nuclear and missile cooperation seriously threatened our security – had few takers.

<https://www.hindustantimes.com/analysis/kargil-established-india-s-image-as-a-responsible-power/story-mWm7RGpTBhMGfwEtVSOxPM.html>

Remembering APJ Abdul Kalam: The Missile Man who vouched for India's Joint family system

Kartikey Sehgal, National Herald, July 27, 2019

On 27th July 2015, APJ Abdul Kalam passed away. One of his most cherished desires was the joint family system – he called it the ultimate problem solver! Kalam's vision showcased this with respect to concern about mental health – similar thoughts have been promoted by a scientist and a filmmaker.

The Supreme Court recently passed an order implying that if a woman files a domestic violence complaint against her husband,

then the husband's brother too is expected to pay her maintenance money if he was living with the couple.

Perhaps the court had only good intentions while pronouncing this judgment. However, there is one man who would have disliked this. He was one of India's leading scientific minds who would have probably called such a judgment as an attack on India's joint family system.

<https://www.nationalheraldindia.com/india/remembering-apj-abdul-kalam-the-missile-man-who-vouched-for-indias-joint-family-system>

Chandrayaan

Apollo 11 And Chandrayaan-2: Major Moon Stories, Contrasting Lessons For Career Owners

Michael B. Arthur, Forbes, July 20, 2019

On July 20, 2019, the world celebrated the 50th anniversary of NASA's Apollo 11 mission. Less than two and a half years after a tragic fire on Apollo 1, the U.S. had placed the first man on the moon. On July 22, the Indian Space Research Organization (ISRO) announced the successful launch of their Chandrayaan-2 moonshot. Led by two women scientists, project director Muthayya Vanitha and mission director Ritu Karidhal, it involved a pathbreaking "slingshot" approach. What can career owners in each country – and around the world – learn from the contrast between these events?

India: India belongs to a list of just five countries – the U.S., Russia, China, India and Japan – along with the European Space Agency that have successfully launched moon rockets. If the projected soft landing in around seven weeks goes as planned, it will be one of just four countries to have achieved such a landing. Notably it is the first moon project to have been led by women, and 30% of the project's scientists were women. Moreover, it piloted a new approach to space travel using smaller, energy-saving rockets that emphasized the slingshot approach to take advantage of the earth's

gravity. Career owners can learn from the both the leadership and innovation on display.

<https://www.forbes.com/sites/michaelbarthur/2019/07/30/appollo-11-and-chandrayaan-2-major-moon-stories-contrasting-lessons-for-career-owners/#736508f31d90>

China

Tiangong-2's controlled re-entry shows China's international responsibility: chief designer

Deng Xiaoci and Li Ruohan, Global Times, July 19, 2019

China to play bigger role in peaceful space use. China's space lab Tiangong-2 successfully left orbit and re-entered the atmosphere on Friday night in a controlled manner after more than 1,000 days in service, with a small amount of debris falling into a designated security area in the South Pacific Ocean and most of the spacecraft burned in the atmosphere. "Tiangong-2 space lab has completed all of its planned and extension tasks," Zhu Zongpeng, chief space lab designer, said in a press release sent from the main project developer, China Academy of Space Technology under the China Aerospace Science and Technology Co (CAST), to the Global Times on Friday.

According to the developer, Tiangong-2 had a designed operation life of two years, and had been operating in orbit for over 1,000 days. Though they had been operating longer than designed life, the research platform and all payloads onboard Tiangong-2 were still in good condition, and the propellant carried by the space lab was also sufficient to support its flight in orbit for several years. "Considering multiple factors, including security and the reliability of the space lab in orbit, we have to choose to de-orbit the space lab," Zhu said. Retiring the "healthy and strong" space lab highlights China's image as a great responsible power, Zhu noted

<http://www.globaltimes.cn/content/1158460.shtml>

China invites nations to join in moon exploration

Zhao Huanxin, China Daily, July 22, 2019

Chinese lunar explorers said their moon exploration program, including plans for a robotic lunar research station prototype by 2030 to prepare manned missions, is open to international cooperation. Four missions were conducted between 2007 and 2019, with Chang'e-4 deploying a lander and the Yutu-2 rover on the surface of the far side of the moon in early January. The fifth mission, scheduled for early next year, is to return rocks to Earth from an as yet unsampled lunar area, according to the authors. After 2030, China's lunar exploration program will continue to develop robotic and human exploration, with the former taking precedence in subsequent lunar exploration missions, they said. NASA, the US space agency, aims to put Americans on the moon again by 2024.

In the Science article, "China's present and future lunar exploration program", Li and his colleagues said China's exploration plan is "flexible and iterative", with an emphasis on international cooperation. The authors wrote that China is open to cooperation with NASA on lunar exploration. "Both sides can start cooperating on aspects such as exchange of scientific data and space situational awareness information," the article said. "China also looks forward to exploring more opportunities to cooperate with NASA to preserve the space environment for generations to come." Already, China's latest lunar mission Chang'e-4 has carried out experiments from Germany, Sweden and the Netherlands, it said. In April, the China National Space Administration announced cooperation opportunities for China's sixth lunar mission and its asteroid exploration mission. It also signed lunar exploration cooperation agreements with the United Nations Office for Outer Space Affairs, Turkey, Ethiopia and Pakistan.

<http://www.chinadaily.com.cn/a/201907/22/WS5d3504fca310d83056400329.html>

China, Russia, Europe to jointly explore plan for research station on Moon

Global Times, July 23, 2019

Space authorities of China, Europe and Russia have agreed to jointly explore the plan to build a scientific research station on the Moon, a senior Chinese space official said Monday. The joint exploration will focus on the scientific objectives of the station, as well as system-related or mission-based discussions, said Wu Yanhua, deputy director of the China National Space Administration (CNSA).

Participants will jointly plan and design the station, coordinate their implementation of the plan and ultimately share the scientific results, Wu said at an international conference on the exploration of the Moon and the deep space that opened Monday in the southern Chinese city of Zhuhai, Guangdong Province. Pei Zhaoyu, deputy director of the Lunar Exploration and Space Program Center of the CNSA, said the construction plan for the station is expected to be completed after two to three years of deliberations by an international team of scientists. China, Russia and Europe have all put forward or showed inclinations for the idea of building a scientific base on the Moon.

<http://www.globaltimes.cn/content/1158816.shtml>

China risk cannot be ignored: expert

Aaron Tu and Jonathan Chin, Taipei Times, July 23, 2019

China's plan to exert more control in Hong Kong and cultivate pro-Beijing factions in Taiwan has taken a blow, but the regime is likely to renew its efforts when conditions are seen to be favorable, so Taiwan must be cautious, security expert Lee Che-chuan said. Lee wrote the comments in an article in the latest issue of the Institute of National Defense and Security Research's journal, the National Defense and Security Weekly. The institute is a think tank affiliated with the

Ministry of National Defense. Hong Kong protests over a proposed extradition law offer Taiwan insight into Chinese President Xi Jinping's decisionmaking process, as Xi is known to direct Beijing's policies regarding the territory and Taiwan, Lee wrote.

<http://www.taipetimes.com/News/taiwan/archives/2019/07/23/2003719156>

Warning signs in Chinese launches

Lu Li-shih, Taipei Times, July 23, 2019

From June 29 to July 3, the Chinese People's Liberation Army (PLA) for the first time conducted multiple test firings of ballistic missiles in the South China Sea. Calling them "military drills," the PLA issued a warning to shipping that from that point on, it sealed off the Dreyer Shoal (-NWS-fTM1) and surrounding waters of the South China Sea. This was followed by a "notice to airmen" (NOTAM) by the Sanya flight information region (FIR) regarding a temporary danger area south of China's Hainan Island and north of Woody Island (Yongxing Island) Reuters and Japan Broadcasting Corp reported that the PLA fired six ballistic missiles, which presents two questions to which Taiwan's military needs to find responses:

First, how do these "drills" correlate with exercises in the Philippine Sea and waters close to Hainan Island involving China's Liaoning aircraft carrier group? Second, what level of threat do the missile tests present to nations of the first island chain, including Taiwan? Over the past few years, the PLA Navy has dispatched several task forces, formed around Type 071 Yuzhao-class amphibious transport ships, conducting escort duties in the Gulf of Aden, in the Indian Ocean and, in January, even passing through the Bashi Channel – Taiwan's southern theater of operations – to conduct blue-water exercises in the Pacific Ocean.

<http://www.taipetimes.com/News/editorials/archives/2019/07/23/2003719135>

China invites others to join moon program

Zhao Huanxin, China Daily Global, July 23, 2019

China's latest lunar mission, Chang'e 4, has already carried experiments from Germany, Sweden and the Netherlands, the article said. In April, the China National Space Administration announced cooperation opportunities for China's sixth lunar mission and its asteroid exploration mission. It also signed lunar exploration cooperation agreements with the United Nations Office for Outer Space Affairs, Turkey, Ethiopia and Pakistan. James Head, a professor of geological science and planetology at Brown University in the US state of Rhode Island who participated in all the Apollo missions in the 1960s and '70s, said the 50th anniversary of the moon landing "makes us realize that when the astronauts looked back from the moon, they saw no national boundaries, but simply what Carl Sagan called a 'pale blue dot' that was their home planet".

"The ability of many countries to undertake robotic, and soon human, exploration is a wonderful, peaceful way to demonstrate their technical capability and develop space technology that can be used to better conditions in their own countries as well as the Earth as a planet," he told China Daily in an email. "International cooperation is already well underway on all of these missions." In an earlier interview with China Daily, Head said the moon is a big place with "lots of exciting questions" to pursue, and there is lots of room for individual countries to have specific national lunar exploration programs. "But it would be in no one's interest if we all duplicated each other's work. Coordination, collaboration and cooperation are among the many ways that we can work to optimize the scientific and fiscal outcomes," he said.

<http://www.chinadaily.com.cn/a/201907/23/WS5d3665e0a310d83056400774.html>

India 'paranoid' to conduct space war drill with eye on China: analyst

Zhang Han, Global Times, July 25, 2019

Indian media noted that the country's first space war drill Thursday had an "eye on

China," prompting a Chinese military expert to dub the comment "paranoia." The two-day IndSpaceEx drill is conducted by tri-Service integrated defense staff under India's defense ministry "in the backdrop of China's rapidly expanding space and counter-space capabilities," the Times of India reported on Wednesday. The drill is simulated space warfare with military and scientific stakeholders, which Diplomat magazine called a "table-top war game." It will lead to drafting of a joint space doctrine for futuristic battles, the Times of India reported.

<http://www.globaltimes.cn/content/1159191.shtml>

Tech to help tame descent of rockets

Zhao Lei, China Daily, July 29, 2019

Chinese engineers have begun developing a technology that will help minimize hazards for those below a carrier rocket's trajectory and also enable rockets to be reused, according to project leaders at the China Academy of Launch Vehicle Technology, the country's major carrier rocket maker.

During China's latest rocket launch on Friday from Xichang Satellite Launch Center in Sichuan province, researchers from the academy conducted the country's first successful controlled-descent test of a major part of the rocket, He Wei, a senior rocket scientist, said on Sunday. They installed a set of devices known as grid fins foldable, adjustable heat-resistant wings between the first and second stage of a Long March 2C liquid-propelled carrier rocket. After the 23-meter-tall first stage burned up its fuel and separated from the second stage, the grid fins were unfolded and began to steer the first stage as it fell back from the edge of space through the Earth's atmosphere, He said. The scientist said that thanks to the grid fins, debris from the first stage returned to a designated area in Guizhou province, adding that the test showed that China has become the second nation after the United States to possess controlled-descent technology for carrier rockets.

<http://www.chinadaily.com.cn/a/201907/29/WS5d3e2a45a310d83056401658.html>

Pakistan

The Negative Nuclear Signaling And Anti-Pakistan Rhetoric In India's General Election 2019 – OpEd

Haris Bilal Malik, Eurasia Review, July 25, 2019

The Indian General Election 2019 that was held in seven phases between April and May reportedly involved 900 million voters to cast their votes, making it world's largest democratic exercise. As predicted by analysts around the world, the ruling Bharatiya Janata Party (BJP), an extremist right wing Hindu nationalist party won the election.

The landslide victory of BJP was based on many domestic and external factors, out of which the 'negative signaling' of the BJP leadership against Pakistan during the whole election campaign played a crucial role. In this regard the BJP has a history of spreading hatred against Pakistan during election campaigns for achieving the desired electoral results.

<https://www.eurasiareview.com/25072019-the-negative-nuclear-signaling-and-anti-pakistan-rhetoric-in-indias-general-election-2019-oped/>

Should Pakistan denuclearize, if India does?

Business Recoder, July 29, 2019

To the otherwise much ballyhooed 'reset' of the Pakistan-US ties there are quite a few slips, the most disturbing being Prime Minister Imran Khan's re-interpretation of Pakistan's nuclear doctrine. In an interview with Fox News, he said Pakistan would give up its nuclear weapons if India did the same. "Nuclear is not an option. And between Pakistan and India the idea of nuclear war is actually self-destruction, because we have two and a half thousand-mile border," he said. Asked why he was willing to give up the nuclear weapons, he referred to the last February incidents following the Pulwama attack and said "there is a realization (for this) in the subcontinent." In fact what the prime minister said the American establishment had been waiting to hear for

a long time. It has never agreed to Pakistan getting nuclear weaponry but always did everything within its control to help India win international recognition of its status as a nuclear-state. Of late it is trying harder to get India, which is not a signatory to Nuclear Non-Proliferation Treaty (NPT) and therefore ineligible to be a member of Nuclear Suppliers Group, to be its member. Since India claims that its nuclear programme is essentially China-oriented and not a match to what Pakistan has, the prime minister's comment tends to strengthen the American perception that Pakistan does not necessarily need nuclear weapons even as minimum credible deterrence.

India has, on more than one occasion, offered to sign a 'No first strike of nuclear weapons' treaty with Pakistan that has been steadfastly refused because the nuclear option for Pakistan is to maintain a credible deterrence against any adventure by India through use of conventional weapons. How did Prime Minister Khan go wrong on such a critical issue? Was it just slip of tongue or a lollypop to the Americans? An explanation is therefore warranted mainly because of the fact that the highest-level military leadership was part of entourage during his visit to Washington.

<https://fp.brecorder.com/2019/07/20190729501164/>

USA

Inside Project A119, the secret US plan to detonate a nuclear bomb on the Moon

Antony Funnell, ABC News, July 17, 2019

Landing on the Moon was option B.

Option A was to detonate a nuke on it.

In the late 1950s, Washington set in place a secret operation to examine the feasibility of detonating a thermonuclear device on the surface of our closest celestial neighbour.

It was codenamed Project A119.

Had it gone ahead, the expression “shooting for the Moon” would have gained a whole new meaning.

<https://www.abc.net.au/news/2019-07-17/moon-us-plans-cold-war-russia-sputnik/11220340>

Nevada: Feds should restudy seismic risk at nuke dump site

Ken Ritter, AP News, July 18, 2019

Nevada’s governor and congressional delegation are pointing to earthquakes this month in the California desert and calling for the U.S. Energy Department to look again at seismic risks of burying the nation’s most radioactive nuclear waste at a site in the Mojave Desert.

In a letter made public Wednesday, Democratic Gov. Steve Sisolak told Energy Secretary Rick Perry that 6.4 and 7.1 magnitude quakes during the July Fourth holiday near Ridgecrest, California, underscore safety concerns that Nevada first raised about Yucca Mountain in 2008.

<https://www.apnews.com/4eff37799c904671adf3fc406f23a09f>

Opinion: Detroit debate should address nuclear weapons

Megan Donahue and Laura Grego, The Detroit News, July 28, 2019

When presidential candidates take the stage for the second Democratic primary debates in Detroit this week, debate moderators should ask them to address an issue that a vast majority of Michigan voters want to hear about: their plans for U.S. nuclear weapons policy.

Michigan residents understand that the ongoing risk of nuclear war is one of the greatest threats to humanity. More than 80% of Michiganians surveyed in a recent Union of Concerned Scientists poll believe it is critical for the candidates to lay out their positions on this issue.

<https://www.detroitnews.com/story/opinion/2019/07/29/opinion-detroit-debate-should-address-nuclear-weapons/1829989001/>

Trump administration will again waive nuclear sanctions on Iran

Josh Rogin, Washington Post, July 30, 2019

After an internal policy battle, the Trump administration is set to announce later this week that it will once again waive five different nuclear-related sanctions on Iran, preserving a key part of the Obama-era Iran nuclear deal. The decision will upset Iran hawks in Washington and be welcomed by Russia, China, European allies and the Iranian leadership. The issue is emblematic of the tension inside the administration over the implementation of President Trump’s “maximum pressure” policy.

In an Oval Office meeting last week, Trump sided with Treasury Secretary Steven Mnuchin, who argued that the administration should again renew sanctions waivers related to five separate parts of Iran’s nuclear program. Mnuchin prevailed over the objections of Secretary of State Mike Pompeo and national security adviser John Bolton, according to six administration officials. Pompeo, who is the lead official on the issue, will nevertheless support Trump’s decision when it is announced later this week.

https://www.washingtonpost.com/opinions/2019/07/30/trump-administration-will-again-waive-nuclear-sanctions-iran/?utm_term=.67baf53d051

Russia

How Russia made USA addicted to its nuclear fuel

Dmitry Sudakov, Pravda Times, July 17, 2019

The isotope of uranium-238 is the most common isotope of uranium found in nature, with a relative abundance of 99 percent. The rest accounts for uranium-235, about 0.72%. To use nuclear technology for peaceful purposes, one needs to increase the percentage of uranium-235 in natural uranium to three or five percent to produce low-enriched

uranium. To create atomic weapons, one needs to increase the number to 90-100% for highly-enriched uranium.

There are two ways of uranium enrichment used nowadays - gas diffusion and centrifugal methods. The USA uses the gas diffusion technology. To give the reader a picture of the process, one can imagine sifting flour through a sieve, when larger fractions (particles) remain in the sieve, and the uniformity and quality of the flour increases. This process is similar to the gas diffusion method, when only uranium-235, which has three neutrons less, separates from uranium-238 in gaseous uranium hexafluoride through small cell membranes. The Soviet Union had originally used the same technology.

http://www.pravdareport.com/world/142526-russia_ursa_uranium/

Pillars of nuclear arms control are teetering

Financial Times, July 30, 2019

Barring a miraculous turnaround, a key pillar of the cold war-era nuclear arms control architecture will tumble this week. First the US then Russia suspended participation this year in the 1987 Intermediate-Range Nuclear Forces Treaty, which banned missiles with a range of 500km-5500km, over Washington and Nato's claims that Moscow has developed missiles breaching the agreement. Unless Russia destroys those missiles by August 2, the US is set to terminate the treaty. This is not just highly dangerous for European security. It is a further step in the unravelling of arms control and rekindling of the nuclear arms race.

More than 40 years of talks between the US and Moscow produced nine significant treaties and agreements to limit and then reduce nuclear weapons. The demise of the INF treaty follows the US withdrawal in 2002 from the Anti-Ballistic Missile Treaty so the country could proceed to develop a missile defence system to counter rockets from "rogue" states such as Iran and North Korea.

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<https://www.ft.com/content/f040fb68-afca-11e9-8030-530adfa879c2>

West Asia

P. Iran

American rulers have created problems for entire world: Larijani

Tehran Times, July 17, 2019

Parliament Speaker Ali Larijani says the American rulers have created problems, not just for Iran, but for the entire world.

Addressing a meeting with Iranian entrepreneurs in Amlborz Province on Wednesday, Larijani said the U.S. has created problems for Europeans, Chinese and Latin American countries.

He also lashed out at U.S. President Donald Trump, saying among the world leaders, rarely can one find an "outlandish creature" like Trump.

The Majlis speaker said Trump's racist tweet targeting four minority congresswomen were the embodiment of his "pathological behavior".

"He has created troubles for Iran with such behavior, and of course, some regional countries have also provoked him and gave him money," he added.

Larijani also spoke at a joint parliament-administration meeting in Tehran on Wednesday, during which he highlighted efforts made to reduce economic pressures against the Islamic Republic.

<https://www.tehrantimes.com/news/438267/American-rulers-have-created-problems-for-entire-world-Larijani>

“We’ll see how it goes”

M.A. Saki, Tehran Times, July 17, 2019

Here is the deal: President Trump lifted waivers on Iranian oil to strangle the country’s oil-dependent economy under the “maximum pressure” policy. Tehran won relief from international sanctions following a multilateral accord with six world powers, including the U.S., in 2015.

Trump pulled his country out of the deal in 2018 despite Tehran’s ongoing commitment to it.

In retaliation, Iran announced partial withdrawal from the accord on May 8 on the anniversary of the U.S. pullout to have sent a strong message to Washington and the other signatories that it won’t sit idly by now that the deal is not delivering economic benefits it was originally designed for. Just recently, Iran upped its uranium enrichment beyond the 3.67% limit dictated by the deal, as previously flagged by Tehran, threatening to take “stronger measures” should the European signatories of France, England, and Germany fail to buy Iranian oil and ease banking sanctions.

<https://www.tehrantimes.com/news/438237/We-ll-see-how-it-goes>

Demand that the Mideast become a nuclear-weapon-free zone!

Martin Love, Tehran Times, July 20, 2019

Petty and small-minded is the sole way to describe the restrictions on Iran’s Foreign Minister Javad Zarif’s movements to a six-block area around the United Nations complex while he is in New York to address a UN group. This kind of action and mentality is the stuff of petty tyrants, not befitting the alleged leader or government of an “empire” that has any serious, responsible sense of itself or of others overseas or internally who don’t happen to be “Caucasian”. Or “Western” or whatever.

Trump stepped into a hornet’s nest when he blathered on both in front of the press and on Twitter about four ladies of color in Congress, all young Democrats, and then even while the House of Representatives in

the U.S. Congress condemned what were clearly racist comments, only four members of the House on the Republican side of the aisle joined in the condemnation. The series of Tweets aimed at the Congresswomen who hold policy positions antithetical to his own on multiple issues could only be characterized as racist.

<https://www.tehrantimes.com/news/438373/Demand-that-the-Mideast-become-a-nuclear-weapon-free-zone>

Timeline: Iran’s recent clashes with the West over Gulf shipping, nuclear plans

Reuters, July 21, 2019

Tensions between Iran and the West have escalated since U.S. sanctions on Iranian oil exports took full effect in May and British naval forces seized an Iranian supertanker.

Below is a timeline of recent incidents:

May 2 - The United States, which withdrew from a nuclear accord between Iran and global powers in 2018 and stepped up sanctions on Tehran, ends waivers that had allowed eight countries - China, Greece, India, Italy, Japan, South Korea, Taiwan and Turkey - to continue buying Iranian crude

May 5 - The United States says it is deploying an aircraft carrier strike group and bombers to the Middle East, citing threats from Iran

May 8 - Iran announces it will relax some curbs on its nuclear programme, stopping short of violating its 2015 deal with world powers but threatening more action if countries do not shield it from U.S. sanctions

May 10 - The U.S. Maritime Administration warns of possible Iranian attacks on shipping in the Gulf

May 12 - Four ships, including two Saudi oil tankers, are attacked in the Gulf just outside the Strait of Hormuz, a major oil shipping route. U.S. officials pin the blame on Iran, a charge Tehran denies

June 13 - Two tankers are attacked south of the Strait of Hormuz. Washington again blames Iran and Tehran denies any role

June 20 - Iran shoots down an unmanned U.S. surveillance drone.

July 4 - Royal Marines seize Iranian supertanker Grace 1 near Gibraltar on suspicion of violating European Union sanctions on Syria

July 5 - An Iranian Revolutionary Guards commander threatens to seize a British ship unless the Grace 1 is released

July 7 - Iran says it will boost uranium enrichment above a cap set under the 2015 nuclear deal and will reduce its commitments to the pact, drawing a warning from U.S. President Donald Trump and expressions of concern from Germany, France and Britain

July 10 - Royal Navy frigate HMS Montrose issues verbal warnings and aims its guns at boats believed to belong to Iranian Revolutionary Guards which approached BP oil tanker British Heritage at the northern entrance of the Strait of Hormuz

July 18 - The United States says USS Boxer "destroyed" an Iranian drone in the Strait of Hormuz after it threatened the U.S. Navy ship but Iran denies it has lost a drone

July 19 - Gibraltar extends detention of tanker Grace 1 by one month

July 19 - Iran seizes British-operated oil tankers Stena Impero and Mesdar, the latter released after receiving a warning from Iranian authorities

<https://in.reuters.com/article/mideast-iran-britain/timeline-irans-recent-clashes-with-the-west-over-gulf-shipping-nuclear-plans-idINKCN1UG0EQ>

White House narrative on JCPOA incoherent: analyst

Tehran Times, July 22, 2019

The founder of media company Bourse & Bazaar says the Trump administration's approach toward the 2015 nuclear deal between Tehran and world powers is incoherent.

"The Trump administration's narrative on Iran's nuclear program is incoherent and this reflects that different figures in the administration have different assessments of what satisfactory non-proliferation controls entail," Esfandiyar Batmanghelidj told Tasnim in an interview published on Monday.

Batmanghelidj is founder and publisher of Bourse & Bazaar, a media company that supports business diplomacy between Europe and Iran through publishing, research, and events, such as the annual Europe-Iran Forum.

<https://www.tehrantimes.com/news/438469/White-House-narrative-on-JCPOA-incoherent-analyst>

The different reactions of Arab governments and nations toward the seizure UK tanker

Fatemeh Salehi, Tehran Times, July 26, 2019

On Friday, a British oil tanker was seized in the Strait of Hormuz by the Islamic Revolution Guards Corps (IRGC). The tanker was seized due to violation of maritime laws, causing marine pollution and endangering other vessels.

The interesting point here is the huge gap between the Arab government and Arab nations in their reaction to this incident. This gap can also be seen in other important issues in the Middle East, such as the fate of Palestine.

Arab nations have always proved that they are wide aware of foreign issues and their opinions are far more progressive than those of their governments. Up to now, they have held several protests to announce their opposition toward government policies especially toward Palestine and have voiced their disagreement toward plans to normalize relationships with the Zionist regime.

<https://www.tehrantimes.com/news/438562/The-different-reactions-of-Arab-governments-and-nations-toward>

Israel

Israel touts air defense system to South Korea

Arab News, July 16, 2019

President Reuven Rivlin extolled the virtues of Israeli air defense missile systems during a summit with South Korean President Moon Jae-in in Seoul on Monday at the presidential Blue House, citing the need to defend the country against its nuclear-armed northern neighbor.

Rivlin noted “big similarities” between the two countries, both having survived conflicts to become global economic powers.

“Both South Korea and Israel faced catastrophic events after World War II, but we have built great nations and people, rising from the ashes of war,” the Israeli president said in a statement ahead of his talks with Moon.

<http://www.arabnews.com/node/1526271/world>

East Asia

Japan

Latest science should apply to anti-quake steps of nuclear plants

The Asahi Shimbun, July 18, 2019

A study group at the Nuclear Regulation Authority (NRA) has worked out a draft plan to revise a calculation formula crucial for efforts to improve the earthquake resistance of nuclear plants.

This step is naturally required to ensure compliance with the fundamental principle that safety measures for nuclear plants should be based on the latest scientific knowledge.

The plan will be formalized shortly and instructions about the change will be issued to electric utilities operating nuclear plants.

The revision to the calculation formula will also be applied to nuclear reactors that have been officially certified to fulfill the new safety standards including ones that have already been restarted. This is a system

known as “backfitting,” which means the required modification resulting from a new or amended provision in the NRA’s regulations based on the latest scientific knowledge.

<http://www.asahi.com/ajw/articles/AJ201907180052.html>

Taiwan

Agreements aim to boost satellite testing in Taiwan

Lin Chia-nan, Taipei Times, July 24, 2019

The National Space Organization (NSPO) yesterday signed memorandums of agreement with Linkou Chang Gung Memorial Hospital and Chang Gung University to boost the nation’s capabilities in radiation testing of satellite components and space industry development.

The documents were signed by NSPO Director-General Lin Chun-liang (—gÊOo,), the hospital’s Proton and Radiation Therapy Center convener Hung Ji-hong (*m×_•[]) and the university’s Institute for Radiological Research dean Tung Chuan-jong (c,,³P-N).

<http://www.taipeitimes.com/News/taiwan/archives/2019/07/24/2003719220>

From moon walk to space wars

Brahma Chellaney, Taipei Times, July 25, 2019

Fifty years after astronauts first walked on the Moon, space wars have gone from Hollywood fantasy to looming threat. Not content with possessing enough nuclear weapons to wipe out all life on Earth many times over, major powers are rapidly militarizing space. Given the world’s increasing reliance on space-based assets, the risks are enormous.

As with the Cold War-era space race between the US and the Soviet Union, the new global space race has an important symbolic dimension. Given the lunar landing’s role in establishing US dominance in space, the Moon is a natural starting point for many of the countries jostling for position there.

China in January became the first country to land an uncrewed robotic spacecraft on the far side of the Moon.

<http://www.taipeitimes.com/News/editorials/archives/2019/07/25/2003719277>

Q. Think Tanks and Reports

Building the Bridge Commentary on Arms Control to Reduce Violence, Prevent Conflict and Advance Sustainable Development

Katherine Aguirre and Robert Muggah, The United Nations Institute for Disarmament

The impact of armed violence is significant in both conflict and nonconflict settings, ranging from direct effects such as deaths, injuries, or psychological harm, to long-term effects such as mass displacement and restricted access to health, education and livelihood, which impede investment and economic growth. Arms – in particular small arms, light weapons and explosive weapons – remain the primary tool of violence in affected environments. The 2030 Agenda for Sustainable Development places arms control, peace and security squarely within the scope of prevention and development thinking and actions. States acknowledge that sustainable development cannot be realized without peace and security and that peace and security will be at risk without arms control. Uncontrolled proliferation, misuse and diversion of arms has implications for the realization of several Sustainable Development Goals (SDGs), including those relating to peace, justice and strong institutions (SDG16), poverty reduction (SDG1), economic growth (SDG8), health (SDG3), gender equality (SDG5), and safe cities and communities (SDG11).

<http://www.unidir.org/files/publications/pdfs/en-814.pdf>

The International Atomic Energy Agency Could Improve Priority Setting, Performance Measures, and Funding Stabilization

US Government Accountability Office, July 29, 2019

Nuclear terrorism remains among the most

significant threats to the United States and other nations. Nuclear materials stolen from poorly secured facilities could be used for a nuclear device. The International Atomic Energy Agency's nuclear security work includes helping countries protect these facilities.

Among other things, we found the agency's nuclear security program:

Doesn't have the guidelines it needs to ensure it is appropriately prioritizing its work and targeting its resources

Relies heavily on voluntary contributions and hasn't analyzed ways to stabilize its funding

<https://www.gao.gov/products/GAO-19-429>
<https://www.gao.gov/assets/710/700609.pdf>

Spent Fuel Management: Four Decades of Research

Laura Gil, International Atomic Energy Agency, July 30, 2019

The nuclear power plant construction boom of the 1960s and 1970s held the promise of a new energy era and at the same time brought about a new challenge: dealing with the spent fuel discharged by the plants. Could this fuel be recycled? Could it be disposed of? Could it be stored and, if so, for how long and under what conditions?

Over the years, experts have developed answers to these questions. Almost four decades' worth of research on spent nuclear fuel management coordinated by the IAEA is now available in a new publication. Behaviour of Spent Power Reactor Fuel during Storage (IAEATECDOC-1862) is the title of an IAEA publication that compiles relevant data, observations and recommendations recorded by experts on this topic since 1981.

<https://www.iaea.org/newscenter/news/spent-fuel-management-four-decades-of-research>

US Withdraws from INF Treaty August 2, Move Will Undermine US Security

*David Wright, Union of Concerned Scientists,
July 31, 2019*

On February 2, President Donald Trump suspended the United States' obligations under the Intermediate-range Nuclear Forces (INF) Treaty and notified Russia that the U.S. would officially withdraw from the treaty in six months. That day arrives on Friday, August 2. Signed by President Ronald Reagan and Soviet leader Mikhail Gorbachev in 1987, the treaty prohibits short- and medium-range ground-launched missiles carrying nuclear or conventional warheads, and the launchers of such missiles.

Below is a statement by physicist David Wright, co-director of the Global Security Program at the Union of Concerned Scientists.

"Withdrawing from this landmark treaty is shortsighted and will ultimately undermine the security of the United States and its allies. The president's decision will increase tensions between the United States and Russia and open the door to a competition in conventionally armed missiles that will undermine stability.

<https://www.ucsusa.org/press/2019/us-withdrawals-inf-treaty-august-2-move-will-undermine-us-security>

The biggest nuclear power plants in the US

Power Technology, July 31, 2019

Six of the biggest nuclear plants in the US have generated more than 2.6GW and supply electricity to more than two million homes in the country. Power-technology profiles the top ten nuclear power plants in the US, based on installed capacity.

Top ten nuclear power plants in the US:
Ranking the biggest

10. Byron Nuclear Power Station - 2.34GW
9. McGuire Nuclear Power Plant - 2.38GW
8. Braidwood Generating Station - 2.39GW

7. Vogtle Nuclear Power Station - 2.43GW
6. Susquehanna Nuclear Power Plant - 2.6GW
5. Oconee Nuclear Station - 2.61GW
4. South Texas Project Electric Generating Station - 2.7GW
3. Peach Bottom Atomic Power Station - 2.77GW
2. Browns Ferry Nuclear Plant - 3.4GW
1. Palo Verde Generating Station - 3.93GW

<https://www.power-technology.com/features/the-biggest-nuclear-power-plants-in-the-us/>

Order from Chaos: Iran's threats are an attempt to negotiate

*Suzanne Maloney, Brookings US, July 26,
2019*

In July 2012, several senior U.S. government officials made a clandestine visit to Muscat, where they met with Iranian diplomats in the first of what would be a series of back-channel negotiations. Officially, nothing like this meeting in Oman was ever supposed to happen: The two countries had severed their formal diplomatic relations decades earlier, and intensifying U.S. economic pressure on Iran had made direct diplomacy more toxic than ever.

But this secret dialogue ended up providing the genesis for the historic 2015 nuclear agreement between Tehran, Washington, and five other world powers—the first time that the international community managed to slow the clerical regime's steady progress toward nuclear weapons capability.

With Iran, Trump Speaks Loudly But (Fortunately) Carries a Small Stick

*Richard Sokolosky, Aaron David Miller,
Carnegie Endowment for International
Peace, July 26, 2019*

This week President Donald Trump demonstrated one of the most consistent

themes of his presidency – speak loudly but carry a very small stick. Talking about Afghanistan in his meeting with Pakistani Prime Minister Imran Khan, Trump told reporters in the Oval Office “I could win that war in a week. I just don’t want to kill 10 million people.” How many times have we heard a variation of “tough” Trump? To name a couple of examples, he vowed to use fire and fury on North Korea, but he didn’t do it. And he has made empty threats of a US military intervention against President Nicolás Maduro in Venezuela.

But the country that the President seems the most determined to consistently show his tough side to is Iran. He has threatened to use “overwhelming” force against Tehran multiple times. And in some areas, he made clear that “overwhelming will mean obliteration.” But there’s little doubt that Trump – who has shown a degree of risk-aversion when it actually comes to using military force, despite his tough talk – would like to avoid a conflict with Iran if possible. He knows that once one begins it might be very difficult to control, let alone stop. And with his political antennae tuned day and night to elections in 2020, he has reason to worry that a messy war could undermine his campaign commitments, the economy and his core constituencies’ support.

<https://carnegieendowment.org/2019/07/26/with-iran-trump-speaks-loudly-but-fortunately-carries-small-stick-pub-79584>

Toward New Negotiations with Iran

Ariel Levite, Shimon Stein, Carnegie Endowment for International Peace, July 30, 2019

Iran’s recent crossing of the enrichment limit of the 2015 nuclear agreement (JCPOA) de facto seals the fate of the already faltering deal. Sabre rattling to coerce each other while placating domestic and external constituencies. They nonetheless struggle to contain escalation to a war neither wishes to take place. And most critically, maneuver to improve their opening position for when negotiations between them (and others?) inevitably commence. Inept crisis management could still result in a

showdown. This process –could provide an opportunity to move away from a temporary transactional deal that failed toward a transformational one that might fare better.

Ariel (Eli) Levite was the principal deputy director general for policy at the Israeli Atomic Energy Commission from 2002 to 2007. Iran’s supreme leader profoundly distrust the US. Many of Trump’s advisers share no less skeptical view of Iran, preferring regime change or at a minimum its profound regime transformation. Yet at the end of the day, Both will have to bite the bitter bullet and negotiate. Against that background, Intermediaries would first have to work out de-escalation ground rules to diminish friction that might derail the process, let alone result in a military confrontation. These will require the US at the very least to ease enforcement of some of the Iran sanctions currently in place. Whereas Iran would have to exercise restraint in its nuclear and regional pursuits.

<https://carnegieendowment.org/2019/07/30/toward-new-negotiations-with-iran-pub-79590>

What’s in it for China? A Beijing Insider’s Surprising Insight on Nuclear Arms Control

George Perkovich, Carnegie Endowment for International Peace, July 30, 2019

If bookies took wagers on nuclear weapons, the odds would be very high that in eighteen months all legal controls on nuclear arsenals will have ended. That’s because the smart money says that Washington and Moscow will not extend the New Strategic Arms Reduction Treaty (New START) before it expires in February 2021. This means that the United States and Russia, like China and the six other nuclear-armed countries, will be free to build and deploy as many of these weapons as they want. U.S. President Donald Trump’s administration – perhaps against the odds – says its top priority is to establish a new “twenty-first-century model of arms control” that would include China, as well as Russia and the United States. But Beijing declined an invitation

to discuss these issues with U.S. and Russian diplomats in Geneva in July 2019. (The U.S.-Russian talks ended with no report of progress).

<https://carnegieendowment.org/2019/07/30/what-s-in-it-for-china-beijing-insider-s-surprising-insight-on-nuclear-arms-control-pub-79596>

What Is the Status of the Iran Nuclear Agreement?

Zachary Laub, Council on Foreign Relations, July 31, 2019

The United States' withdrawal from the arms control agreement has heightened tensions and left the remaining signatories scrambling to keep the deal alive. The 2015 Iran nuclear agreement is breaking apart, raising the risk not just of Iran accelerating its nuclear program, but also of a military clash in the Persian Gulf. Under the agreement, formally known as the Joint Comprehensive Plan of Action (JCPOA), Iran dismantled much of its nuclear program and gave international inspectors extensive access to its facilities in exchange for relief from economic sanctions. President Donald J. Trump withdrew the United States from the agreement in May 2018, saying it failed to address Iran's ballistic missile program and its role in regional wars. The United States reimposed sanctions and moved to wipe out Iran's oil exports. Iran has responded by resuming some of its nuclear activities, leaving the deal in a tenuous state.

<https://www.cfr.org/background/what-status-iran-nuclear-agreement>

R. Documents

US

Notice of OFAC Sanctions Actions

Office of Foreign Assets Control, Treasury, July 16, 2019

The Department of the Treasury's Office of Foreign Assets Control (OFAC) is publishing the names of one or more persons that have been placed on OFAC's Specially Designated Nationals and Blocked Persons List based on OFAC's determination that one or more applicable legal criteria were

satisfied. All property and interests in property subject to U.S. jurisdiction of these persons are blocked, and U.S. persons are generally prohibited from engaging in transactions with them.

<https://www.federalregister.gov/documents/2019/07/23/2019-15594/notice-of-ofac-sanctions-actions>

The United States To Impose Sanctions on Chinese Firm Zhuhai Zhenrong Company Limited for Purchasing Oil From Iran

Michael R. Pompeo, US Department of State, Press Statement Office of the Spokesperson, July 22, 2019

Today, the United States is taking further action as part of our maximum economic pressure campaign against the Iranian regime by imposing sanctions on the Chinese firm Zhuhai Zhenrong Company Limited and its chief executive for knowingly purchasing or acquiring oil from Iran, contrary to U.S. sanctions. We said we would fully enforce our sanctions, and we are backing this up with real action. The announcement today will help deny the regime critical income to fund terror around the world, engage in foreign conflicts, and advance its ballistic missile development. The Iranian regime must cease these destabilizing activities. Zhuhai Zhenrong Company Limited knowingly engaged in a significant transaction for the purchase or acquisition of crude oil from Iran. The transaction in question took place after the expiration of China's Significant Reduction Exception (SRE) on May 2, 2019, and was not covered by that SRE. Among other things, the imposition of these sanctions blocks all property and interests in property of Zhuhai Zhenrong Company Limited that are in the United States or within the possession or control of a U.S. person, and provides that such property and interests in property may not be transferred, paid, exported, withdrawn, or otherwise dealt in.

<https://www.state.gov/the-united-states-to-impose-sanctions-on-chinese-firm-zhuhai-zhenrong-company-limited-for-purchasing-oil-from-iran/>

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<https://www.federalregister.gov/documents/2019/07/23/2019-15594/notice-of-ofac-sanctions-actions>

This Week in Iran Policy: Factsheet

*US Department of State, Press Statement
Office of the Spokesperson, July 19-26, 2019*

"I would welcome the chance to speak directly to the Iranian people. I've talked about this before. Zarif gets to come here, he comes to New York, he drives around in the most wonderful city in America, and the - and he speaks to the media, he talks to the American public, gets to put Iranian propaganda out into the American airwaves. I'd like a chance to go not do propaganda, but speak the truth to the Iranian people about what it is their leadership has done and how it has harmed Iran. I think the reason they won't permit that to happen is because they know the truth as well." - Secretary of State Mike Pompeo, with Kevin Cirilli of Bloomberg,

"We are at the beginning stages of developing our maritime security initiative. We'll be a part of that, but so will nations from all across the world." - Secretary of State Mike Pompeo, with Bret Baier of Fox News, July 25

The United States is working with its partners and Allies to protect civilian shipping and ensure international commerce through the Strait of Hormuz. The Maritime Security Initiative (a.k.a. "Operation Sentinel") will safeguard freedom of

navigation and maritime security in the Middle East by promoting the safe passage of vessels and increasing surveillance capabilities.

<https://www.state.gov/this-week-in-iran-policy-july-19-26/>

Notice of OFAC Sanctions Actions

*Office of Foreign Assets Control, Treasury,
July 30, 2019*

The U.S. Department of the Treasury's Office of Foreign Assets Control (OFAC) is publishing the names of one or more persons that have been placed on OFAC's Specially Designated Nationals and Blocked Persons List based on OFAC's determination that one or more applicable legal criteria were satisfied. All property and interests in property subject to U.S. jurisdiction of these persons are blocked, and U.S. persons are generally prohibited from engaging in transactions with them.

<https://www.federalregister.gov/documents/2019/07/30/2019-15796/notice-of-ofac-sanctions-actions>

Secretary Pompeo Renews Nuclear Restrictions on Iran

*US Department of State, Press Statement
Office of the Spokesperson, July 31, 2019*

Today, Secretary Pompeo has continued restrictions on the Iranian regime's nuclear program. The action today will help preserve oversight of Iran's civil nuclear program, reduce proliferation risks, constrain Iran's ability to shorten its "breakout time" to a nuclear weapon, and prevent the regime from reconstituting sites for proliferation-sensitive purposes. The world's leading state sponsor of terrorism continues to use its nuclear program to extort the international community and threaten regional security. The United States is resolute in its commitment to denying Iran any pathway to a nuclear weapon and to using the full range of our diplomatic and economic tools to constrain Iran's nuclear activities. As long as the Iranian regime continues to reject diplomacy and expand its nuclear

program, the economic pressure and diplomatic isolation will intensify.

<https://www.state.gov/secretary-pompeo-renews-nuclear-restrictions-on-iran/>

S.Interview

Full Disclosure: Extraterrestrials, No Nuclear War, End of the Deep State?

Javad Heirannia, Tehran Times, July 19, 2019

Robert David Steele, a former Marine Corps infantry officer and CIA spy as well as an activist for Open Source Everything Engineering (OSEE), regularly answers questions for Tehran Times.

To sum this all up very quickly – and the reason this matters to Iran – there appear to be multiple stellar civilizations (their preferred term) active on Earth, with those that have been supporting the Deep State now on the run, and the more peaceful progressive civilizations literally disarming the US, UK, and others – literally melting down nuclear warheads, frying the electronic systems of inter-continental missiles, and generally placing those who might wish to fire a nuclear missile – including the Zionists – under quarantine. I don't think this is absolute – but generally speaking, I now believe it is impossible for there to be a nuclear exchange on Earth. This is not to say that the Zionists and the Cabal cannot continue to wage wars, create millions of refugees, do geoengineering and artificially create earthquakes and violent weather while continuing to poison us all, but on balance, we are at the beginning of 1,000 years of peace and prosperity and the Deep State and its Zionist underbelly are going to be put down. The bottom line is that no one – not Israel, or Saudi Arabia or the USA or Iran or Russia – no one – can start a nuclear war.

<https://www.tehrantimes.com/news/438309/Full-Disclosure-Extraterrestrials-No-Nuclear-War-End-of-the>

Are Russia and America Headed Toward Nuclear War?

Dimitri Alexander Simes, National Interest Blog, July 23, 2019

Last week, U.S. and Russian delegations met in Geneva to discuss arms control. Dimitri A. Simes, a contributor to the National Interest, spoke to Viktor Murakhovsky, a retired Russian colonel, defense analyst, and editor-in-chief of the Arsenal of the Fatherland magazine, to better get the Russian perspective on the future of arms control. Murakhovsky is widely regarded in Russia as a leading military expert and is frequently cited by Russian media. The following transcript of their conversation has been lightly edited for length.

Dimitri A. Simes: Last fall, President Donald Trump announced that the United States will exit the Intermediate-Range Nuclear Forces (INF) treaty. More recently, National Security Advisor John Bolton stated that Washington is not sure whether it will extend the New START treaty. How did Moscow react to these developments?

Viktor Murakhovsky: I will not speak on behalf of all of Moscow, so I will just explain my personal analysis. In my view, the INF treaty was concluded under very particular circumstances. During that time period, ballistic missiles were practically the only type of intermediate range missiles – cruise missiles were only starting to be developed. For that reason, there existed a threat that the flight time from the Federal Republic of Germany to the western part of the Soviet Union was twelve to fifteen minutes. If you look at technical components of the treaty, it focused on prohibiting the development of ballistic intermediate range missiles and the liquidation of that class of weapons.

<https://nationalinterest.org/feature/are-russia-and-america-headed-toward-nuclear-war-68702?page=0%2C1>

Power generation in India

*Amit Maheshwari and Neeraj Menon,
Lexology, July 25, 2019*

Authorisation to construct and operate generation facilities

What authorisations are required to construct and operate generation facilities?

As mentioned earlier, generation is a delicensed subject; however, construction, operation and maintenance of a generation facility require permits, consents and approvals under other laws relating to land acquisition, environmental clearance, corporate and labour compliances, approvals for use of restricted land and consent to establish and operate the power station from pollution control authorities. Further, in the case of power stations using domestic coal, the developer is required to obtain a coal linkage (which provides for assured fuel supply from the coal mines of Coal India Limited and its subsidiaries) or use coal extracted from a coal block specifically allotted to it by a government entity. If coal is used from an allotted mine, the developer is also required to obtain specific approvals (such as an environmental clearance) in relation to the coal mine. The Ministry of Environment, Forests and Climate Change, GoI (Environment Ministry), has issued a notification pursuant to which stand-alone coal fired thermal power plants of all capacities are required to be supplied with, and are required to use, raw or blended or beneficiated coal with ash content not exceeding 34 per cent, on a quarterly average basis.

<https://www.lexology.com/library/detail.aspx?g=94ea53cd-3fab-4b86-a245-66ba399480ac>

France Is Moving Swiftly On Atomic Power Reactors At Jaitapur In Coming Months: French Ambassador Ziegler

Manish Kumar Jha, Business World, July 27, 2019

From the Agreement of military logistics support to Garuda VI, an Indo- French military exercise, the Indian engagement with France is on the roll. BW's Manish Kumar Jha speaks with

French Ambassador Alexandre Ziegler on the full spectrum of issues from building six nuclear reactors to investment protection for further investments in India.

The Industrial Way Forward Agreement was signed between the Nuclear Power Corporation of India Ltd (NPCIL) and the Electricite de France (EDF) last year for constructing six atomic power reactors. EDF has to provide sovereign guarantee for financial assistance to Jaitapur nuclear power plant. What is the status?

The signing of an Industrial Way Forward Agreement between NPCIL and EDF, during President Macron's India visit last year for the construction of six EPR-type units in Jaitapur, Maharashtra, marked an important step, especially with regard to defining the industrial blueprint. Since then EDF and NPCIL have held intense discussions on the technical configuration, the commercial model, as well as a financing plan. December 15th last year saw another landmark with EDF submitting a complete techno-commercial offer to NPCIL. I'm sure this will enable us to advance swiftly in the coming months.

This project is very important for India's economic development and combatting climate change. Six EPRs means a total capacity of almost 10 GW – and that's a major contribution to India's goal of producing 40% of its electricity from non-fossil fuels by 2030, in keeping with the commitment it had announced ahead of the Paris Climate Conference. Jaitapur will also contribute to "Make in India", as it involves transfers of production, technology, joint research and training.

<http://www.businessworld.in/article/France-Is-Moving-Swiftly-On-Atomic-Power-Reactors-At-Jaitapur-In-Coming-Months-French-Ambassador-Ziegler/27-07-2019-174022/>

China, Russia and US define world order

Global Times, July 16, 2019

In terms of global strategic architecture, China, Russia, and the US are crucial to the world. How can Beijing and Moscow

deepen cooperation? How will the 2020 US presidential elections affect Russia-US ties? Global Times (GT) reporter Lu Yuanzhi talked to Andrey Kortunov (Kortunov), director general of the Russian International Affairs Council, on these issues at the sidelines of the Eighth World Peace Forum held in Beijing recently.

GT: US President Donald Trump met Putin in Osaka, Japan. Putin said Russia would do all it could to upgrade US relations, but it was up to the US to decide how to develop bilateral relations. How do you interpret Putin's statement?

Kortunov: Putin's message is clear. When Putin thought Washington was ready to work with Russia, he made a couple of specific proposals to Trump. For instance, Putin offered practical ways in which both sides could strengthen strategic arms control. There were specific proposals on Syria, Iran, and North Korea. However, Putin made it clear he would not deviate from defending Russia's basic principles and interests.

It is up to the US to take it or to leave it. If the White House is ready to extend the New Strategic Arms Reduction Treaty (New START) agreement or work with the Kremlin on Syria, the Russian side will go the extra mile to accommodate the US. If the US is not ready, Moscow will wait. This pause is regrettable, but it is not the end of the world. Russia can provide for its security even without the New START and can handle Syria with other partners. It is up to the US to decide what to do.

GT: The Intermediate-Range Nuclear Forces Treaty (INF) may cease to exist from August 2. How will it affect geopolitics?

Kortunov: The absence of INF may put into motion a chain reaction. With INF gone, it becomes very difficult to extend the New START. If the New START ceases to exist, it might mean the end for the Non-Proliferation Treaty (NPT). If there is no NPT around, the Comprehensive Nuclear-Test-Ban Treaty may be the next chip to fall. It resembles a house of cards. If you take one card out, the whole house will collapse. From

this viewpoint, the death of INF is very risky because it might lead us into a world without any arms control whatsoever, not just a world with no bilateral US-Russia arms control agreements.

GT: How would relations among China, the US, and Russia affect world order?

Kortunov: They would have a very important impact because these countries define the rules of the game. For example, if Russia and the US do not want to disarm, nobody will be ready to disarm. If China and the US cannot agree on free trade, who would agree?

The united world that we know today might well split into a number of competing blocs. This is not a very bright prospect for anyone. If there is a technological war between Beijing and Washington, other countries cannot sit on the fence, they will have to choose their side in this war.

The three countries should act on the assumption that they understand their responsibilities. They should set a good example on how to make compromises among themselves, but also on how to take interests of smaller states into account. If the three of us fail to do that, the world will not be a safe and sustainable place.

<http://www.globaltimes.cn/content/1158123.shtml>

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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