Nuclear, Missile & Space Digest

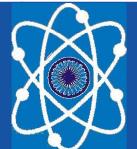
A Fortnightly Newsletter from the Indian Pugwash Society

Contents

July 31, 2019

A. India Amb. Sujan R. Chinoy Upgrading obsolete Technology in Aircrafts New Atomic Power Plants Additional nuclear reactors at Kudankulam Space Technology Space Missions Electricity generation through atomic energy Nuclear Plant Expansion Programme **Executive Council** • Rs 16,925 crore BE for Department of Atomic Energy in General Budget 2019-20 Cdr. (Dr.) Probal K. Ghosh • New Space India Ltd. incorporated as a new commercial arm of D/o Space: Air Marshal S. G. Inamdar • Finance Minister Company to spearhead commercialization of various space (Retd.) products Space Station and Manned Space Mission Dr. Roshan Khanijo Nuclear Insurance Pool Amb. R. Rajagopalan Creation of Gaganyaan National Advisory Council Dr. Rajesh Rajagopalan Setting up of Neutrino Observatory Shri Dinesh Kumar • Expect a friend to order oil': Iranian envoy messages India on US sanctions Yadvendra Budget 2019: Atomic energy department sees marginal dip in allocation; customs duty cut on nuclear fuel India's NSG hopes dashed by China yet again; Beijing continues its veto despite Modi-Xi bonhomie India Says First US Nuclear Reactor Proposed in 2008 Still Work 'in Progress' Team Modi Seeks Bids For 6 New Submarines. \$6.6 Billion At Stake

- Budget 2019: Optimising the Defence budget and the need for organisational reform
- India, Russia hold talks to boost space cooperation
- India's Hypersonic Missiles Are a Major Threat to Pakistan



Volume 11, Number 14

Convener (Interim)

Indian Pugwash Society

No.1, Development Enclave, Rao Tula Ram Marg, Near USI , Delhi-110010

Tel. No (91-11) 2671-7983 Fax No. (91-11)2615-4192

Extn 7014 & 7012 Email: indianpugwashsociety@gmail.com

- Chandrayaan 2 Mission Launch Highlights: Launch Called Off Due To Technical Snag, Revised Dates At Least 10 Days Away, Says Isro
- India's second lunar mission delayed due to 'technical snag': ISRO

B. China

- China to launch constellation of remote sensing satellites by 2021
- Chinese Navy conducts 5 days of military exercises in S. China Sea
- Nuke research school to break ground soon
- China urges restraint to avoid escalation of Gulf tensions
- China's new ship-borne chopper to raise PLA's ability to new level: military specialists
- Pentagon says China missile test in South China Sea 'disturbing'
- China to launch constellation with 72 satellites for Internet of Things
- Chinese, Japanese scientists discover highest energy photon
- U.S., Germany slam China at U.N. Security Council over Xinjiang: diplomats
- China's innovation persistence pays off with great human progress
- China's lunar orbiter captures Earth's images during solar eclipse
- · Live-fire anti-aircraft test held in Gobi desert
- DNA data storage becomes a top emerging technology
- · Scientists make breakthrough that enables rockets to orbit longer
- Guangzhou schools will start pilot AI courses in September
- China revitalizes old howitzers with modern add-ons
- China-donated frigate arrives in Sri Lanka
- China firmly opposes U.S. arms sales to Taiwan, says senior official
- China missile test destroys trust
- Chinese, Singaporean universities join hands for AI research
- China's Chang'e-4 probe switches to dormant mode
- Top 10 emerging technologies of 2019- Safer nuclear reactors
- Golden women
- China to launch 100 additional satellites by 2025: official
- No need to overreact to Iran's nuclear moves: Chinese delegate
- China develops new generation recoverable satellite for commercial use
- China says Xi urged Trump to ease North Korea sanctions 'in due course'
- Beijing to impose sanctions on US firms involved in US\$2.2 billion Taiwan arms deal
- US arms sales to Taiwan severely undermines China's sovereignty and security interests: spokesman
- China announces controlled deorbit plan for Tiangong-2
- Galileo system's woes may provide opening for China's BeiDou
- After Taiwan buys arms, China holds military drills on southeast coast
- MND downplays recent PLA drills near Taiwan
- US should end pressure on Iran: Beijing

C. Pakistan

- Pakistan safe because of nuclear assets: CJP
- Low-cost Moon mission puts India among lunar pioneers
- India prepares to land rover on moon in global space race

D. USA

- US federal funding granted for SSR technology development
- U.S. Accuses Iran of 'Nuclear Extortion' and Vows More Sanctions
- GE Hitachi Nuclear Energy wins Oyster Creek contract
- Trump threatens to 'substantially' increase sanctions on Iran
- US research reactor goes digital in licensing 'first'
- Intruders jump fence at U.S. nuclear reactor that uses bomb-grade fuel
- NASA shake up in new race to the moon
- Trump, Netanyahu discuss Iran threat, sanctions in call statements
- Trump Finds a Trade Fight He Doesn't Like in Uranium Imports
- Trump declines to set U.S. uranium production quotas
- Trump Sends Negotiators to Geneva for Nuclear Talks With Russians and Also Seeks to Limit Chinese Warheads
- Former U.S. official says Trump has left nuclear deal because Obama negotiated it

E. Europe

- IAEA Concludes Long Term Operational Safety Review at Belgium's Doel Nuclear Power Plant
- Sweden to boost Gotland air defense amid Russia tensions
- AP Analysis: Europe squeezed in Iran-US nuclear deal dispute
- Developing the First Ever Facility for the Safe Disposal of Spent Fuel
- A New Player in Fusion Research: Croatia Launches Dual Ion Beam Facility with IAEA Support
- Soviet sub that sank off Norway in 1989 still emitting radiation
- Italy seizes missile from far-right sympathisers

F. France

- France's Macron trying to save Iran nuclear deal by July 15
- France says anti-tank missiles found in Libya were 'unusable'

G. UK

- UK to send a second warship to the Gulf amid crisis with Iran
- UK to facilitate release of Iranian tanker if it gets Syria guarantees: Hunt
- Leaked UK memo says Trump axed Iran deal to spite Obama
- Britain's Hunt says 'small window' to save Iran nuclear deal

H. Russia

- Russia supports US proposal on multilateral agreement on nuclear disarmament
- Russia's floating nuclear power plant ready to heat up the Arctic
- 14 Russian Sailors Killed in Fire on Nuclear Sub
- Putin signs law suspending INF treaty with US
- Floating Nuclear Power Plant Will Be Key Element on Northern Sea Route
- Russia Confirms Submarine Hit by Deadly Fire Was Nuclear-Powered
- Russia not discussing Pentagon's nuclear test allegations with Washington ambassador
- Russian Sailors Killed in Nuclear Sub Fire May Have Averted 'Global Catastrophe' -Official
- Kremlin regrets consequences of Iran's cuts to nuclear deal commitments
- Russia ready for ministerial meeting on Iranian nuclear program, says Lavrov
- Russian design bureau unveils nuclear-powered aircraft carrier project at naval show
- Russian Navy to get nuclear-powered aircraft carrier
- Russian Nuclear Sub Wreck's Radiation 100K Higher Than Normal, Scientists Say
- US escalates tension around nuclear deal to change power in Iran Russian diplomat
- State support pivotal to Russia's nuclear sector, says report
- Nuclear bonds: Russia supplies fuel for China Experimental Fast Reactor

WEST ASIA

I. Iran

- Zarif says Iran has not violated nuclear deal
- Russian diplomat says Iran not after nuclear weapons
- Iran's decision on uranium stockpile in accordance with JCPOA: envoy
- Zarif says Iran's commitment to JCPOA will be commensurate to Europeans'
- INSTEX a preliminary step for Europe to implement its commitments: Zarif
- UN nuclear watchdog's board to meet on Iran at US request
- Iran expresses regret over Russia submarine fire
- IAEA to hold special meeting on Iran on July 10
- Iran will enrich uranium as much as it needs, cleric says
- Iran threatens British shipping in retaliation for tanker seizure
- EU to consult with nuclear deal partners as Iran warns of new steps
- Iran ready for higher uranium enrichment: top adviser
- It is a 'sad irony' that U.S. has requested IAEA meeting on Iran, diplomat says
- Iran starts enriching uranium to above 3.67%
- Iran warned after ratcheting up tensions with higher enrichment

- Macron, Rouhani discuss ways to save nuclear deal
- Zarif: Iran's nuclear steps reversible only through E3 compliance
- MP: Iran needs 90% uranium for maritime propellers
- Iran nuke deal violation condemned
- UN nuclear inspectors will report back on Iran's enrichment move
- Iran's second step in reducing nuclear commitments does not mean quitting JCPOA: MP
- Iranians despair over nuclear deal confrontation
- Iran's uranium enrichment degree reaches 4.5 percent
- The Iran Crisis: How the Nuclear Deal Started to Unravel, and What's Next
- Iran says will not breach JCPOA unless 'bizarre actions' are taken
- Russia to continue trade with Iran regardless of U.S. sanctions
- Iran Guards commander says US bases are in range of its missiles
- Government: Iran's commitment to JCPOA will match Europeans'
- Zarif: 'U.S. has no standing to raise JCPOA issues'
- Russian diplomat urges Europe to save nuclear deal
- Rouhani says U.S. call for UN nuclear watchdog meeting is 'farcical'
- Timeline: Iran's recent clashes with the West over Gulf shipping, nuclear plans
- Iran, Russia say US 'was isolated' at IAEA's special meeting
- Iran ready to talk if U.S. lifts sanctions, Pompeo skeptical
- U.S. 'holding off' sanctions on FM Zarif: sources
- Authorities unanimous on Iran's JCPOA move: cleric
- Iran will not crack under U.S. pressure: National Interest
- Zarif discusses JCPOA, ties with Norwegian counterpart
- The U.S. and the JCPOA: Carrot-and-stick diplomacy without the carrot
- E3 reaffirm commitment to Iran deal
- Rouhani says U.S. has been left alone in quitting nuclear deal
- Academic's arrest hits effort to save Iran nuclear deal
- 'Iran says expects practical and effective steps by European partners to save JCPOA'
- European chief diplomats insist on the need to save nuclear deal
- Reducing commitments intended to give diplomacy a chance, Iranian nuclear spokesman says

J. Saudi Arabia

- Nuclear harm: Riyadh General Court to look into compensation suits
- Advanced nuclear reactors hold promise of clean energy for Gulf countries
- KSA takes a firm stand against Iran's nuclear program

K. UAE

- UAE national nuclear reactor operators
- First Barakah operators receive regulatory certification

L. Turkey

- Turkey's Erdogan: Russian missile defense system to arrive in 10 days: media
- Despite Turkey's assurances, U.S. still eyes sanctions, F-35 exit
- Turkey begins receiving Russian missiles in challenge to U.S. and NATO
- Explainer: What is at stake with Turkey's Russian air defense deal?
- Erdogan says Trump can waive sanctions on Turkey for Russian defense purchase
- Turkey's Erdogan says Russian S-400s will be fully deployed by April 2020

M. Israel

- Errant missile from Syria-Israel clash lands on Cyprus
- Israel says EU's response on Iran recalls Nazi appeasement

EAST ASIA

- N. Japan
 - Japanese entities to buy stake in major Russian LNG project
 - Warship shows Japan's plan to expand military role
 - 2011 Fukushima nuke disaster cesium takes shortcut back to Japan's waters
 - Japan urges Iran to keep to nuclear deal after Tehran admits to breaching enrichment limit
 - Japan says it won't discuss or retract SKorea export rules
 - Japan prepares for U.S. request to join patrols in Strait of Hormuz
 - Japan's defense chief has 'no plan' to dispatch SDF troops to the Middle East
 - Japanese IAEA head Yukiya Amano to step down next year for health reasons: diplomatic source

O. North Korea

- North Korea upbeat on Trump-Kim surprise meeting as a chance to push nuclear talks
- North Korea says U.S. 'hell-bent on hostile acts' despite wanting to talk
- N. Korea vows to develop 'special' weapons as South buys US F-35A
- North Korea Threatens the South Over Its Purchase of U.S. Stealth Fighters
- N. Korea's Hwasong-15 ICBM can strike anywhere in US mainland: USFK
- North Korea says nuclear talks at risk if U.S.-South Korea exercises go ahead
- Pompeo hopes U.S., North Korea can be 'more creative' in nuclear talks
- North Korea suggests it might lift weapons test moratorium
- Transatlantic relations as far apart as ever
- North Korea condemns US for breaking its promise

P. South Korea

- Cheong Wa Dae proposes int'l probe into Japan's claim over S. Korea's strategic material control
- Pentagon: Seoul, Washington preparing joint exercise despite Pyongyang's warning

Q. Taiwan

- Iran conflict might hold defense key for Taiwan
- Taiwan to shut down 2nd nuclear reactor within days
- AEC approves Taipower's Jinshan decommission plan

R. Miscellaneous and World

- How Each Country Contributed to the Explosion in Energy Consumption
- Why The World Needs More Nuclear Power
- Trinity: "The most significant hazard of the entire Manhattan Project"

S. Op-ed

INDIA

- India and Pakistan: Two Nations Always At the Brink of Nuclear War
- Whoops: India's Navy Left Nearly Sunk Its Own \$3 Billion Nuclear Submarine CHINA
- India should stop using 'China threat' to build up its military
- Arms sales to Taiwan a blow to Sino-US ties

PAKISTAN

- Envisaging a South Asian peace dialogue?
- Importance Of Nuclear Submarines For Pakistan -
- Pakistan's relations with the US are important but their scope is limited

USA

- Iran Is Rushing to Build a Nuclear Weapon and Trump Can't Stop It
- What do Americans really think about conflict with nuclear North Korea? The answer is both reassuring and disturbing
- Janne Nolan: from "fellowette" to godmother of the D.C. nuclear policy community
- The Tell-Tale Flaws in Trump's North Korea Strategy

RUSSIA

- Nuclear Holocaust: If an Israel vs. Russia War Broke Out in the Middle East
- What Would the U.S. Do if Russia Attacked with Nuclear Weapons?
- Spy Sub Down: How a Secret Russian Nuclear Submarine Caught Fire
- Why Chernobyl still divides Russia from the west

WEST ASIA

IRAN

• The complex brinkmanship behind Iran's nuclear response

• Game of chicken that can end in disaster: on U.S.-Iran relations

EAST ASIA

JAPAN

- Upper House poll will be vote on curbing Abe's dominant power
- Parties must close gap with reality in talks on nuclear power
- Latest science should apply to anti-quake steps of nuclear plants

TAIWAN

• Richard D. Fisher, Jr. On Taiwan: China's hypersonic attack missiles require deterrent responses

T. Think Tanks

- Trump Won't Accept These Harsh Realities on Iran
- The Other Existential Threat: Nuclear Weapons & the 2020 Presidential Campaign
- Recycle everything, America-except your nuclear waste
- A Sign Of Easing Tension? India And Pakistan's Joint Venture To Forge Religious Ties
- New CRP: Optimizing Nuclear Techniques to Assess Accurate Quantitative Biomarkers of Added Sugar Intake in Adults (E43034)
- Finding evidence of undeclared past nuclear activity in Iran shows the IAEA process is working
- NATO Secretary-General Stoltenberg's INF Response Is Inadequate
- U.S. Questions Russian CTBT Compliance
- Building Safeguards Into the Design of Spent Fuel Storage Facilities

U. Interviews, Press Releases

- ElBaradei says U.S. exit from nuclear deal lacks rationale, legal basis, and common sense
- 'Hell broke loose': Yashwant Sinha recalls time of India's nuclear test
- China, Russia and US define world order

V. Reports

• BP Statistical Review of World Energy

A. India

Upgrading obsolete Technology in Aircrafts

PIB Delhi, July 1, 2019

The contract for upgradation of AN-32 aircraft with Ukraine has not been terminated and 15 AN-32 aircraft have already been upgraded at 1 BRD, Kanpur.

Out of 105 AN-32 aircraft planned for upgradation, 55 aircraft have been upgraded – 40 aircraft at Kiev, Ukraine and 15 aircraft at 1 BRD, Kanpur. Upgradation of the remaining aircraft is planned in a phased manner depending upon the supply of mod kits by Ukraine.

http://pib.nic.in/ PressReleseDetail.aspx?PRID=1576430

New Atomic Power Plants

PIB Delhi, July 3, 2019

During the last three years and the current year, the government has accorded administrative approval and financial sanction for construction of twelve (12) nuclear power reactors - 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) to be set up in cooperation with Russian Federation to enhance nuclear power capacity in the country.

Presently, two public sector companies of the Department of Atomic Energy, Nuclear Power Corporation of India Limited (NPCIL) and Bharatiya Nabhikiya Vidyut Nigam Limited (BHAVINI) are involved in nuclear power generation. The Government has also amended the Atomic Energy Act to enable Joint Ventures of Public Sector Companies to set up nuclear power projects.

There is no proposal under consideration at present to permit private sector in the area of nuclear power generation. However, the private sector participates in the nuclear power sector by providing core reactor components, equipment, materials and services in areas that include construction, fabrication & erection of equipments, piping, electrical, instrumentation, consultancy, auxiliary and logistical services. 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/ PressReleseDetail.aspx?PRID=1576811

Additional nuclear reactors at Kudankulam

PIB Delhi, July 3, 2019

A General Framework Agreement (GFA) for setting up two additional units of 1000 MW each at Kudankulam in Tamil Nadu (Kudankulam Nuclear Power Plant, KKNPP-5&6 - 2X1000 MW) was signed by Nuclear Power Corporation of India Limited (NPCIL) with Atomstroyexport (ASE) of Russian Federation in June 2017.

Following the signing of the GFA, excavation for main plant buildings and off-shore structures is in progress. The work on the contracts for first priority design works, first priority equipment, long manufacturing cycle equipment, working documentation etc. is in progress.

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/ PressReleseDetail.aspx?PRID=1576810

Space Technology

PIB Delhi, July 3, 2019

ISRO has started an annual program called "Young Scientist Programme (Yuvika-2019), on May 13, 2019. A total

of 111 students representing each State and Union Territory of India were brought for fifteen days to four ISRO Centers. The programme was primarily aimed at imparting basic knowledge on Space Technology, Space Science and Space Applications. A special session was also arranged for interaction with eminent space scientists.

Indian Space Research Organisation has developed a capacity building program "UNNATI" for development of nano satellites for the participants from other countries. First batch of this programme was successfully concluded on March 15, 2019 benefiting 29 participants from 17 countries.

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, DrJitendra Singh in written reply to a question in Lok Sabha today.

http://pib.nic.in/ PressReleseDetail.aspx?PRID=1576830

Space Missions

PIB Delhi, July 3, 2019

The details of the space missions during the last three years and the current year are as follows:

SI. No.	Launch Date	Launch Vehicle	Satellite Name	
1.	28/04/2016	PSLV-C33	IRNSS-1G	
2.	23/05/2016	RLV-Technology Demonstrator		
3.	22/06/2016	PSLV-C34	Cartosat-2C + 2 Student Satellites + 6 Foreign Satellites	
4.	28/08/2016	SCRAMJET- Technology Demonstrator		
5.	08/09/2016	GSLV-F05	INSAT-3DR	
6.	26/09/2016	PSLV-C35	SCATSAT-1 + 2 Student Satellites + 5 Foreign Satellites	
7.	06/10/2016	Foreign Launcher	GSAT-18	
8.	07/12/2016	PSLV-C36	Resourcesat-2A	
9.	15/02/2017	PSLV-C37	Cartosat-2D+ 2 Nano Satellites + 7 Foreign Satellites	

10.	05/05/2017	GSLV-F09	GSAT-9
11.	05/06/2017	GSLV-MkIII- D1	GSAT-19
12.	23/06/2017	PSLV-C38	Cartosat-2E + 1 Student Satellite + 20 Foreign Satellites
13.	29/06/2017	Foreign Launcher	GSAT-17
14.	31/08/2017	PSLV-C39	IRNSS-1H
15.	12/01/2018	PSLV-C40	CartoSat-2 Series + 1 Micro Satellite + 1 Nano Satellite + 19 Foreign Satellites
16.	29/03/2018	GSLV-F08	GSAT-6A
17.	12/04/2018	PSLV-C41	IRNSS-11
18.	14/11/2018	GSLV-MkIII- D2	GSAT-29
19.	29/11/2018	PSLV-C43	HysIS
20.	05/12/2018	Foreign Launcher	GSAT-11
21.	19/12/2018	GSLV-F11	GSAT-7A
22.	24/01/2019	PSLV-C44	Microsat-R + Kalamsat-V2
23.	06/02/2019	Foreign Launcher	GSAT-31
24.	01/04/2019	PSLV-C45	EMISAT
25.	22/05/2019	PSLV-C46	RISAT-2B

http://pib.nic.in/PressReleseDetail.aspx?PRID=1576828

11

Electricity generation through atomic energy

PIB Delhi, July 4, 2019

The share of atomic energy in the overall electricity generation in the country was about 2.93% in the year 2017-18.

Nuclear share has remained around 3% of the total electricity generation in the country. The main reason for low share has been the low installed capacity base. The reasons for low capacity base are:

- i. Technology development and international embargo regime that persisted from 1974 to 2008. As a result, all the technologies for nuclear power including the fuel cycle technologies had to be developed within the country, thus took time.
- ii. Another constraint faced during the first two decades was availability of financial resources, as it had to solely depend on budgetary support. However, the earlier constraints have now been overcome and nuclear power programme is poised for rapid expansion.

To increase the share of nuclear power generation, the Government has taken several steps to increase the nuclear power capacity and to provide adequate quantity of fuel. These include:

- Resolution of issues related to Civil Liability for Nuclear Damage (CLND) Act & Creation of Indian Nuclear Insurance Pool (INIP).
- 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) to be set up in cooperation with Russian Federation.
- iii. Amendment of the Atomic Energy Act to enable Joint Ventures of Public Sector Companies to set up nuclear power projects.

iv. Entering into enabling agreements with foreign countries for nuclear power cooperation including supply of fuel.

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/ PressReleseDetail.aspx?PRID=1577210

Nuclear Plant Expansion Programme

PIB Delhi, July 4, 2019

Finance Minister's budget speech in Lok Sabha on 29.02.2016 for 2016-17 budget included the following reference to nuclear energy:

"In the power sector, we need to diversify the sources of power generation for long term stability. Government is drawing up a comprehensive plan, spanning next 15 to 20 years, to augment the investment in nuclear power generation. Budgetary allocation up to Rs 3,000 crore per annum, together with public sector investments, will be leveraged to facilitate the required investment for this purpose."

To meet the large equity requirements involved in implementation of the planned nuclear power expansion programme, formation of Joint Ventures (JV) of Nuclear Power Corporation of India Limited (NPCIL) with other PSUs was contemplated. In this context, NPCIL entered into Joint Ventures (JV) with Public Sector Undertakings NTPC Limited, Indian Oil Corporation Limited and National Aluminium Company Limited (NALCO). The Government also brought an Amendment of the Atomic Energy Act to enable Joint Ventures of Public Sector Companies to set up nuclear power projects.

The equity funding of the projects presently under construction and projects whose administrative approval and financial sanction is available, have been tied up.

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/ PressReleseDetail.aspx?PRID=1577209

Rs 16,925 crore BE for Department of Atomic Energy in General Budget 2019-20

PIB Delhi, July 5, 2019

The Union Budget 2019-20 proposed customs duty reductions on certain raw materials and capital goods needed for nuclear power plants. While presenting the Union Minister of Finance and Corporate Affairs Smt. Nirmala Sitharaman said these measures will further promote domestic manufacturing.

The customs duty reduction will be applicable for the following nuclear power plants:

- a. MahiBanswara Atomic Power project-1 to 4,
- b. Kaiga Atomic Power project 5 & 6,
- c. Gorakhpur Atomic Power project- 3 & 4,
- d. Chutka Atomic Power project- 1 & 2

With regard to Budget Estimates for Department of Atomic Energy (DAE), Rs 16,925 crore has been provided for FY 2019-20. The outlay for major schemes are given below:

Outlay of major schemes:

(in Rs crore)

Schemes	2018-19 (RE)	2019-20 (BE)
Nuclear fuel inventory	417	749
R&D basic Science and Engineering	1000	1320
R&D for Fast Reactor S&T	210	271
Backed Fuel cycle projects	240	440
Radiation & Isotopes project	30	110
Nuclear Power Projects	64	110
Nuclear Fuel Projects	164	170
AERB Expansion Project	15	40

http://pib.nic.in/ PressReleseDetail.aspx?PRID=1577393

New Space India Ltd. incorporated as a new commercial arm of D/o Space: Finance Minister Company to spearhead commercialization of various space products

PIB Delhi, July 5, 2019

Presenting the General Budget 2019-20 in the Parliament today, Union Minister of Finance and Corporate Affairs Smt. Nirmala Sitharaman said that a Public Sector Enterprise viz. New Space India Limited (NSIL) has been incorporated as a new commercial arm of Department of Space to tap the benefits of the Research & Development carried out by ISRO.

The Company will spearhead commercialization of various space products including production of launch vehicles, transfer to technologies and marketing of space products. The Minister said that, "India has emerged as a major space power with the technology and ability to launch satellites and other space products at globally low cost. Time has come to harness this ability commercially".

The Budget Estimates for Department of Space for FY 2019-20 is Rs 12,473.26 crore as compared to the RE of Rs 11,200 crore in FY 2018-19.

Outlay of major schemes:

(in Rs crore)

Schemes	2018-19 (RE)	2019-20 (BE)
Space Technology (including Gaganyan)	6993	8408
Space Applications	1595	1885
INSAT Satellite Systems	1330	884

http://pib.nic.in/ PressReleseDetail.aspx?PRID=1577403

Space Station and Manned Space Mission

PIB Delhi, July 10, 2019

The activities associated with Space station will be an extension of Gaganyaan Programme.

Gaganyaan Programme status: The design and configuration of major subsystems are finalised. The qualification tests pertaining to human rating of flight systems has commenced and Cryogenic Engine tests are in progress. The crew training plan is finalised and the crew selection process has commenced.

The Gaganyaan Programme has been approved by the Government of India and a new centre in ISRO, namely Human Space Flight Centre (HSFC) is created to carry out the activities related to human spaceflight. The Gaganyaan project team has been identified.

ISRO has signed a MoU with Indian Air Force for Crew Management Activities for Indian Human Spaceflight Programme. The scope of MoU includes co-operation in Crew screening and selection, crew health management, post travel rehabilitation etc. 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, DrJitendra Singh in written reply to a question in Lok Sabha today.

http://pib.nic.in/ PressReleseDetail.aspx?PRID=1578139

Nuclear Insurance Pool

PIB Delhi, July 10, 2019

The Government has created an Indian Nuclear Insurance Pool (INIP) on 12th June, 2015. M/s. General Insurance Corporation of India (GIC-Re), along with other Indian several Insurance Companies, have launched the Indian Nuclear Insurance Pool (INIP) with a capacity of ¹ 1500 crore to provide insurance to cover the liability as prescribed under Civil Liability for Nuclear Damage (CLND) Act, 2010. This has addressed issues related to Civil Liability for Nuclear Damage (CLND) Act and had facilitated commencement of work in setting up new nuclear power projects.

The present nuclear power capacity is 6780 MW comprising of 22 reactors. There are 9 reactors with a capacity of 6700 MW (including 500 MW PFBR being implemented by BHAVINI) under construction. The Government in 2017 has also accorded administrative approval and financial sanction of 12 nuclear power plants totaling to a capacity of 9000 MW. On their progressive completion, the installed nuclear capacity is expected to reach 8180 MW by 2020 and 22480 MW by 2031.

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, DrJitendra Singh in written reply to a question in Lok Sabha today.

http://pib.nic.in/ PressReleseDetail.aspx?PRID=1578152

Creation of Gaganyaan National Advisory Council

PIB Delhi, July 11, 2019

The Gaganyaan project is on track to be realized by the 75th Independence day or earlier. The design and configuration of major subsystems are finalised. The qualification tests pertaining to human rating of flight systems has commenced and Cryogenic Engine tests are in progress. The crew training plan is finalised and the crew selection process has commenced.

A Gaganyaan National Advisory Council has been created with members from different institutions and industries

The Gaganyaan Advisory Council comprises of Secretaries of Department of Space, Department of Science and Technology, Department of Defence Research and Development, Department of Scientific and Industrial Research, Principal Scientific Advisor to PM, Senior Officials from Armed Forces, Indian Coast Guard, Former Chairman of ISRO, Member of Space Commission, Former Director of Aeronautical Development Agency, Former Indian Astronaut, Directors of Premier Academic and Research Institutions and Heads of various Indian Industries.

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/ PressReleseDetail.aspx?PRID=1578382

Setting up of Neutrino Observatory

PIB Delhi, July 11, 2019

The Government of India has approved a project to build the India-based Neutrino Observatory (INO) at Pottipuram in the Theni District of Tamil Nadu. Briefly, the project aims to set up a 51000 ton Iron Calorimeter (ICAL) detector to observe naturally occurring atmospheric neutrinos in a cavern at the end of an approximately 2 km long tunnel in a mountain. This will help to reduce the noise from cosmic rays that is ever present over-ground and which would outnumber the rare neutrino interactions even in a detector as large as ICAL.

The INO project does not disturb the ecosystem around the site and does not release any radiation, as it does not have any radioactive substance. It measures cosmic rays.

There is no other neutrino detector anywhere in India at present. ICAL at INO would be the first of its type.

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/ PressReleseDetail.aspx?PRID=1578386

Expect a friend to order oil': Iranian envoy messages India on US sanctions

Rezaul H Laskar

Hindustan Times, July 3, 2019

India will decide on oil purchases in line with its national interests but Tehran is

hopeful New Delhi will resume Iranian oil imports that have been hit by American sanctions, Iranian ambassador Ali Chegeni said on Tuesday.

New Delhi stopped Iranian oil purchases after Washington ended on May 2 a sixmonth waiver that had allowed the top buyers, including India, to continue imports.

The US imposed sanctions on Iran after pulling out of the 2015 nuclear deal last year.

"We understand India will act according to its national interests. We know India is under pressure (but) India's relationship with any other country is not against us," Chegeni told reporters after the opening of an exhibition of Iranian arts.

https://www.hindustantimes.com/india-news/ hopeful-that-india-will-resume-iran-oil-importssays-envoy/story-LN1U9klssR2ZurRNO8gTFO.html

Budget 2019: Atomic energy department sees marginal dip in allocation; customs duty cut on nuclear fuel

Financial Express, July 5, 2019

The Department of Atomic Energy has seen a dip of Rs 40 crore in its monetary allocation in the annual Budget presented on Friday. Finance Minister Nirmala Sitharaman on Friday also announced waving the custom duty for nuclear power and parts required for building eight indigenous atomic power plants. In 2018-19, the DAE was allocated Rs 16,965.25 crore, which has come down to Rs 16,925.51 crore in 2019-20.

The allocation for Nuclear Power Corporation of India (NPCIL) has gone down drastically from Rs 4,665 crore in 2018-19 to Rs 3,000 crore in 2019-20. The NPCIL operates 22 nuclear power plants in the country. To further promote domestic production, customs duty reductions have also been proposed on fuels for nuclear power plants.

https://www.financialexpress.com/budget/ budget-2019-atomic-energy-department-seesmarginal-dip-in-allocation-customs-duty-cuton-nuclear-fuel/1632453/

India's NSG hopes dashed by China yet again; Beijing continues its veto despite Modi-Xi bonhomie

Vinay Kaura, July 6, 2019

China once again ensured that there was no discussion on India's admission into the Nuclear Suppliers Group (NSG), arguing that the issue can be discussed only after a consensus evolves over the entry of all countries who have not signed the Non-Proliferation Treaty (NPT). The NSG plenary concluded recently in Nur-Sultan, formerly known as Astana, in Kazakhstan.

The NSG is the most important global multilateral governance body to regulate export of nuclear materials and technologies, including dual-use items. India is not a signatory to the NPT by choice, but it remains outside the NSG due to global non-proliferation norms as well as geopolitical manoeuvrings.

https://www.firstpost.com/india/indias-nsghopes-dashed-by-china-yet-again-beijingcontinues-its-veto-despite-modi-xi-bonhomie-6946851.html

India Says First US Nuclear Reactor Proposed in 2008 Still Work 'in Progress'

Sputnik, July 10, 2019

The Indian government said on Wednesday that it might not be able to reach a consensus with Westinghouse Electric Company (WEC) in the US to set up six AP-1000 nuclear reactors in the southern Indian state of Andhra Pradesh. India has been negotiating with the company for more than a decade, soon after New Delhi and Washington signed a historic civil nuclear deal in 2008.

"Presently techno-commercial discussions to arrive at a project proposal for setting up nuclear power reactors in cooperation with Westinghouse Electric Company (WEC) are still in progress", Jitendra Singh, Minister of State for Atomic Energy said on Wednesday in Parliament.

https://sputniknews.com/asia/ 201907101076203822-india-says-first-usnuclear-reactor-proposed-in-2008-still-work-inprogress/

Team Modi Seeks Bids For 6 New Submarines. \$6.6 Billion At Stake

NDTV, July 11, 2019

Prime Minister Narendra Modi's administration has asked global warship makers to submit proposals to build six conventional submarines in India to boost local shipyard capability and plug gaps in the navy's underwater warfare fleet.

France's Naval Group SA, German Thyssenkrupp Marine Systems GmBH, Swedish Saab Kockums, Spanish Navantia SA and Russian Rosoboronexport OJSC were asked to show if they can transfer technology to build the diesel-electric powered submarines in India, people familiar with the matter said in New Delhi, asking not to be identified as the discussions were private.

https://www.ndtv.com/india-news/teamnarendra-modi-seeks-bids-for-6-new-submarines-6-6-billion-at-stake-2067927

Budget 2019: Optimising the Defence budget and the need for organisational reform

Commodore Anil Jai Singh

Financial Express, July 12, 2019

In the prevailing security scenario with two adversarial nuclear-armed continental

neighbors having an unholy nexus between them and each constantly sniping at India's heels, has placed a tremendous strain on the revenue resources allocated to the armed forces.

The absence of any mention of the defence outlay in the budget presentation by the Finance Minister Nirmala Sitharaman, despite her having been the Defence Minister till less than two months ago reflected the continuing neglect of national security at the highest levels of government.

https://www.financialexpress.com/budget/ budget-2019-optimising-the-defence-budgetand-the-need-for-organisational-reform/ 1641772/

India, Russia hold talks to boost space cooperation

India Today, July 13, 2019

India and Russia held high-level talks here to elevate bilateral cooperation to the next level in the field of space, including assistance in India's maiden human space flight mission 'Gaganyaan', according to Ministry of External Affairs.

National Security Advisor Ajit Doval and Dmitry Rogozin, Director-General of Russia's space agency ROSCOSMOS, led the two sides in the meeting held on Thursday.

https://www.indiatoday.in/india/story/indiarussia-hold-talks-to-boost-space-cooperation-1568017-2019-07-13

India's Hypersonic Missiles Are a Major Threat to Pakistan

Michael Pack

National Interest Blog, July 13, 2019

"Sources said that while the missile on which the platform was mounted successfully took off from the range, the test could not be completed to demonstrate the vehicle at hypersonic speed as the Agni 1 did not reach the desired altitude for the test. Scientists are looking at the technical reasons behind this and are studying all available data."

Ironically, the first launch of the Hypersonic Technology Demonstrator Vehicle, or HSTDV, was a failure. The HSTDV, which is shaped almost like a sailing ship, is supposed to be a testbed for developing future hypersonic weapons such as cruise missiles. It is launched atop an Agni 1, an Indian ballistic missile.

https://nationalinterest.org/blog/buzz/indiashypersonic-missiles-are-major-threat-pakistan-66682

Chandrayaan 2 Mission Launch Highlights: Launch Called Off Due To Technical Snag, Revised Dates At Least 10 Days Away, Says Isro

Firstpost, July 15, 2019

India's second unmanned mission to the Moon, named Chandrayaan 2, has been put on hold citing technical issues, and a revised countdown is to be announced shortly. In a first for India, ISRO will deposit a lander and rover on the surface of the Moon on 6 September 2019. The orbiter-lander-rover composite is expected to make a soft-landing on a previously unexplored region just 650 kilometres from the lunar South Pole. This will be the first time any mission touched down so far away from the equator.

https://www.firstpost.com/tech/science/launchcalled-off-due-to-technical-snag-revised-dates-atleast-10-days-away-says-isro-6988241.html

India's second lunar mission delayed due to 'technical snag': ISRO

Reuters, July 15, 2019

India's space agency said it delayed the launch of its second lunar mission, Chandrayaan-2, in the early hours of Monday due to a "technical snag" which was observed less than an hour before the scheduled lift-off.

"A technical snag was observed in launch vehicle system at T-56 minute," the Indian Space Research Organization (ISRO), said in a tweet here. "As a measure of abundant precaution, Chandrayaan2 launch has been called off for today."

The mission, which the ISRO chairman said is the most complex mission it has ever undertaken, was scheduled to launch at 09:21 p.m. GMT, or 02:51 a.m. local time on the Geosynchronous Satellite Launch Vehicle (GSLV) Mark III rocket. ISRO said it will announce the revised launch date later. India successfully carried out its first lunar mission, Chandrayaan-1, nearly 11 years ago.

https://in.reuters.com/article/us-space-exploration-india-moon/indias-second-lunar-missiondelayed-due-to-technical-snag-isroidINKCN1U90N7

B. China

China to launch constellation of remote sensing satellites by 2021

China Daily, July 1, 2019

China is planning to launch a constellation of 192 remote sensing satellites by 2021, reports China Central Television. Artificial intelligence technology will process the images captured by the satellites, which will have sensors with multiple resolutions. This will allow poor quality images to be filtered out so that only useful data is beamed back to earth. Scientists working on the project are also attempting to enable the constellation to be selfpiloting. When complete, the project is expected to provide better data for environmental monitoring, disaster prevention and mitigation, and traffic management.

http://www.chinadaily.com.cn/a/201907/01/ WS5d1973b9a3103dbf1432b30b.html

Chinese Navy conducts 5 days of military exercises in S. China Sea

Duncan DeAeth

Taiwan News, July 1,2019

China's naval forces are conducting a series of military training exercises in the

South China Sea, the China Maritime Safety Administration announced over the weekend. The exercises began on June 29 and will conclude on July 3. The Chinese government has designated a zone north of the Spratly island chain as restricted for the duration of the exercises. The Spratly island chain is one of the most contested areas of the South China Sea, with multiple islands being occupied by different nations with competing claims including China, the Philippines, Taiwan, Vietnam, and Malaysia.

The Chinese naval drills come on the heels of Japanese naval exercises, jointly conducted by the Japanese Coast Guard and Maritime Self-Defense Force, that were carried out in nearby waters on June 26, reports the Asahi Shimbun. The Liberty Times reports that the drills are likely intended to send a message to Japanese and U.S. forces in the region, which have stepped up the frequency of Freedom of Navigation Operations and military exercises in recent months.

https://www.taiwannews.com.tw/en/news/ 3735702

Nuke research school to break ground soon

Yang Cheng in Tianjin

China Daily, July 2, 2019

China's first university devoted to nuclear research will break ground in September, with the construction expected to last until 2021 in the coastal area of Tianjin. The city's construction authorities released the information on their website on Monday, vying for supervisors for the project. A total of 675 million yuan (\$98.1 million) has been allocated for investment in the construction area of 223,125 square meters, according to the website. The new university will be located in the northern part of the China-Singapore Tianjin Eco-City - a landmark area jointly invested in by the Chinese and Singaporean governments that is part of the city's Binhai New Area.

http://www.chinadaily.com.cn/a/201907/02/

WS5d1aae64a3103dbf1432b59e.html

China urges restraint to avoid escalation of Gulf tensions

Global Times, July 2, 2019

US pressure 'root cause' of Iran's uranium moves, China on Tuesday urged parties related to the Iranian nuclear issue to exercise restraint and avoid escalation of tension, after Tehran announced that it had surpassed the limit of the low-grade enriched uranium stockpile under the 2015 Iran nuclear deal, which Washington abandoned.

http://www.globaltimes.cn/content/ 1156543.shtml

China's new ship-borne chopper to raise PLA's ability to new level: military specialists

Liu Xuanzun

Global Times, July 2, 2019

China's latest vessel-borne helicopter will take the People's Liberation Army (PLA) Navy's combat capability to a new level, Chinese military experts said on Tuesday after a full-sized model of the navy variant of the Z-20 utility helicopter was allegedly spotted testing on a warship for the first time.

http://www.globaltimes.cn/content/ 1156458.shtml

Pentagon says China missile test in South China Sea 'disturbing'

Reuters, July 2, 2019

The Pentagon said on Tuesday a recent Chinese missile launch in the disputed South China Sea was "disturbing" and contrary to Chinese pledges that it would not militarize the disputed waterway. The South China Sea is one of a growing number of flashpoints in the U.S.-China relationship, which include a trade war, U.S. sanctions and Taiwan. China and the United States have repeatedly traded barbs in the past over what Washington says is Beijing's militarization of the South China Sea by building military installations on artificial islands and reefs.

China has not confirmed the missile tests and on Tuesday the foreign ministry declined to comment, referring questions to the defense ministry, which did not respond to a request for comment. The Chinese government has said that the military was carrying out drills between the Spratly and Paracel Islands starting last weekend and ending on Wednesday, warning other shipping not to enter a designated area. China's claims in the South China Sea, through which about \$5 trillion in ship-borne trade passes each year, are contested by Brunei, Malaysia, the Philippines, Taiwan and Vietnam.

https://www.reuters.com/article/us-usa-chinasouthchinasea/pentagon-says-china-missile-testin-south-china-sea-disturbingidUSKCN1TX2QZ

China to launch constellation with 72 satellites for Internet of Things

Xinhua, July 3, 2019

A research institute of the Chinese Academy of Sciences (CAS) has announced a constellation program, planning to launch 72 small satellites for the Internet of Things in the next three years.

The program will be implemented by Beijingbased private satellite company "Commsat," which was funded by the Xi'an Institute of Optics and Precision Mechanics under the CAS. A total of eight communication satellites of the program were sent into space last year for in-orbit tests. The company plans to initiate the commercial use of the program in 2020 with a launch of another four satellites, and to complete a global deployment of the constellation of 72 lowearth orbit satellites by the end of 2022. These satellites will serve different segments including wildlife protection, field emergency rescue, vehicle and ship monitoring and logistics tracing, a CAS source said.

http://www.xinhuanet.com/english/2019-07/03/ c_138195322.htm

Chinese, Japanese scientists discover highest energy photon

Zhang Zhihao

China Daily, July 3, 2019

Scientists from China and Japan have detected the highest energy photon, particles of light, ever observed on Earth. Studying these speedy space travelers can shed light on their mysterious origins and acceleration mechanism, leading to new revelations about the extreme conditions of the universe. The Tibet ASgamma experiment, a China-Japan joint research project located about 4.3 kilometers above sea level on Tibet autonomous region, recently spotted two dozen photons with energies above 100 trillion electron volts (TeV), one of which even registered a staggering 450 TeV. These finds represent the first measurements of high energy photons over 100 TeV and the highest ever recorded, said Huang Jing, the spokesperson for the project and a researcher from the Institute of High Energy Physics from the Chinese Academy of Sciences.

http://www.chinadaily.com.cn/a/201907/03/ WS5d1c45f0a3105895c2e7b6f6.html

U.S., Germany slam China at U.N. Security Council over Xinjiang: diplomats

Reuters, July 3, 2019

The United States and Germany slammed China during a closed-door United Nations Security Council meeting on Tuesday for detaining more than one million ethnic Uighurs and other Muslims, accusing Beijing of depriving them of their rights, diplomats said. China has been widely condemned for setting up detention complexes in remote Xinjiang. It describes them as "education training centers" helping to stamp out extremism and give people new skills.

https://www.reuters.com/article/us-china-usarights/u-s-germany-slam-china-at-u-n-securitycouncil-over-xinjiang-diplomats-

idUSKCN1TX2YZ

China's innovation persistence pays off with great human progress

Xinhua, July 4, 2019

"They were very interested in how Yutu-2 works on the far side of the moon. One visitor even asked me how the Queqiao relay satellite sets the communication link between Earth and the probe," Chen recalled. China has made great progress in science and technology in recent years, from probing space to exploring the deep sea, and from observing the universe to researching micro particles. Advances have fueled the public zeal for science.

Over 310 million visits were paid to more than 21,000 science popularization events during the week. "It is inspiring to learn about new technologies so closely," said a visiting middle school student. Yutu-2 has driven more than 200 meters on the far side of the moon to conduct research. The rover was reported to have found materials from deep inside the moon that could help unravel the mystery of the lunar mantle composition. The research has been published online by the academic journal Nature.

http://www.xinhuanet.com/english/2019-07/04/ c_138198458.htm

China's lunar orbiter captures Earth's images during solar eclipse

Xinhua, July 4, 2019

With the shocking images of the recent total solar eclipse in South America still fresh in memory, have you imagined what Earth would look like during the solar eclipse if you were on the moon? A microsatellite developed by the Harbin Institute of Technology in northeast China's Heilongjiang Province, which is now orbiting the moon, took photos of Earth during the solar eclipse in the early hours of Wednesday (Beijing time). The microsatellite, weighing 47 kg and named Longjiang-2, was sent into space on May 21, 2018 together with the Chang'e-4 lunar probe's relay satellite "Queqiao," and entered lunar orbit four days later. The research team from the Harbin Institute of Technology cooperated with amateur radio operators in Spain and Germany in taking and receiving the photos. Four pictures taken by the microsatellite during the solar eclipse have been sent back to Earth on Wednesday.

http://www.xinhuanet.com/english/2019-07/04/ c_138198527.htm

Live-fire anti-aircraft test held in Gobi desert

China Online Military, July 4, 2019

Anti-aircraft missile systems attached to a brigade under the PLA 72nd Group Army fire at mock low-altitude aerial targets during a live-fire test on June 29, 2019. The test aimed to inspect the troops' multipledirection target interception capabilities.

http://eng.chinamil.com.cn/view/2019-07/04/ content_9547728.htm

DNA data storage becomes a top emerging technology

By Yang Yang

China Daily, July 5, 2019

DNA data storage has become a top 10 emerging technology of 2019 on this year's World Economic Forum's annual list released in Dalian, Northeast China's Liaoning province. Other technological breakthroughs with the greatest potential to make a positive impact on our world include social robots, cheaper and safer nuclear reactors and a novel way of reining in rogue proteins.

The technologies on the list were selected based on their potential to have a mainstream impact on societies and economies within five years and be both disruptive and attractive to investors and researchers. "From income inequality to climate change, technology will play a critical role in finding solutions to the challenges our world faces today. This year's emerging technologies demonstrate the rapid pace of human innovation and offer a glimpse into what a sustainable, inclusive future will look like," said WEF CTO Jeremy Jurgens, at the 2019 World Economic Forum's Annual Meeting of the New Champions, also known as the Summer Davos Forum.

http://www.chinadaily.com.cn/a/201907/05/ WS5d1ec132a3105895c2e7be2c.html

Scientists make breakthrough that enables rockets to orbit longer

Xinhua, July 5, 2019

Chinese scientists have made a breakthrough in cryogenic rocket engine technology that can extend the orbital period of rockets from a few hours to 30 days, providing support for China's future deep space exploration. Cryogenic rocket engines are specially designed to work at extremely low temperatures. They use non-toxic and nonpolluting propellants, such as liquid hydrogen and liquid oxygen, which are more cost-efficient than others.

The engine has been widely used in domestic and foreign launch vehicles, including China's Long March-5 and Long March-7 carrier rockets. However, most of these rockets can orbit only a few minutes or a few hours. An extended orbital period has puzzled the aerospace community for a long time. Scientists from the China Academy of Launch Vehicle Technology have developed two insulating materials that can reduce propellant evaporation loss and keep rockets in flight for longer than before.

http://www.xinhuanet.com/english/2019-07/05/ c_138201446.htm

Guangzhou schools will start pilot Al courses in September

Zheng Caixiong

China Daily, July 5, 2019

Guangzhou in Guangdong province will begin offering courses in artificial

intelligence to primary and middle school students in September, education officials said on Monday. The provincial capital's bureau of education is now selecting about 100 schools to feature the pilot AI courses and further promote intelligent education, it said in a statement on its website. By 2022, all primary and middle schools in the city will have AI courses in their regular curriculum to help train and nurture AI talent for the city, traditionally a commercial hub.

http://www.chinadaily.com.cn/a/201907/05/ WS5d1e8414a3105895c2e7bc3d.html

China revitalizes old howitzers with modern add-ons

Liu Xuanzun

Global Times, July 4, 2019

A Type 66 cannon-howitzer system attached to an army brigade with the PLA 77th Group Army sends its 152mm shells at a simulated target during a live-fire training exercise in plateau area.

China has revitalized a type of howitzer that has been part of the People's Liberation Army (PLA) arsenal for more than half a century by updating it with equipment that suits the needs of modern warfare. The 152 millimeter cannonhowitzer is one of the most widely used pieces of artillery in the Chinese military, and the PLA has developed new tactics and equipment to let this old weapon shine even after 50 years of practical deployment, China Central Television (CCTV) reported on Wednesday.

http://www.globaltimes.cn/content/ 1156775.shtml

China-donated frigate arrives in Sri Lanka

Xinhua, July 8, 2019

The China-gifted frigate "P625" arrived at Sri Lanka's Colombo Port on Monday morning. Speaking at the welcoming reception, Commander of Sri Lanka Navy Vice Admiral Piyal De Silva thanked China for the gifted frigate, saying that the Sri Lankan navy would take the donation as a suggestion of the good friendship between the two countries. The navy commander said that Sri Lanka is currently facing maritime challenges with the surrounding sea being used by perpetrators for many unlawful acts including drug trafficking. With the acquisition of the frigate, the surveillance capabilities of the navy will be greatly enhanced.

http://www.xinhuanet.com/english/2019-07/08/ c_138209800.htm

China firmly opposes U.S. arms sales to Taiwan, says senior official

Xinhua, July 9, 2019

China is strongly dissatisfied and firmly opposed to U.S. arms sales to Taiwan, and has lodged stern representations to the U.S. side, a senior Chinese official said Tuesday. Yang Jiechi, a member of the Political Bureau of the Central Committee of the Communist Party of China (CPC) and director of the Office of the Foreign Affairs Commission of the CPC Central Committee, made the remarks when meeting with Igor Ivanov, president of Russian International Affairs Council and former Russian foreign minister.

"Taiwan question is purely China's internal affairs and allows no outside interference," Yang said. "The will and determination of the Chinese government and people in safeguarding national sovereignty and territorial integrity is firm and unswerving." China urges the U.S. to fully understand the damages of U.S. arms sales to Taiwan, abide by the one-China principle and the three China-U.S. joint communiques, immediately correct its mistake and withdraw the planned arms sales to and sever military ties with Taiwan so as to avoid further damage to bilateral relations and peace and stability across the Taiwan Strait, Yang said.

http://www.xinhuanet.com/english/2019-07/09/ c_138212545.htm

China missile test destroys trust

Taipei Times, July 9, 2019

Between June 29 and Wednesday, the Chinese People's Liberation Army (PLA) conducted unprecedented anti-ship ballistic missile tests in the South China Sea, launched from a missile battery stationed on one of the artificial islands China has created, two US officials told US broadcaster MSNBC. Pentagon spokesman Lieutenant Colonel Dave Eastburn later confirmed the report, calling it "disturbing," but Beijing denied testing missiles, saying that only "ammunition" was fired during the exercises. China's flimsy denial rings hollow: It is just the latest in a long line of carefully crafted deceptions over its fishy behavior in the South China Sea and further erodes trust in Beijing's leadership.

http://www.taipeitimes.com/News/editorials/ archives/2019/07/09/2003718341

Chinese, Singaporean universities join hands for AI research

Xinhua, July 9, 2019

An international joint center for artificial intelligence (AI) research has been established by China's Shandong University and Singapore's Nanyang Technological University (NTU). The research institute was inaugurated earlier this month in Jinan, capital of east China's Shandong Province. Fan Liming, president of Shandong University, said the research institute would become a platform for scientific research, talent training and great successes through its global university resources and scholars.

http://www.xinhuanet.com/english/2019-07/09/ c_138212102.htm

China's Chang'e-4 probe switches to dormant mode

Xinhua, July 9, 2019

Both the lander and the rover of the Chang'e-4 probe switched to dormant

mode for the lunar night on the far side of the moon on Tuesday morning. The scientific instruments on the Chang'e-4 probe worked well during the seventh lunar day after the probe made the first-ever soft-landing on the Von Karman Crater in the South Pole-Aitken Basin on the far side of the moon on Jan. 3, according to the Lunar Exploration and Space Program Center of the China National Space Administration. A new batch of 1.2 G scientific detection data obtained by the probe was sent to the core research team for analysis in early July.

http://www.chinadaily.com.cn/a/201907/09/ WS5d246f0ea3105895c2e7c8dd.html

Top 10 emerging technologies of 2019- Safer nuclear reactors

China Daily, July 9, 2019

The great risk with nuclear power is that the fuel rods can overheat and, when mixed with water, produce hydrogen, which can then explode. New fuels are coming online that are much less likely to overheat and, if they do, produce very little or no hydrogen. The advantage is these new configurations can replace existing fuel rods with little modification.

http://www.chinadaily.com.cn/a/201907/09/ WS5d23c640a3105895c2e7c581_9.html

Golden women

By Shan Jie

Global Times, July 9, 2019

Female nuclear reactor operators conquer difficulties to achieve their goals, In nuclear power plants, reactor operators are called "golden people" Of the first 140 operators at the Haiyang Nuclear Power Plant in East China's Shandong Province, only five are women "Golden women" sometimes have to overcome greater difficulties on the way to becoming qualified operators

http://www.globaltimes.cn/content/ 1157281.shtml

China to launch 100 additional satellites by 2025: official

Global Times, July 10, 2019

Nearly 100 Chinese satellites will be launched into space before 2025, adding to the more than 200 that are already in orbit, said a Chinese official on Tuesday. The announcement was made by Yu Qi, an official at the China National Space Administration, at a conference held in Beijing, news portal chinanews.com reported on Tuesday. Developing the space economy has become a trend in space development around the world, said Yu, noting that China had developed the fundamental and proper environment to accelerate the space economy with breakthroughs in space technologies.

http://www.globaltimes.cn/content/ 1157389.shtml

No need to overreact to Iran's nuclear moves: Chinese delegate

Xinhua, July 11, 2019

The international community should not overreact to Iran's recent nuclear moves because they do not incur any proliferation risks, said Fu Cong, head of the Chinese delegation at an International Atomic Energy Agency (IAEA) Board of Governors meeting on Wednesday. "We do not, we should not overreact to the actions taken by Iran, because in our view, these actions do not incur any proliferation risks, and they do not contravene Iran's obligation under the safeguard agreement," said Fu, who is director general of the Department of Arms Control of the Chinese Foreign Ministry.

China expressed at the meeting its regret over Iran's exceeding some of the limits under the 2015 nuclear deal, while noting that the current situation came as a result of the U.S. unilateral withdrawal from the Iran nuclear deal and its imposition of unilateral sanctions against Iran. "This whole meeting started from a very funny situation," Fu noted, "because it is called for by the U.S., a country that withdrew unilaterally from the JCPOA, and it is the U.S. that asked to convene the meeting to discuss the implementation by a member of the JCPOA, so we think it is quite paradoxical.

Fu urged the United States to abandon its maximum pressure policy against Iran and to resume the agreement. "We are fully committed to the JCPOA, and we are making every effort to implement the commitment we have undertaken under the JCPOA," he said. "We also believe that the Joint Commission is the right place to discuss issues related to the implementations of JCPOA," he added. Fu also called on related parties to accelerate efforts and take concrete actions so that Iran could reap the economic benefit promised under the nuclear deal.

http://www.xinhuanet.com/english/2019-07/11/ c_138217255.htm

China develops new generation recoverable satellite for commercial use

Xinhua, July 11, 2019

China is developing a new generation recoverable satellite for commercial use, which is expected to make its maiden flight in 2020, according to a space engineer. Delivering a report at a science communication salon recently, Zhao Huiguang, chief designer of the recoverable satellite from the China Academy of Space Technology, said China's new generation recoverable satellite is able to return 500 kg to 600 kg payloads back to Earth from space. So far, China has launched 25 recoverable satellites, and their usage is shifting from resources investigation to space science, according to Zhao.

http://www.xinhuanet.com/english/2019-07/11/ c_138218151.htm

China says Xi urged Trump to ease North Korea sanctions 'in due course'

Cate Cadell, David Brunnstrom

Reuters, July 12, 2019

Chinese President Xi Jinping urged U.S. President Donald Trump last month to show flexibility in dealings with North Korea and ease sanctions on the country "in due course," China's Foreign Ministry said on Friday. A senior U.S. official said U.S. policy continued to be to maintain sanctions on North Korea until it gives up its nuclear weapons and the State Department reiterated that it expected countries around the world to fully implement and enforce them.

China signed up for strict U.N. sanctions following repeated North Korean nuclear and missile tests but also has suggested they could be eased as a reward for good behaviour. Chinese Foreign Ministry spokesman Geng Shuang told reporters that Xi briefed Trump on China's position on North Korea when they met on the sidelines of the G20 summit in Osaka. "President Xi ... pushed the U.S. side to show flexibility and meet the North Koreans half way, including easing sanctions in due course," Geng said.

https://in.reuters.com/article/northkorea-usachina/china-says-xi-urged-trump-to-ease-northkorea-sanctions-in-due-course-idINKCN1U710I

Beijing to impose sanctions on US firms involved in US\$2.2 billion Taiwan arms deal

Teddy Ng

South China Morning Post, 12 July, 2019

Beijing said on Friday it will issue sanctions against the US companies involved in the latest arms sale to Taiwan, as tensions between China and the United States continue to rise. The foreign ministry said in a brief statement that the move by Washington had violated China's territorial sovereignty and national security. "To protect our national interest, China will impose sanctions on the US companies involved in the arms sale," ministry spokesman Geng Shuang was quoted as saying.

https://www.scmp.com/news/china/diplomacy/ article/3018419/beijing-impose-sanctions-usfirms-involved-us22-billion-taiwan

US arms sales to Taiwan severely undermines China's sovereignty and security interests: spokesman

China Military Online, July 12, 2019

Chinese military is strongly dissatisfied and firmly opposed to US arms sales to Taiwan, and has lodged stern representations to the US side. Wu Qian, spokesperson for China's Ministry of National Defense made the comments on Thursday in response to the US planned arms deal worth 2.22 billion US dollars with Taiwan. The sales of weapons approved by the US State Department includes selling General Dynamics (GD) M1A2 Abrams tank and Stinger anti-aircraft missiles to Taiwan.

"Taiwan is an inalienable part of China's territory. China's firm opposition to the US arms sales to Taiwan is clear and consistent. The US arms sales to Taiwan severely violates the one-China principle and the three China-US joint communiques," Wu said. "It grossly interferes in China's internal affairs, undermines China's sovereignty and security interests, severely damages development of relations between the two countries and their militaries, and seriously harms peace and stability across the Taiwan Strait."

http://english.chinamil.com.cn/view/2019-07/11/ content_9555061.htm_

China announces controlled deorbit plan for Tiangong-2

Global Times, July 12, 2019

China Manned Space Engineering Office

(CMSEO) on Saturday announced its plan to deorbit Tiangong-2 space lab in the near future. The controlled re-entry in the atmosphere after successfully completing experiments and tasks on time, marks solid technical progress for further development of manned space, according to an expert. Tiangong-2 is slated to re-enter the atmosphere on July 19, small debris is likely to fall into the designated safe area - from 160 degrees and 90 degrees west longitude, from 30 degrees to 45 degrees south latitude - in the South Pacific Ocean, according to the press release CMSEO sent the Global Times on Saturday.

http://www.globaltimes.cn/content/ 1157727.shtml_

Galileo system's woes may provide opening for China's BeiDou

Tu Lei

Global Times, July 14, 2019

The breakdown of the Galileo navigation satellite system over the weekend has triggered users' concern about the service, and it could bring opportunities to China's navigation satellites to serve European clients, analysts said. The entire Galileo system suffered an unexpected signal outage beginning on Thursday, July 11 at 1 am Coordinated Universal Time, (9 am Beijing time). A note posted on gsceuropa.eu, the official website of the European Global Navigation Satellite Systems Agency, showed that 22 of the 24 satellites remain "not usable" as of press time, and the status of only two satellites was shown as "testing."

http://www.globaltimes.cn/content/ 1157850.shtml_

After Taiwan buys arms, China holds military drills on southeast coast

Reuters, July 14, 2019

China's military recently carried out air and naval drills along its southeast coast,

the Defence Ministry said on Sunday, following the latest arms sales from the United States to self-ruled Taiwan, which China claims as a renegade province. In a brief statement, and without giving an exact geographical location, the ministry said that the People's Liberation Army had in "recent days" held the exercises. "These drills were routine arrangements in accordance with annual plans for the military," it said, without elaborating.

https://in.reuters.com/article/china-taiwan/aftertaiwan-buys-arms-china-holds-military-drills-onsoutheast-coast-idINKCN1U903T_

MND downplays recent PLA drills near Taiwan

Taipei Times, July 15, 2019

The Ministry of National Defense (MND) yesterday downplayed recent Chinese military exercises near Taiwan amid speculation that they were meant to send a message after the US last week announced it would move ahead with a major weapons deal with Taiwan. The ministry said the livefire exercises announced by its Chinese counterpart earlier in the day were part of the Chinese People's Liberation Army's (PLA) annual drills, and described them as "nothing more than routine exercises." It has a complete picture of all PLA military maneuvers and exercises in the region and would be in position to respond effectively and accordingly to defend the nation should the need arise, the ministry said.

http://www.taipeitimes.com/News/taiwan/ archives/2019/07/15/2003718702_

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. Mogherini said that they also don't intend to invoke the nuclear deal dispute mechanism.

According to Geng, Iran's compliance issue should be addressed under the framework of the joint commission of the JCPOA. It's also necessary to ensure a balance of rights and obligations of the JCPOA. On Sunday, the leaders of France, Germany and the UK issued a joint statement, saying that they are "concerned about the risk that JCPOA [nuclear deal] will collapse following sanctions imposed by the US and as a result of Iran's decision to no longer respect key provisions of the agreement."

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

C. Pakistan

Pakistan safe because of nuclear assets: CJP

The News International, July 10, 2019

The Supreme Court has directed the Capital Development Authority (CDA) to demolish all illegal constructions near a sensitive government facility, setting aside a petition seeking their regularisation.

A three-member bench, headed by Chief Justice of Pakistan Justice Asif Saeed Khosa, heard the case. Justice Khosa asked the civic agency officials as to why the illegal constructions close to a sensitive government facility were not being removed.

"Who is the CDA chairman? There will be no compromise on the defense of the country. Pakistan is secure because of its nuclear assets. Are you planting bombs of illegal constructions? If the court orders are not implemented then you will have to face contempt proceedings," said the chief justice.

https://www.thenews.com.pk/print/496148pakistan-safe-because-of-nuclear-assets-cjp

Low-cost Moon mission puts India among lunar pioneers

The Express Tribune, July 12, 2019

India will step up the international space race on Monday when it launches a lowcost mission to become only the fourth country to land a probe on the Moon.

Just five days before the 50th anniversary of man's first lunar landing, Chandrayaan-2 — or Moon Chariot 2 — will blast off from a tropical island off Andhra Pradesh state after a decade-long build-up.

https://tribune.com.pk/story/2011690/8-low-costmoon-mission-puts-india-among-lunar-pioneers/

India prepares to land rover on moon in global space race

The Express Tribune, July 12, 2019

India is looking to take a giant leap in its space program and solidify its place among the world's spacefaring nations with its second unmanned mission to the moon, this one aimed at landing a rover near the unexplored south pole.

The Indian Space Research Organization plans to launch a spacecraft using homegrown technology on Monday, and it is scheduled to touch down on the moon Sept. 6 or 7. The \$141 million Chandrayaan-2 mission will analyze minerals, map the moon's surface and search for water.

https://www.pakistantoday.com.pk/2019/07/12/ india-prepares-to-land-rover-on-moon-in-globalspace-race/

India scrubs Moon mission launch one hour before liftoff

Dawn, July 15, 2019

India on Monday postponed the launch of

a lunar probe less than an hour before blast-off because of a technical problem, delaying its bid to become only the fourth nation to land a spacecraft on the Moon.

The Chandrayaan-2 — or Moon Chariot 2 — India's Moon mission is part of India's ambitious space programme, and its success would have propelled the South Asian nation into rarefied company: Russia, the United States and China are the only countries to have landed craft on the lunar surface.

The spacecraft looked set for launch atop a Geosynchronous Launch Vehicle (GSLV) Mk III — India's most powerful rocket from the Satish Dhawan Space Centre, but countdown was halted 56 minutes and 24 seconds before the planned liftoff at 2:51 am (2121 GMT Sunday).

https://www.dawn.com/news/1494199/indiascrubs-moon-mission-launch-one-hour-beforeliftoff

D. USA

US federal funding granted for SSR technology development

World Nuclear News, July 5, 2019

The funding, from the US Department of Energy's Advanced Research Project Agency-Energy (ARPA-E), will be used to develop composite structural technologies (COST) for the reactor. Moltex says this will bring the Stable Salt Reactor-Wasteburner (SSR-W) - the first variant of the SSR being developed by the company - even closer to market and global roll-out.

"If we are to displace fossil-fuelled generation fast, the entire plant - from reactor to final construction and operation - needs to consider the real-world financing, economic issues, operating practicalities and lead times of nuclear new build," said Adam Owens, principal investigator of Moltex's COST programme. "This project demonstrates SSR-W as an economically practical solution to climate change in the urgent timeframes required, in the highest impact 29

areas for global decarbonisation in the 2030s, rather than the 2040s or 2050s."

https://world-nuclear-news.org/Articles/USfederal-funding-granted-for-SSR-technology-deve

U.S. Accuses Iran of 'Nuclear Extortion' and Vows More Sanctions

Steven Erlanger

The New York Times, July 10, 2019

The United States on Wednesday accused Iran of "nuclear extortion" and threatened further sanctions against Tehran, which has begun stockpiling and enriching uranium beyond the limits set in the 2015 accord that President Trump has abandoned.

The United States called an emergency meeting of the International Atomic Energy Agency in Vienna on Wednesday in response to the Iranian moves, while a senior French envoy was in Tehran exploring ways to reopen negotiations on compliance with the deal.

https://www.nytimes.com/2019/07/10/world/ europe/us-iran-nuclear-sanctions.html

GE Hitachi Nuclear Energy wins Oyster Creek contract

World Nuclear News, July 10, 2019

GE Hitachi Nuclear Energy (GEH) has been awarded a contract by Comprehensive Decommissioning International (CDI) to decommission reactor internals and the reactor pressure vessel at the Oyster Creek nuclear power plant in New Jersey, USA. CDI is a joint venture company of Holtec and SNC-Lavalin.

GEH said today that its contracted handling and segmentation work at the boiling water reactor, which was shut down last September, will be carried out underwater and will be accomplished using the Primary Segmentation System that was designed in conjunction with REI Nuclear. GEH acquired the business and certain assets of REI Nuclear in December last year.

https://www.world-nuclear-news.org/Articles/GE-

Hitachi-Nuclear-Energy-wins-Oyster-Creekcontra

Trump threatens to 'substantially' increase sanctions on Iran

Doina Chiacu, Francois Murphy

Reuters, July 10, 2019

President Donald Trump warned on Wednesday that U.S. sanctions on Iran would be increased "substantially" soon, as the U.N. nuclear watchdog held an emergency meeting at Washington's request to weigh Tehran's breach of a nuclear deal.

Trump also accused Iran of secretly enriching uranium for a long time but offered no evidence, and Iran said after the 35-nation meeting in Vienna that it had "nothing to hide". U.N. inspectors have uncovered no covert enrichment by Iran since long before its 2015 nuclear agreement deal with world powers.

https://www.reuters.com/article/us-mideastiran-usa/trump-threatens-to-substantiallyincrease-sanctions-on-iran-idUSKCN1U510D

US research reactor goes digital in licensing 'first'

World Nuclear News, July 10, 2019

The US Nuclear Regulatory Commission (NRC) has licensed the first entirely digital nuclear reactor instrumentation and control (I&C) system in the USA, at a university-based research reactor originally built in 1962. The NRC licence also for the first time covers parts certified under standards laid down by a non-US regulatory body.

Purdue University Reactor Number One (PUR-1) and its associated research facility have undergone a digital conversion which began in 2012, when the US Department of Energy awarded the university a grant under its Nuclear Energy University Program to replace reactor equipment with a state-of-the-art instrumentation and control system. The fully digital system was developed by the university in collaboration with Mirion Technologies and the Curtiss-Wright Corp.

http://world-nuclear-news.org/Articles/US-research-reactor-goes-digital-in-licensing-firs

Intruders jump fence at U.S. nuclear reactor that uses bomb-grade fuel

Timothy Gardner

Reuters, July 10, 2019

Two people jumped a security fence at a GE Hitachi research reactor near San Francisco, the U.S. nuclear power regulator said on Thursday, raising concerns over a plant that is one of the few in the country that uses highly enriched uranium, a material that could be used to make an atomic bomb.

The intruders jumped a security perimeter fence at the Vallecitos reactor in Alameda County on Wednesday afternoon, a 1,600acre (647.5-hectare) site about 40 miles (64 km) east of San Francisco, the U.S. Nuclear Regulatory Commission said on its website in a security threat notice.

They escaped security at the plant after being detected, but shortly afterwards suspects were detained outside the facility, the NRC said. The Alameda County Sheriff's Office did not immediately respond to a request for comment.

https://in.reuters.com/article/usa-nuclearpowersecurity/intruders-jump-fence-at-u-s-nuclearreactor-that-uses-bomb-grade-fuelidINKCN1U62DB

NASA shake up in new race to the moon

Joey Roulette

Reuters, July 11, 2019

As NASA scrambles to meet U.S. President Donald Trump's mandate to return humans to the moon by 2024, two longtime heads of NASA's human exploration wing were demoted Wednesday in a slew of administrative shakeups, officials said in an internal memo. NASA Administrator Jim Bridenstine participates in a press preview event of the upcoming Paris Air Show at the National Press Club in Washington, U.S. June 6, 2019. REUTERS/Leah Millis

The biggest change to rock the agency is the demotion of Bill Gerstenmaier, who was leading the efforts to return humans to the lunar surface.

He has been with the agency since 1977, led some of its most high profile programs and was the head of the human exploration office in a 14-year tenure.

The agency's chief Jim Bridenstine announced the changes in an internal memo to employees, signaling the latest leadership changes.

https://in.reuters.com/article/space-exploration/ nasa-shake-up-in-new-race-to-the-moonidINKCN1U60G3

Trump, Netanyahu discuss Iran threat, sanctions in call statements

Reuters, July 11, 2019

President Donald Trump spoke with Israeli Prime Minister Benjamin Netanyahu about Iran on Wednesday, the White House said, the same day the U.S. president threatened to "substantially" increase sanctions on Tehran to curb its nuclear activities. Iran recently started enriching uranium beyond a limit established in a 2015 nuclear agreement with world powers, a deal from which Trump withdrew. Trump has since intensified economic sanctions on Tehran, and tensions have escalated.

The two leaders discussed cooperation between the United States and Israel in advancing shared national security interests, including efforts to prevent Iran's malign actions in the region," White House spokesman Judd Deere said on Thursday.

Netanyahu's office said the leaders discussed Trump's latest warning - issued

by tweet on Wednesday - to further tighten sanctions.

"The prime minister expressed his appreciation for the president's intention of increasing the sanctions against Iran," Netanyahu's office said in a statement.

https://in.reuters.com/article/mideast-iran-usaisrael/trump-netanyahu-discuss-iran-threatsanctions-in-call-statements-idINKCN1U628Z

Trump Finds a Trade Fight He Doesn't Like in Uranium Imports

Jennifer Jacobs, Ari Natter, and Will Wade

Bloomberg, July 12, 2019

President Donald Trump has found a trade fight he doesn't like. After disrupting global markets by imposing tariffs on steel, hundreds of billions of dollars worth of Chinese goods and even washing machines and solar panels, Trump has decided against putting a cap on uranium imports, at least for now. His decision came in a memorandum released by the White House late Friday.

https://www.bloomberg.com/news/articles/2019-07-12/trump-denies-uranium-miners-an-importcap-in-big-win-for-nuclear

Trump declines to set U.S. uranium production quotas

Valerie Volcovici, Timothy Gardner

Reuters, July 13, 2019

President Donald Trump declined to issue quotas for domestic uranium production late on Friday and instead ordered a 90-day governmental review, a decision praised by U.S. nuclear power generators who fear curbs on fuel imports would boost costs.

Trump said in a memorandum he did not concur with a U.S. Commerce Department investigation that found uranium imports threaten to impair U.S. national security.

While Trump said the department's findings "raise significant concerns", he ordered a deeper review by the U.S. Nuclear Fuel Working Group, with input from several government agencies. "A fuller analysis of national security considerations with respect to the entire nuclear fuel supply chain is necessary," the memorandum said.

https://www.reuters.com/article/us-usa-tradeuranium/trump-declines-to-set-u-s-uraniumproduction-quotas-idUSKCN1U8032

Trump Sends Negotiators to Geneva for Nuclear Talks With Russians and Also Seeks to Limit Chinese Warheads

Peter Baker

The New York Times, July 15, 2019

President Trump is sending a high-level delegation to meet with Russian counterparts in Geneva this week to pursue an arms control treaty that for the first time would cap the nuclear arsenals of not just the two largest powers, but China as well.

Mr. Trump broached the idea with President Vladimir V. Putin of Russia during their meeting in Osaka, Japan, last month and has also signaled his ambition for such a three-way accord to President Xi Jinping of China, administration officials said on Monday. Russia has expressed interest; China has not.

https://www.nytimes.com/2019/07/15/us/ politics/trump-russia-china-nuclear-arms.html

Former U.S. official says Trump has left nuclear deal because Obama negotiated it

The Tehran Times, July 15, 2019

Ben Rhodes, former President Barack Obama's adviser, has said that U.S. President Donald Trump quit the 2015 nuclear deal, known as the JCPOA, because Obama negotiated it.

"Did anyone really need a leaked document from the UK Ambassador to know that Trump pulled out of the Iran Deal because Obama negotiated it?" he tweeted on Sunday.

Kim Darroch, the former British ambassador to the U.S., said Trump seemed to be discarding the Iran nuclear deal for "personality reasons," as the deal had been agreed to by Obama, the Daily Mail reported on Saturday.

Darroch said the Trump administration was "set upon an act of diplomatic vandalism" in its decision to abandon the JCPOA.

https://www.tehrantimes.com/news/438174/ Former-U-S-official-says-Trump-has-left-nucleardeal-because

E. Europe

IAEA Concludes Long Term Operational Safety Review at Belgium's Doel Nuclear Power Plant

IAEA Office of Public Information and Communication, July 1, 2019

An International Atomic Energy Agency (IAEA) team of experts has completed a review of long term operational safety at the Doel Nuclear Power Plant (NPP) Units 1 and 2 in Belgium operated by Engie Electrabel. The SALTO (Safety Aspects of Long Term Operation) follow-up review mission was requested by the Belgian Federal Agency for Nuclear Control (FANC). Doel's Units 1 and 2 went into operation in 1975. FANC approved a 10-year extension of the units' operating license in December 2015, provided that a set of safety conditions is fulfilled every year. During the 25-28 June mission, the SALTO team reviewed Doel's response to recommendations and suggestions made during an initial SALTO mission in 2017. The team-comprising seven experts from Canada, the Czech Republic, South Africa, Sweden, Switzerland and the IAEA—said that plant management had:

https://www.iaea.org/newscenter/pressreleases/iaeaconcludes-long-term-operational-safety-review-atbelgiums-doel-nuclear-power-plant

Sweden to boost Gotland air defense amid Russia tensions

Reuters, July 1, 2019

Sweden's military said on Monday it would deploy an updated ground-to-air missile defense system on the Baltic Sea island of Gotland in another sign of tension in the region with Russia. The new system, developed and built by defense firm Saab, replaces the mobile anti-aircraft guns the military on Gotland have previously been equipped with. "Gotland is an important area from a military-strategic perspective," Micael Byden, supreme commander of the Swedish Armed Forces, said in a statement.

"Its geographical location gives the island significant military advantages in terms of protection and control of sea traffic, the Baltic's airspace and the ability to base military units and capabilities." Although it is not a North Atlantic Treaty Organization (NATO) member, Sweden has close ties to the alliance and has been beefing up its armed forces after decades of neglect amid increased anxiety over Russian sabre-rattling in the Baltic Sea region.

https://www.reuters.com/article/us-swedendefence-gotland/sweden-to-boost-gotland-airdefense-amid-russia-tensionsidUSKCN1TW27U

AP Analysis: Europe squeezed in Iran-US nuclear deal dispute

Jon Gambrell

Reuters, July 5, 2019

When it comes to saving Iran's nuclear deal, Europe finds itself in the impossible situation of trying to salvage an accord unraveling because of the maximalist U.S. sanctions campaign. Since President Donald Trump unilaterally withdrew America from the accord over a year ago, a slow fuse has burned through Iran. At first, it appeared Iranian officials thought they might be able to wait out Trump. They spoke about "strategic patience" as the U.S. 2020 presidential election loomed. That talk faded as U.S. sanctions choked off Iran's vital crude oil sales abroad and then began targeting its paramilitary Revolutionary Guard and officials including Supreme Leader Ayatollah Ali Khamenei. Soon, the talk changed to "strategic action" and making threats to the Strait of Hormuz, a crucial global oil supply point.

https://www.apnews.com/ 460624b689454f4880772eda59c7d513

Developing the First Ever Facility for the Safe Disposal of Spent Fuel

Nathalie Mikhailova

IAEA Bulletin, July 10, 2019

Following several decades of committed implementation of disposal strategies in Finland and Sweden, as well as cooperation in the development of a safe disposal solution based on a Swedish design, the first ever deep geological repository for spent fuel is being constructed in Olkiluoto, Finland. Sweden, along with other countries, is also working towards building such a facility. After spent fuel is removed from nuclear power reactors, it continues to generate significant heat for several decades.

It is therefore placed in water pools or in dry storage facilities to cool down. Storage pools and containers ensure that spent fuel maintains its integrity and no radiation or radioactive materials are released, thereby protecting people and the environment from exposure. However, spent fuel remains highly radioactive for several thousands of years and needs to be isolated for several hundred thousand years. One way to dispose of spent fuel — when declared as waste — once the heat has decayed is to bury it in engineered facilities several hundred metres below ground level, in deep geological disposal facilities. The objective is to contain its radioactivity by encapsulating the spent fuel in robust and leak-tight containers and isolating it by burying it.

https://www.iaea.org/newscenter/news/developingthe-first-ever-facility-for-the-safe-disposal-ofspent-fuel

A New Player in Fusion Research: Croatia Launches Dual Ion Beam Facility with IAEA Support

Laura Gil

IAEA Office of Public Information and Communication, July 11, 2019

A dual ion beam facility, which enables two ion beams from different accelerators to be combined simultaneously, has been inaugurated in Zagreb, strengthening Croatia's fusion research and expanding the global supply of facilities with such cutting-edge capabilities. Installed with IAEA support, the Ruðer Boškoviæ Institute's He Ion Source & DiFU Dual-Beam Facility will help scientists test and develop new structural materials indispensable for fusion energy to become a reality. Only very few facilities of this kind exist worldwide.

Fusion researchers and engineers work to develop methods to harness the power generated by the fusion of light nuclei, a process comparable to the energy production of stars. It holds the promise of abundant, safe and carbon free energy. However, fusion reactions generate highly energetic neutrons and alpha particles which, after some time of exposure, can damage reactor walls. Ion beam technology like the dual-beam facility in Croatia can simulate these extreme conditions and help to develop new materials sturdy enough to sustain them.

https://www.iaea.org/newscenter/news/a-newplayer-in-fusion-research-croatia-launches-dualion-beam-facility-with-iaea-support

Soviet sub that sank off Norway in 1989 still emitting radiation

Reuters, July 10, 2019

A Soviet nuclear submarine which sank off Norway in 1989 is still emitting radiation, researchers said on Wednesday following an expedition that used a remotely controlled vehicle for the first time. The wreck of the Komsomolets lies on the bottom of the Norwegian Sea at a depth of about 1,700 meters (5,577 feet).

Authorities have conducted yearly expeditions to monitor radiation levels since the 1990s but this year's inspection was the first one to use a remotely operated vehicle called Aegir 6000 to film the wreckage and take samples which will be further analyzed. The scientific mission's samples show levels of radioactivity at the site up to 800,000 higher than normal, the Norwegian Radiation and Nuclear Safety Authority said in a statement. "This is of course a higher level than we would usually measure out at sea but the levels we have found now are not alarming," said expedition leader Hilde Elise Heldal of the Norwegian Institute of Marine Research.

https://www.reuters.com/article/us-russiasubmarine-nuclear/soviet-sub-that-sank-offnorway-in-1989-still-emitting-radiationidUSKCN1U51Q7

Italy seizes missile from far-right sympathisers

AFP, July 15, 2019

Italian police seized an air-to-air missile, machine guns and rocket launchers during raids sparked by an investigation into farright 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 245-kilogramme (540-pound) Matra missile. They also found automatic assault rifles that they described as "latest generation" among the cache.

https://www.afp.com/en/news/15/italy-seizesmissile-far-right-sympathisers-doc-1is8dq4

F. France

France's Macron trying to save Iran nuclear deal by July 15

Reuters, July 7, 2019

French President Emmanuel Macron says he is trying to find a way by July 15 to resume dialogue between Iran and Western partners. Macron's office said in a statement that the French leader spoke for more than an hour Saturday with Iranian President Hassan Rouhani amid a standoff between Tehran and the U.S.

Macron expressed "strong concern about new weakening" of the 2015 accord aimed at curbing Iran's nuclear ambitions. He said they would "explore between now and July 15 conditions for resumed dialogue among all parties." The statement didn't elaborate. Europe is struggling to save the 2015 accord after President Donald Trump abandoned it last year. Iran has set a deadline for Sunday for Europe to offer new terms to the accord, and is threatening to accelerate uranium enrichment.

https://www.apnews.com/ d72d880f76a14caf8c6e18b74d0a99a3

France says anti-tank missiles found in Libya were 'unusable'

Reuters, July 10, 2019

France said on Wednesday anti-tank missiles it bought from the United States and were later found in a base belonging to troops loyal to Libya's eastern commander Khalifa Haftar were never intended for sale or transfer to any party to Libya's conflict. The Army Ministry said the missiles were intended for the "selfprotection of a French military unit deployed to carry out intelligence and counter-terrorism operations". "Damaged and unusable, the armaments were being temporarily stocked at a depot ahead of their destruction," the ministry said in a statement.

https://www.reuters.com/article/us-france-libyamissiles/france-says-anti-tank-missiles-foundin-libya-were-unusable-idUSKCN1U50Q5

France launches new nuclearpowered attack submarine

Saudi Gazette, July 12, 2019

President Emmanuel Macron on Friday launched the first of a new fleet of nuclearpowered attack submarines that aims to ensure French naval superiority in the coming decades. The first French submarine to be launched in a decade, the Suffren is the front-runner for a new line of Barracuda attack-class vessels, 12 of which have already been ordered by Australia.

A vast, 99-metre (325 foot) behemoth of black steel, the Suffren was launched at a dry-dock ceremony in the northern port of Cherbourg.Built by French shipbuilder Naval Group for the French navy, the Suffren is a Barracuda-class nuclear attack submarine designed to replace the Rubisclass submarines which have been in service since the 1980s.

http://saudigazette.com.sa/article/571692/World/ Europe/France-launches-new-nuclear-poweredattack-submarine

G. UK

UK to send a second warship to the Gulf amid crisis with Iran

The Gaurdian, July 13, 2019

The UK is stepping up its military presence in the Gulf by sending a second warship to the region to protect British commercial oil tankers, the Ministry of Defence has said. The HMS Duncan, a Type 45 destroyer, will be deployed within days after it completed a course of Nato exercises in the Baltic Sea with the aim to be in the Gulf region by next week.

The ship will work alongside the Royal Navy's frigate HMS Montrose and US Gulf allies, but will not participate in Washington's proposed global maritime coalition to protect shipping in the area.

https://www.theguardian.com/world/2019/jul/12/ iran-warns-western-powers-to-leave-region-amidgulf-crisis

UK to facilitate release of Iranian tanker if it gets Syria guarantees: Hunt

Reuters, July 13, 2019

British foreign minister Jeremy Hunt told his Iranian counterpart on Saturday that Britain would facilitate the release of the detained Grace 1 oil tanker if Tehran gave guarantees it would not go to Syria. The tanker was seized last week by British Royal Marines off the coast of the British Mediterranean territory of Gibraltar on suspicion of violating sanctions against Syria. Iran on Saturday reiterated its call for the ship's release. It denies the tanker was taking oil to Syria in violation of European Union sanctions.

https://www.reuters.com/article/us-mideastiran-tanker-britain/uk-to-facilitate-release-ofiranian-tanker-if-it-gets-syria-guarantees-huntidUSKCN1U80II

Leaked UK memo says Trump axed Iran deal to spite Obama

Jill Lawless

AP News, July 14, 2019

A U.K. newspaper has published more leaked memos revealing a British ambassador's blunt assessments of the Trump administration, including one in which the envoy to Washington claimed President Donald Trump pulled out of the Iran nuclear deal to spite predecessor Barack Obama. In the May 2018 cable published by the Mail on Sunday, U.K. Ambassador Kim Darroch called Trump's decision to abandon the international accord "an act of diplomatic vandalism, seemingly for ideological and personality reasons" because the pact "was Obama's deal."

Darroch wrote the memo after then-Foreign Secretary Boris Johnson visited Washington in a failed attempt to persuade the United States not to abandon the 2015 nuclear agreement.

https://www.apnews.com/ 7894d6dc1d1c4a3b9747558553ddcdbf

Britain's Hunt says 'small window' to save Iran nuclear deal

Reuters, July 15, 2019

British Foreign Secretary Jeremy Hunt said on Monday that there was still time to save the Iran nuclear deal and that despite the United States being Britain's closest ally it disagreed on how to handle the Iran crisis. The Brussels meeting will seek to flesh out how to convince Iran and the United States to reduce tensions and initiate a dialogue amid fears that the 2015 deal is close to collapse. U.S.-Iranian tensions have worsened since U.S. President Donald Trump decided last year to abandon the nuclear deal under which Iran agreed to curtail its atomic program in return for relief from economic sanctions crippling its economy.

https://www.reuters.com/article/us-mideast-iraneu-britain/britains-hunt-says-small-window-tosave-iran-nuclear-deal-idUSKCN1UA0PW

H. Russia

Russia supports US proposal on multilateral agreement on nuclear disarmament

TASS News Agency, July 1, 2019

Russia supports the US stance on the feasibility to increase the number of participants under agreements on the nuclear weapons disarmament, Russian Deputy Foreign Minister Sergei Ryabkov said at the Valdai International Discussion Club on Monday.

"We are very seriously considering signals coming from the United States in favor of this solution to problems, which keep piling up in the sphere of reduction and limitation of nuclear weapons," Ryabkov said.

https://tass.com/defense/1066573

Russia's floating nuclear power plant ready to heat up the Arctic

Russian Times, July 1, 2019

The world's first floating nuclear power

plant (NPP), built by Russia and called the 'Akademik Lomonosov,' has received a license for operation. It is to provide heat and energy to Russia's remote regions in the Arctic.

According to Rosenergoatom, at the end of August the vessel will be towed to Pevek, a port city on the Arctic coast of the Chukotka region. It will thus become the northernmost operating nuclear plant in the world.

https://www.rt.com/business/463129-russiaarctic-nuclear-power/

14 Russian Sailors Killed in Fire on Nuclear Sub

The Moscow Times, July 2, 2019

Fourteen submariners on board a Russian Defense Ministry research vessel were killed in a fire while carrying out a survey of the sea floor off Russia's Arctic coast, the ministry was quoted as saying by Russian news agencies.

The incident took place on the AS-31 deepsea nuclear submarine nicknamed Losharik, an unnamed source in the security forces told the RBC news website. Launched in 2003, Losharik was designed for research, rescue and special military operations and can hold up to 25 crew members.

https://www.themoscowtimes.com/2019/07/02/ 14-russian-sailors-killed-in-fire-on-nuclear-subreports-a66257

Putin signs law suspending INF treaty with US

Russian Times, July 3, 2019

Russian President Vladimir Putin has signed a law suspending the Cold Warera INF Treaty. Putin announced in February that he would halt participation in the treaty after Washington's abrupt decision to pull out of the agreement.

The Trump administration announced last October that the US would pull out of the

treaty which has been a cornerstone of European security since its signing in 1987. Moscow later promised a "mirror response" to the decision and said it would suspend its own participation.

https://www.rt.com/news/463288-putin-lawsuspends-inf-treaty/

Floating Nuclear Power Plant Will Be Key Element on Northern Sea Route

The Moscow Times, July 4, 2019

The construction and testing of Russia's first power plant are declared completed. On Thursday morning the installation was officially handed over from Baltic Yard to Rosatom.

At the ceremony, representatives of two Russian state companies signed a document saying that the Akademik Lomonosov passed all necessary tests and successfully met requirements.

"It marks a significant milestone and certifies that the obligations of the contractor to the customer have been fully met and that results are in line with the conditions of the contract," Andrei Petrov, General Director of Rosenergoatom, said.

https://www.themoscowtimes.com/2019/07/04/ floating-nuclear-power-plant-will-be-key-elementon-northern-sea-route-a66285

Russia Confirms Submarine Hit by Deadly Fire Was Nuclear-Powered

The Moscow Times, July 4, 2019

Russian President Vladimir Putin disclosed on Thursday for the first time that a secret military submarine hit by a fatal fire three days ago was nuclear-powered, prompting Russia's defense minister to assure him its reactor had been safely contained.

Russian officials have faced accusations of trying to cover up the full details of the accident that killed 14 sailors as they were carrying out what the defense ministry called a survey of the sea floor near the Arctic.

https://www.themoscowtimes.com/2019/07/04/ russia-confirms-submarine-hit-by-deadly-firewas-nuclear-powered-a66277

Russia not discussing Pentagon's nuclear test allegations with Washington — ambassador

TASS News Agency, July 6, 2019

Moscow is not discussing with Washington allegations of carrying out above the "zero yield" nuclear tests earlier made by the Defense Intelligence Agency (DIA), Russia's ambassador to the US, Anatoly Antonov, told TASS on Friday.

Moscow is not discussing with Washington allegations of carrying out above the "zero yield" nuclear tests earlier made by the Defense Intelligence Agency (DIA), Russia's ambassador to the US, Anatoly Antonov, told TASS on Friday.

https://tass.com/world/1067360

Russian Sailors Killed in Nuclear Sub Fire May Have Averted 'Global Catastrophe' – Official

The Moscow Times, July 8, 2019

The 14 Russian sailors killed in last week's nuclear submarine fire may have prevented a "planetary catastrophe," a high-ranking officer has reportedly said at their funeral ceremony this weekend.

The sailors were killed on July 1 when a fire broke out as their deep-water research submarine was surveying the seafloor near the Arctic, the Russian Defense Ministry has said. President Vladimir Putin disclosed for the first time on Thursday that the secret military submarine was nuclear-powered, prompting the defense minister to assure him its reactor had been safely contained.

https://www.themoscowtimes.com/2019/07/08/ russian-sailors-killed-in-nuclear-sub-fire-mayhave-averted-global-catastrophe-official-a66316

Kremlin regrets consequences of Iran's cuts to nuclear deal commitments

TASS News Agency, July 8, 2019

Russian presidential press secretary Dmitry Peskov said that the Kremlin was regretting the consequences arising from Iran cutting back on the Joint Comprehensive Plan of Action (JCPOA) on the Iranian nuclear program after the US unilateral withdrawal from the deal.

"Regretfully, we are now registering these consequences. The Russian diplomacy will continue working," he pledged. "We will also be expecting the results of the work of an IAEA commission, which will be convened in the coming days."

https://tass.com/politics/1067502

Russia ready for ministerial meeting on Iranian nuclear program, says Lavrov

TASS NewsAgency, July 9, 2019

Russia is prepared for holding a joint ministerial commission on fulfilling the Joint Comprehensive Plan of Action (JCPOA) on the Iranian nuclear program, Russian Foreign Minister Sergey Lavrov told reporters on Tuesday.

Lavrov earlier attended an informal meeting of foreign ministers of the Organization for Security and Cooperation in Europe (OSCE) member-states in Slovakia's Vysoke Tatry. When asked whether the sides discussed there the situation around the Iranian nuclear deal, Lavrov noted that this was a matter for a joint commission of signatories. "The joint commission recently gathered at the level of political directors and there is a proposal to convene it at the level of ministers," he said. "We will be ready for this, but if there is an understanding that there is the need to put forward particular agreements at this meeting. So far, no such agreements are on the horizon."

Russian design bureau unveils nuclear-powered aircraft carrier project at naval show

TASS NewsAgency, July 10, 2019

The Nevskoye Design Bureau (part of Russia's United Shipbuilding Corporation) unveiled the newest Project 11430E 'Lamantin' nuclear-powered aircraft carrier. Its mockup was shown on the design bureau's display stand at the St. Petersburg international maritime defense show.

The 'Lamantin' aircraft carrier is designated to provide for the deployment and the combat use of an air task force that comprises various types of shipborne aircraft capable of employing weapons and armament against air, sea (submarine and surface) forces, and also land troops and ground installations of an enemy in the oceanic, maritime and coastal waters, and also to ensure naval groups' combat sustainability and provide cover for amphibious assault troops and their landing force against strikes and attacks by enemy air-launched weapons," the project's description says.

https://tass.com/defense/1067933

Russian Navy to get nuclearpowered aircraft carrier

TASS News Agency, July 10, 2019

The Russian Navy will have a nuclearpowered aircraft carrier in its structure, although this will not happen in the immediate future, Navy Commander-in-Chief Nikolai Yevmenov told reporters at the St. Petersburg international maritime defense show on Wednesday.

"There will be, of course, a nuclearpowered aircraft carrier but not in the short-term perspective," the Navy chief said.

https://tass.com/defense/1067923

Russian Nuclear Sub Wreck's Radiation 100K Higher Than Normal, Scientists Say

The Moscow Times, July 10, 2019

Norwegian scientists have discovered radiation levels 100,000 times higher than normal near a Soviet-era nuclear submarine that sank 30 years ago in the Arctic, Norway's TV2 broadcaster reported Tuesday.

The Komsomolets sank in a section of the Barents Sea considered to be one of the world's largest fishing areas in 1989, killing 42 of its 69 crew. Concerns about contamination from its nuclear reactor have not yet given way to an actual environmental crisis, and readings taken as recently as 2008 have shown no indication of a radiation leak.

https://www.themoscowtimes.com/2019/07/10/ russian-nuclear-sub-wrecks-radiation-100khigher-than-normal-scientists-say-a66341

US escalates tension around nuclear deal to change power in Iran — Russian diplomat

TASS News Agency, July 11, 2019

The US policy aimed at changing power in Iran is the prime cause of tension around the Iranian nuclear deal, Russian Foreign Ministry Spokeswoman Maria Zakharova said on Thursday.

"It is clear to all that Washington's policy of exerting maximum pressure on Tehran, rooted in anti-Iranian sentiments and the desire to achieve a change of power in the sovereign state, is the prime cause of the current tension around the Joint Comprehensive Plan of Action (JCPOA)," the Russian diplomat stressed.

https://tass.com/world/1068187

State support pivotal to Russia's nuclear sector, says report

World Nuclear News, July 12, 2019

Russia's nuclear power sector "continues to benefit" from supportive government policy, in contrast to "tighter restrictions" in Western Europe owing to environmental concerns and growing competition from renewables, S&P Global Ratings says in a report published yesterday.

Russia's nuclear power industry consists of 89 enterprises that are owned by the state-run joint stock company Atomic Energy Power Corporation (AEPC), or Atomenergoprom, its Russian name.

http://world-nuclear-news.org/Articles/S-Preport-on-Russia

Nuclear bonds: Russia supplies fuel for China Experimental Fast Reactor

Russian Times, July 13, 2019

The first batch of nuclear fuel has been supplied by a subsidiary of Russia's state nuclear corporation Rosatom for the China Experimental Fast Reactor (CEFR).

According to a company statement, the fuel has been supplied under a contract between TVEL (a Rosatom subsidiary), the China Nuclear Energy Industry Corporation, and the China Institute of Atomic Energy.

CEFR is used for research purposes, though it also operates within a 20MW power unit, supplying electricity to the grid. It is classified by the International Atomic Energy Agency as the only fast power reactor in the world outside of Russia.

https://www.rt.com/business/464103-russiachina-nuclear-reactor/

WESTASIA

I. Iran

Zarif says Iran has not violated nuclear deal

Tehran Times, July 2, 2019

Foreign Minister Mohammad Javad Zarif said late on Monday that Iran has not violated the 2015 nuclear deal as the country's stockpile of enriched uranium passed 300kg limit, saying Iran was just exercising its right to respond to the U.S. withdrawal and reimposition of sanctions.

His tweeted message was also along with paragraph 36 of the JCPOA according to which provides a mechanism to resolve disputes when parties believe other signatories are not fulfilling their obligations.

"We have NOT violated the #JCPOA.

Para 36 of the accord illustrates why:

We triggered & exhausted para 36 after US withdrawal.

We gave E3+2 a few weeks while reserving our right.

We finally took action after 60 weeks.

As soon as E3 abide by their obligations, we'll reverse."

https://www.tehrantimes.com/news/437665/Zarifsays-Iran-has-not-violated-nuclear-deal

Russian diplomat says Iran not after nuclear weapons

Tehran Times, July 2, 2019

Russia's Permanent Representative to International Organizations in Vienna Mikhail Ulyanov has said that Iran's act in exceeding stockpiles of enriched uranium does not mean it is seeking to develop nuclear weapons.

"Iran's stockpiles of low enriched uranium exceeded 300 kg. This is a deviation from voluntary commitment under #JCPOA, but has nothing to do with a violation of NPT or development of nuclear weapons. Ironically this is a result of U.S. decision to sanction removal of LEU from Iran," Ulyanov tweeted on Monday.

Iranian Foreign Minister Mohammad Javad Zarif said on Monday that Iran's enriched uranium stockpile has passed the 300 kilogram limit under the 2015 nuclear deal, known as the Joint Comprehensive Plan of Action.

https://www.tehrantimes.com/news/437676/ Russian-diplomat-says-Iran-not-after-nuclearweapons

Iran's decision on uranium stockpile in accordance with JCPOA: envoy

Tehran Times, July 2, 2019

Tehran's ambassador to Vienna-based international organizations says Iran was entitled under the 2015 nuclear deal to let the stockpile of its enriched uranium pass 300 kilograms.

Kazem Gharibabadi said Iran's Supreme National Security Council has already made it clear that Tehran has referred to the Articles 26 and 36 of the JCPOA to defend its rights, Tasnim reported.

Gharibabadi's remarks came hours after the International Atomic Energy Agency (IAEA) announced that Iran's enriched uranium stockpile has passed the 300 kg limit set by the Joint Comprehensive Plan of Action.

https://www.tehrantimes.com/news/437668/ Iran-s-decision-on-uranium-stockpile-inaccordance-with-JCPOA

Zarif says Iran's commitment to JCPOA will be commensurate to Europeans'

Tehran Times, July 3, 2019

Foreign Minister Mohammad Javad Zarif said on Tuesday that Iran will show commitment to the 2015 nuclear deal as long as Europeans fulfil their commitments. Under the nuclear deal, officially called the Joint Comprehensive Plan of Action, Iran agreed to put limits on its nuclear activities in exchange for termination of economic and financial sanctions on the country.

"Iran is committed to the full implementation of the #JCPOA: as long as E3/EU implement THEIR economic commitments," Zarif twitted.

Zarif added that Iran's loyalty to the JCPOA will be commensurate to those of the Europeans, including the E3 - France, Germany and Britain which are signatory to the deal - and the rest of the European Union states.

https://www.tehrantimes.com/news/437699/Zarifsays-Iran-s-commitment-to-JCPOA-will-becommensurate-to

INSTEX a preliminary step for Europe to implement its commitments: Zarif

Tehran Times, July 3, 2019

Iranian Foreign Minister Mohammad Javad Zarif said on Wednesday that INSTEX is a preliminary step for Europe to implement its commitments under the 2015 nuclear deal, officially known as the Joint Comprehensive Plan of Action (JCPOA).

"If INSTEX becomes operational, it will be a preliminary to 11 commitments that Europeans should meet," he told reporters on the sidelines of a cabinet meeting.

He also said Iran will be committed to the JCPOA as long as the Europeans will be.

https://www.tehrantimes.com/news/437702/ INSTEX-a-preliminary-step-for-Europe-toimplement-its-commitments

UN nuclear watchdog's board to meet on Iran at US request

Saudi Gazette, July 5, 2019

The United States has called an emergency meeting of the UN atomic watchdog's 35nation Board of Governors to discuss Iran, the US mission to the agency said on Friday, after Tehran breached its 2015 nuclear deal with major powers.

Any country on the board can call a meeting, and the International Atomic Energy Agency confirmed in a note to member states that the meeting would be held next Wednesday at 2:30 p.m. (1230 GMT) after the IAEA this week said Iran had exceeded the maximum stock of enriched uranium allowed under the deal. "Today ... US Ambassador to International Organizations in Vienna Jackie Wolcott requested a special meeting of the Board to discuss the IAEA Director General's latest, concerning report on the Iranian regime's nuclear program," the US mission said in a statement, referring to the IAEA's report on Monday. "The international community must hold Iran's regime accountable."

http://saudigazette.com.sa/article/571040/ World/Mena/UN-nuclear-watchdogs-board-tomeet-on-Iran-at-US-request

Iran expresses regret over Russia submarine fire

Tehran Times, July 5, 2019

Iranian Foreign Ministry spokesman Seyyed Abbas Mousavi has expressed regret over a lethal fire that broke out on a Russian nuclear-powered submarine, killing several crew members.Mousavi offered condolences and sympathy to Russia, particularly the bereaved families, over the tragic incident.

At least 14 sailors died in the blaze aboard the research vessel while carrying out a survey of the seafloor, Russian news agencies quoted the Defense Ministry as saying.

https://www.tehrantimes.com/news/437770/ Iran-expresses-regret-over-Russia-submarine-fire

IAEA to hold special meeting on Iran on July 10

Saudi Gazette, July 5, 2019

The UN's nuclear watchdog said Friday it will hold a special meeting on Iran's

nuclear program next week, days after Tehran breached one of the limits set in a 2015 deal with world powers. The meeting of the International Atomic Energy Agency (IAEA)'s board of governors would be held "on 10 July at 14:30," an IAEA spokesman said.

Earlier, the US mission in Vienna said in a statement that the American Ambassador to International Organizations Jackie Wolcott had requested the special meeting to discuss the IAEA's latest report on Iran, issued earlier this week. In it, the IAEA confirmed that Iran had breached the limit of 300kg for stockpiles of enriched uranium as stipulated under the 2015 Joint Comprehensive Plan of Action (JCPOA).

http://saudigazette.com.sa/article/571063/World/ Mena/IAEA-to-hold-special-meeting-on-Iran-on-July-10

Iran will enrich uranium as much as it needs, cleric says

Tehran Times, July 5, 2019

Tehran Friday prayer leader Ayatollah Mohammad-Ali Movahedi Kermani says Iran will enrich uranium to any level and in any quantity it needs starting from July 7.

"Iran will continue its enrichment. However, our enrichment is not for atomic bomb because we neither regard it ethical nor do we need it," Movahedi Kermani told worshippers in Tehran.

President Hassan Rouhani said on Wednesday that the Arak heavy water nuclear reactor – which was agreed to be redesigned under the JCPOA – will resume its previous activities after July 7 if the other signatories to the deal fail to uphold their end of the bargain.

https://www.tehrantimes.com/news/437759/Iranwill-enrich-uranium-as-much-as-it-needs-clericsays

Iran threatens British shipping in retaliation for tanker seizure

Saudi Gazette, July 5, 2019

The Federal Authority for Nuclear Regulation (FANR), the UAE's nuclear regulator, has officially certified Monday the first group of 15 UAE National Senior Reactor Operators (SROs) and Reactor Operators (ROs) at Nawah Energy Company, the operations and maintenance subsidiary of the Emirates Nuclear Energy Corporation (ENEC).

The certification is part of complying with FANR's Regulation 17 'Regulation for the Certification of Operating Personnel at Nuclear Facilities' that dictates requirements for the training and qualification of Senior Reactor Operators and Reactor Operators, and ensures their competence to operate the nuclear energy plant. In addition, the certification of SROs and ROs is a key requirement for future receipt of the Operating License.

http://saudigazette.com.sa/article/570981/ World/Mena/Iran-threatens-British-shippingin-retaliation-for-tanker-seizure

EU to consult with nuclear deal partners as Iran warns of new steps

Tehran Times, July 5, 2019

The European Union has said it's in contact with the remaining signatories of the 2015 nuclear deal, the Joint Comprehensive Plan of Action, to discuss Iran's decision to reduce its commitments under the deal.

"We've called on Iran to reverse these steps and to refrain from further measures that would undermine the nuclear agreement," AP quoted a spokeswoman for EU foreign policy chief Federica Mogherini as saying on Thursday. Iranian President Hassan Rouhani said on Wednesday Tehran will get past a 3.67% uranium enrichment level set by the nuclear deal on July 7 as a retaliatory measure to U.S. ditching of the agreement.

"We will discard that commitment. We will go beyond 3.67% as much as we want and as much as we need to," he said during a cabinet meeting.

https://www.tehrantimes.com/news/437754/EUto-consult-with-nuclear-deal-partners-as-Iranwarns-of-new

Iran ready for higher uranium enrichment: top adviser

Tehran Times, July 6, 2019

A top foreign policy adviser to the Leader of the Islamic Revolution says the Islamic Republic is ready for higher uranium enrichment because Europe has "indirectly violated" the nuclear deal.

Ali Akbar Velayati said in a Friday interview that Iran may increase the level of its enriched uranium to at least five percent as of July 7, Mehr reported.

The move would come as part of a decision by Tehran to reduce its commitments under the 2015 nuclear deal, officially known as the Joint Comprehensive Plan of Action (JCPOA).

According to Velayati, Tehran will raise the 3.67% limit to any level it deems necessary for its peaceful activities.

https://www.tehrantimes.com/news/437803/Iranready-for-higher-uranium-enrichment-top-adviser

It is a 'sad irony' that U.S. has requested IAEA meeting on Iran, diplomat says

Tehran Times, July 7, 2019

Days after Tehran's stockpile of the enriched uranium surpassed the limit allowed in the 2015 nuclear deal, the International Atomic Energy Agency said on July 5 it will hold an emergency meeting on Iran's nuclear program next week. The meeting of the IAEA board of governors, which follows an emergency call by the United States, would be held "on 10 July at 14:30," an IAEA spokesman said.

Ironically, the U.S. has repeatedly ignored IAEA reports certifying that Iran was compliant with the terms of the nuclear deal in order to pull out of that deal unilaterally and reimpose sanctions.

https://www.tehrantimes.com/news/437814/ltis-a-sad-irony-that-U-S-has-requested-IAEAmeeting-on-Iran

Iran starts enriching uranium to above 3.67%

Tehran Times, July 7, 2019

As the Europeans missed a two-month deadline to devise a concrete economic and financial mechanism to protect Iran from the harsh U.S. sanctions, Iran officially announced on Sunday, July 7, that it is starting to enrich uranium to a higher purity than the 3.67%.

The announcement was made in a joint news conference by Deputy Foreign Minister Abbas Araqchi, government spokesman Ali Rabiei, and Atomic Energy Organization spokesman Behrouz Kamalvandi in Tehran.

Iran's chief demand is that Tehran be permitted to export crude oil at the same levels before the U.S. reimposed sanctions.

Under the 2015 nuclear deal, officially called the JCPOA, Iran had agreed to put limits on parts of its nuclear activities in exchange for the termination of all economic and financial sanctions.

https://www.tehrantimes.com/news/437825/ Iran-starts-enriching-uranium-to-above-3-67

Iran warned after ratcheting up tensions with higher enrichment

Saudi Gazette, July 7, 2019

Iran announced on Sunday it will shortly boost its uranium enrichment above a cap

set by a landmark 2015 nuclear deal, a major breach likely to draw a tougher reaction from President Donald Trump who has pressured Tehran to renegotiate the pact. In a sign of heightening tensions, France, Germany and Britain — all parties to the deal — expressed concerns over Tehran's decision.

In a live news conference, senior Iranian officials said Tehran would keep reducing its commitments every 60 days, unless European signatories of the pact protect it from US sanctions imposed by President Trump. "We are fully prepared to enrich uranium at any level and with any amount," said Behrouz Kamalvandi, spokesman for Iran's Atomic Energy Organization.

http://saudigazette.com.sa/article/571193/World/ Mena/Iran-warned-after-ratcheting-up-tensionswith-higher-enrichment

Macron, Rouhani discuss ways to save nuclear deal

Tehran Times, July 7, 2019

French President Emmanuel Macron telephoned his Iranian counterpart on Saturday to explore ways to save the 2015 nuclear deal.

The telephone conversation took place one day before Iran officially announced that it will start enriching uranium to a purity level above the current 3.67 percent from July 7. The measure followed a 60-day deadline to Europe to protect Iran from the U.S. sanctions.

Rouhani told the French leader that if all U.S. sanctions are ended it could open the way for negotiations on the 2015 nuclear deal, officially called the Joint Comprehensive Plan of Action (JCPOA).

https://www.tehrantimes.com/news/437828/ Macron-Rouhani-discuss-ways-to-save-nucleardeal

Zarif: Iran's nuclear steps reversible only through E3 compliance

Tehran Times, July 7, 2019

Iranian Foreign Minister Mohammad Javad Zarif said on Sunday that Iran's steps in reducing its nuclear commitments are "reversible" only if the three European countries of Britain, France, and Germany (E3) honor their commitments under the Joint Comprehensive Plan of Action, the official name for the 2015 nuclear agreement.

Zarif's statement came a few hours after Iran officially announced it has started enriching uranium to a higher purity than the current 3.67%, as the Europeans missed a 60-day deadline by Tehran to devise a concrete mechanism to protect the country from the U.S. sanctions.

https://www.tehrantimes.com/news/437849/ Zarif-Iran-s-nuclear-steps-reversible-onlythrough-E3-compliance

MP: Iran needs 90% uranium for maritime propellers

Tehran Times, July 7, 2019

A senior MP, Mojtaba Zonnur, has said that Iran needs to have 90% uranium to set maritime propellers working.

President Hassan Rouhani in November 2016 ordered the development of a nuclear-propulsion system for vessels, describing the move as a retaliatory response to an extension of sanctions by the U.S. Congress for another ten years.

Rouhani also requested a study of fuel production for the propulsion system and set a three-month deadline for a progress report on both steps. Iran said back then that the sanctions renewal breached an international nuclear deal finalized between the country and six world powers, including the U.S., a year earlier.

https://www.tehrantimes.com/news/437857/ MP-Iran-needs-90-uranium-for-maritimepropellers

Iran nuke deal violation condemned

Saudi, Gazette, July 7, 2019

French President Emmanuel Macron condemned on Sunday the Iranian decision to enrich uranium above limits agreed upon in 2015, a move he qualified of "violation" of the agreement, an official of the presidency told Reuters.

The French president reiterated the deadline of July 15 to resume dialogue between the parties, the official said, without elaborating on what would happen after that date.

A French government source said the French government will not trigger the Iran nuclear deal's dispute resolution mechanism for now, instead giving itself one week to try to get all parties talking again after Iran decided to enrich uranium above limits agreed in 2015. "It's not an option at this moment," a source at President Emmanuel Macron's Elysee office said on Sunday. The dispute resolution mechanism could eventually lead to the reimposition of United Nations sanctions on Iran.

http://saudigazette.com.sa/article/571235/World/ Mena/Iran-nuke-deal-violation-condemned

UN nuclear inspectors will report back on Iran's enrichment move

Tehran Times, July 7, 2019

Inspectors from the International Atomic Energy Agency (IAEA), who are in Iran, will report back once they have checked the level of Tehran's enrichment level, the agency said on Sunday.

"We are aware of Iran's announcement related to its uranium enrichment level," a spokesman for the agency said, according to Reuters.

"IAEA inspectors in Iran will report to our headquarters as soon as they verify the announced development," it added.

The IAEA announcement came after Iran on Sunday declared a second step in reduction of its commitments under the 2015 nuclear deal between Tehran and world powers by ramping up the level of uranium enrichment to over 3.67 percent.

The formal announcement was made at a press conference in the president's office in Tehran.

https://www.tehrantimes.com/news/437854/ UN-nuclear-inspectors-will-report-back-on-Iran-s-enrichment-move

Iran's second step in reducing nuclear commitments does not mean quitting JCPOA: MP

Tehran Times, July 7, 2019

Deputy Chairman of the Parliament's National Security and Foreign Policy Committee Kamal Dehghani has said that Iran's second step in reducing its commitments under the 2015 nuclear deal, the Joint Comprehensive Plan of Action, does not mean quitting the agreement.

Iran's first step was to remove ban on its stockpile of nuclear fuel. Under the agreement Iran was permitted to keep 300 kilograms of uranium.

"The international community is well aware that the Islamic Republic of Iran has abided by its commitments so far, an issue which has been confirmed by the International Atomic Energy Agency. So, according to international law, Iran has fulfilled its obligations and it is other sides' turn to fulfil their commitments," he told ISNA in an interview published on Sunday.

https://www.tehrantimes.com/news/437859/ Iran-s-second-step-in-reducing-nuclearcommitments-does-not-mean

Iranians despair over nuclear deal confrontation

Saudi Gazette, July 8, 2019

Iran's decision to further challenge the United States by boosting its uranium enrichment beyond limits in its 2015 nuclear deal has deepened fears among Iranians that their country will remain in crisis mode over the long term. The United States' exit from the pact last year, under President Donald's Trump's campaign to squeeze Iran with sanctions, has so far failed to force its clerical rulers to renegotiate. Iran confirmed on Monday it had enriched uranium to a purity beyond that allowed by the pact. Trump, who ordered air strikes last month only to cancel them minutes before impact, has warned Iran's leaders 'to be careful'. Since May, he has tightened sanctions with the aim of halting Iran's oil exports entirely, depriving it of its main source of revenue.

"Yes, life is difficult because of the sanctions. Yes, I think this (nuclear) program is too costly for Iranian people," said Firouzeh, 43, a housewife in the city of Babolsar, reached by telephone. Prices for basic goods have skyrocketed in Iran and a young population longs for jobs. In April, the International Monetary Fund (IMF) said Iran's economy was expected to shrink for the second consecutive year and inflation could reach 40 percent.

http://saudigazette.com.sa/article/571303/World/ Mena/Iranians-despair-over-nuclear-deal-confrontation

Iran's uranium enrichment degree reaches 4.5 percent

Tehran Times, July 8, 2019

On Monday, Behrouz Kamalvandi, the spokesman for the Atomic Energy Organization of Iran (AEOI), told ISNA that Iran's degree of uranium enrichment has reached 4.5 percent which he said is enough to power nuclear plants.

Increasing the level of enrichment to above 3.67 percent was taken on Sunday after Europe missed a 60-day deadline by Tehran to devise a concrete mechanism to guard Iran against U.S. sanctions.

On Sunday, Iran also gave Europeans another 60-day time to protect the country from sanctions otherwise it will take the next step.

https://www.tehrantimes.com/news/437887/Irans-uranium-enrichment-degree-reaches-4-5-percent

The Iran Crisis: How the Nuclear Deal Started to Unravel, and What's Next

David D. Kirkpatrick

The New York Times, July 8, 2019

The International Atomic Energy Agency confirmed Monday that Iran had resumed enriching uranium to higher levels than permitted under a 2015 accord with the United States and other world powers. The step inches Tehran closer to having the capacity to build a nuclear bomb.

President Trump's administration has vowed to prevent Iran from developing such weapons.

https://www.nytimes.com/2019/07/08/world/ europe/iran-trump.html

Iran says will not breach JCPOA unless 'bizarre actions' are taken

Tehran Times, July 8, 2019

Iran will not take any measure against the 2015 nuclear agreement unless the other parties to the deal take peculiar, unexpected actions, Foreign Ministry spokesman Abbas Mousavi said on Monday.

"Iran's next step is also under the legal framework and under the paragraphs 26 and 36 of the JCPOA, unless certain countries in the meantime take peculiar, unexpected measures, after which the third step would not be taken and we'll take a fundamental step instead," Mousavi said during a press conference in Tehran.

Iran officially announced on Sunday, July 7, that it is starting to enrich uranium to a higher purity than the 3.67%, as the Europeans missed a two-month deadline to devise a concrete economic and financial mechanism to protect Iran from the harsh U.S. sanctions.

https://www.tehrantimes.com/news/437886/ Iran-says-will-not-breach-JCPOA-unlessbizarre-actions-are

46

Russia to continue trade with Iran regardless of U.S. sanctions

Tehran Times, July 9, 2019

Russian Permanent Representative to the European Union Vladimir Chizhov has said that Russia will ignore the U.S. sanctions against Iran and will continue trade with the country without creating any special mechanisms.

"Our colleagues here [in Brussels] sometimes ask why Russia and China do not create their own INSTEX [Instrument in Support of Trade Exchanges]. To that we answer with the question: why do we need it? We have already traded and will trade without paying any attention to U.S. sanctions," Sputnik quoted him as saying on Tuesday.

The day before, the Finnish government said that it was considering joining a trading system that core EU members set up to bypass U.S. sanctions on Iran.

https://www.tehrantimes.com/news/437946/ Russia-to-continue-trade-with-Iran-regardless-of-U-S-sanctions

Iran Guards commander says US bases are in range of its missiles

Saudi Gazette, July 9, 2019

commander in Iran's elite Revolutionary Guards said on Tuesday that US regional bases and its aircraft carriers in the Gulf are within the range of Iranian missiles, the Tasnim news agency reported, amid heightened tension between Tehran and Washington. "American bases are within the range of our missiles ... Our missiles will destroy their aircraft carriers if they make a mistake," said Hossein Nejat. "Americans are very well aware of the consequences of a military confrontation with Iran."

The tension between longtime foes Iran and the United States has sharply increased in recent weeks, a year after Washington exited the 2015 deal between Iran and world powers to curb Tehran's nuclear program in exchange for the lifting of international financial sanctions http://saudigazette.com.sa/article/571459/ World/Mena/Iran-Guards-commander-says-USbases-are-in-range-of-its-missiles

Government: Iran's commitment to JCPOA will match Europeans'

Tehran Times, July 9, 2019

Ali Rabiei, the government spokesman, said on Tuesday that Iran's commitment to the 2015 nuclear deal, officially known as the JCPOA, will be commensurate to the Europeans' commitment to the agreement.

"We will abide by the deal as long as Europeans abide to it, and in proportion to their commitment," he said during a speech in ceremony marking International Day of Cooperatives.

He noted that all Iran's actions regarding the JCPOA are line with efforts to save the deal.

Under the JCPOA, Iran had agreed to put limits on parts of its nuclear activities in exchange for the termination of all economic and financial sanctions. However, U.S. President Donald Trump withdrew Washington from the nuclear deal in May 2018 and ordered sanctions on Tehran. Trump has even introduced full ban on Iran's oil export, a move which has been described as an economic war against Tehran.

https://www.tehrantimes.com/news/437945/ Government-Iran-s-commitment-to-JCPOAwill-match-Europeans

Zarif: 'U.S. has no standing to raise JCPOA issues'

Tehran Times, July 10, 2019

The IAEA board of governors met on Wednesday at the request of the United States as Iran is reducing its commitments in response to the U.S. abrogation of the nuclear deal (JCPOA) and the return of sanctions. Iranian Foreign Minister Mohammad Javad Zarif said the U.S. is not in a position to talk about the JCPOA. "The U.S. has no standing to raise JCPOA issues," Zarif tweeted.

The Trump administration killed the JCPOA in May 2018 and has imposed the toughest ever sanctions on Iran. Trump has used the worst language against the JCPOA.

https://www.tehrantimes.com/news/438006/Zarif-U-S-has-no-standing-to-raise-JCPOA-issues

Russian diplomat urges Europe to save nuclear deal

Tehran Times, July 10, 2019

Russian Deputy Foreign Minister Sergey Ryabkov on Tuesday urged Europe to save the 2015 nuclear deal, formally known as the Joint Comprehensive Plan of Action (JCPOA).

"The Russian side confirmed that it is necessary to bolster joint efforts of all participants in the JCPOA, including Iran and the EU trio countries in favor of saving the agreements and ensuring their full implementation on the basis of abidance by their commitments by all the involved parties and with due regard for the principle of reciprocity on which the Plan of Action was based initially," Ryabkov said in a meeting with British Ambassador to Russia Laurie Bristow, French Ambassador Sylvie Bermann and Charge d'Affaires ad Interim of the German Embassy in Russia Beate Crzeski.

According to TASS, Ryabkov said, "It was noted that the main challenges preventing an efficient implementation of the JCPOA are systemic violations and subversive actions from the U.S."

https://www.tehrantimes.com/news/437987/ Russian-diplomat-urges-Europe-to-save-nucleardeal

Rouhani says U.S. call for UN nuclear watchdog meeting is 'farcical'

Tehran Times, July 10, 2019

Iranian President Hassan Rouhani said on Wednesday that the U.S. call for an

emergency meeting of the UN atomic watchdog on Iran's nuclear actions is a "farcical story".

"They called for an emergency meeting of the Board of Governors to discuss why Iran has abandoned some of its nuclear commitments under the JCPOA which is a farcical story and unprecedented in the world's political history," he said during a cabinet meeting.

Iran announced on Sunday that it has started enriching uranium to a higher purity than the 3.67%, as the Europeans missed a 60-day deadline by Tehran to devise a concrete mechanism to protect the country from the U.S. sanctions.

https://www.tehrantimes.com/news/437967/ Rouhani-says-U-S-call-for-UN-nuclearwatchdog-meeting-is-farcical

Timeline: Iran's recent clashes with the West over Gulf shipping, nuclear plans

Reuters, July 11, 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.

Oil tankers pass through the Strait of Hormuz, December 21, 2018. REUTERS/ Hamad I Mohammed/Files

Below is a timeline of recent incidents:

May 2 - The United States, which withdrew from an international nuclear accord between Iran and global powers in 2018, ends waivers that had allowed some mainly Asian importers 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

https://in.reuters.com/article/mideast-iran-britaintimeline/timeline-irans-recent-clashes-with-thewest-over-gulf-shipping-nuclear-plansidINKCN1U60SO

Iran, Russia say US 'was isolated' at IAEA's special meeting

Tehran Times, July 11, 2019

Tehran says the UN nuclear watchdog's special meeting held at Washington's request to win the Board of Governors' support for its anti-Iran claims turned into another failure for Americans. "Another failure for the US at the mockery of the IAEA's Board of Governors," Iranian Foreign Ministry Spokesman Seyyed Abbas Mousavi tweeted on Wednesday in reference to an emergency meeting of the 35-member Board of Governors of the International Atomic Energy Agency (IAEA) to discuss Iran's nuclear program, which wrapped up with no conclusion earlier in the day in Vienna.

https://www.tehrantimes.com/news/438007/Iran-Russia-say-US-was-isolated-at-IAEA-s-specialmeeting

Iran ready to talk if U.S. lifts sanctions, Pompeo skeptical

Parisa Hafezi, Bate Felix

Reuters, July 12, 2019

Iran is ready to hold talks with the United States if Washington lifts sanctions and returns to the 2015 nuclear deal it quit last year, Iranian President Hassan Rouhani said in a televised speech on Sunday.

U.S. President Donald Trump's administration has said it is open to negotiations with Iran on a more farreaching agreement on nuclear and security issues. But Iran has made any talks conditional on first being able to export as much oil as it did before the United States withdrew from the nuclear pact with world powers in May 2018.

"We have always believed in talks ... if they lift sanctions, end the imposed economic pressure and return to the deal, we are ready to hold talks with America today, right now and anywhere," Rouhani said in his Sunday speech.

<u>https://in.reuters.com/article/iran-nuclear-usa/</u> <u>iran-ready-to-talk-if-u-s-lifts-sanctions-pompeo-</u> <u>skeptical-idINKCN1U90DS</u>

U.S. 'holding off' sanctions on FM Zarif: sources

Tehran Times, July 12, 2019

The U.S. has decided to put off imposing sanctions on Iranian Foreign Minister Mohammad Javad Zarif for now, Reuters quoted two unnamed sources as saying on Thursday.

Last month, U.S. Treasury Secretary Steven Mnuchin announced that Zarif would be blacklisted as part of the U.S. policy to put "maximum pressure" on Iran and its top officials.

Blacklisting Iran's chief diplomat would be in stark contrast with Washington's repeated calls for dialogue with Tehran amid heightened tensions.

"Cooler heads prevailed. We ... saw it as not necessarily helpful," said one source familiar with the matter who spoke on condition of anonymity, adding U.S. Secretary of State Mike Pompeo had opposed designating Zarif "for the time being."

https://www.tehrantimes.com/news/438037/U-S-holding-off-sanctions-on-FM-Zarif-sources

Authorities unanimous on Iran's JCPOA move: cleric

Tehran Times, July 12, 2019

Hojjatoleslam Kazem Seddiqi, the interim Friday prayer leader of Tehran, says authorities unanimously agree on reducing Iran's commitments to the 2015 nuclear deal, also known as the Joint Comprehensive Plan of Action (JCPOA).

"The two-month deadline has ended, and today, by the grace of God, all authorities are unanimous on reduction of commitments," Kazem Seddiqi told worshippers in Tehran on Friday.

He described the JCPOA as a fruitless deal and criticized Europeans for being obedient to the U.S. in revoking the JCPOA and imposed sanctions on Iran.

"After a year (since the U.S. withdrawal from the JCPOA), not only the Europeans have failed to fulfill their obligations but also they have in practice become obedient to the U.S.," he remarked.

https://www.tehrantimes.com/news/438038/ Authorities-unanimous-on-Iran-s-JCPOA-movecleric

Iran will not crack under U.S. pressure: National Interest

The Tehran Times, July 14, 2019

In an article published by The National Interest on Saturday, it is said that Iran will "not crack" under the U.S. economic pressure.

"Will Iran crack under American pressure? Don't count on it. Iran has grown accustomed to living under America's recent economic sanctions and continues to pursue its own policies at home and abroad despite the restrictions associated with the latest U.S.-Iranian crisis," says the article.

The article added that Tehran can rely on substantial domestic support and has a large army. U.S. President Donald Trump withdrew Washington in May 2018 from the multilateral nuclear accord, officially known as the Joint Comprehensive Plan of Action (JCPOA), which was reached between Iran and six world powers in 2015.

https://www.tehrantimes.com/news/438133/Iranwill-not-crack-under-U-S-pressure-National-Interest

Zarif discusses JCPOA, ties with Norwegian counterpart

The Tehran Times, July 14, 2019

Foreign Minister Mohammad Javad Zarif had a phone conversation with his Norwegian counterpart Marie Eriksen Soreide on Sunday to discuss mutual ties, JCPOA related issues and regional developments.

The phone conversation was made during Zarif's stopover in the Scandinavian nation en route to New York to take part in the annual meeting of the high-ranking officials of the United Nations Economic and Social Council, ISNA reported.

Zarif left Tehran for New York on Saturday.

After the UN meeting, the top Iranian diplomat will leave the U.S. for Venezuela to attend the Ministerial Meeting of the Coordinating Bureau of the Non-Aligned Movement (NAM).

https://www.tehrantimes.com/news/438109/ Zarif-discusses-JCPOA-ties-with-Norwegiancounterpart

The U.S. and the JCPOA: Carrotand-stick diplomacy without the carrot

Yuram Abdullah Weiler

The Tehran Times, July 14, 2019

Led by an unprincipled president who has shown himself to be an arrogant abrogator of agreements, a duplicitous demolisher of deals, and a tyrannical trasher of treaties, the United States appears well on its way towards setting a new world record in behavior as a rogue state. After first violating the terms of the so-called Iran nuclear deal, the Joint Comprehensive Plan of Action (JCPOA), withdrawing from it, forcing other nations to eschew their obligations under it, and lately resorting to acts of sabotage and piracy on the high seas, the Washington regime remains unrepentant and undeterred in its criminal actions.

The U.S. has long been committing diplomatic injustices. The rate merely intensified after the demise of the Soviet Union, which had acted as a formidable restraining force on the imperialistic imaginations of the predatory politicos on the Potomac, who are addicted to ousting any legitimate government they find not to their liking. In recent times, Albania (1991), Yugoslavia (1999-2000), Ecuador (2000), Afghanistan (2001), Venezuela (2002), Iraq (2003), Haiti (2004), Honduras (2009), Libya (2011) and Ukraine (2014) have all had their sovereignty breached and legitimate governments toppled by the Washington regime, while Irag (1991), Somalia (1993, 2007 to present) and Syria (2012 - present) have suffered attempted coups d'état. The U.S. was likely behind the attempt in Turkey in 2016, too.

https://www.tehrantimes.com/news/438103/The-U-S-and-the-JCPOA-Carrot-and-stick-diplomacy-without-the

E3 reaffirm commitment to Iran deal

World Nuclear News, July 15, 2019

France, Germany, and the UK - together known as the E3, as the three founding members of the European Union - issued a joint statement yesterday reaffirming their commitment to the Joint Comprehensive Plan of Action (JCPOA). But they said they were "deeply troubled" by recent events in the Gulf and "concerned" over US-Iran relations.

According to the International Atomic Energy Agency's latest verification and monitoring report on Iran, which it made public last week, Iran has been enriching UF6 above the 3.67% U-235 limit stipulated in the JCPOA at its Fuel Enrichment Plant at Natanz.

http://world-nuclear-news.org/Articles/E3reaffirm-commitment-to-Iran-deal

Rouhani says U.S. has been left alone in quitting nuclear deal

The Tehran Times, July 15, 2019

Iranian President Hassan Rouhani said on Sunday that the U.S. has been left alone in quitting the 2015 nuclear deal, officially known as the Joint Comprehensive Plan of Action.

"Only a fake regime and one or two small countries supported the U.S. However, the whole world stood against the U.S. and its bullying and praised our strategic patience against the U.S., which was a difficult thing to do," he said at a session of the Administrative Council of North Khorasan.

However, he said that there is a limit to Iran's patience.

On May 8, Iran announced a partial withdrawal from some aspects of the nuclear pact, saying that the country would no longer adhere to some of the limits on its nuclear activities. It also threatened to step up uranium enrichment if an agreement is not made within 60 days to protect it from the sanctions' effects.

https://www.tehrantimes.com/news/438181/ Rouhani-says-U-S-has-been-left-alone-inquitting-nuclear-deal

Academic's arrest hits effort to save Iran nuclear deal

Victor Mallet, Alex Barker and Monavar Khalaj

Financial Times, July 15, 2019

The arrest of a French-Iranian academic has thrown a new obstacle in the path of European diplomats trying to salvage the Iran nuclear deal and defuse tensions in the Gulf. France's foreign ministry said on Monday that Fariba Adelkhah, an international affairs expert with Sciences Po university in Paris, had been detained in Iran at the start of June and that France was seeking answers from Tehran about her case.

https://www.ft.com/content/642c5ff8-a711-11e9b6ee-3cdf3174eb89

'Iran says expects practical and effective steps by European partners to save JCPOA'

The Tehran Times, July 15, 2019

Foreign Ministry spokesman Abbas Mousavi said on Monday that Iran expects European partners to the 2015 nuclear deal, known as the JCPOA, to take practical actions to implement the deal.

"Iran expects the European partners to the JCPOA to take practical decision and actions which are effective and responsible in the procedure of implementing the JCPOA," he stated.

His comments came as France, Germany, and the UK issued a statement on Sunday, expressing their support for the deal.

"We, the leaders of France, Germany and the United Kingdom, sharing common security interests, in particular upholding the non-proliferation regime, recall our continuing commitment to the Joint Comprehensive Plan of Action (JCPOA) that was agreed upon four years ago with Iran, on 14 July 2015," reads the statement.

https://www.tehrantimes.com/news/438175/Iransays-expects-practical-and-effective-steps-by-European

European chief diplomats insist on the need to save nuclear deal

The Tehran Times, July 15, 2019

European Union foreign policy chief Federica Mogherini and a number of European foreign ministers have said they seek to discuss how to save the 2015 nuclear deal, known as the JCPOA.

The chief diplomats made the remarks prior their meeting in Brussels on Monday.

"Together with all the member states and our international partners, how we preserve the nuclear deal with Iran and put in place all the measures so that Iran can go back to full compliance, as it has been until a few weeks... days ago," Express quoted Mogherini as saying prior to the meeting.

France, Germany, and the UK, the three parties to the JCPOA, issued a statement on Sunday reiterating their support for the deal.

https://www.tehrantimes.com/news/438173/ European-chief-diplomats-insist-on-the-need-tosave-nuclear-deal

Reducing commitments intended to give diplomacy a chance, Iranian nuclear spokesman says

The Tehran Times, July 15, 2019

Behrooz Kamalvandi, spokesman for the Atomic Energy Organization of Iran (AEOI), said on Monday that 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.

Kamalvandi said the move was aimed to awaken the other parties to the Joint Comprehensive Plan of Action (JCPOA) to honor their obligations, IRNA reported.

Under the nuclear accord, Iran was tasked to put limits on its nuclear activities in exchange for termination of economic and financial sanctions.

"What Iran gave up was much more than what it received, because the other side, particularly after the U.S. exit from the deal, forgot their obligations," he lamented.

https://www.tehrantimes.com/news/438164/ Reducing-commitments-intended-to-givediplomacy-a-chance-Iranian

J. Saudi Arabia

Nuclear harm: Riyadh General Court to look into compensation suits

Saudi Gazette, July 5, 2019

Pertinent authorities in Saudi Arabia have referred to the General Court in Riyadh all applications for compensation under civil responsibility for harms caused by damage from nuclear installations in the country. The decision came in line with the regulation that called for referring all such applications to a court, but without specifically naming any court.

According to the regulation, harms from nuclear facilities that come under civil responsibility include death or injury, loss or damage to property, economic losses, costs of restoring damaged environment to normal state, economic installations incurring a loss of income resulting from severe damage to the environment, costs of preventive measures, and any loss or harm caused by these measures. The operators of the nuclear facilities and those who transport radioactive materials will pay the compensation in line with the decision of the court.

http://saudigazette.com.sa/article/571056/ SAUDI-ARABIA/Nuclear-harm-Riyadh-General-Court-to-look-into-compensation-suits

Advanced nuclear reactors hold promise of clean energy for Gulf countries

Arab News, July 14, 2019

Saudi Arabia will be one of a handful of countries expected to receive state-of-the-art advanced nuclear reactors from China and Russia, according to a new report.

The report, "Advancing Nuclear Innovation: Responding to Climate Change and Strengthening Global Security," was commissioned by the Global Nexus Initiative. This is a project established by the Partnership for Global Security, a Washington DC-based think tank, and the Nuclear Energy Institute (NEI), which represents the US nuclear energy industry. It is a publicly available assessment of the non-proliferation, security, and geopolitical characteristics of advanced nuclear-reactor technology.

http://www.arabnews.com/node/1525176/ middle-east

KSA takes a firm stand against Iran's nuclear program

Saudi Gazette, July 11, 2019

Saudi Arabia has called on the international community to take a firm stand against Iran's nuclear program, stressing the importance of stopping the Islamic Republic's transgressions and breaches of international agreements and treaties related to its nuclear program. The Kingdom's strongly worded statement came at a special session of the International Atomic Energy Agency (IAEA) Board of Governors meet held in Vienna following the two reports of IAEA Director General Yukiya Amano.

Amano had tabled his reports on "Verification and Monitoring in Iran in light of UN Security Council Resolution 2231 (2015)," which noted that Iran exceeded the proportion and quantity of enriched uranium specified in the joint comprehensive action plan. In its speech, the Saudi permanent delegation noted the Saudi position on the nuclear agreement with Iran in 2015 in which the Kingdom expressed the importance of a comprehensive international agreement on Iran's nuclear program that would prevent it from acquiring nuclear weapons in any way.

http://saudigazette.com.sa/article/571584/ SAUDI-ARABIA/KSA-takes-a-firm-standagainst-Irans-nuclear-program

K. UAE

UAE national nuclear reactor operators

Saudi Gazette, Jul 8, 2019

The Federal Authority for Nuclear Regulation (FANR), the UAE's nuclear regulator, has officially certified Monday the first group of 15 UAE National Senior Reactor Operators (SROs) and Reactor Operators (ROs) at Nawah Energy Company, the operations and maintenance subsidiary of the Emirates Nuclear Energy Corporation (ENEC).

The certification is part of complying with FANR's Regulation 17 'Regulation for the Certification of Operating Personnel at Nuclear Facilities' that dictates requirements for the training and qualification of Senior Reactor Operators and Reactor Operators, and ensures their competence to operate the nuclear energy plant. In addition, the certification of SROs and ROs is a key requirement for future receipt of the Operating License.

http://saudigazette.com.sa/article/571321/BUSI-NESS/UAE-national-nuclear-reactor-operators

First Barakah operators receive regulatory certification

World Nuclear News, July 8, 2019

The United Arab Emirates' Federal Authority for Nuclear Regulation (FANR) has officially certified Nawah Energy's first group of operators for the Barakah nuclear power plant. Certification of operators is a key requirement for the issue of the plant's operating licence.

Certification of the 15 senior reactor operators and reactor operators, ensuring their competence to operate the nuclear plant, was described by FANR Director General Christer Viktorsson as a "major milestone" for the UAE nuclear energy programme.

https://www.world-nuclear-news.org/Articles/ First-Barakah-operators-receive-regulatory-certifi

L. Turkey

Turkey's Erdogan: Russian missile defense system to arrive in 10 days: media

Tuvan Gumrukcu

Reuters, July 1, 2019

Turkey's President Tayyip Erdogan said Russian S-400 defenses would begin arriving within 10 days, Turkish media reported, setting the clock ticking on possible U.S. sanctions after his warm meeting with President Donald Trump on Saturday. Hard-hit Turkish financial assets jumped on Monday after a weekend in which Erdogan said Trump had told him at a G20 summit there would be no U.S. sanctions, and the U.S. leader said Turkey had been treated unfairly over the missiles deal. Turkey and the United States, NATO allies, have been at odds over Ankara's decision to purchase the S-400s, with Washington warning of U.S. sanctions if the delivery took place.

https://www.reuters.com/article/us-turkey-usadefense/turkeys-erdogan-russian-missile-defensesystem-to-arrive-in-10-days-mediaidUSKCN1TV0ZS

Despite Turkey's assurances, U.S. still eyes sanctions, F-35 exit

Phil Stewart, Humeyra Pamuk

Reuters, July 3, 2019

The Trump administration still plans to impose sanctions on Turkey and remove it from a critical fighter jet program if the NATO ally acquires Russian air defenses, U.S. officials told Reuters, despite the Turkish president's assurances to the contrary.

After meeting U.S. President Donald Trump over the weekend in Japan, Turkish President Tayyip Erdogan said Ankara would be spared damaging U.S. sanctions once Russia's S-400 air defense system starts arriving in Turkey in coming days. Trump appeared sympathetic to Erdogan at the talks and reluctant to publicly commit to sanctions — despite being repeatedly asked by reporters. But U.S. government officials told Reuters that, at least so far, the administration intends to impose sanctions on Turkey and pull it from the F-35 fighter jet program if it takes delivery of the Russian S-400 system, as expected.

https://www.reuters.com/article/us-usa-turkeydefense/despite-turkeys-assurances-u-s-still-eyessanctions-f-35-exit-idUSKCN1TY0HY_

Turkey begins receiving Russian missiles in challenge to U.S. and NATO

Sarah Dadouch, Idrees Ali

Reuters, July 12, 2019

Turkey began taking delivery of an advanced Russian missile defense system on Friday, a move expected to trigger U.S. sanctions against a NATO ally and drive a wedge into the heart of the Western military alliance. The first parts of the S-400 air defense system were flown to the Murted military air base northwest of Ankara, the Turkish Defence Ministry said, sealing Turkey's deal with Russia which Washington had struggled for months to prevent. Reaction from Washington, which has threatened to impose sanctions on Turkey, was limited, with acting Defence Secretary Mark Esper saying the U.S. position has not changed.

https://www.reuters.com/article/us-turkeysecurity-erdogan/erdogan-says-trump-can-waivesanctions-on-turkey-for-russian-defense-purchaseidUSKCN1U90FI_

Explainer: What is at stake with Turkey's Russian air defense deal?

Reuters, July 12, 2019

Turkey took its first deliveries of the Russian S-400 air defense system on Friday, a development likely to trigger U.S. sanctions on Ankara and escalate tensions between Turkey and its Western partners in the NATO military alliance.

Why does Turkey need the Russian defense system?

Ankara sees the system as a strategic defense requirement as it faces security threats from its southern borders with Syria and Iraq. It says that when it made the S-400 deal with Russia, the United States and Europe had not presented a viable alternative. Turkey has said the Russian system met its expectations in terms of price and technology and it hopes to cooperate with Russia in the development of the next generation S-500 missile systems, benefiting from technology transfer and co-production.

According to Ankara, the S-400s do not pose a direct threat to the U.S. military. It has proposed setting up a technical working group that could include NATO, to address U.S. concerns about the potential impact of the system on U.S. F-35 jets. This proposal has so far been left unanswered, Turkey says.

https://www.reuters.com/article/us-turkeysecurity-explainer/explainer-what-is-at-stakewith-turkeys-russian-air-defense-dealidUSKCN1U71OE_

Erdogan says Trump can waive sanctions on Turkey for Russian defense purchase

Reuters, July 14, 2019

U.S. President Donald Trump has the authority to waive sanctions on Turkey for its purchase of Russian air defense systems and should find a "middle ground" in the dispute, President Tayyip Erdogan said on Sunday.

Erdogan's comments came two days after NATO member Turkey took delivery of the first consignment of advanced Russian S-400 missile defense system parts, despite warnings from Washington that the move would trigger U.S. sanctions. Broadcaster Haberturk quoted Erdogan as telling Turkish journalists that Trump "has the authority to waive or postpone CAATSA", referring to U.S. sanctions designed to prevent countries buying military equipment from Russia. "Since this is the case, it is Trump who needs to find the middle ground," Erdogan said, according to Haberturk.

https://www.reuters.com/article/us-turkeysecurity-erdogan/erdogan-says-trump-can-waivesanctions-on-turkey-for-russian-defense-purchaseidUSKCN1U90FI_

Turkey's Erdogan says Russian S-400s will be fully deployed by April 2020

Sarah Dadouch

Reuters, July 16, 2019

Turkish President Tayyip Erdogan said on Monday that the Russian S-400 missile defence system, parts of which have been delivered to Turkey over the past four days, would be fully deployed in April 2020. Turkey's purchase of the Russian system has raised tensions with its NATO allies, particularly the United States, which has warned Turkey that it will respond with sanctions.

Speaking at Istanbul's Ataturk Airport on the third anniversary of 2016's attempted coup, Erdogan said eight planes had already brought parts of the Russian system and more were coming, as he had repeatedly promised. "With God's permission, they will have been installed in their sites by April 2020," he told the crowd.

https://www.reuters.com/article/us-turkeysecurity/turkeys-erdogan-says-russian-s-400swill-be-fully-deployed-by-april-2020idUSKCN1UA25X_

M. Israel

Errant missile from Syria-Israel clash lands on Cyprus

Michele Kambas, Daren Butler

Reuters, July 1, 2019

An errant missile struck Cyprus early on Monday, skimming the densely populated capital Nicosia and crashing on a mountainside in what authorities described as a spillover from strikes between Israel and Syria. The explosion occurred around 1 a.m. (2200 GMT Sunday) in the region of Tashkent, also known as Vouno, some 20 kms (12 miles) northeast of Nicosia, with the impact starting a fire and heard for miles around.

https://www.reuters.com/article/us-cypruscrash/errant-missile-from-syria-israel-clashlands-on-cyprus-idUSKCN1TW15V_

Israel says EU's response on Iran recalls Nazi appeasement

Reuters, July 16, 2019

Israeli Prime Minister Benjamin Netanyahu condemned a European Union response on Monday to Iran's breaches of nuclear limitations, saying it recalled failed diplomacy with Nazi Germany ahead of World War Two. "(It) reminds me of the European appeasement of the 1930s," Netanyahu said in a video statement after EU foreign policy chief Federica Mogherini said none of the parties to a 2015 nuclear deal with Iran saw its increased uranium enrichment as "significant non-compliance".

"Then, too, there were those who stuck their head in the sand and did not see the approaching danger," said Netanyahu, who has often cast Iran's nuclear projects as a mortal menace to Israel and the wider world. Iran denies seeking a nuclear bomb. "It seems there are those in Europe who will not wake up until Iranian nuclear missiles land on European soil. But then it will be too late, of course," Netanyahu said.

https://www.reuters.com/article/us-mideastiran-eu-israel/israel-says-eus-response-on-iranrecalls-nazi-appeasement-idUSKCN1UA1W6_

EAST ASIA

N. Japan

Japanese entities to buy stake in major Russian LNG project

The Asahi Shimbun, July 2, 2019

Two Japanese organizations will invest up to 400 billion yen (\$3.7 billion) in a Russian liquefied natural gas (LNG) project in the Arctic Circle, which could boost Japan's energy sources and also help bilateral relations with Russia. Major trading house Mitsui & Co. and the government-affiliated Japan Oil, Gas and Metals National Corp. (JOGMEC) will buy a stake in the Arctic LNG 2 project. The project is planned around the Yamal Peninsula in the Russian Arctic Circle by major Russian LNG developer Novatek. Production is scheduled to start in 2023 and 19.8 million tons of LNG are expected to be produced annually.

In addition, Japanese companies that purchase LNG buy it mainly based on longterm contracts. When the contracts expire, the sellers have to set forth conditions that are acceptable to purchasers. Electric power companies are the biggest purchasers. However, if they can resume operations of their nuclear power plants, they will be hesitant to be locked into long-term contracts to purchase LNG.

http://www.asahi.com/ajw/articles/ AJ201907020057.html

Warship shows Japan's plan to expand military role

The Asahi Shimbun, July 3, 2019

One of Japan's largest warships, the helicopter carrier Izumo, offers a glimpse of where its Self-Defense Forces are headed: For the first time, troops from a newly formed amphibious brigade participated in an extended naval deployment. The Izumo left Subic, a former U.S. naval base in the Philippines, at the end of a two-month deployment in the Indo-Pacific region at a time of prolonged tensions involving China's sweeping territorial claims in and around the South China Sea. The carrier, along with the destroyers Murasame and Akebono, just finished a series of drills with the United States and other countries.

In May, Japan conducted its first quadrilateral exercise with France, the United States and Australia in the Bay of Bengal. France deployed its flagship nuclearpowered aircraft carrier, the FS Charles de Gaulle, while the United States sent a missile destroyer, the William P. Lawrence. Other drills have included Canada, India, Malaysia, Vietnam, Brunei and the Philippines.

http://www.asahi.com/ajw/articles/ AJ201907030058.html

2011 Fukushima nuke disaster cesium takes shortcut back to Japan's waters

Mainichi Japan, July 8, 2019

Radioactive cesium released into the Pacific Ocean due to the March 2011 meltdowns at Fukushima Daiichi Nuclear Power Station is returning to Japanese shores via a shorter route than expected, according to a joint research initiative. The findings were revealed by a team from the University of Tsukuba, the Japan Agency for Marine-Earth Science and Technology (JAMSTEC) and Kanazawa University.

Until now, it was thought that cesium from the Tokyo Electric Power Co. (TEPCO)-operated plant would be circulated around the Pacific by subtropical gyre currents for several decades before returning to Japanese waters. But in 2012, a year after the reactor core meltdowns, tests on seawater samples collected by the team showed increased cesium concentrations in East China Sea waters off Japan. Researchers say that the concentrations observed are too low to impact sea life

https://mainichi.jp/english/articles/20190708/ p2a/00m/0na/015000c

Japan urges Iran to keep to nuclear deal after Tehran admits to breaching enrichment limit

Japan Times, July 8, 2019

Japan on Monday urged Iran to follow its commitments under a 2015 nuclear agreement with major powers and refrain from taking further actions to undermine it, after Tehran said it had started enriching uranium above the limit set by the deal.

https://www.japantimes.co.jp/news/2019/07/08/ national/japan-urges-iran-keep-nuclear-dealtehran-admits-breaching-enrichment-limit/ #.XTAjXFQza00

Japan says it won't discuss or retract SKorea export rules

Mari Yamaguchi And Kim Tong-hyung

AP News, July 10, 2019

Japan said Tuesday it does not plan to retract or renegotiate its stricter controls on hightech exports to South Korea, a day after the South Korean president urged that the issue be resolved through diplomacy. Tokyo tightened the approval process for Japanese shipments of photoresists and other sensitive materials to South Korean companies last week. Japanese officials say such materials can be exported only to trustworthy trading partners, hinting at security risks without citing specific cases. They have rejected suggestions that the move was driven by a worsening in ties between the two countries related to historical issues.

South Korea denied the allegations, summoning a Japanese Embassy official to protest Abe's suggestion that it could not be trusted to faithfully implement sanctions against North Korea, Foreign Ministry spokesman Kim In-chul said. South Korean officials say there is no evidence to back up such claims and that Seoul has been properly implementing international sanctions against the North over its nuclear weapons program. Sung Yun-mo, South Korea's minister of trade, industry and energy, said Tuesday that an "emergency inspection" of companies that process and export the chemicals imported from Japan found no sign of illegal transactions allowing them to reach North Korea or any other country affected by United Nations sanctions.

https://www.apnews.com/ 7c9a44fd7a7047c5b7790becae6ef872

Japan prepares for U.S. request to join patrols in Strait of Hormuz

The Asahi Shimbun, July 11, 2019

Japanese officials are apparently scrambling to determine how to respond to a possible U.S. request to join a military coalition to secure maritime safety in the Strait of Hormuz off Iran. Several Defense Ministry officials on July 10 said Washington has not sounded out Tokyo on the proposal made by Joseph Dunford, chairman of the U.S. Joint Chiefs of Staff, on July 9. However, there is a high possibility that the United States will ask Japan to take part in the military coalition.

Such a request would put Japan in a legal quandary over participation of the Self-Defense Forces in overseas activities. "Japan and the United States are closely communicating with each other," Deputy Chief Cabinet Secretary Kotaro Nogami said at a July 10 news conference when asked about Dunford's proposal. "But I want to refrain from talking about the details." Dunford made the proposal at a time of escalating friction between the United States and Iran over its nuclear program and maritime incidents in the Strait of Hormuz. However, the content of the coalition's activities has not been revealed. Under the proposal, each participating country in the coalition would escort their own commercial vessels through the strait.

http://www.asahi.com/ajw/articles/ AJ201907110052.html

Japan's defense chief has 'no plan' to dispatch SDF troops to the Middle East

Japan Times, July 16, 2019

Defense Minister Takeshi Iwaya said Tuesday he has "no plan" to send the Self-Defense Forces to the Middle East to join a military coalition envisioned by the United States to safeguard commercial shipping from Iranian threats in the region.

https://www.japantimes.co.jp/news/2019/07/16/ national/japans-defense-chief-no-plan-dispatchsdf-troops-middle-east/#.XTAh6IQza00

Japanese IAEA head Yukiya Amano to step down next year for health reasons: diplomatic source

Japan Times, July 18, 2019

The head of the U.N.'s nuclear watchdog,

Yukiya Amano, will step down in March for health reasons, diplomatic sources said Wednesday, as the agency navigates verification of the increasingly fragile Iran nuclear deal. "An official statement about his departure is expected next week," said a diplomat, who spoke on condition of anonymity. Amano has been directorgeneral of the International Atomic Energy Agency (IAEA) since 2009 and his latest mandate had been due to run until 2021.

But the 72-year-old Japanese national is seeking to step down for health reasons, another diplomat said, also on condition of anonymity. The IAEA declined comment Wednesday other than to say Amano was in contact with members of the agency's board of governors "regarding his future plans." "He will make a formal communication to the board at an appropriate time," the Vienna-based agency's press office said.

https://www.japantimes.co.jp/news/2019/07/18/ world/iaea-head-yukiya-amano-step-next-yearhealth-grounds-diplomats/#.XTAjClQza00

O. North Korea

North Korea upbeat on Trump-Kim surprise meeting as a chance to push nuclear talks

Joyce Lee

Reuters, July 1, 2019

North Korean leader Kim Jong Un and U.S. President Donald Trump agreed at their meeting on Sunday to push forward dialogue for making a new breakthrough in the denuclearisation of the Korean peninsula, North Korean state media said on Monday.

Trump became the first sitting U.S. president to set foot in North Korea on Sunday when he met Kim in the Demilitarized Zone (DMZ) between the two Koreas and agreed to resume stalled nuclear talks.

https://in.reuters.com/article/northkorea-usa/ north-korea-upbeat-on-trump-kim-surprisemeeting-as-a-chance-to-push-nuclear-talksidINKCN1TW1D1

North Korea says U.S. 'hell-bent on hostile acts' despite wanting to talk

Michelle Nichols

Reuters, July 4, 2019

North Korea's mission to the United Nations accused the United States on Wednesday of being "more and more hellbent on hostile acts" against Pyongyang, despite President Donald Trump wanting talks between the two countries. In a statement the mission said it was responding to a U.S. accusation that Pyongyang breached a cap on refined petroleum imports and a letter that it said was sent on June 29 by the United States, France, Germany and Britain to all U.N. member states urging them to implement sanctions against North Korea.

"What can't be overlooked is the fact that this joint letter game was carried out by the permanent mission of the United States to the U.N. under instruction of the State Department, on the very same day when President Trump proposed for the summit meeting," the statement said.

https://www.reuters.com/article/us-northkoreausa-un/north-korea-says-us-hell-bent-on-hostileacts-despite-wanting-to-talk-idUSKCN1TY2S6

N. Korea vows to develop 'special' weapons as South buys US F-35A

Mainichi, July 11, 2019

North Korea has been forced to develop "special" weapons to counter the South's deployment of U.S. F-35A stealth fighter jets, an official of the country's Foreign Ministry was quoted as saying by the staterun Korean Central News Agency on Thursday. The delivery of the F-35As is aimed at "especially opening a 'gate' to invading the north in time of emergency on the Korean peninsula," the policy research director at the Institute for American Studies of the Foreign Ministry said in a statement carried by KCNA.

"We, on our part, have no other choice

but to develop and test the special armaments to completely destroy the lethal weapons reinforced in south Korea," the director added. The official did not elaborate on specifically what kind of weapons North Korea will pursue.

https://mainichi.jp/english/articles/20190711/p2g/ 00m/0in/063000c

North Korea Threatens the South Over Its Purchase of U.S. Stealth Fighters

Timothy W. Martin and Dasl Yoon

Wall Street Journal, July 11, 2019

North Korea called the planned mid-July delivery of two U.S. stealth jet fighters to South Korea an affront to last year's pledge by the two countries to tone down military tensions on the peninsula, saying it had no choice but to develop arms to counter them.

Pyongyang, which frequently makes exaggerated threats against Seoul and Washington, said it would develop "special armaments" to destroy the jets in a statemedia report Thursday. Seoul has plans to buy 40 of the F-35A jets, with the first two having arrived in March.

This year, Pyongyang has conducted three smaller-scale weapons tests—including a May launch of evasive short-range missiles that military experts believe can reach U.S. military bases in South Korea.

https://www.wsj.com/articles/north-koreathreatens-the-south-over-its-purchase-of-u-sstealth-fighters-11562845508

N. Korea's Hwasong-15 ICBM can strike anywhere in US mainland: USFK

Yonhap

Korea Herald, July 11, 2019

The United States Forces Korea (USFK) has said that North Korea's Hwasong-15 intercontinental ballistic missile (ICBM) is capable of reaching anywhere in the US mainland, its first official assessment of the long-range missile. The Hwasong-15 ICMB that the communist country test-fired on Nov. 29, 2017, has an estimated range of 8,000 miles, or 12,874 kilometers, which is "capable of striking any part of the continental US," according to the "2019 Strategic Digest," an annual publication by the USFK along with the United Nations Command and the Combined Forces Command.

http://www.koreaherald.com/ view.php?ud=20190711000203&ACE_SEARCH=1

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

Hyonhee Shin, Jeff Mason

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 workinglevel 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-usadrills/north-korea-says-nuclear-talks-at-risk-ifu-s-south-korea-exercises-go-aheadidINKCN1UB0RR

Pompeo hopes U.S., North Korea can be 'more creative' in nuclear talks

Makini Brice, David Brunnstrom

Reuters, July 16, 2019

U.S. Secretary of State Mike Pompeo said on Monday he hoped both North Korea and the United States could "be a little more creative" when the two sides restart talks aimed at ending Pyongyang's nuclear weapons program. Speaking in a radio interview on "The Sean Hannity Show," Pompeo did not say when the negotiations would resume. At the end of June he had said it would likely happen "sometime in July ... probably in the next two or three weeks." "I hope the North Koreans will come to the table with ideas that they didn't have the first time," Pompeo said in Monday's radio interview. "We hope we can be a little more creative too."

However, Pompeo added: "The president's mission hasn't changed: to fully and finally denuclearize North Korea in a way that we can verify. That's the mission set for these negotiations."

https://www.reuters.com/article/us-northkoreausa/pompeo-hopes-us-north-korea-can-be-morecreative-in-nuclear-talks-idUSKCN1UA2KZ

North Korea suggests it might lift weapons test moratorium

Foster Klug

AP News, July 16, 2019

North Korea on Tuesday suggested it might call off its 20-month suspension of nuclear and missile tests because of summertime U.S.-South Korean military drills that the North calls preparation for an eventual invasion. The statement by the North's Foreign Ministry comes during a general deadlock in nuclear talks, but after an extraordinary meeting of the U.S. and North Korean leaders at the Korean border that raised hopes that negotiations would soon resume. The comments ramp up pressure on the United States ahead of any new talks. North Korea has had longstanding antipathy toward U.S.-South Korean military cooperation, which the allies call defensive and routine but the North sees as hostile.

Amid the diplomatic jockeying, North Korea said Tuesday that expected regular summertime U.S.-South Korean military drills are forcing it to rethink whether to remain committed to the promises it has made to the United States. It cited its moratorium on nuclear and missile tests and other steps aimed at improving ties with Washington. "With the U.S. unilaterally reneging on its commitments, we are gradually losing our justifications to follow through on the commitments we made with the U.S. as well," said the statement, carried by the North's official Korean Central News Agency.

https://www.apnews.com/ 44424e0c62eb4faaa8735a5d26fc6cc6

Transatlantic relations as far apart as ever

Pyongyang Times, July 15, 2019

Disputes and friction are growing in several fields between the EU and the US that maintain partnership. Surfacing is the friction surrounding the issue of European defence before anything else. In April the European Parliament approved the plan for raising fund worth €13 billion for the development of weapon systems in the 2021-2027 period and founding a PESCO to coordinate military cooperation between member nations as part of the efforts to carry out its own defence programme.

The US denounced it, saying that through the independent defence policy the EU seeks for a change that is likely to jeopardize the integration process which has been pushed for decades within the framework of the military alliance, called NATO.

The EU dismissed it as ungrounded, insisting that the implementation of its own defence plan will help EU member nations fulfil their commitments to NATO more properly and also the military bloc benefit from the EU's collective efforts for defence. Some European countries think that dependence on the US in the field of defence can never guarantee European security. The abrogation of the Russia-US Intermediate Nuclear Force Treaty (INF Treaty) has forced the EU to regard the building of self-defence capacity as an urgent matter that brooks no further delay.

http://www.pyongyangtimes.com.kp/ ?bbs=30681

North Korea condemns US for breaking its promise

Pyongyang Times, July 15, 2019

A spokesman for the DPRK Foreign Ministry issued the following statement on Tuesday: The United States and south Korea are going to defiantly conduct a joint military exercise "Alliance 19-2" targeting us in August. Outwardly, the US is trumpeting that this exercise is a simulation to verify whether the south Korean army is capable of taking over wartime operational control. But, it is crystal clear that it is an actual drill and a rehearsal of war aimed at militarily occupying our Republic by surprise attack and rapid dispatch of large-scale reinforcements under the cloak of "containment" and "counteroffensive" in time of emergency.

We really have many things to say about the facts that the US, together with Japan, south Korea and other countries, staged the "Proliferation Security Initiative" exercise targeting our country in early July and continues to bring highly sophisticated war equipment into south Korea. With the US unilaterally reneging on its commitments, we are gradually losing our justifications to follow through on the commitments we made with the US as well. I wonder whether there would be such obligation or law that one side alone has to continue to cling to when it is clear that a unilateral adherence would not bring any gains because the other side neither honors nor minds them.

http://www.pyongyangtimes.com.kp/

P. South Korea

Cheong Wa Dae proposes int'l probe into Japan's claim over S. Korea's strategic material control

Yonhap

Korea Herald, July 12, 2019

The office of President Moon Jae-in on Friday bristled at Japan's accusations that South Korea might have leaked sensitive industrial materials to North Korea or third countries, demanding that Tokyo agree to have an international panel look into the issue. Cheong Wa Dae urged the Japanese government to apologize and retract its recent export control against Seoul if its assertion turns out to be false.

In a statement, Kim You-geun, deputy chief of Cheong Wa Dae's national security office, emphasized that South Korea, a signatory to four major multilateral export control regimes, has thoroughly curbed the illicit shipment of dual-use and strategic materials from its shores.Kim pointed out, South Korea caught more than 150 attempts to export such materials without authorization. The government made an announcement on that as well.

It demonstrates that South Korea is abiding by global export control rules strictly and transparently, he added. If it's proved that South Korea is innocent, Japan will have to offer an apology itself and immediately withdraw the export restrictions, he said. Kim, who's doubling as head of the secretariat of the National Security Council, urged Japan to ask itself if it's transparently following the four export control systems: the Wassenaar Arrangement, Nuclear Suppliers Group, Australia Group and Missile Technology Control Regime. He called for a full investigation into possible violations by Japan as well.

http://www.koreaherald.com/ view.php?ud=20190712000445&ACE_SEARCH=1

Pentagon: Seoul, Washington preparing joint exercise despite Pyongyang's warning

Korea Times, July 17, 2019

South Korea and the United States are preparing to stage a joint military exercise this fall, the Pentagon said Tuesday, after North Korea warned the drill will affect the prospects of working-level nuclear talks between the two countries.

The North's foreign ministry issued the warning Tuesday, arguing that the "19-2 Dong Maeng" exercise, slated for around August, runs counter to the commitment

that U.S. President Donald Trump made when he held a surprise meeting with North Korean leader Kim Jong-un on June 30. "If the military exercise really goes ahead, it would affect the DPRK-U.S. working-level talks," the North said. "We will formulate our decision on the opening of the DPRK-U.S. working-level talks, while keeping watch over the U.S. move hereafter."

http://www.koreatimes.co.kr/www/nation/2019/ 07/103_272428.html

Q. Taiwan

Iran conflict might hold defense key for Taiwan

Lu Li-shih

Taipei Times, July 1, 2019

Iran was able to accurately assess multiple targets flying close to its territorial airspace despite not having fighter jets monitoring or tailing the US aircraft suggests that it was relying on electronic intelligence. Iran's challenge to the US military's close-in reconnaissance tactics flies in the face of "freedom of overflight" and "freedom of navigation" operations conducted by many countries in the past few years. These operations have included military planes and warships periodically passing through the crowded and narrow Taiwan Strait.

Taiwan's military uses radar, early-warning aircraft, maritime patrol vessels, combat air patrols and visual identification by fishing vessels. This should be complemented by including open-source intelligence, such as flight data from the ADS-B Exchange and automatic identification systems, into a joint intelligence detection system to provide the most up-to-date possible picture of maritime and airspace movements. The Chinese People's Liberation Army (PLA) is possibly modeling itself on US military tactics and employs electronic-warfare/jammer aircraft with Harbin BZK-005 high-altitude, longrange reconnaissance drones, which conduct encirclement "drills" around Taiwan. Harbin drones are stationed on the Zhoushan archipelago in the East China Sea and Woody Island (Yongxing Island) in the South China Sea.

http://www.taipeitimes.com/News/editorials/ archives/2019/07/01/2003717895

Taiwan to shut down 2nd nuclear reactor within days

Mainichi Japan, July 12, 2019

Taiwan's Atomic Energy Council agreed on Friday to shut down a second nuclear reactor on Monday when its 40-year operating license expires, moving the island a step closer to nuclear-free status.The decommissioning of the No. 2 reactor of the No. 1 nuclear power plant in Shimen, New Taipei City, follows that of the plant's No. 1 reactor, closed for the same reason last December.

Taiwan still has two other nuclear power plants, each with two reactors. In a statement, the council said it issued the decommission license Friday to Taiwan Power Co., the builder and operator of the facility, after the state-owned power utility submitted relevant documents. Li Chi-ssu, deputy director of the council's Department of Nuclear Regulation, told Kyodo News that with the license, the company can now begin the lengthy process of discharging and storing spent fuel rods. It originally planned to store them at an outdoor dry storage facility, but cannot do so due to the opposition of the New Taipei City government.

https://mainichi.jp/english/articles/20190712/ p2g/00m/0in/095000c

AEC approves Taipower's Jinshan decommission plan

Lin Chia-nan

Taipie Times, July 13, 2019

The Atomic Energy Council (AEC) yesterday issued a permit to state-run Taiwan Power Co (Taipower) to decommission the Jinshan Nuclear Power Plant over a 25-year period, council official Kao Pin said, adding that storage of used fuel rods remains a major challenge. Built in New Taipei City's Shihmen Districtin the 1970s, Taiwan's first nuclear power plant, it has two reactors with an installed capacity of 636 megawatts each, information on Taipower's Website showed.

The 40-year operation permit for the plant's No. 1 reactor expired on Dec. 5 last year, but it has not operated since 2014 due to a problem with reactor components, Kao said. The 40-year permit for its No. 2 reactor is to expire on Monday, although it, too, has not been in operation since a power transmission tower collapsed due to heavy rain in June 2017, he said. After Taipower's decommissioning plan last week obtained environmental impact assessment approval from the Environmental Protection Administration (EPA), the council yesterday issued the permit, which is to take effect on Tuesday, he said.

http://www.taipeitimes.com/News/taiwan/ archives/2019/07/13/2003718586

R. Miscellaneous and World

UN chief welcomes possibility of resumed talks between US and DPR Korea

UN News, July 1, 2019

The UN chief "welcomes the meetings in Panmunjom involving the leaders of the Democratic People's Republic of Korea, the Republic of Korea and the United States", his spokesperson said in a statement, adding "particularly the announcement that the DPRK and the United States will resume working-level dialogue".

For the first time since their last summit in the Vietnamese capital, Hanoi, broke down in February, both countries agreed to resume stalled nuclear talks. Before crossing over, US President Donald Trump and North Korean leader Kim Jong-un, posed for photographers in the heavily-fortified demilitarized zone.

How Each Country Contributed to the Explosion in Energy Consumption

Lauren Leatherby and Chris Martin

Bloomberg, July 9, 2019

The world has almost doubled its energy consumption since 1980. While renewable energy resources such as solar and wind power are getting cheaper to build, much of that demand growth has come from the use of fossil fuels. In fact, half of all carbon emissions from fossil-fuel operations in modern history have come in just the last three decades, putting the Earth on a climate precipice.

The rise in energy demand is essentially a story of economic and population growth. Primary energy consumption—which encompasses virtually all demand, right down to the losses of energy as it travels across transmission and distribution lines—has boomed in developing parts of the world, even as it leveled off, or even fell, in industrialized countries.

https://www.bloomberg.com/graphics/2019international-energy-use-renewables-coal-oil/

Why The World Needs More Nuclear Power

Robert Rapier

Forbes, July 11, 2019

This is the final article in a series based on BP's recently-released Statistical Review of World Energy 2019. Previous articles in this series covered carbon dioxide emissions, petroleum supply and demand, the production and consumption of coal, global natural gas trends, and the continued explosion in the growth of renewable energy:

https://www.forbes.com/sites/rrapier/2019/07/ 11/why-the-world-needs-nuclear-power/ #7c72c507bd61

64

https://news.un.org/en/story/2019/07/1041622

Trinity: "The most significant hazard of the entire Manhattan Project"

Kathleen M. Tucker, Robert Alvarez, July 15, 2019

Arms Control Association, July 15, 2019

For the past several years, the controversy over radioactive fallout from the world's first atomic bomb explosion in Alamogordo, New Mexico on July 16, 1945—code-named Trinity—has intensified. Evidence collected by the New Mexico health department but ignored for some 70 years shows an unusually high rate of infant mortality in New Mexico counties downwind from the explosion and raises a serious question whether or not the first victims of the first atomic explosion might have been American children.

Even though the first scientifically credible warnings about the hazards of radioactive fallout from a nuclear explosion had been made by 1940, historical records indicate a fallout team was not established until less than a month before the Trinity test, a hasty effort motivated primarily by concern over legal liability. In October 1947, a local health care provider raised an alarm about infant deaths downwind of the Trinity test, bringing it to the attention of radiation safety experts working for the US nuclear weapons program. Their response misrepresented New Mexico's then-unpublished data on health effects

https://thebulletin.org/2019/07/trinity-the-mostsignificant-hazard-of-the-entire-manhattanproject/

S. OP-ED

India

India and Pakistan: Two Nations Always At the Brink of Nuclear War

National Interest Blog, July 5, 2019

In other words, as the Kashmir dispute continues to fester, inducing periodic terrorist attacks on India and fueling the competition between New Delhi and Islamabad to outpace each other in the variety and size of their nuclear arsenals, the peril to South Asia in particular and the world at large only grows.

It's possible that a small spark from artillery and rocket exchanges across that border might — given the known military doctrines of the two nuclear-armed neighbors — lead inexorably to an all-out nuclear conflagration. In that case the result would be catastrophic. Besides causing the deaths of millions of Indians and Pakistanis, such a war might bring on "nuclear winter" on a planetary scale, leading to levels of suffering and death that would be beyond our comprehension.

https://nationalinterest.org/blog/buzz/india-andpakistan-two-nations-always-brink-nuclearwar-65696

Whoops: India's Navy Left Nearly Sunk Its Own \$3 Billion Nuclear Submarine

National Interest Blog, July 10, 2019

Call it a lesson learned for the Indian navy, which managed to put the country's first nuclear-missile submarine, the \$2.9 billion INS Arihant, out of commission in the most boneheaded way possible.

The incident is also quite an embarrassment — and strategic concern - for the Indian Armed Forces. A Russian Akula-class attack sub modified to accommodate a variety of ballistic missiles, the Arihant represented a major advance in India's nuclear triad after its completion in October 2016. (India in 1974 became the 6th country to conduct a successful nuclear test.) Indeed, the Arihant's ability to deliver K-15 short-range and K-4 intermediate-range nuclear missiles was envisioned as a powerful deterrent against India's uneasy nuclear state neighbor, Pakistan.

This is just some sloppy, dangerous seamanship, and the Indian Navy better get its act together fast. Either that, or perhaps follow the Royal Navy's lead and install the 2001-era Windows XP as an operating system on all your most vital vessels. That way, you can blame the blue screen of death instead of "human error" for the next critical foul-up. Although even outdated software probably knows enough to dog down on all the hatches.

https://nationalinterest.org/blog/buzz/whoopsindias-navy-left-nearly-sunk-its-own-3-billionnuclear-submarine-66211

China

India should stop using 'China threat' to build up its military

Ai Jun

Global Times, July 2, 2019

Since the founding of India, the country has been longing to become a major global power. The pursuit of dominance in the Indian Ocean is vital to its great power dream. However, some Indian people, especially Indian journalists, have a bad habit - taking the so-called China threat theory as its excuse to develop India's military strength.

Bloomberg published on Monday a report written by an Indian correspondent, saying the Indian government "seeks to buy \$2.2 billion in warships." The author explained it is a part of Indian Prime Minister Narendra Modi's \$250 billion military modernization plan to arm the country "when it faces threats in its maritime waters from its neighbor China." By "threats" he means "Beijing has in the past sent its warships to the Indian Ocean region." The article was soon republished by several India media.

http://www.globaltimes.cn/content/ 1156529.shtml

Arms sales to Taiwan a blow to Sino-US ties

Li Zhenguang

China Daily, July 11, 2019

By approving the potential sale of arms worth \$2.2 billion to Taiwan, the US State

Department has not only further strained cross-Straits relations, it is also trying Beijing's patience. And by passing a series of acts and resolutions related to Taiwan this year, the US Congress has dealt a serious blow to Sino-US relations, as well as undermined peace and stability across the Straits.

The US House of Representatives enacted the Taiwan Assurance Act of 2019 and passed a resolution reaffirming the US' commitment to Taiwan on May 7, which essentially means the US would sell arms to the island regularly and back its participation international in organizations. That the US has continued to meddle in Taiwan affairs shows it is desperate to use the "Taiwan card" to contain the Chinese mainland. The US believes that by consolidating its relationship with Taiwan authorities through acts and resolutions, it can further integrate the island into its "Indo-Pacific" strategy to contain the mainland, the biggest rival in Washington's eyes thanks, in part, to the trade disputes between them.

http://www.chinadaily.com.cn/a/201907/11/ WS5d266de2a3105895c2e7ccf8.html

Pakistan

Envisaging a South Asian peace dialogue?

Syed Qamar Afzal Rizvi

Daily Times, July 1, 2019

Indian premier Narendra Modi and FM Subrahmanyam Jaishankar have reportedly responded to Pakistan's renewed call for dialogue, having written to their respective counterparts Imran Khan and Shah Mehmood Qureshi expressing the intent, a news report said recently. "India is ready to hold talks with Pakistan and other countries in the region for the sake of regional peace and prosperity," the report added. This peace initiative rightly taken from Islamabad and belatedly responded by New Delhi could nevertheless provide a sustainable basis for

the two nuclear neighbours to amicably mend their fences beyond the ghettos of cultural antagonism and geopolitical quest for power dominance.

https://dailytimes.com.pk/421956/envisaging-asouth-asian-peace-dialogue/

Importance Of Nuclear Submarines For Pakistan –

Anjum Sarfraz

Eurasia Review, July 2, 2019

A submarine is a very powerful platform, because of its stealth features and ability to operate covertly. It plays vital role in naval warfare and as a strategic weapon carrier. It can operate under water for a considerable duration, hence cannot be easily detected; therefore it has become an essential constituent of modern navies.

Submarines (subs) are of four types, which differ mainly because of their propulsion system and weapons carried on board. Diesel powered attack submarines (SSK) while on surface use diesel engines for propulsion, and while traversing under water it runs on batteries which have limited endurance. To recharge, conventional subs have to come up to periscope depth for snorkeling very often, keeping in view battery conditions. It is very vulnerable while snorkeling; chances of detection by Anti-Submarine Warfare Forces (ASW) like maritime patrol aircraft, helicopter, and surface platforms are very high. It is relevant to mention that subs have no weapons against the aircrafts.

https://www.eurasiareview.com/02072019importance-of-nuclear-submarines-for-pakistanoped/

Pakistan's relations with the US are important but their scope is limited

Asia News Network, July 9, 2019

The prime minister will meet the president of the US on July 22. The Foreign Office will prepare essential briefing materials. Leaders ignore them at their peril. Pakistan-US relations are not good. American arrogance of power and Pakistan's punching above its weight are to blame. The prime minister will need to convince Trump not to blame Pakistan for US failures in Afghanistan and to assure him that he will do his best to enable the US to exit Afghanistan without loss of credibility. This will require actions more than words.

Pakistan's relations with the US are important. But their scope is limited. The benefits of a better relationship with the US, while important, are circumscribed by the priority it gives India as the fulcrum of its Indo-Pacific strategy. This will not change.

https://asianews.network/2019/07/09/pakistansrelations-with-the-us-are-important-but-theirscope-is-limited/

Nuclear Suppliers Group And Membership Of Pakistan

Anjum Sarfraz

Eurasia Review, July 15, 2019

The Nuclear Suppliers group(NSG) was formed in 1975 after the explosion by India in May 1974 of a nuclear device that had been built by using civilian technology acquired under the auspices of the United States-sponsored Atoms for Peace Program acquired from USA and Canada. India declared this detonation for peaceful purposes although it was for military use. The NSG seeks to prevent similar future misuses.

To admit a new country in the group prerequisites are; it must have the capability to supply the items and country should adhere to the guidelines of NSG, signatory of Nuclear Non-proliferation Treaty (NPT). The country supports the international efforts towards nonproliferation of weapons of mass destruction and of their delivery vehicles. Enforcement of a legally based domestic export control system which gives effect to the commitment to act in accordance with the guidelines. Consensus of all member states which are presently 48 is mandatory for new entrant.

https://www.eurasiareview.com/15072019nuclear-suppliers-group-and-membership-ofpakistan-oped/

USA

Iran Is Rushing to Build a Nuclear Weapon — and Trump Can't Stop It

John J. Mearsheimer

The New York Times, July 1, 2019

President Trump says he wants to make sure Iran never acquires nuclear weapons. His policy, however, is having the opposite effect: It is giving Tehran a powerful incentive to go nuclear, while at the same time making it increasingly difficult for the United States to prevent that. On Monday the official Iranian news agency announced that the country had breached the limits for enriched uranium imposed on it by the 2015 international agreements.

Although there has not yet been a significant military clash, the United States has effectively declared war on Iran. Its wideranging sanctions campaign is strangling Iran's economy, in the hope of gaining sufficient leverage to force Tehran to permanently dismantle its capacity to reprocess plutonium and enrich uranium, the main pathways to the bomb.

https://www.nytimes.com/2019/07/01/opinion/ iran-is-rushing-to-build-a-nuclear-weapon-andtrump-cant-stop-it.html

What do Americans really think about conflict with nuclear North Korea? The answer is both reassuring and disturbing

Alida R. Haworth , Scott D. Sagan, Benjamin A. Valentino

Bulleitin of Atomic Scientistc, July 2, 2019

A thoroughgoing survey of US public opinion about war in East Asia produced some reassuring results. Most Americans, for example, do not want the United States to launch a preventive war against North Korea. But our survey also showed that a large hawkish minority lurks within the US public; over a third of respondents approve of a US preventive strike across scenarios. For many of these hawks, support for an attack, even in a preventive war, does not significantly decrease when the story says that the United States would use nuclear weapons that are expected to kill 1 million North Korean civilians. A survey shows that a large hawkish minority lurks within the US public. It would likely support a nuclear attack on North Korea, even if it killed 1 million civilians.

https://thebulletin.org/2019/07/what-doamericans-really-think-about-conflict-withnuclear-north-korea-the-answer-is-both-reassuring-and-disturbing/

Janne Nolan: from "fellowette" to godmother of the D.C. nuclear policy community

Anne I. Harrington

Bulleitin of Atomic Scientistc, July 9, 2019

The inimitable Janne Nolan passed away last week. Janne was one of the godmothers of the D.C. nuclear policy community. She made her name as an expert in nuclear weapons, proliferation, and arms control while working as a senior fellow at the Brookings Institution during the waning years of the Cold War. Throughout the 1990's she served as an advisor to the US Secretary of Defense, sitting on the Defense Policy Board as well as multiple blue ribbon commissions. She taught courses on national security and weapons of mass destruction at Georgetown, Columbia, and the University of Pittsburgh.

In 2010, Janne joined the faculty of George Washington University's Elliot School of International Affairs where she headed the Nuclear Security Working Group (NSWG), hosting regular bipartisan gatherings of high-level policy makers, nuclear experts from think tanks and academia, and retired US military flag officers and generals. She authored eight books and numerous articles. Janne started out her career working for Senator Gary Hart, a Colorado Democrat on the Senate Armed Services Committee. She went on to become an advisor to his 1988 presidential campaign. Hart was the front runner for the Democratic party's nomination until questions of marital infidelity and womanizing began to plague him, a photograph of him aboard a yacht with a woman (who was not his wife) perched on his lap finally tanking his campaign.

https://thebulletin.org/2019/07/janne-nolan-fromfellowette-to-godmother-of-the-d-c-nuclear-policycommunity/

The Tell-Tale Flaws in Trump's North Korea Strategy

Naoko Aoki

The National Interest, July 14, 2019

President Donald Trump and North Korean leader Kim Jong-un agreed in their impromptu meeting at the demilitarized zone (DMZ) between the two Koreas on June 30 to revive working-level talks over North Korea's denuclearization. If the bilateral negotiations resume as scheduled later this month, then U.S. negotiators could face potential time constraints tied to the political calendar and a complex task. The meeting between Trump and Kim at the DMZ appears to have injected much-needed political momentum into diplomacy between the United States and North Korea, which has been stalled since the failed Hanoi summit in February.

The two leaders emphasized their good personal relations in the DMZ meeting, which was high in symbolism even if limited in substance. But the reliance on personal chemistry between Trump and Kim has its downside. It means that the process is highly dependent on the personalities of the two leaders, and that the U.S. presidential election in 2020 could have an especially important role to play for the diplomatic process. In fact, North Korean concern about this key event may have been behind Kim Jong-un's decision in April to set an endof-year deadline for diplomacy with the United States.

https://nationalinterest.org/blog/korea-watch/ tell-tale-flaws-trumps-north-korea-strategy-66952

Russia

Nuclear Holocaust: If an Israel vs. Russia War Broke Out in the Middle East

Michael Peck

National Interest Blog, July 1, 2019

Were the Israelis and Russians to come to blows, or if Moscow were to seriously threAaten military force against Israel, could the United States risk a grave loss of prestige by not intervening to back its longtime ally? Could Russia—whose Syrian intervention is a proud symbol of its reborn military muscle and great power status—not retaliate for another downed Russian plane or a dead Russian soldier?

https://nationalinterest.org/blog/buzz/nuclearholocaust-if-israel-vs-russia-war-broke-outmiddle-east-65051

What Would the U.S. Do if Russia Attacked with Nuclear Weapons?

Warrior Maven

National Interest Blog, July 3, 2019

Goldfein extended this thinking to specify that, in an instant, US and NATO forces would launch a massive counterattack including, as he put it, "fighters, bombers, tankers, space, command and control, ISR, cyber, special operations and aeromedical teams trained and ready for high-end warfare."

(Washington, D.C.) Red lights start flashing in rapid succession, space-based infrared sensors detect a heat signature, somebody calls the President...and in what may seem like a matter of seconds, the US launches an immediate, massive counterattack. F-35s, B-2 bombers, nucleararmed Navy submarines, missile-armed destroyers, Ground Based Interceptors and satellites — are all instantly thrust into action. Why?

https://nationalinterest.org/blog/buzz/whatwould-us-do-if-russia-attacked-nuclear-weapons-65326

Spy Sub Down: How a Secret Russian Nuclear Submarine Caught Fire

Mark Episkopos

National Interest blog, July 6, 2019

A fire broke out on a Russian research submarine earlier this week, killing fourteen sailors in what is Russia's worst submarine disaster since 2008.

Russian authorities have remained tightlipped on the nature of the data being collected by the submarine and the circumstances of the fire. "On July 1, fourteen submariners - sailors died in Russian territorial waters as a result of inhaling combustion products aboard a research submersible vehicle designated for studying the seafloor and the bottom of the World Ocean in the interests of the Russian Navy after a fire broke out during bathymetric measurements," reads the Defense Ministry's press release.

https://nationalinterest.org/blog/buzz/spy-subdown-how-secret-russian-nuclear-submarinecaught-fire-65886

Why Chernobyl still divides Russia from the west

Henry Foy

Financial Times, July 12, 2019

The most dangerous building in the world is lit with halogen floodlights beneath a shimmering silver dome. Dappled in shades of faded grey, propped up at one end by yellow scaffolding, it looms like an industrial crime scene. We are standing just a dozen metres from the condemned concrete walls of Reactor Four at the Chernobyl nuclear power plant when my companion's radiation detector begins to beep manically. You cannot smell it, see it or hear it, but death still emanates from the place.

https://www.ft.com/content/d37ff98e-a18d-11e9-974c-ad1c6ab5efd1

WEST ASIA

Iran

The complex brinkmanship behind Iran's nuclear response

Andrew England

Financial Times, July 3, 2019

Hours after the White House claimed illogically that there was "little doubt" that Tehran had violated its nuclear accord even before it existed, Mohammad Javad Zarif summed up Iran's exasperation in a word.

His frustration was not unreasonable. In the year after Donald Trump unilaterally withdrew the US from the 2015 pact and imposed sweeping sanctions on Iran, the Islamic republic complied with the accord. This was despite the US president crushing Iran's hopes that it would reap the economic dividend it was promised when it agreed to curb its atomic activities.

https://www.ft.com/content/75fd3f62-9cd1-11e9-9c06-a4640c9feebb

Game of chicken that can end in disaster: on U.S.-Iran relations

Mohammed Ayoob

Hindu, July 13, 2019

On July 7, Iran announced that it would begin enriching uranium above a concentration of 3.67% permitted under the nuclear deal, known as the Joint Comprehensive Plan of Action (JCPOA), reached by Iran and the P5+1 (China, France, Germany, Russia, the United Kingdom, and the United States) on July 14, 2015. These steps come in the wake of increasing tensions between the U.S. and Iran following the shooting down of an unmanned U.S. drone over the Strait of Hormuz in June. The circumstances surrounding this event and the locale of the downing are contested. However, it led to the U.S. President, Donald Trump, first ordering a retaliatory strike on Iran and then rescinding it at the last minute. It is possible that had this strike taken place it would have become the first act in a major military confrontation between the U.S. and Iran.

https://www.thehindu.com/opinion/op-ed/gameof-chicken-that-can-end-in-disaster/ article28415525.ece

EAST ASIA

Japan

Upper House poll will be vote on curbing Abe's dominant power

The Asahi Shimbun, July 4, 2019

The opposition candidates will undoubtedly attract votes from many people critical of the Abe administration. But it is not quite clear to voters under what kind of common political agenda the opposition forces are joining hands. The leaders of five opposition parties, including the Constitutional Democratic Party of Japan, the Democratic Party for the People, the Japanese Communist Party and the Social Democratic Party, have signed a 13-point agenda proposed by the Civil Alliance for Peace and Constitution, a citizen union promoting opposition alliance.

The agenda calls for opposing an amendment to the war-renouncing Article 9, repealing the security legislation, phasing out nuclear power generation and aborting the planned consumption tax hike. While the agenda is described as a common policy platform, the parties are not in agreement on which of the planks should be given a higher priority.

http://www.asahi.com/ajw/articles/ AJ201907040031.html

Parties must close gap with reality in talks on nuclear power

The Asahi Shimbun, July 15, 2019

Any discussion on nuclear power policy should be based on reality. In their Upper House election campaign platforms, the ruling Liberal Democratic Party and its junior coalition partner, Komeito, say they will allow more restarts of nuclear reactors in line with the government's Basic Energy Plan. The plan defines nuclear energy as a mainstay source of power, which it assumes will account for 20 to 22 percent of Japan's total power supply in fiscal 2030.

Following the 2011 Fukushima nuclear disaster, decisions have been made to decommission some of the nation's nuclear reactors; plans are being floated to decommission others. The total number of the reactors concerned is 21. Achieving the goal of the Basic Energy Plan would require about 30 operating reactors, meaning the activation of almost all remaining nuclear reactors in Japan. One is tempted to ask if such a plan can be described as realistic.

http://www.asahi.com/ajw/articles/ AJ201907150030.html

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

The Asahi Shimbun, July 15, 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

Richard D. Fisher, Jr. On Taiwan: China's hypersonic attack missiles require deterrent responses

Taipei Times, July 8, 2019

China's near-term deployment of a new class of maneuverable hypersonic speed missiles poses a new level of threat to Taiwan, United States forces in Asia, and those of its allies. As a credible defensive response to this threat may not be possible for many years, it is crucial that Washington deploy a deterrent response by rapidly developing its own hypersonic missiles and offering appropriate versions to allies and friends like Taiwan.

Hypersonic missile and hypersonic glide vehicle (HGV) weapons pose a major threat because their high Mach 10, or ten times the speed of sound speed, combined with the ability to perform extreme maneuvers at detection-delaying lower altitudes, make them invulnerable to current missile defense systems. In addition, their very high impact speeds increase their destructive effect, though they can also be equipped with small nuclear warheads. After decades of research, development and more recent testing, China's People's Liberation Army (PLA) may be on the verge of deploying its first land-based medium range, missilebased, HGV-armed attack missile.

http://www.taipeitimes.com/News/editorials/ archives/2019/07/08/2003718294

T. Think Tanks

Trump Won't Accept These Harsh Realities on Iran

Richard Sokolsky, Aaron David Miller

Carnegie Endowment for International Peace, July 02, 2019

All administrations — and together we worked for seven — have their blind spots and illusions on foreign policy and national security. But the Trump administration seems particularly divorced from reality, especially with its otherworldly view of the current US-Iran crisis.

Facing up to some hard realities might actually help to prevent a catastrophe and protect US interests, even though we have little confidence the administration will be able to — or even wants to — squirm out of the box it has put itself in.

First, the current crisis flows from events set in motion by President Donald Trump's reckless and unnecessary decision to walk out of an admittedly flawed but still highly functional nuclear accord without a serious plan B.. Make no mistake: The US and Iran were at odds long before Trump walked out of the 2015 Iran nuclear deal last year.

https://carnegieendowment.org/2019/07/02/ trump-won-t-accept-these-harsh-realities-oniran-pub-79432

The Other Existential Threat: Nuclear Weapons & the 2020 Presidential Campaign

Sean Meyer

Union of Concerned Scientist, July 3, 2019

The 2020 presidential campaign kicked off in earnest with last week's Miami debates, and many of the "high profile" topics were covered: climate change, immigration, gun control. One topic was a little more unexpected: nuclear weapons. On the first night, three of the ten candidates on stage said nuclear weapons or the threat of nuclear war is the biggest geopolitical threat facing the United States.

This should not be surprising: recent polling shows that in key primary states, including New Hampshire and Iowa, over 80% of respondents want to know what candidates think about nuclear weapons. We also know from recent national polling that more than 80% of people support arms control treaties with Russia.

https://blog.ucsusa.org/sean-meyer/nuclearweapons-candidates-primaries

Recycle everything, America except your nuclear waste

Allison Macfarlane, Sharon Squassoni

Bulletin of Atomic Scientist, July 8, 2019

Americans have come late to the game on responsible consumerism, but they are making up for lost time with a passionate obsession about waste. It's no coincidence that Fox News, CNN, YouTube and USA Today have all reported that the deepest solo ocean dive found plastic waste seven miles below the surface, in the Mariana Trench.

Now that Americans are "woke" about waste in general, they may turn to the specific kind produced by the nuclear energy industry. Plans to revitalize US nuclear power, which is in dire economic straits, depend on the potential for new, "advanced" reactors to reduce and recycle the waste they produce. Unfortunately, as they "burn" some kinds of nuclear wastes, these plants will create other kinds that also require disposal. At the same time, these "advanced" reactors-many of which are actually reprises of past efforts-increase security and nuclear weapons proliferation risks and ultimately do nothing to break down the political and societal resistance to finding real solutions to nuclear waste disposal.

https://thebulletin.org/2019/07/recycle-everything-america-except-your-nuclear-waste/

A Sign Of Easing Tension? India And Pakistan's Joint Venture To Forge Religious Ties

The Organisation for World Peace, July 10, 2019

Under the directives of the Prime Minister of Pakistan, Imran Khan, and Evacuee Trust Property Board (ETPB) Chairman Dr Amir Ahmed, July 3rd witnessed the opening of an ancient Hindu temple in Sialkot in Pakistan's Punjab province. For the first time in 72 years, Pakistani adherents of Hinduism were granted access to worship in the Shawala Teja Singh Temple. The move follows the government's announcement in April that they will reclaim and restore 400 temples to the minority group in Pakistan, and compliments a joint decision by Prime Minister Khan and the Prime Minister of India, Narendra Modi, to construct the Kartarpur corridor, allowing visa-free access to Hindi pilgrims from India. These actions are symbolic of potential reconciliation efforts on behalf of the two governments to quell ongoing conflict that was sparked during the Partition of India in 1947. A meeting between officials of India and Pakistan is scheduled to take place in Pakistan on 14th July to discuss the opening of the corridor between the two countries.

http://theowp.org/a-sign-of-easing-tensionindia-and-pakistans-joint-venture-to-forgereligious-ties/

New CRP: Optimizing Nuclear Techniques to Assess Accurate Quantitative Biomarkers of Added Sugar Intake in Adults (E43034)

Cornelia Loechl

International Atomic Energy Agency, July 12, 2019

The IAEA is launching a new five-year Coordinated Research Project (CRP) that aims to optimize the use of natural abundance stable isotope ratios of carbon $(^{13}C/^{12}C$, hereafter the "CIR") to assess added sugar intake in different populations. This is relevant in terms of the emerging evidence for the role of carbohydrate and free sugar intake in chronic disease, and the recent guidelines issued by the World Health Organization (WHO) which recommend restricting free sugar in the diet to less than 10%, or even 5% of total energy intake for additional health benefits.

https://www.iaea.org/newscenter/news/new-crpoptimizing-nuclear-techniques-to-assess-accuratequantitative-biomarkers-of-added-sugar-intake-inadults-e43034

Finding evidence of undeclared past nuclear activity in Iran shows the IAEA process is working

Mark Fitzpatrick

IISS Blog, July 15, 2019

With the International Atomic Energy Agency (IAEA) having recently concluded that traces of undeclared radioactive material were indeed found at a warehouse in Tehran, Mark Fitzpatrick argues the IAEA investigative process is working. A cooperative approach is the best way to provide for the greater access to suspect sites in Iran the IAEA needs if it is to resolve the issue. Overshadowed by other Iran-related tensions, there was a noteworthy development last week about nuclearrelated material that Iran has sought to conceal. Israeli media reported that environmental sampling conducted earlier this year by the International Atomic Energy Agency (IAEA) at a warehouse in the Turguzabad district of Tehran found traces of what Israeli President Benjamin Netanyahu last September said was 15kg of radioactive material that had been stored there along with tonnes of equipment and moved elsewhere last summer. The Israeli government apparently leaked the findings out of disappointment that the IAEA did not report on it in the mid-June Board of Governors meeting. It is a serious matter. Netanyahu's characterisation of 'radioactive' material had previously led me to think that it might not rise to the level of

a reporting violation, as many kinds of radioactive material, such as the americium in smoke detectors and the cobalt-60 used for medical radiotherapy, do not fall under IAEA safeguards. It is now my understanding, however, that it was material that Iran was obliged to report to the IAEA.

https://www.iiss.org/blogs/survival-blog/2019/ 07/undeclared-iranian-nuclear-activity-andiaea-process

NATO Secretary-General Stoltenberg's INF Response Is Inadequate

Daryl G. Kimball

Arms Control Association, July 15, 2019

Russian pursuit of the 9M729 intermediate-range missile, which is banned under the 1987 Intermediate-Range Nuclear Forces (INF) Treaty, is unacceptable and merits a strong response. But NATO Secretary-General Stoltenberg's formula, as expressed in a new op-ed published in the Germanlanguage Frankfurter Allgemeine, is inadequate. In his July 14 essay, the Secretary-General embraces the Trump administration's decision to terminate the treaty August 2 without a realistic plan to help resolve the long-running compliance dispute. This move, combined with the possibility of new U.S. ground-launched cruise missiles in Europe-is risky and unwise as it opens the door to a new phase of destabilizing INF missile competition with Russia.

Furthermore, Stoltenberg fails to mention that U.S. officials have refused thus far to take up Russia's offer to discuss "any mutually beneficial proposals that take into account the interests and concerns of both parties." Options that address Russian concerns about U.S. missile defense launchers in Romania and Poland which are capable of firing offensive missiles—and that encourage the verifiable elimination of Russian noncompliant cruise missiles might have resolved the INF Treaty dispute.

https://www.armscontrol.org/blog/2019-07-15/ nato-secretary-general-stoltenbergs-inf-responseinadequate

U.S. Questions Russian CTBT Compliance

Daryl G. Kimball

Arms Control Association, July/August

A top U.S. intelligence official publicly accused Russia in May of not complying with the 1996 Comprehensive Test Ban Treaty (CTBT), raising concerns that the Trump administration may be considering withdrawing from another multilateral arms control agreement. The allegation is a significant shift from recent U.S. government and intelligence community assessments.

"Russia probably is not adhering to its nuclear testing moratorium in a manner consistent with the 'zero-yield' standard" outlined in the CTBT, said Lt. Gen. Robert Ashley, the director of the Defense Intelligence Agency (DIA), in remarks to the Hudson Institute May 29.

https://www.armscontrol.org/act/2019-07/news/ us-questions-russian-ctbt-compliance

Building Safeguards Into the Design of Spent Fuel Storage Facilities

Adem Mutluer

IAEA Department of Safeguards, July 16, 2019

The IAEA works to enhance the contribution of nuclear technology to peace and prosperity around the world, while verifying that nuclear material is not diverted from peaceful use. IAEA safeguards, an important part of the global nuclear non-proliferation regime, provide for independent verification of States' compliance with their international legal obligations. To help with this, the IAEA issues guidance through its safeguards by design (SBD) document series to assist nuclear facility designers and operators in contemplating, at an early stage of the design process, the safeguards activities relevant to nuclear facilities, including spent fuel storage facilities.

Consideration of safeguards requirements prior to embarking on the construction or modification of a facility, a concept known as SBD, is voluntary and aims to facilitate the improved implementation of existing safeguards requirements. However, if SBD is applied, safeguards inspections can be implemented more effectively and efficiently, while reducing the burden on the operator of a facility.

https://www.iaea.org/newscenter/news/buildingsafeguards-into-the-design-of-spent-fuelstorage-facilities

U. Interviews, Press Releases

ElBaradei says U.S. exit from nuclear deal lacks rationale, legal basis, and common sense

Tehran Times, July 13, 2019

Mohamed ElBaradei, the former head of the International Atomic Energy Agency, has described the U.S. President Donald Trump's decision to withdraw from the 2015 nuclear deal, known as the JCPOA, when it was "working" as "lacking rationale, legal basis and any common sense".

In an interview with BBC Radio 4 published on Friday, he said that the U.S. is applying waterboarding method to Iran by exerting economic pressure on the country.

"They are applying a waterboarding method to Iran, drowning Iran and then looking and then asking them: let's have a dialogue without any preconditions," he said.

https://www.tehrantimes.com/news/438087/ ElBaradei-says-U-S-exit-from-nuclear-deallacks-rationale-legal

'Hell broke loose': Yashwant Sinha recalls time of India's nuclear test

Business Standard, July 14, 2019

A few days before India conducted nuclear tests on May 11, 1998, the then prime minister Atal Bihari Vajpayee asked his finance minister Yashwant Sinha to remain prepared to deal with backlash from the world powers, especially in the economic field.

Sinha was summoned to Vajpayee's residence one morning in early May 1998. When he reached there, he was taken to the prime minister's bedroom.

I guessed immediately that what he was about to tell me was not only important but also highly confidential, Sinha recalls, adding Vajpayee then broke a piece of stunning news that left him feeling both proud and shaken.

I have decided to go for nuclear tests in the next few days. It is a highly secret operation because the world powers are not going to like it. They may take punitive action against us, especially in the economic field.

So, we must be prepared to meet any challenge the move would throw up on the economic front. I thought I should warn you in advance, so that you are not taken by surprise when it happens, Vajpayee told Sinha.

It took Sinha some time to absorb the full import of what Vajpayee had told him so calmly.

Sinha recollects this incident in his autobiography Relentless, which is scheduled to be launched on Monday.

https://www.business-standard.com/article/ptistories/be-ready-for-economic-backlash-vajpayeetold-me-before-nuke-tests-yaswant-119071400246_1.html

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: Chinese President Xi Jinping paid a visit to Moscow in June and both sides agreed to upgrade their comprehensive strategic partnership of coordination for a new era. Where are bilateral ties headed?

Kortunov: It will partially depend on the overall development of the international system, because many things remain unclear, including fundamental challenges and opportunities for Chinese-Russian cooperation. However, it's important the two countries are committed to long-term shared approaches and future vision, such as how to reconcile the China-proposed Belt and Road Initiative with Russia's Eurasian Economic Union, or how to handle international crises that might affect both sides. For instance, Americans are likely to leave Afghanistan before too long; Russians and Chinese are already working on how they could jointly prevent Islamic fundamentalism from spreading to their territories or to neighboring countries.

It seems likely Moscow and Beijing will deepen cooperation not only in security, but also in development and high-tech areas. For example, Huawei is now under attack from Washington, and the US has threatened to block it from Google software. Russia and China can work together on alternative software for smartphones and on other things much more sophisticated, including AI.

GT: Russian President Vladimir Putin said he will step down when his term ends in 2024. Without Putin as president, will China-Russia relations change? Kortunov: It will be one of the most important tasks of Putin to make sure his successor has good relations with the Chinese leadership. I suppose he will invest plenty of time and effort in continuing the kind of personal chemistry he enjoys with President Xi.

However, it's not just about leadership change. It's about how we can adjust our respective economic and social systems so they will be more compatible than they are now. There are many things to work on here. One of the challenges is to go beyond the primary public sector cooperation and incentivize small- and medium-sized enterprises from the two countries to work together.

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: How will the 2020 US presidential elections affect relations with Russia?

Kortunov: It is hard to tell because so far we

do not know who will win. Today, it seems likely Trump will be re-elected because the US economy is doing well. He is also smart enough not to engage the US into another bloody and expensive war.

Trump is thinking mostly about his reelection, so he has to be nice to all political and social groups within the US that might impact voters. This consideration clearly affects his foreign policy decisions on China, Russia, the EU, or whatever. If he is re-elected, we will see a president no longer constrained by election considerations. We do not know for sure who this unleashed Trump will likely become and what kind of policies he would make.

Our country is perceived as evil or at least Putin is perceived as evil. I do not think this negative attitude will change fast. That is why relations between Russia and the US will be on a bumpy road long after 2020, no matter who comes to the White House.

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

V. Reports

BP Statistical Review of World Energy

BP, 68th edition, 2019

In particular, the data compiled in this year's Review suggest that in 2018, global energy demand and carbon emissions from energy use grew at their fastest rate since 2010/11, moving even further away from the accelerated transition envisaged by the Paris climate goals. BP's economics team estimate that much of the rise in energy growth last year can be traced back to weather-related effects, as families and businesses increased their demand for cooling and heating in response to an unusually large number of hot and cold days. The acceleration in carbon emissions was the direct result of this increased energy consumption.

https://www.bp.com/content/dam/bp/businesssites/en/global/corporate/pdfs/energy-economics/ statistical-review/bp-stats-review-2019-fullreport.pdf

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).

Disclaimer:

Data included in this newsletter is only for educational purpose and wider dissemination. All liabilities and rights belong to respective writers & authors.

Prepared by :

Ms Deepika Sharma Ms Diya Deep Singh Ms Raj Rajeshwari Singh Ms Rishika Chauhan

Indian Pugwash Society

No.1, Development Enclave, Rao Tula Ram Marg, Near USI, Delhi-110010 Tel. No (91-11) 2671-7983 Fax No. (91-11)2615-4192 Email: indianpugwashsociety@gmail.com