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SPECIAL FEATURE

INDIA GSLV MKIII-D2 SUCCESSFULLY LAUNCHES GSAT-29

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A. GSAT-11

India GSLV MkIII-D2 successfully launches GSAT-29 *Press Information*

Bureau, November 14, 2018

India's GSAT-29 communication satellite was successfully launched by the second developmental flight of Geosynchronous Satellite Launch Vehicle MarkIII (GSLV MkIII-D2) today from the Satish Dhawan Space Centre (SDSC) SHAR, Sriharikota.

GSLV MkIII-D2 lifted off from the Second Launch Pad of SDSC SHAR at 17:08 hours (IST), carrying the 3423-kg GSAT-29 satellite. About 17 minutes later, the vehicle injected the satellite into the Geosynchronous Transfer Orbit (GTO) as planned.

After injection, ISRO's Master Control Facility at Hassan has assumed the control of the satellite. In the coming days, three orbit raising manoeuvres will be executed to position the satellite in the Geostationary Orbit at its designated location.

GSLV Mk III is a three-stage heavy lift launch vehicle developed by the Indian Space Research Organisation (ISRO).

Two massive boosters with solid propellant constitute the first stage, the core with liquid propellant form the second stage and the cryogenic engine completes the final stage.

GSAT-29 is a multiband, multi-beam communication satellite, intended to serve as test bed for several new and critical technologies. Its Ku-band and Ka-band payloads are configured to cater to the communication requirements of users including those from remote areas especially from Jammu & Kashmir and North-Eastern regions of India.

In addition, the Q/V-Band communication payload onboard is intended to demonstrate the future high throughput satellite system technologies. Geo High Resolution Camera will carry out high resolution imaging. Optical Communication Payload will demonstrate data transmission at a very high rate through optical communication link.

After the successful launch, ISRO Chairman Dr K Sivan said: "India has achieved significant milestone with our heaviest launcher lifting off the heaviest satellite from the Indian soil. The launch vehicle has precisely placed the satellite in its intended orbit. I congratulate entire ISRO team for this achievement."

Declaring GSLV MkIII operational, Dr Sivan announced that Chandrayaan-2 and Gaganyaan missions will be launched by this heavy-lifter.

Shri Jayakumar B, Mission Director, GSLV Mark III said it is the guidance of the Mentors at ISRO that helped the team to march ahead while facing obstacles. "The industry partners too played a key role in this mission," he said.

Shri K Pankaj Damodar, Project Director, GSAT-29 said the launch will help to bridge the digital divide. He also said several next generation payload technologies will be demonstrated with this mission soon.

The success of GSLV MkIII-D2 marks an important milestone in Indian space programme towards achieving self-reliance in launching heavier satellites. The success of this flight also signifies the completion of the experimental phase of GSLV Mark III.

The first successful mission of GSLV Mark III was an experimental suborbital flight in 2014. Subsequently, GSLV Mark III-D1 launched GSAT-19, a high throughput communication satellite, with a lift-off mass of 3150 kg, into GTO on June 5, 2017.

<http://pib.nic.in/newsite/PrintRelease.aspx?relid=184750>

PM congratulates ISRO scientists on successful launch of GSLV Mk III-D2 carrying GSAT-29 satellite

Posted On: November 14, 2018 by PIB Delhi

The Prime Minister, Shri Narendra Modi has congratulated ISRO scientists on the successful launch of GSLV Mk III-D2 carrying GSAT-29 satellite.

“My heartiest congratulations to our scientists on the successful launch of GSLV MK III-D2 carrying GSAT-29 satellite. The double success sets a new record of putting the heaviest satellite in orbit by an Indian launch vehicle.

The satellite will provide communication and internet services to the remotest corners of our country”, the Prime Minister said.

<http://pib.nic.in/newsite/PrintRelease.aspx?relid=184747>

PSLV-C43 successfully launches earth observation satellite HysIS and 30 foreign satellites ISRO to launch its heaviest satellite, GSAT-11, on Dec 5, 2018 *Press Information Bureau, November 29, 2018.*

Bureau, November 29, 2018.

The Indian Space Research Organisation’s (ISRO) Polar Satellite Launch Vehicle (PSLV-C43) successfully launched 31 satellites from Satish Dhawan Space Centre (SDSC) today in Sriharikota.

The PSLV-C43 lifted off at 9:57:30 (IST) from the First Launch Pad and injected India’s Hyper-Spectral Imaging Satellite (HysIS) into a 645 km sun-synchronous polar orbit 17 minutes and 19 seconds after the lift-off. Later, 30 foreign satellites were injected into their intended orbit after restarting the vehicle’s fourth stage engines twice. The last satellite was injected into its designated orbit 1 hour and 49 minutes after the lift-off.

After separation, the two solar arrays of HysIS were deployed automatically and the ISRO Telemetry Tracking and Command Network at Bengaluru gained control of the satellite. The satellite will be brought to its final operational configuration in the next few days. HysIS Project Director Shri Suresh K. said that the satellite is performing normally after the launch.

HysIS is an earth observation satellite built around ISRO’s Mini Satellite2 (IMS-2) bus weighing about 380kg. The mission life of the satellite is five years.

<http://pib.nic.in/newsite/PrintRelease.aspx?relid=186015>

ISRO’s communication satellite GSAT-11 will bridge the digital divide in India *By: Huma Siddiqui*

This will be followed by GSAT-7A by the Indian rocket Geosynchronous Satellite Launch Vehicle (GSLV) from Sriharikota in India.

After the great success of the sixth mission of the PSLV-C43, all eyes are now towards the launch of communication satellite GSAT-11 from French Guiana by Ariane-5 rocket of Arianespace, on Dec 5.

At 5854 Kgs, GSAT-11 is the heaviest, next generation high throughput communication (16 Gbps) satellite configured around Indian Space Research Organisation’s (ISRO) I-6K Bus, and built by the agency. It has a mission life of 15 years.

This will be followed by GSAT-7A by the Indian rocket Geosynchronous Satellite Launch Vehicle (GSLV) from Sriharikota in India.

Sharing his views with Financial Express Online, Ratan Shrivastava, Advisor, Space Division, FICCI, said “GSAT series of geosynchronous indigenous satellites in S, Ka/Ku bands made and launched by ISRO are aimed at making India self reliant in digital media services. GSAT 29 and GSAT 11 are key satellites for facilitation of the Digital Indiaprogram, bridging the divide between rural and urban India by high speed bandwidth and advanced telecom and DTH services.”

“The satellite is scheduled for launch onboard Ariane-5 launch vehicle from French Guiana and will play a vital role in providing broadband services across the country bridging the digital divide and connecting hinterland with the mainland,” said Shrivastava.

This will also be supporting e-Governance by linking of Gram Panchayats/ villages under the Digital India program as well as consumer high speed broadband connectivity, explained Shrivastava.

Initially, the satellite will be placed in the Geosynchronous Transfer Orbit and will

then be raised to geostationary orbit by firing the satellite's on-board motor. According to ISRO, GSAT-11 is the forerunner in a series of advanced communications satellites with multi-spot beam antenna coverage over Indian mainland and islands.

The GSAT- 11 will be used to meet the increased data demands with high data rates over regions using spot beams. It may be recalled earlier this year; the GSAT 11 had to be brought back to India by ISRO to carry out more tests to check its performance before it was launched in May. After a few tests, and repairs the GSAT -11 is being launched.

<https://www.financialexpress.com/industry/technology/isros-communication-satellite-gsat-11-will-bridge-the-digital-divide-in-india/1398261/>

ISRO's Heaviest Satellite GSAT-11 set to Launch on Board Ariane-5 Rocket on 5 December *First Post*

December 03, 2018

India's heaviest communication satellite with high throughput GSAT-11 will be put into orbit by the Ariane-5 rocket of Arianespace from French Guiana on 5 December 2018, the Indian space agency said.

According to the Indian Space Research Organisation (ISRO), the GSAT-11 weighing 5,854 kg is the heaviest satellite built by it.

The satellite is scheduled for launch onboard Ariane-5 launch vehicle from French Guiana.

The satellite will be initially placed in the Geosynchronous Transfer Orbit and will subsequently be raised to geostationary orbit by firing the satellite's onboard motor.

GSAT-11

According to ISRO, GSAT-11 is the forerunner in a series of advanced communications satellites with multi-spot beam antenna coverage over Indian mainland and islands.

The satellite with a mission life of 15 years will have 32 user beams (Ku band) and eight hub beams (Ka-band) and the throughput

data rate of 16 Gbps.

GSAT-11 will play a vital role in providing broadband services across the country. It will also provide a platform to demonstrate new generation applications.

The Indian space agency said the GSAT-11 will be used to meet the increased data demands with high data rates over regions using spot beams.

The satellite will support BharathNet connecting gram panchayat for e-governance and digital platforms; VSAT terminals and for enterprise network and consumer broadband applications.

In April 2018, ISRO had recalled GSAT-11 from Arianespace's rocket port in French Guiana for further tests, to be on the safe side.

"We are bringing back the GSAT-11 satellite to carry out some tests to be doubly sure of its performance orbiting in the space. There is nothing more to it," K Sivan, Chairman ISRO had told IANS then.

The GSAT-11 was planned to be launched mid-May. The satellite had reached Arianespace's rocket port in March 2018.

The ISRO's move to call back GSAT-11 for further tests and be doubly sure of its performance may be due to the loss of the recently launched **GSAT-6A** satellite, soon after it was put into orbit on 29 March.

ISRO suspected the failure of the power system in the satellite for the loss of communication link.

"The satellites are powered by solar panels that charge the onboard batteries. The batteries are fully charged when the satellite is loaded on to the rocket.

"Even if there is a problem with the solar panel, then the battery power should have kicked in. Here the entire power system of the satellite seems to have failed," one space expert told had IANS earlier.

According to experts, the power system could have failed due to some short-

circuiting or arcing resulting in what is known in the space terminology 'loss of lock' or loss of contact with the ground station.

Satellites in space are locked to ground stations for tracking and other purposes.

On 29 March, Indian rocket Geosynchronous Satellite Launch Vehicle (GSLV) slung GSAT-6A in its intended orbit. From there the satellite was to be taken up further to its orbital slot by firing its onboard motors.

The first orbit raising operation was successfully carried out by firing the onboard motors for around 36 minutes on 30 March morning.

The second orbit raising operation of GSAT-6A satellite was also successful as its motors were fired for about 53 minutes on 31 March.

After that, the communication link got snapped.

<https://www.firstpost.com/tech/science/isros-heaviest-satellite-gsat-11-set-to-launch-on-board-ariane-5-rocket-on-5-dec-5634811.html>

5.8-tonne GSAT-11 ready for launch

Madhumathi D.S., The Hindu, December 03, 2018

Part of ISRO's new satellite fleet for high-speed Internet services

A team of top officials and engineers of the Indian Space Research Organisation (ISRO), now stationed in the Guiana Space Centre, South America, is going over the last steps before it sees off the heaviest Indian communication satellite, GSAT-11, to its space orbit. The liftoff is slated for the wee hours of Wednesday, December 5, India time, but from half way across the globe.

The 5,854-kg satellite, almost double the biggest one built or launched by ISRO to date, will ride up on European launch vehicle Ariane 5 ECA, numbered VA246, between 2.07 a.m. and 3.23 a.m. IST, according to the schedule of Arianespace, which is providing the launch services. It will be sunset at nearby Kourou in French Guiana, located 5 degrees North of the Equator, with a launch window between 5.37 p.m. and 6.53 p.m. local time.

ISRO Chairman K. Sivan, besides the project director and scores of engineers, who have been taking care of the satellite for the last 30-odd days, are in Kourou for the big day, it is learnt.

GSAT-11 is part of ISRO's new family of high-throughput communication satellite (HTS) fleet that will drive the country's Internet broadband from space to untouched areas; the broadband domain is now ruled by underground fibre and covers partial and convenient locations.

High-speed data

Already up in space are two HTSs – GSAT-29 (November 14) and GSAT-19 (June 2017) – while one more is due to join them in the near future. They are all to provide high-speed Internet data services at the rate of 100 Gbps (Gigabits per second) to Indian users. ISRO has earlier said this speed would be far better than what is available in the country now.

The HTSs will also be the backbone of pan-India digital or easy Internet-based programmes and services – such as Digital India, BharathNet for rural e-governance, and commercial and public sector VSAT Net service providers.

According to ISRO, GSAT-11's multiple spot beam coverage – 32 in Ku band and eight in Ka bands – will deliver an improved service of 16 gbps over the Indian region and nearby islands. It said, "GSAT-11 will play a vital role in providing broadband services across the country. It will also provide a platform to demonstrate new generation applications."

New date

GSAT-11 was earlier planned for launch on May 26 this year. A few days before it, ISRO, brought it back from Kourou to the Bengaluru satellite centre for additional checks. The spacecraft was sent back in October for the rescheduled launch.

Its co-passenger is South Korea's GEO-KOMPSAT-2A, a meteorology satellite.

<https://www.thehindu.com/news/national/58-tonne-gsat-11-ready-for-launch/article25656789.ece>

Boost to net connectivity: ISRO's heaviest satellite GSAT-11 launched from French Guiana

The Times of India, December 05, 2018

NEW DELHI: After months of wait, the country's heaviest satellite Gsat-11 weighing 5,854 kg was finally launched from the European spaceport in French Guiana at 2.07 am on Wednesday. Arianespace's Ariane-5 rocket successfully lifted off with communication satellite Gsat-11 and South Korean geo satellite Geo-Kompsat-2A.

Twenty nine minutes after the lift off, Gsat-11 separated from the rocket and was placed in the geo-transfer orbit. The Korean satellite was released four minutes after Gsat-11 separation. Arianespace kept the time gap of around four minutes in separation of two satellites from the rocket in order to avoid a collision between the two in space.

Gsat-11 is a high-throughput satellite that carries 40 transponders in the Ku-band and Ka-band frequencies and is capable of "providing high bandwidth connectivity" with up to 14 gigabit per second (GBPS) data transfer speed. The satellite's designed lifetime is more than 15 years.

Soon after the successful launch, Arianespace chief executive Stephane Israel congratulated Isro chairman K Sivan and P Kunhikrishnan, director of Bengaluru-based UR Rao Satellite Centre, who were present at the Arianespace control room to witness the launch. He said the "cooperation with the Indian space agency went back to 1991 and today's launch has boosted that relationship".

Thanking Arianespace for the launch, Isro chairman Sivan said, "Six days after the successful launch (on November 29) of India's first hyperpectral imaging satellite HysIS, today's launch of the country's heaviest satellite Gsat-11 is a major milestone for the country. This satellite has been designed in most innovative ways by Isro centres and the credit for its success goes to Team Isro." He said that "Gsat-11 is the third in a series of four highthroughput satellites

(Gsat-19, Gsat-29, Gsat-11 and Gsat-20) that will provide the country broadband connectivity of over 100 gigabits per second (Gbps) and will link rural areas and bridge the digital divide under the Digital India programme." While Gsat-19 was launched in June last year, Gsat-29 was launched on November 14 this year.

The chairman said, "The master control centre of Isro (at Hassan in Karnataka) has taken control of Gsat-11. In the coming five days, the satellite will be manoeuvred to its final geo-stationary orbit. Thereafter for the next 10 days, the payloads will be tested." He also congratulated South Korea for the successful launch of Gsat-11's co-passenger Geo-Kompsat-2A. Sivan also recalled that Gsat-11 was earlier scheduled for the launch on May 25 from French Guiana but due to certain circumstances the launch had to be delayed. The communication satellite, which will help increase internet speed in the country, was earlier recalled from French Guiana by Isro as the agency suspected an anomaly in the satellite. Isro felt the need to take the unusual step of recalling the satellite as a precaution measure especially after the failure of the Gsat-6A mission around the same time. Gsat-6A satellite went out of control and signal from it was lost soon after its launch on March 29.

Gsat-11 is meant to provide multi-spot beam coverage over India's mainland and nearby islands. The satellite is special as it uses multiple spot beams (a special kind of transponder that operates on a high frequency) that will increase internet speed and connectivity. A spot beam is a satellite signal that is specially concentrated in power so that it covers only a limited geographical area on the earth. The narrower the beam more is the power. The satellite will reuse "beams" (signals) several times in order to cover the entire country. In contrast, a traditional satellite like INSAT satellite uses a broad single beam, which is not powerful, to cover wide regions. The heavy-duty satellite is so massive that each solar panel is over four metres long, equivalent to the size of a big

sedan. It will also provide a platform to demonstrate new-generation applications.

<https://timesofindia.indiatimes.com/india/6-days-after-hysis-success-isro-launches-heaviest-satellite-gsat-11-from-french-guiana/articleshowprint/66945769.cms>

India's heaviest communication satellite GSAT-11 launched successfully from French

Guiana Press Information Bureau,
Government of India, Department of Space,
December 05, 2018

Indian Space Research Organisation's (ISRO) heaviest and most-advanced high throughput communication satellite GSAT-11 was successfully launched from the Spaceport in French Guiana during the early hours today.

The launch vehicle Ariane 5 VA-246 lifted off from Kourou Launch Base, French Guiana at 02:07 am (IST) carrying India's GSAT-11 and South Korea's GEO-KOMPSAT-2A satellites, as scheduled. Ariane 5 is one of three launch vehicles operated by Arianespace along with Soyuz and Vega.

After a 30-min flight, GSAT-11 separated from the Ariane 5 upper stage in an elliptical Geosynchronous Transfer Orbit. The achieved orbit was very close to the intended one.

The 5,854-kg GSAT-11 will provide high data rate connectivity to users of Indian mainland and islands through 32 user beams in Ku-band and 8 hub beams in Ka-band.

"GSAT-11 will boost the broadband connectivity to rural and inaccessible Gram Panchayats in the country coming under the Bharat Net Project, which is part of Digital India Programme," ISRO Chairman Dr K Sivan said.

The Bharat Net Project aims to enhance the public welfare schemes like e-banking, e-health, e-governance among others.

He said GSAT-11 will act as a forerunner to all future high throughput communication satellites. "Today's successful mission has boosted the confidence of the entire team," Dr Sivan added.

Post-separation, ISRO's Master Control Facility at Hassan in Karnataka took over the command and control of GSAT-11 and found its health parameters normal.

The scientists will undertake phase-wise orbit-raising manoeuvres in the days ahead to place the satellite in the Geostationary Orbit (36,000 km above the equator) using its on-board propulsion systems. GSAT-11 will be positioned at 74-degree east longitude in the geostationary orbit.

Subsequently, the two solar arrays and four antenna reflectors of GSAT-11 will be deployed in orbit. The satellite will be operational after the successful completion of all in-orbit tests.

In the last 21 days, ISRO successfully completed three satellite and two launch vehicle missions.

<http://pib.nic.in/newsite/PrintRelease.aspx?relid=186117>

Next, GSAT-11 awaits Rs 200 crore ground system *Madhumathi D.S.*

The Hindu, December 09, 2018

Now that GSAT-11, the third and latest Internet-boosting communication satellite, is up in space, the Indian Space Research Organisation (ISRO) says it is in the process of readying a Rs 150-200-crore ground infrastructure across cities to use it.

A Ka-band hub or gateway each is being set up in Delhi, Bengaluru, Ahmedabad and Ranchi to deliver high-speed broadband services via the giant satellite.

K.Sivan, Chairman, ISRO, said, "The activity of establishing the ground system is on and it may happen over some more months."

The nearly six-tonne heavyweight satellite was launched in December 5 on a European launcher. Along with its older HTS mates – GSAT-19 and GSAT-29 – it forms an Indian quartet of high-throughput satellites (HTSs). Each of them has a different space location over India and must have its own ground systems.

The ground systems are being put up by external agencies chosen through competitive bidding. They will also be operated and maintained by them for five to seven years. Dr. Sivan admitted that there were “procedural delays” in completing the system with outside support.

The use of the Ka band will be new in the country. In 2017, ISRO’s payload developing unit, the Space Applications Centre (SAC) in Ahmedabad, had put out a search or RFP (request for proposal) for companies that could set up GSAT-11’s Ka-band ground systems.

About the HTSs, Dr. Sivan said, “Our target is to deliver close to [a Net data speed at the rate of] 100 Gbps through them. We have planned a fourth one, too – the GSAT-20. It will be a four-tonne-class HTS and will be launched towards the second half of 2019 on our GSLV MarkIII vehicle. With that, our current national requirement should be met.”

Remote areas

The fleet is designed to mainly serve the remote and hilly northeastern States, and Jammu & Kashmir, which are starved of reliable Net services. “Our concentration is on those areas, where it is not possible to establish terrestrial cables as in cities,” Dr. Sivan said.

Referring to the consecutive launches of GSAT-29 in November and GSAT-11 in December, Dr. Sivan said, “Within a matter of about 20 days, we have already beefed up the requirements of VSATs (very small aperture terminals) by putting up two satellites suited to them.”

<https://www.thehindu.com/sci-tech/science/next-gsat-11-awaits-200-crore-ground-system/article25704894.ece>

GSAT-11 in designated orbit: ISRO

The Hindu, December 10, 2018

The country’s heaviest communication satellite GSAT-11 has been placed in its designated geostationary orbit at an altitude of about 36,000 km after four orbit-raising

manoeuvres, the Indian Space Research Organisation (ISRO) said Monday.

The space agency said in a statement that the orbit-raising manoeuvres were performed by firing the satellite’s propulsion system for a cumulative duration of more than four hours.

“Finally home! The communication satellite has been positioned in its designated geostationary orbit (at an altitude of about 36,000 km) with final orbit-raising manoeuvre... Solar panels and reflectors have been successfully deployed,” the space agency said.

Launch vehicle Ariane 5 VA-246, carrying GSAT-11 and GEO-KOMPSAT-2A (South Korea), had lifted off from the Kourou launch base in French Guiana in the early hours of December 5.

Post-separation, ISRO’s Master Control Facility at Hassan, in Karnataka, took over the command and control of GSAT-11 and found its health parameters normal.

The 5,854-kg GSAT-11 will provide high data rate connectivity to users of the Indian mainland and islands through 32 user beams in Ku-band and eight hub beams in Ka-band, the space agency said.

“GSAT-11 will boost the broadband connectivity to rural and inaccessible gram panchayats in the country coming under the Bharat Net Project, which is a part of the Digital India programme,” ISRO Chairman Dr K Sivan had said at its launch.

Sivan said the Bharat Net Project aimed at enhancing public welfare schemes like e-banking, e-health and e-governance, among others.

The ISRO had hired the Ariane-5 rocket as its own geosynchronous satellite launch vehicle, GSLV MK III, can only haul satellites that weigh up to 4 tonnes.

<https://www.thehindubusinessline.com/news/science/gsat-11-in-designated-orbit-isro/article25710854.ece>

ISRO's Heaviest Communication Satellite GSAT-11 Raised to Its Final Orbit: ISRO *First Post, Press Trust of India, December 11, 2018*

The country's heaviest communication satellite GSAT-11 has been placed in its designated geostationary orbit at an altitude of about 36,000 km after four orbit-raising manoeuvres, the Indian Space Research Organisation (ISRO) said today.

The space agency said in a tweet that the orbit-raising manoeuvres were performed by firing the satellite's propulsion system for a cumulative duration of more than four hours.

"Finally home! The communication satellite has been positioned in its designated geostationary orbit (at an altitude of about 36,000 km) with final orbit-raising manoeuvre... Solar panels and reflectors have been successfully deployed," the space agency said.

Launch vehicle Ariane 5 VA-246, carrying GSAT-11 and GEO-KOMPSAT-2A (South Korea), had lifted off from the Kourou launch base in French Guiana in the early hours of 5 December.

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vehicle, GSLV MK III, can only haul satellites that weigh up to 4 tonnes.

<https://www.firstpost.com/tech/science/isros-heaviest-communication-satellite-gsat-11-raised-to-its-final-orbit-isro-5706851.html>

B. India

India-Australia Bilateral Dialogue on Disarmament, Non-Proliferation and Export Control

Ministry of External Affairs, November 01, 2018

The 5th round of India-Australia Bilateral Dialogue on Disarmament, Non-Proliferation and Export Control was held in Canberra on 01 November 2018. Indian delegation was led by Shri Indra Mani Pandey, Additional Secretary (Disarmament and International Security Affairs), Ministry of External Affairs, while Australian delegation was led by Mr Richard Sadleir, First Assistant Secretary, International Security Division, Department of Foreign Affairs and Trade. During the consultations, the two sides exchanged views on a range of contemporary export control, disarmament & non-proliferation issues of mutual interest.

Both sides reiterated the importance of holding the Dialogue regularly, which enables the two countries to enhance their mutual understanding of various issues of strategic significance to them. India and Australia enjoy very close friendly relations, which is described as 'Strategic Partnership'. The two sides agreed to hold the next round of Dialogue on a mutually convenient date in 2019 in New Delhi.

https://www.mea.gov.in/press-releases.htm?dtl/30581/IndiaAustralia_Bilateral_Dialogue_on_Disarmament_NonProliferation_and_Export_Control

Hindustan Petroleum may buy Iranian oil if India secures sanctions waiver *Tehran Times, November 02, 2018*

November 02, 2018

State-run Indian refiner Hindustan Petroleum said it may resume buying Iranian oil if New Delhi secures a waiver

from U.S. sanctions, its chairman M K Surana said. India is Iran's top oil client after China and hopes to get a waiver on U.S. sanctions before they take effect on Sunday. "Why not?" Surana told a press conference, when asked if his firm would look at resuming oil imports from Iran if India gets a waiver.

An Indian government source told Reuters that the United States could announce a waiver for New Delhi on Sunday. The source said India would soon sign an initial agreement with Iran to start paying for oil in Indian rupees through UCO bank. After the latest round of U.S. sanctions was announced, HPCL was the first Indian refiner to halt purchases from Iran after its insurer backed out.

HPCL's head of finance J. Ramaswamy told the same press conference that the company had already settled all payments for Iran oil purchases. In the previous round of sanctions India made payments in rupees to Iran's account with UCO bank. Iran used the funds to buy goods from India.

<https://www.tehrantimes.com/news/429171/Hindustan-Petroleum-may-buy-Iranian-oil-if-India-secures-sanctions>

Prime Minister felicitates crew of INS Arihant on completion of Nuclear Triad *Press Information Bureau, November 05, 2018*

Prime Minister Shri Narendra Modi received today the crew of Strategic Strike Nuclear Submarine (SSBN) INS Arihant. The submarine recently returned from its first deterrence patrol, completing the establishment of the country's survivable nuclear triad.

Stressing the significance of the successful deployment of INS Arihant for the completion of India's nuclear triad, the Prime Minister congratulated the crew and all involved in the achievement which puts India among a handful of countries having the capability to design, construct and operate SSBNs.

Noting that the indigenous development of the SSBN and its operationalisation attest to the country's technological prowess and the synergy and coordination among all concerned, the Prime Minister thanked them for their dedication and commitment in realising this pioneering accomplishment enhancing immensely the country's security.

The Prime Minister commended the courage and commitment of India's brave soldiers and the talent and perseverance of its scientists, whose untiring efforts transformed the scientific achievement of nuclear tests into establishment of an immensely complex and credible nuclear triad, and dispelled all doubts and questions about India's capability and resolve in this regard.

As a responsible nation, India has put in place a robust nuclear command and control structure, effective safety assurance architecture and strict political control, under its Nuclear Command Authority. It remains committed to the doctrine of Credible Minimum Deterrence and No First Use, as enshrined in the decision taken by the Cabinet Committee on Security in its meeting chaired by the then Prime Minister Shri Atal Bihari Vajpayee on January 04, 2003.

<http://pib.nic.in/PressReleaseDetail.aspx?PRID=1551894>

Media Briefing by Secretary (ER) during visit of Vice President to Malawi (November 05, 2018)

Ministry of External Affairs, November 06, 2018

Three MoUs will be signed shortly. First is the extradition treaty, second is the MoU on cooperation in the field of atomic energy for peaceful purposes between Global Center for Nuclear Energy in partnership of the Department of Atomic Energy and the Ministry of Natural Resources, Energy and Mining of Malawi. The third is the visa waiver agreement for diplomatic and official passports.

Question: Please tell us more about the cooperation on Nuclear Energy?

Secretary (ER), Shri T S Tirumurti: This we see as a very important agreement with Malawi. We already have an agreement with Malawi on minerals and this agreement is to reinforce this entire thing about nuclear energy partnership. Now why this is important is that Malawi has rare earth, it has the minerals but however they don't have regulatory and administrative structure to deal with this. So therefore the exploration and exploitation of some of these minerals has not progressed very far.

https://www.mea.gov.in/media-briefings.htm?dtl/30574/Media_Briefing_by_Secretary_ER_during_visit_of_Vice_President_to_Malawi_November_05_2018

Transcript of On-board Media Briefing by Vice President on 3-Nation visit to Botswana, Zimbabwe and Malawi (November 6, 2018)

Ministry of External Affairs, November 08, 2018

Minerals, especially rare earth minerals and their trading came in for specific discussion since all these three countries are rich in minerals including uranium, copper, nickel etc. We signed an MoU with Malawi on providing capacity building in nuclear energy regulatory framework, and its protection, safety etc. keeping in mind the rich deposits of uranium and rare earth minerals in Malawi. We also signed an MoU on geology, mining and minerals with Zimbabwe. Direct trading in raw diamonds was also discussed with Botswana and Zimbabwe.

https://www.mea.gov.in/media-briefings.htm?dtl/30578/Transcript_of_Onboard_Media_Briefing_by_Vice_President_on_3Nation_visit_to_Botswana_Zimbabwe_and_Malawi_November_6_2018

Pakistan voices concern over Indian nuclear submarine patrol

Dawn, November 08, 2018

Pakistan has taken notice of a first "deterrence patrol" of an Indian nuclear submarine and subsequent "self-congratulatory messages in India", Foreign Office Spokesperson Dr Mohammad Faisal

said during his weekly briefing in Islamabad.

The development marks the first actual deployment of ready-to-fire nuclear warheads in South Asia which is a matter of concern not only for the Indian Ocean littoral states but also for the international community at large," *Radio Pakistan* quoted Dr Faisal as saying.

The bellicose language employed by the top Indian leadership highlights the threats to strategic stability in South Asia and raises questions about responsible nuclear stewardship in India," the Foreign Office spokesperson said.

<https://www.dawn.com/news/1444377>

Transcript of Weekly Press Briefing by Official Spokesperson (November 09, 2018) Ministry of External Affairs, November 10, 2018

Question: Yesterday there was this briefing by Pakistan Foreign Ministry in which a question was asked on Arihant, the Pakistani Foreign Ministry said, it is the first actual deployment of nuclear warhead in South Asia, what is your reaction on that?

Official Spokesperson, Shri Raveesh Kumar: I think it is important to keep in mind what we have said on this issue and you must have seen the tweets by the Prime Minister, there was also a press statement release issued by the Prime Minister's Office on this matter and beyond that there is nothing further which we need to add.

https://www.mea.gov.in/media-briefings.htm?dtl/30583/Transcript_of_Weekly_Press_Briefing_by_Official_Spokesperson_November_09_2018

Nuclear power remains important option to meet challenges of energy demand, climate change: India

Indian Express, November 11, 2018

Important option to meet the challenges of increased energy demand, address concerns about climate change and ensure energy supply security.

Addressing a UN General Assembly session on 'Report of the International Atomic Energy Agency' Friday, First Secretary in India's Permanent Mission to the UN Sandeep Kumar Bayyapu said India attaches importance to the IAEA's work in different fields of nuclear science and supports its programme on nuclear fusion.

"Nuclear power remains an important option to meet the challenges of increased energy demand, address concerns about climate change, redress volatile fossil fuel prices and ensure security of the energy supply," he said.

<https://indianexpress.com/article/india/nuclear-power-remains-important-option-to-meet-challenges-of-energy-demand-climate-change-india-5441119/>

Indian obstinacy on Kashmir issue can trigger nuclear war: AJK

president By Mamir, *The Express Tribune*, November 13, 2018

President Azad Jammu and Kashmir (AJK) Sardar Masood Khan has said there is no military solution to the Kashmir issue and India will have to initiate dialogue process with Pakistan and people of the valley to find a way to peacefully resolve the conflict.

"The United Nations and world powers need to intervene in setting a stage for the resolution of Kashmir before the two nuclear-armed states indulge in a full-fledged war which will be a monumental disaster that will engulf not only the region but other parts of the world," President Khan emphasised.

<https://tribune.com.pk/story/1846551/1-indian-obstinacy-kashmir-issue-can-trigger-nuclear-war-ajk-president/>

C. US & Europe

Secretary of State Michael R. Pompeo With Mark Reardon of the Mark Reardon Show *U.S. Department of State*, November 1, 2018

QUESTION: You've been racking up some frequent flier miles to North Korea. I think you've been there four times already. There

hasn't really been a breakthrough. What's the status of those negotiations, or what might happen? There's still talk of a summit next year, another summit. What can you tell us about that?

SECRETARY POMPEO: Yes, sir. Well, we've made some progress, right? We stopped their missile testing. There is no longer nuclear tests being conducted. Those are really dangerous activities, and the North Koreans have stopped them. We've had - they have closed down a couple of sites. We have been told that we will get to inspect those sites shortly. Chairman Kim told me that himself. I'm hopeful that that will take place before too long as well.

And then we are continuing our negotiations not only, as Americans have seen, on the return of the remains of our fallen there in North Korea - a very important thing that we shouldn't underestimate either, at least the beginning of that. It is very important to those families. But we're working diligently to complete what Chairman Kim and President Trump agreed to back in June, which is the complete and verifiable denuclearization of North Korea. No one ever thought it would be easy, straightforward, or quick, and so we're working to put the next steps in place so we can begin to take real, measurable, impactful steps, reducing North Korea's nuclear threat. And when we're done, when we get to the end, President Trump wants there to be a brighter future for the North Korean people. We're determined to get to that point.

QUESTION: Obviously this is a trust but verify situation, but why should we believe that the North truly wants to give up those nuclear weapons?

SECRETARY POMPEO: Well, he said that he will. We'll have to verify it. We have to see it. Your point is well taken. No one should for a moment believe that President Trump or me or this administration is going to take anyone's word for this. We'll need to see it. We'll need to know it. And once we've had the capacity, the opportunity to verify that this

has taken place, then and only then will the economic sanctions that have been put on North Korea be removed.

<https://www.state.gov/secretary/remarks/2018/11/287071.htm>

Interview With Tony Katz of Tony Katz Today *U.S. Department of State, November 01, 2018*

QUESTION: Let's talk about - move it to where I would believe - and you'll correct me if I'm wrong, sir - our two largest potential, if not actual, geopolitical foes: Russia and China. And part of what I believe we're seeing is a little bit of a return to more of a Henry Kissinger type theory that you don't get anywhere by not having a relationship with people; try to have relationships with people, specifically these two nations, so the other nation is more inclined to have a relationship with you.

In Russia, you still have a question about what's happening in the Ukraine. You have conversations about how they're trying to move into some of those Estonian nations. With China, it's the Spratly Islands, and trying to maintain control of the South China Sea, the Yellow Sea, and therefore build military dominance China is looking for. Who's the bigger threat? Where should Americans be paying more of their attention, I should say?

SECRETARY POMPEO: Tony, it's a really good question. I try to avoid ranking and prioritizing but rather just talking about the differences and the threats between those two countries. Russia is a much smaller economy, but still maintains an enormously large nuclear arsenal, which threatens not only the United States but the world. President Trump has been really tough. We have done things to put pressure on Vladimir Putin and Russia in a way that no previous administration has.

On China, conversely, this is a long-term challenge. This challenge is across every front. China's continued efforts in the South China Sea. Just this week, ten Chinese were indicted for stealing intellectual property, aviation-related intellectual property. These

are not the types of actions that countries that truly want to be part of the global community engage in, and we're pushing back against China across every one of those fronts to try and achieve that on behalf of the American people.

<https://www.state.gov/secretary/remarks/2018/11/287057.htm>

Secretary of State Michael R. Pompeo With Lars Larson of the Lars Larson Show *U.S. Department of State, November 01, 2018*

QUESTION: No doubt. Mr. Secretary, what would the mullahs have to do to satisfy both you and President Trump that they've decided to rejoin the community of nations and not be this terror sponsor, and also the nuclear ambitions they still seem to have? What would they have to say or do?

SECRETARY POMPEO: Lars, we've laid out 12 items. And 12 may seem like a lot to some, but frankly these are simple asks, asks like cease firing missile into the Middle East; stop arming Hizballah, which threatens Israel; cease engaging in terror activities in Europe. I don't know if you saw, just yesterday or the day before Denmark arrested an Iranian official who was plotting an assassination attempt in Europe. Stop those kinds of things. And on the nuclear file, we've asked them to do what, frankly, was the United States official position until the previous administration caved, which is cease their nuclear activity. We're happy to provide them with the energy that they need, but cease their nuclear activity in a way that doesn't create proliferation risk throughout the world.

QUESTION: Do you have any doubt that they are still trying to pursue nuclear weapons at this point?

SECRETARY POMPEO: So what I can say is this: The Islamic Republic of Iran has refused to do the kinds of things which are the hallmark of countries that truly want to have a peaceful nuclear program and who don't have the intention or at

least want to have the capacity to use their nuclear tools in a way that harms the world.

QUESTION: Mr. Secretary, let's move to North Korea. You did a lot of the preparatory work for President Trump. You were there on the frontlines. Where do we stand in that? I mean, it seemed as though we got some fairly substantial movement, more movement than I think anybody's seen in 25 years, despite all the accommodations that have been made for that country over the last 25 years. President Trump drew a hardline and he pushed back when North Korea pushed back, and I think North Korea got the message. But where do we stand there today?

SECRETARY POMPEO: We have made real progress on North Korea. There still remains an awful lot to do; I'll concede that. But no one thought this would either be easy, straightforward without some complexity, nor did anybody think this would be quick. Remember, we're only a few months past the June summit. This has been a problem that's gone on for decades.

We have convinced North Korea not to test fire their missiles. They haven't conducted a nuclear test. They returned a number of remains of American fallen soldiers. I'm hopeful there will be more to follow. And they have dismantled a couple of facilities, which we are hopeful we will get a chance to actually conduct verification on before too long as well. There still remains an awful lot of their nuclear program that needs to be dismantled and verified. We're working to bring those steps forward. But make no mistake, President Trump's been clear. The economic sanctions will not be lifted until such time as we have had the capacity to verify that they have eliminated their nuclear program.

QUESTION: I mean, there have been times that the leader of North Korea, the dictator, has been very vocal, very belligerent, very much on the world stage. Lately, he seems to have been quiet. Am I misreading that he's being quiet because he is finally getting with the program, or is he being quiet because he's got something else up his sleeve?

SECRETARY POMPEO: Goodness, it's all about verification. I was there a few weeks back. I met with Chairman Kim. He reiterated his commitment to denuclearize. We made a little progress on what the next steps ought to look like. I'm hopeful we'll have a summit before too long, where we'll make another substantial step along the way. Only time will tell. What I want your listeners to know is, unlike previous administrations that have begun negotiations, grown weary of them, and then have provided North Korea with a whole bunch of money, this administration has no intention of allowing that to happen

<https://www.state.gov/secretary/remarks/2018/11/287070.htm>

Briefing on Iran Sanctions

U.S. Department of State, November 02, 2018

President Trump withdrew from the fatally flawed nuclear deal and implemented a new campaign aimed at fundamentally altering the behavior of the Islamic Republic of Iran. This part of the campaign about which we're speaking today is simple. It is aimed at depriving the regime of the revenues that it uses to spread death and destruction around the world. Our ultimate aim is to compel Iran to permanently abandon its well-documented outlaw activities and behave as a normal country.

On November 5th, the United States will reimpose sanctions that were lifted as part of the nuclear deal on Iran's energy, ship building, shipping, and banking sectors. These sanctions hit at the core areas of Iran's economy. They are necessary to spur changes we seek on the part of the regime.

In order to maximize the effect of the President's pressure campaign, we have worked closely with other countries to cut off Iranian oil exports as much as possible. We expect to issue some temporary allotments to eight jurisdictions, but only because they have demonstrated significant reductions in their crude oil and cooperation on many other fronts and

have made important moves towards getting to zero crude oil importation. These negotiations are still ongoing. Two of the jurisdictions will completely end imports as part of their agreements. The other six will import at greatly reduced levels.

The Obama administration issued SREs to 20 countries multiple times between 2012 and 2015. We will have issued, if our negotiations are completed, eight and have made it clear that they are temporary. Not only did we decide to grant many fewer exemptions, but we demanded much more serious concessions from these jurisdictions before agreeing to allow them to temporarily continue to import Iranian crude oil. These concessions are critical to ensure that we increase our maximum pressure campaign and accelerate towards zero.

Our laser-focused approach is succeeding in keeping prices stable with a benchmark Brent price right about where it was in May of 2018 when we withdrew from the JCPOA. Not only is this good for American consumers and the world economy, it also ensures that Iran is not able to increase its revenue from oil as its exports plummet. We will, we expect, have reduced Iranian crude oil exports by more than 1 million barrels even before these sanctions go into effect. This massive reduction since May of last year is three to five times more than what many analysts were projecting when President Trump announced our withdrawal from the deal back in May. We exceeded our expectations for one simple reason: Maximum pressure means maximum pressure.

<https://www.state.gov/secretary/remarks/2018/11/287090.htm>

Interview With John Dickerson of CBS Face the Nation *U.S. Department of State, November 04, 2018*

QUESTION: What if they restart their nuclear program in Iran?

SECRETARY POMPEO: We're confident that the Iranians will not make that decision.

QUESTION: Let me ask you a question about North Korea. You have talks this

week. North Korea is saying they might restart their nuclear program if the U.S. does not start lifting sanctions. Is it still the U.S. position that North Korea will not see any economic sanctions lift until there is complete denuclearization?

SECRETARY POMPEO: So, John, I will. I'll be in New York City at the end of this week meeting with my counterpart, Kim Yong-chol. I expect we'll make some real progress, including an effort to make sure that the summit between our two leaders can take place, where we can make substantial steps towards denuclearization. John, we have to remember and the American people need to remember the North Koreans haven't launched a missile, haven't conducted a nuclear test. They allowed the return of American remains. We've had success in just the handful of months since this past June, and we continue to make good progress. I'm confident that we'll advance the ball again this week when I'm in New York City.

QUESTION: Mr. Secretary, you said that North Korea will not see any economic sanctions lifted until it has demonstrated complete denuclearization. Is that still your position?

SECRETARY POMPEO: It is. Not only complete denuclearization, but our capacity to verify that that has taken place —

<https://www.state.gov/secretary/remarks/2018/11/287111.htm>

Interview With Chris Wallace of Fox News Sunday *U.S. Department of State, November 04, 2018*

QUESTION: You're talking about how effective these reimposition of sanctions are. But as you well know, there are some people who are criticizing the sanctions you're reimposing and saying they're not tough enough. And let me put this up on the screen. Republican senators — Republican Senators Cruz, Cotton, and Rubio — plan to introduce legislation to cut off Iranian banks from the global financial network known as SWIFT. And a group

called United Against Nuclear Iran tweeted this about your sanctions: “Whatever happened to maximum pressure? They caved. Big time.”

Mr. Secretary, your response?

SECRETARY POMPEO: Chris, the President’s policy of maximum pressure will be fully in place come tomorrow. Watch the Iranians. That’s who really understands the importance and the impact of the efforts that we’re undertaking. The rial has fallen to 140,000 rial to the dollar, has had an enormous impact already, and we are working diligently to make sure we support the Iranian people and that we direct our activity towards ensuring that the Islamic Republic of Iran’s malign behavior is changed. That’s the goal, that’s the mission, and that’s what we will achieve on behalf of the President.

QUESTION: Meanwhile, let’s turn to another one of your hotspots you’re dealing with. North Korea is now threatening to resume its nuclear buildup because they say that the U.S. has not matched them in offering concessions, in this case lifting economic sanctions. They say that they’ve made concession and the Trump administration has not followed suit.

SECRETARY POMPEO: Chris, I’ll be meeting this week in New York City with my counterpart Kim Yong-chol. We’ll have a good opportunity to continue the denuclearization discussions that were set out just a few months back. It seems like a long time ago in news world, but it was just this past June when President Trump and Chairman Kim met and set us on the path that we’re on today. We haven’t had any missile tests. There have been no nuclear tests. We’ve had the returns of American remains. These are all good steps. We’re continuing to negotiate with the North Koreans to achieve what President Trump set out: the full denuclearization verified by the United States of the Korean Peninsula, and then a brighter future for the North Korean people.

QUESTION: But to follow up specifically, what’s your reaction to the foreign ministry of North Korea saying – threatening that

they are going to resume nuclear activity? What’s, one, your reaction to that? And two, is there any possibility that to get them to stop that that the U.S. will change its policy and start offering concessions on a kind of tit-for-tat basis, a phased effort by both countries?

SECRETARY POMPEO: Chris, I’m not worried about rhetoric. We’ve seen this as we go through negotiations. Stray voltage happens to be all around us, and we’re very focused. We know with whom we’re negotiating. We know what their positions are. And President Trump has made his position very clear: no economic relief until we have achieved our ultimate objective.

<https://www.state.gov/secretary/remarks/2018/11/287110.htm>

Press Availability With Secretary of Treasury Steven T. Mnuchin

U.S. Department of State, November 05, 2018

In May of this year, after President Trump withdrew from the nuclear deal, the Trump administration announced a new strategy to fundamentally alter the behavior of the Islamic Republic of Iran’s leadership. At the center of this effort – and there are multiple lines of effort – but at the center of it is an unprecedented campaign of economic pressure. Our objective is to starve the Iranian regime of the revenue it uses to fund violent and destabilizing activities throughout the Middle East, and indeed around the world.

We hope a new agreement with Iran is possible, but until Iran makes changes in the 12 ways that I listed in May, we will be relentless in exerting pressure on the regime. As a reflection of that resolve, today we’re reimposing all sanctions that were previously lifted under the nuclear deal. This includes sanctions on energy, banking, shipping, and shipbuilding industries.

Since the Trump administration came into office, we’ve done 19 rounds of sanctions targeting 168 Iranian entities. 100 percent of the revenue Iran receives from the sale

of oil will be held in foreign accounts. Iran can only use this money for humanitarian trade or bilateral – in bilateral nonsanctioned goods.

Speaking of Iran's nuclear program, we have decided to grant narrow and temporary waivers that permit the continuation of three nonproliferation projects currently underway. Allowing these activities to continue for the time being will improve ongoing oversight of Iran's civil nuclear program and make these facilities less susceptible to illicit and illegal nuclear uses. Rest assured Iran will never come close to getting a nuclear weapon on President Trump's watch.

Over the last five months, Treasury has implemented some of the most impactful sanctions ever seen. Combined with the previous actions, more than 900 Iran-related targets have been sanctioned under this administration in less than two years, marking the highest-ever level of U.S. economic pressure on Iran. We are making it abundantly clear to the Iranian regime that they will face mounting financial isolation until they fundamentally change their destabilizing behavior.

They must stop ballistic missiles and abandon their nuclear ambitions if they seek a path to sanctions relief. We are watching the Iranian regime with laser focus. If they try to evade our sanctions, we will take action to disrupt their activity time and time again.

Three waivers have been issued for the civilian nuclear energy project. Bushehr is one of the three. What we've authorized is very narrow, very limited, very time limited as well, but important nonetheless that these nonproliferation projects are not things that are taking place without some ability to see what's going on,

<https://www.state.gov/secretary/remarks/2018/11/287132.htm>

Constraining Iran's Nuclear Program

U.S. Department of State, November 05, 2018

Iran cannot be trusted to have vital constraints on its nuclear program lifted. The

United States is committed to ensuring that Iran never comes close to possessing a nuclear weapon.

Starting today, all nuclear cooperation with Iran, except for the limited activities for which waivers are being granted, will be sanctionable. This includes:

Re-designating the Atomic Energy Organization of Iran and 23 of its subsidiaries.

Placing new limits on Iran's nuclear program significantly beyond current restrictions. Iran will not be able to pursue any new nuclear facilities with foreign assistance, including power reactors or hot cell facilities currently allowed under the JCPOA.

Involvement in the expansion of Iran's nuclear capabilities beyond current limits will also be subject to sanctions.

We are not issuing waivers for any new civil nuclear projects. We are only permitting the continuation for a temporary period of certain ongoing projects that impede Iran's ability to reconstitute its weapons program and that lock in the nuclear status quo until we can secure a stronger deal that fully and firmly addresses all of our concerns.

We are specifically permitting nonproliferation projects at Arak, Bushehr, and Fordow to continue under the strictest scrutiny to ensure transparency and maintain constraints on Iran.

Permitting these specific activities to continue is an interim measure that preserves oversight of Iran's civil nuclear program. It enables the United States and our partners to reduce the proliferation risks at Arak, maintain safe oversight of operations at Bushehr, limit Iran's stockpile of enriched uranium, and prevent the regime from reconstituting sites such as Fordow for proliferation-sensitive purposes. This oversight enhances our ability to constrain Iran's program and keep pressure on the regime while we pursue a new, stronger deal.

Each of the waivers we are granting is conditional on the cooperation of the various stakeholders. If we determine at any time that the work conducted pursuant to these waivers is anything other than what we have authorized or that Iran has reneged on its commitments, we reserve the right to modify or revoke the waivers immediately.

<https://www.state.gov/r/pa/prs/ps/2018/11/287133.htm>

Secretary Pompeo to Travel to Paris

U.S. Department of State, November 07, 2018

U.S. Secretary of State Michael R. Pompeo will travel to Paris, France November 10-11.

On November 10, he will arrive in Paris, where he will join President Trump in commemorating the 100th anniversary of the end of the first World War, including visits to memorial sites and cemeteries to honor our shared sacrifice and reaffirm the Transatlantic Alliance. On November 11, Secretary Pompeo will attend the formal WWI commemoration ceremony at the Arc de Triomphe and a working lunch with international partners hosted by Foreign Minister Le Drian to discuss cooperation on global priorities, including ways to counter Iranian malign behavior and to advance the denuclearization of the Korean Peninsula. The Secretary will also participate in the President's meeting with French President Emmanuel Macron.

<https://www.state.gov/r/pa/prs/ps/2018/11/287200.htm>

Geopolitics should be factor in new nuclear investment decision: Czech PM

Reuters, November 14, 2018

Czech Prime Minister Andrej Babis said on Wednesday geopolitics should be a factor when the NATO and EU member country decides future nuclear power investments as the country mulls whether to build new reactors. Babis' comments came after a meeting with U.S. Energy Secretary Rick Perry who urged nations in central Europe to have a diverse set of energy supplies and suppliers.

"We have to keep in mind our geopolitical

orientation while investing into nuclear power," Babis said. The world's main six nuclear power builders from countries including Russia, China and the United States are all vying for the expansion deal, long under discussion in the Czech Republic.

<https://www.reuters.com/article/us-czech-nuclear/geopolitics-should-be-factor-in-new-nuclear-investment-decision-czech-pm-idUSKCN1NJ22E>

D. Russia & Central Asia

Iran sanctions deal powerful blow to NPT: Moscow

Tehran Times, November 03, 2018

The United States is dealing another powerful blow to the Nuclear Nonproliferation Treaty (NPT) by unveiling new sanctions against Iran, the Russian Foreign Ministry has said. "A new round of anti-Iran sanctions announced by Washington is aimed at undermining the consistent efforts by the parties to the Joint Comprehensive Plan of Action (JCPOA) to preserve that deal," the ministry said in a statement, TASS reported on Saturday.

"Washington's policy aimed at scrapping international legal nuclear nonproliferation and arms control tools triggers profound disappointment and growing concern," it added.

<https://www.tehrantimes.com/news/429212/Iran-sanctions-deal-powerful-blow-to-NPT-Moscow>

Russia says U.S. plan of limited nuclear war may cause global catastrophe

New China | November 09, 2018

MOSCOW, Nov. 8 (Xinhua) — The U.S. strategy of a limited use of nuclear weapons could cause a global catastrophe and does not guarantee victory in a possible war, the Russian Foreign Ministry said Thursday.

"Voices sound louder and louder in the United States, calling for enhancing the role of nuclear weapons and expanding

the capabilities of the U.S. nuclear arsenal,” Maria Zakharova, spokesperson of Russian Foreign Ministry, said at a news briefing.

“The need for such a policy is invariably presented through the prism of a certain mythical Russian threat,” she added.

Zakharova referred to an article by former U.S. Deputy Assistant Defense Secretary Elbridge Colby in Foreign Affairs magazine, in which he urged the United States to increase its nuclear potential and prepare for limited, effective nuclear operations.

Washington has already announced plans to build nuclear warheads and their delivery systems, with some experts claiming the United States and its allies would be able to win a limited nuclear war, Zakharova said.

Russia considers such a policy irresponsible and extremely dangerous as Moscow firmly believes that there can be no winners in a nuclear war, she said.

To think about a limited nuclear war “is tantamount to playing with the devil,” Zakharova said.

http://www.xinhuanet.com/english/2018-11/09/c_137593003.htm

NATO chief calls on Russia to stick with INF Treaty *Martin Banks, Defence News, November 12, 2018*

NATO Secretary General Jens Stoltenberg has warned that the deployment of new Russian SSC-8 missiles puts the “historic” Intermediate-Range Nuclear Forces (INF) treaty in jeopardy. In a speech, he called on Russia to ensure “full compliance” with the treaty but at the same time repeated NATO’s pledge not to deploy more nuclear weapons to Europe in case the pact between Washington and Moscow collapses.

Speaking in Berlin, Stoltenberg today put the ball in Moscow’s court. “The deployment of new Russian missiles is putting this historic treaty in jeopardy,” he said. “For years, Russia has developed, produced, tested and fielded a new missile system, the SSC-8. These missiles are mobile. They are hard to detect. They can be nuclear-armed. They reduce warning time to minutes. They lower the

threshold for nuclear conflict. And they can reach European cities like Berlin,” he said.

<https://www.defensenews.com/global/europe/2018/11/12/nato-chief-calls-on-russia-to-stick-with-inf-treaty/>

E. China

Foreign Ministry Spokesperson Lu Kang’s Regular Press Conference *on Ministry of Foreign Affairs, the People’s Republic of China, November 02, 2018*

We are glad to see that in recent two weeks, interactions between the DPRK and the ROK have led to more positive outcomes which have contributed to improving their bilateral relations and advancing the denuclearization process of the Korean Peninsula and the political settlement of the Korean Peninsula issue.

https://www.fmprc.gov.cn/mfa_eng/xwfw_665399/s2510_665401/2511_665403/t1609798.shtml

China says Its Lawful Trade with Iran should be Respected *The Jerusalem Post, NOVEMBER 05, 2018*

China said on Monday its lawful trade cooperation with Iran should be respected and expressed regret that the United States re-imposed sanctions on the Middle Eastern country.

Speaking at a daily news briefing in Beijing, foreign ministry spokeswoman Hua Chunying did not directly comment on whether China had been granted exemption from the Iran sanctions by the United States.

The restoration of U.S. sanctions on Monday targeting Iran’s oil sales and banking sector is part of an effort by U.S. President Donald Trump to force Iran to halt its nuclear and ballistic missile programs outright, as well as its support for proxy forces in conflicts across the Middle East.

<https://www.jpost.com/Breaking-News/China-says-its-lawful-trade-with-Iran-should-be-respected-571094>

Foreign Ministry Spokesperson Hua Chunying's Regular Press

Conference *Ministry of Foreign Affairs, the People's Republic of China, November 05, 2018*

Q: On November 5, the United States restored its unilateral sanctions that cover Iran's energy and financial sectors. They are the second batch of sanctions the US has re-imposed since it withdrew from the Joint Comprehensive Plan of Action (JCPOA). Do you have any comment?

A: The Chinese side regrets the US decision and we also noted the widespread opposition to the unilateral sanctions and long-arm jurisdiction among the international community. The Joint Comprehensive Plan of Action (JCPOA) is a multilateral agreement ratified by the UN Security Council and should be implemented in a comprehensive and effective way. This is conducive to upholding the international nuclear non-proliferation regime as well as peace and stability in the Middle East and serves the common interests of the international community.

Despite the great changes that have taken place in the situation over the past half year, the existing participants of the JCPOA have remained committed to implementing the deal and maintaining normal economic cooperation and trade with Iran in a responsible manner, which is widely supported by the international community. We noted that the Iranian side by far has been strictly fulfilling its nuclear-related obligations under the JCPOA, and the International Atomic Energy Agency (IAEA) has confirmed that for 12 times in a row. The Chinese side commends the endeavors made by the Iranian side.

Under the current circumstances, we hope that relevant parties will bear in mind the larger and long-term interests, fulfill due responsibilities and obligations and stand on the right side of history. With a fair, objective and responsible attitude, the Chinese side will continue to make unremitting efforts to uphold the JCPOA and firmly safeguard its own legal and legitimate rights and interests.

Q: Has the US government granted China an exemption from sanctions on the oil import from Iran?

A: We have stated China's position on many occasions. China is always opposed to unilateral sanctions and long-arm jurisdiction. The normal cooperation between China and Iran within the framework of international law is legal and legitimate, which should be respected and safeguarded.

Q: According to reports, given that the US recently announced it would unilaterally pull out of the Intermediate-Range Nuclear Forces Treaty (INF Treaty), some believe the INF Treaty should be changed into a multilateral deal which includes China and NATO members. What's your reaction to that?

A: The Chinese side already stated its position on this issue for many times. The Intermediate-Range Nuclear Forces Treaty (INF Treaty) is a bilateral agreement signed by the United States and the former Soviet Union. It has played an important role in easing the international relations, moving forward the nuclear disarmament process and safeguarding global strategic balance and stability. It is still highly relevant today. Unilaterally withdrawing from the treaty will have negative effects on many aspects. The Chinese side opposes the unilateral withdrawal of the US side as well as the multilateralization of the INF Treaty.

China follows a defense policy that is defensive in nature. We have been highly restrained in building up our military and have no intention to and will never pose threats to any other country.

https://www.fmprc.gov.cn/mfa_eng/xwfw_665399/s2510_665401/2511_665403/t1610459.shtml

Foreign Ministry Spokesperson Hua Chunying's Regular Press Conference *Ministry of Foreign Affairs, the People's Republic of China, November 06, 2018*

China always supports the DPRK-US dialogue. We hope that the DPRK and the

US, through dialogues at all levels, including the leaders' summit, can enhance mutual trust, implement the consensus that has been reached, address each other's legitimate concerns and advance the denuclearization of the Korean Peninsula and the political settlement process of the Korean Peninsula issue.

https://www.fmprc.gov.cn/mfa_eng/xwfw_665399/s2510_665401/2511_665403/t1610830.shtml

U.S.-China Diplomatic and Security Dialogue

U.S. Department of State, November 09, 2018

Strategic Security and Mil-Mil Relations: The United States and China recognized that the U.S.-China military-to-military relationship could be a stabilizing factor for the overall bilateral relationship, and committed to a productive mil-mil relationship. The two sides reaffirmed the importance of improving communication mechanisms to reduce the risk of misunderstanding between the two nations' militaries. Both countries seek to maintain communication on implementing existing Confidence Building Measures and developing a military-to-military Crisis Deconfliction and Communication Framework. The two sides decided to deepen engagement to advance their shared commitment to the nonproliferation of weapons of mass destruction and their means of delivery. The United States and China committed to convene consultations on cyber and space security, and deepen communication on nuclear and strategic issues.

North Korea: Both sides emphasized their continued commitment to achieving the final, fully verified denuclearization of the Korean Peninsula, as committed to by President Trump and Chairman Kim. The United States and China committed to continue coordination and to fully, strictly implement the relevant UN Security Council resolutions.

Regional Security: Both sides acknowledged their mutual interest in Afghanistan's stability, committed to work together on a political settlement to end the

conflict, and supported an Afghan-led peace process with direct negotiations between the Afghan government and the Taliban. The United States raised the threat posed to regional stability by Iran's nuclear and missile programs, support for terrorist organizations, and other malign behavior. Both sides intend to continue consultations on topics related to Iran.

<https://www.state.gov/r/pa/prs/ps/2018/11/287282.htm>

Foreign Ministry Spokesperson Hua Chunying's Regular Press Conference

Ministry of Foreign Affairs, the People's Republic of China, November 14, 2018

Q: According to reports, on November 13, the Director General of the IAEA has confirmed again in his latest report that Iran has been abiding by the terms of the JCPOA. What is your comment?

A: China has noted the latest report submitted by the Director General of the IAEA. This is for the 13th time in a row that the IAEA Director General has confirmed Iran's compliance with its nuclear-related obligations under the JCPOA since it took effect in 2016. The report mentioned that the IAEA has been supervising and verifying Iran's nuclear programs in accordance with its mandate in an objective and unbiased way. China welcomes that and commends the efforts made by the Iranian side and the IAEA. As has been stressed many times by the Chinese side, under the current circumstances, we hope that all relevant parties could bear in mind the whole and long-term picture, fulfill respective duties and obligations, and continue to uphold and implement the JCPOA, since this serves the common interests of the international community.

The US-DPRK summit is an important step in the direction of politically resolving the Korean Peninsula nuclear issue. We hope that the US and the DPRK can implement the outcomes of the summit, enhance mutual trust, continue with their efforts to address each other's concerns through

dialogue and consultation and move forward the political settlement process of the Korean Peninsula issue.

https://www.fmprc.gov.cn/mfa_eng/xwfw_665399/s2510_665401/2511_665403/t1613116.shtml

China's 'artificial sun' reaches 100 million degrees Celsius marking milestone for nuclear fusion *By Jack Kilbride and Bang Xiao, ABC News Online, November 15, 2018*

The team of scientists from China's Institute of Plasma Physics announced this week that plasma in their Experimental Advanced Superconducting Tokamak (EAST) – dubbed the “artificial sun” – reached a whopping 100 million degrees Celsius, temperature required to maintain a fusion reaction that produces more power than it takes to run.

To put that in perspective, the temperature at the core of the sun is said to be about 15 million degrees Celsius, making the plasma in China's “artificial sun” more than six times hotter than the original.

The news comes after China shocked the science community last month with plans to launch an “artificial moon” bright enough to replace city streetlights by 2020.

<https://www.abc.net.au/news/2018-11-15/china-attempts-to-create-an-artificial-sun/10495536>

List of Chinese financial firms facing possible sanctions over North Korea's nuclear programme demanded by US congressional panel *South China Morning Post, November 15, 2018*

The US-China Economic and Security Review Commission (USCC) recommended in its latest report that Congress should “direct the US Department of the Treasury to provide a report within 180 days on the current state of Chinese enforcement of sanctions on North Korea”.

<https://www.scmp.com/news/china/diplomacy/article/2173265/us-congressional-panel-wants-list-chinese-financial-firms>

Cheng Kaijia, China's 'nuclear commander,' dies at 101 *Global Times, November 18, 2018*

One of China's foremost pathfinders of nuclear weapons research, Cheng Kaijia, who participated in more than 30 nuclear tests, died in Beijing on Saturday at the age of 101, the Chinese Academy of Sciences announced.

Dubbed “China's nuclear commander,” Cheng oversaw tests of China's first atomic bomb in 1964, its first hydrogen bomb in 1967 and the first underground nuclear test in 1969.

Cheng established China's nuclear explosion theory in the 1960s, which became a significant basis for the design, safe demonstration, test and analysis of China's nuclear tests, The Beijing News reported Saturday.

Cheng created research on radiation hardening technology in the 1980s, which helped China research radiation in the environment after a nuclear explosion.

<http://www.globaltimes.cn/content/1127926.shtml>

China to resume imports of oil from Iran soon *Iran Daily, November 23, 2018*

China is said to be preparing to resume imports of crude oil from Iran in what analysts say could allay fears that US sanctions on the major producer would constrain global supplies.

Bloomberg quoted informed people as saying that China would start loading as much as 360,000 barrels per day of Iranian crude oil again before the end of November after a hiatus of a month caused by the newly imposed US sanctions against the Islamic Republic.

<http://www.iran-daily.com/News/234718.html>

F. East & South East Asia

Treading carefully, Japan's nuclear industry makes a comeback

By Reuters, The Express Tribune, November 2, 2018

Nearly eight years after an earthquake and tsunami triggered nuclear meltdowns at Tokyo Electric Power's Fukushima Daiichi plant, the battered industry is making a quiet and somewhat unexpected return in Japan. Workers prepared to reopen Shikoku Electric Power's Ikata nuclear plant, nestled next to Japan's inland sea at the base of the verdant Sadamisaki peninsula.

Ikata is a poster child for that recovery. In September, a court reversed a decision that had idled Shikoku Electric's sole nuclear reactor for about a year, paving the way for the operator to re-open the facility.

Regional utilities like Shikoku Electric have aggressively fought a string of lawsuits since 2011, hiring veteran lawyers to beef up their legal teams. At the same time, they wooed towns where nuclear plants are based, visiting with residents door to door while the government kept up a stream of generous subsidies for local projects.

Thanks in large part to this strategy, Japan is on track to have nine reactors running in the near future.

<https://tribune.com.pk/story/1839109/3-treading-carefully-japans-nuclear-industry-makes-comeback/>

North Korea issues nuclear threat ahead of high-level talks with US

By Joshua Berlinger, CNN, November 05, 2018

As the United States and North Korea prepare for another round of high-level talks this week, Pyongyang's increasingly heated rhetoric has analysts worried that the stalemate between the two sides could lead to a breakdown in negotiations.

An official with North Korea's Foreign Ministry issued a veiled threat Friday, warning that Pyongyang could restart

"building up nuclear forces" if the US does not ease the crippling sanctions levied on North Korea.

The comments come ahead of Secretary of State Mike Pompeo's meeting with his North Korean counterpart, Kim Yong Chol, in New York this week.

The piece, carried in North Korea's state-run news agency KCNA, accused Washington of believing the "foolish idea that the DPRK came out to the negotiating table, yielding to the sanctions" and failing to understand that "the improvement of relations and sanctions are incompatible."

<https://edition.cnn.com/2018/11/05/asia/north-korea-nuclear-talks-intl/index.html>

How the Army Could Destroy North Korea's Nuclear Weapons

Michael Peck, The National Interest, November 09, 2018

Army Techniques Publication No. 3-90.40, "Combined Arms Countering Weapons of Mass Destruction," explains U.S. doctrine for neutralizing WMDs. The guidelines focus on the nuts and bolts of counter-WMD combined-arms operations by brigade combat teams, or BCTs.

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Army Techniques Publication No. 3-90.40 is a curious mixture of conventional combat concepts as applied to hunting WMDs. Defeating the enemy—the ultimate goal of ground combat operations—becomes defeating "a threat at a particular site and to set the conditions that allow technical forces to defeat a WMD network."

<https://nationalinterest.org/blog/buzz/how-army-could-destroy-north-koreas-nuclear-weapons-35627>

North Korea Is Operating at Least 13 Secret Missile Sites, Satellite Images Show

By MATTHEW LEE /
AP Time, November 12, 2018

U.S. analysts said Monday they have located more than half of an estimated 20 secret North Korean missile development sites, highlighting the challenge the Trump administration faces in ensuring that North Korea complies with any eventual agreement to end its nuclear and missile programs.

The findings, which were released amid signs the administration's negotiations with the North have stalled, draw on commercial satellite imagery and identify 13 secret facilities used to produce missiles and related technology. They suggest that Pyongyang is continuing its missile work, even though it has halted test launches in what President Donald Trump and his administration have claimed as a success since his historic June meeting with North Korean leader Kim Jong Un in Singapore.

<http://time.com/5452134/north-korea-secret-missile-sites/>

IAEA Team Completes Fourth Review of Japan's Plans to Decommission Fukushima Daiichi

International Atomic Energy Agency, November 13, 2018

An International Atomic Energy Agency (IAEA) team of experts today completed the fourth review mission of Japan's efforts towards the decommissioning of the Fukushima Daiichi Nuclear Power Station (NPS). The *International Peer Review of Japan's Mid-and-Long-Term Roadmap Towards the Decommissioning of TEPCO's Fukushima Daiichi Nuclear Power Station* took place from 5 to 13 November 2018. The IAEA team said Japan has made significant progress since the accident in March 2011, advancing from an emergency situation towards a stable situation now. The team said this achievement will now allow Japan to focus more resources on detailed planning and implementation of decommissioning activities of the whole site, with considerations extended up to completion.

"Given the severity of the challenges faced from the outset of the accident, one can only be impressed by the dedication and the achievements of the people involved," said team leader Christophe Xerri, Director of the IAEA's Division of Nuclear Fuel Cycle and Waste Technology. "Despite these achievements, many challenges remain to be tackled in the decommissioning process, and ensuring safety in this complex situation requires sustained daily attention."

<https://www.iaea.org/newscenter/pressreleases/iaea-team-completes-fourth-review-of-japans-plans-to-decommission-fukushima-daiichi>

Deputy Secretary Sullivan's Meeting With Japanese Vice Minister Takeo Akiba U.S.

Department of State, November 13, 2018

Deputy Secretary of State John J. Sullivan met with Japanese Vice Minister of Foreign Affairs Takeo Akiba in Tokyo, Japan. During the meeting, the two reaffirmed the importance of the U.S.-Japan Alliance as the cornerstone of peace and stability in the Indo-Pacific region. Deputy Secretary Sullivan and Vice Minister Akiba discussed how to further the strong security alliance and cooperate in new areas to advance a free and open Indo-Pacific. Deputy Secretary Sullivan and Vice Minister Akiba also pledged to work together toward achieving both countries' shared goal of a final, fully verifiable denuclearized North Korea, including through trilateral cooperation with the Republic of Korea.

<https://www.state.gov/r/pa/prs/ps/2018/11/287307.htm>

Inter-Korean Military Tension Reduction, North Korean Denuclearization, and the U.S.-ROK Security Alliance

Scott A. Snyder, Council on Foreign Affairs,
November 15, 2018

The 50th U.S.-ROK Security Consultative Meeting (SCM), held on October 31, 2018 between U.S. Secretary of Defense James Mattis and ROK Minister of Defense Jeong

Kyeong-doo, provided the first opportunity for top-level military consultations between the two countries following the signing of the Inter-Korean “Agreement on the Implementation of the Historic Panmunjom Declaration in the Military Domain.” The communique addressed two main challenges: 1) how to maintain military readiness and deterrence while supporting inter-Korean tension reduction measures, and 2) preparations for a revised operational control system on the Korean Peninsula.

<https://www.cfr.org/blog/inter-korean-military-tension-reduction-north-korean-denuclearization-and-us-rok-security>

Kim attends his first weapons test in almost a year *Korea JoonAng Daily, November 17, 2018*

North Korea’s state media reported Friday that its leader, Kim Jong-un, supervised “a newly developed ultramodern tactical weapon test” at a defense institute, the first time in a year that Kim was officially described as overseeing a weapons experiment.

An English version of the KCNA report said the test was conducted “successfully” at the Academy of National Defense Science, and that Kim was “so excited” to have seen “great work” by defense scientists and munitions workers. Kim was quoted as saying the development of the weapon was directed “step by step” by his father, former leader Kim Jong-il, who died in December 2011.

“He [Kim Jong-un] added that the weapon is just like a posthumous weapon and he missed Kim Jong Il very much while seeing the great success of its test,” KCNA reported. The test, Kim Jong-un reportedly said, was “another striking demonstration of the validity of the [Workers’] Party policy of prioritizing defence science and technology and the rapidly developing defence capability of the country and as a decisive turn in bolstering the fighting capability of the Korean People’s Army.”

<http://koreajoongangdaily.joins.com/news/article/article.aspx?aid=3055748>

Moon tones down ‘sanctions easing’ pitch *By Kim Yoo-chul, The Korea Times, November 19, 2018*

President Moon Jae-in is toning down his hopes for an easing of U.S. and United Nations Security Council (UNSC) sanctions on North Korea as the South Korean leader wants to try again as the role of a “neutral facilitator” of the ongoing denuclearization process.

Political analysts in Seoul said Monday the shift came after the President’s efforts to win backing from the United Kingdom and France, which hold seats on the UNSC, apparently fell flat during his earlier trip to European capital cities.

Moon’s “sanctions-easing” agenda, aimed at inducing the North to accelerate its moves for nuclear disarmament with greater engagement, also caused a rift in South Korea’s alliance with the United States.

http://www.koreatimes.co.kr/www/nation/2018/11/113_258947.html

Seoul to buy Israeli radar systems despite thaw on peninsula *By Pan Mengqi | China Daily, November 29, 2018*

At the critical juncture of the denuclearization process, every move made by the two neighbors on the Korean Peninsula is closely watched and will undoubtedly have a decisive impact on the future of the peninsula.

While Pyongyang is reportedly showing openness to allow inspectors into the country’s main nuclear complex, signaling its attempts to push forward the implementation of denuclearization, Seoul, in contrast, is planning to buy two Israeli early warning radar systems, a move seen to reinforce its air defenses against Pyongyang despite fast-improving relations.

Reuters quoted the Republic of Korea’s Defense Acquisition Program Administration (or DAPA) on Tuesday as saying the decision to adopt the Green Pine Block C radar systems, built by ELTA

Systems, a subsidiary of state-owned Israel Aerospace Industries, was made at a defense acquisition committee.

<http://www.chinadaily.com.cn/a/201811/29/WS5bff59eba310eff30328bc4a.html>

G. West Asia

Crown Prince launches first nuclear research reactor project *Saudi Gazette, November 05, 2018*

Crown Prince Muhammad Bin Salman, deputy premier and minister of defense, laid the foundation stone for the first nuclear research reactor and a center for the development of aircraft structures in Saudi Arabia.

These are among seven strategic projects launched by the Crown Prince on Monday evening during his visit to the King Abdulaziz City for Science and Technology (KACST) in Riyadh.

The strategic projects also include those in the fields of renewable energy, atomic energy, water desalination and genetic medicine, the Saudi Press Agency reported.

<http://saudigazette.com.sa/article/547299/SAUDI-ARABIA/Crown-Prince-launches-first-nuclear-research-reactor-project>

Saudi Arabia to build first nuclear research reactor *The News International, November 06, 2018*

Riyadh: Saudi Crown Prince Mohammed bin Salman on Monday laid the foundation stone for the kingdom's first nuclear research reactor, state media said, as the kingdom seeks to diversify its energy mix.

The reactor was among seven projects launched by the prince during a visit to Riyadh's King Abdulaziz City for Science and Technology, the official Saudi Press Agency reported.

SPA offered no details on when the research or non-power reactor — typically used for research, development and education purposes — would be built and at what cost.

The world's top crude exporter harbours plans to build 16 nuclear reactors over the

next two decades for \$80 billion as it seeks to diversify, despite concerns over nuclear proliferation in the Middle East.

Prince Mohammed said in March that if Iran develops a nuclear weapon, Riyadh will do so too.

In an interview with CBS television, he likened regional rival Iran's supreme leader to Hitler, saying he "wants to create his own project in the Middle East".

Riyadh held deep reservations over the 2015 accord aimed at curbing Iran's nuclear ambitions and hailed President Donald Trump's announcement in May that the United States was withdrawing from the deal.

Monday's announcement comes as the US vowed to be "relentless" in countering Iran as sweeping new sanctions took effect.

<https://www.thenews.com.pk/latest/390428-saudi-arabia-to-build-first-nuclear-research-reactor>

UAE role model for development of nuclear energy *Saudi Gazette, November 07, 2018*

The UAE Peaceful Nuclear Energy Program has been recognized for its unique achievements and coordinated development during the 23rd Nuclear Inter Jura Congress. Held for the first time in the Middle East and hosted in Abu Dhabi by the Emirates Nuclear Energy Corporation (ENEC), the congress was organized by the International Nuclear Law Association (INLA) in partnership with local and international sponsors, including the Federal Authority for Nuclear Regulation.

During a special UAE Session at the congress, the UAE Peaceful Nuclear Energy Program was highlighted as a role model for nuclear energy development worldwide, having set a new standard for new nuclear construction. The UAE Program is built on the most rigorous standards of safety, security and quality, and through its cooperation with the International Atomic Energy Agency

(IAEA) and other relevant international organizations, has demonstrated its commitment to non-proliferation, as outlined in the UAE Policy on Nuclear Energy document released in April 2008

<http://saudigazette.com.sa/article/547456/BUSINESS/UAE-role-model-for-development-of-nuclear-energy>

Special Representative for Iran Brian Hook Travel to Israel and the United Arab Emirates *U.S. Department of State, November 09, 2018*

Special Representative Hook's trip aims to advance the President's Iran strategy and increase pressure on the Iranian regime to cease its destructive policies, including its nuclear and missile proliferation threats, support for terrorism, and other regionally destabilizing activities. The United States is committed to working with our allies and partners to fully implement our maximum pressure campaign in order to change Iran's destructive behavior.

<https://www.state.gov/r/pa/prs/ps/2018/11/287278.htm>

FANR releases first annual report on UAE's radiological environmental monitoring *Saudi Gazette, November 13, 2018*

THE Federal Authority for Nuclear Regulation (FANR) has released its first annual report on Radiological Environmental Monitoring in the United Arab Emirates. The report establishes the baseline level of radiation either from naturally occurring or from man-made radionuclides sources in the UAE and reveals that in general the radiation dose rates are very low when compared to most other countries in the world.

The report summarizes the results of the first year of FANR's comprehensive Radiological Monitoring Program, covering January 1 – December 31, 2015. The program was established as a result of FANR's role as the UAE's independent nuclear regulator and its responsibility and authority to monitor radiation levels in the UAE and advise

relevant government entities on the radiation aspect of environmental protection, public health, and water and land use.

<http://saudigazette.com.sa/article/547925/BUSINESS/FANR-releases-first-annual-report-on-UAEs-radiological-environmental-monitoring>

H. Iran

Iran's UK ambassador: It is impossible to renegotiate nuclear deal *Tehran Times, November 02, 2018*

Hamid Baeidinejad addressed Oxford students on the topic of the Joint Comprehensive Plan of Action (JCPOA), according to Press TV. Explaining Iran's current position on the JCPOA, he said: "The aspiration that we have with the European Union, Britain, France and Germany, China and Russia, is that we keep the Iran Nuclear Deal alive and give time to the U.S. to rethink and revise its position."

However, he emphasized that any idea of changing or renegotiating the nuclear deal would be "impossible" because if one word is changed other aspects of the deal will either be changed or compromised. He admitted that "we have a total loss of confidence" in negotiating with the U.S. after their withdrawal from the JCPOA, but added that "we are trying very hard with European countries, with China and Russia, to find mechanisms that this deal could (still) be effectively implemented."

<https://www.tehrantimes.com/news/429164/Iran-s-UK-ambassador-It-is-impossible-to-renegotiate-nuclear>

Iran's joint oil fields could resolve regional tensions *Tehran Times, November 03, 2018*

Joint oil and gas fields are important for all countries in the region, with all countries which share oil and gas fields with Iran gaining billions from their procurement. The US withdrawal from the JCPOA (Joint Comprehensive Plan of Action, more commonly known as the

Iran nuclear deal) has motivated many regional rivals to accelerate their activities further. Since major foreign oil firms have abandoned Iran in response to the now-ineffective agreement, these firms have similarly sought activities elsewhere in the region. Unconfirmed reports so far state that around \$6 billion worth of gas has thus been lost to competitors.

<https://www.tehrantimes.com/news/429179/Iran-s-joint-oil-fields-could-resolve-regional-tensions>

U.S. 'Plan B' includes creating schism in EU over Iran: ex-diplomat

Tehran Times, November 04, 2018

A former Iranian Foreign Ministry spokesman has said that the intention behind the U.S. "Plan B" is to incite a schism between European countries over Iran.

After the U.S. withdrawal from the nuclear deal, the country laid out what Secretary of State Mike Pompeo called "Plan B" as its new strategy for Iran. Pompeo's "Plan B" was to reinstate the sanctions against Iran in order to pressure the country into accepting negotiations for an entirely new deal with broader constraints.

In an interview with ISNA published on Saturday, Ramin Mehmanparast said that the U.S., along with Israel, is to carry out the anti-Iran "Plan B" in a symbolic gesture on the anniversary of the day when revolutionary students captured the den of spies_ as they called the U.S. Embassy_ in Tehran in 1979.

<https://www.tehrantimes.com/news/429229/U-S-Plan-B-includes-creating-schism-in-EU-over-Iran-ex-diplomat>

IRGC chief to Trump: Never threaten Iran

Tehran Times, November 04, 2018

Iranians held a large gathering outside the former U.S. embassy in Tehran to cherish the memory of the capture of the "den of spies" in 1979, as the late Imam Khomeini called it back then. The rally was held a day ahead of the reimposition of U.S. sanctions on Iran which had been lifted under the 2015 nuclear deal. #DownWithUSA in Farsi

trended on Twitter, as the demonstrators shouted the motto as they have over the past four decades since the revolution.

The key speaker of the gathering was the commander of the Islamic Revolution Guards. His "never threaten" address to U.S. President Donald Trump quickly made it to local media headlines. "Never threaten the Iranian people... do not make military threats against us, and do not frighten us from military threats," Mohammad Ali Jafari warned.

<https://www.tehrantimes.com/news/429231/DownWithUSA>

'Sanctions to have no impact on sea transportation'

Tehran Times, November 04, 2018

Iran's Ports and Maritime Organization (PMO) Head Mohammad Rastad announced that the unilateral and cruel sanctions posed by the U.S. against Iran will have no impact on the country's sea transportation, IRIB quoted him as saying on Sunday.

Making the remarks during a conference on passive defense, the official explained that PMO would improve various scenarios to tackle the sanctions and meet domestic demands. White House has restored all the sanctions against Iran, which were lifted under the 2015 nuclear deal.

<https://www.tehrantimes.com/news/429255/Sanctions-to-have-no-impact-on-sea-transportation>

Iran Air in negotiations with non-European airplane manufacturers

Tehran Times, November 04, 2018

Iran Air, Iran's national flag carrier, has started negotiations with the non-European manufacturers of airplanes in line with renovation of its fleet, Farzaneh Sharafbafi, the managing director of the airline, announced on Sunday.

"We will negotiate with any manufacturer which can supply airplanes for us without requiring permits from the U.S. Treasury's Office of Foreign Assets Control (OFAC)", she noted.

OFAC has cancelled licenses for Boeing and Airbus to sell airplanes to Iran after Trump pulled the United States out of the 2015 Iran nuclear agreement in May and reimposed sanctions on the country.

“We welcome any company which is able to provide the airplanes needed by Iran Air. We have even gone after planes such as Russia’s Sukhoi Superjet 100 or planes made by non-European manufacturers”, Sharafbafi stated referring to his company’s plan for renovating its fleet.

Facing lack of modern aircrafts due to decades-long sanctions imposed by the West, Iran took the post-sanction opportunity to make deals with some European manufacturers for the purchase of new airplanes to renew its aging fleet.

<https://www.tehrantimes.com/news/429252/Iran-Air-in-negotiations-with-non-European-airplane-manufacturers>

New sanctions on Iran will not fulfill U.S. national interest:

Nephew *Tehran Times, November 05, 2018*

Richard Nephew, who served as the lead sanctions expert for the U.S. team negotiating with Iran, is of the opinion that U.S. new sanctions on Iran will not fulfill U.S. national interest in long term

Q: As announced before, U.S. returned all nuclear sanctions against Iran. Do you think that this sanctions is according to U.S. national interest in long term?

A: No, I don’t. As I’ve said repeatedly, I think that the best long-term interest for the United States was remaining in the JCPOA and using it as a mechanism for pursuing direct diplomacy between the United States and Iran.

The failure of the Trump administration to take advantage of this opportunity is not in the long term interest of the United States, nor is it in the U.S. interest to misuse sanctions in this fashion.

Q: U.S. exempt 8 countries temporary from importing of Iran’s oil. Do you think these countries can replace another recourses instead of oil of Iran?

A: Sure, I think they must have, if they’ve been able to make the cuts. But, these initial cuts have required pretty high oil production out of OPEC and other countries. It is not clear to me at all – and I am deeply skeptical that – further reductions can be achieved without directly contributing to oil price increases or shortfalls.

Q: The Head of the US Treasury Steven Mnuchin has announced that Washington wants the world-wide payment network to cut off its services to the entities that were affected by Iran sanctions and warned that otherwise SWIFT might be sanctioned as well. Can U.S. do it?

A: Yes, the United States could do it. But, I think the United States will avoid doing so for the simple reason that it gets much out of the existence of the SWIFT network and would not wish it to be undermined unduly.

<https://www.tehrantimes.com/news/429271/New-sanctions-on-Iran-will-not-fulfill-U-S-national-interest>

We will ‘break sanctions proudly’:

Rouhani *Tehran Times, November 05, 2018*

President Hassan Rouhani announced that leaders of four major countries sought to broker talks between him and U.S. President Donald Trump during the UN General Assembly session in New York in September. Rouhani did not mention the name of the leaders of the four countries.

“There is no need for a broker. We have no problem to talk on the condition that the other side attaches value to its obligation,” Rouhani said during a meeting at the headquarters of the Ministry of Economy and Finance. He said Washington’s violation of international law has made the U.S. more isolated than ever.

In May, Trump officially withdrew the U.S. from the 2015 nuclear deal, officially called the Joint Comprehensive Plan of Action (JCPOA), and ordered the new round of sanctions on Iran. The first round of sanctions went into force on August 6

and the second round, which targets Iran's oil exports and banks, were announced on November 4.

<https://www.tehrantimes.com/news/429278/We-will-break-sanctions-proudly-Rouhani>

Iran's H1 foreign arrivals up over 51% y/y *Tehran Times, November 5, 2018*

"Despite threats of the U.S., foreign tourist arrivals in Iran has risen by more than 51 percent during the first six months of this year," Ali-Asghar Mounesan said, adding, with regard to last year's growth of four percent, it has been an unprecedented progress for the past few decades, ISNA reported.

The official declined to provide further details or to say how many foreigners visited the country in the six-month period. The U.S.-led restrictions and propaganda campaign, however, have cut the number of Westerner travelers to Iran but the country is trying its best to attract more visitors from neighboring countries.

Mohammad Moheb-khodaie, a senior Iranian tourism official, said in June: "The number of travelers from European countries cut by 24 percent in the first three months of the [current Iranian calendar] year from a year earlier."

Over the past couple of years, Air France, British Airways and KLM Royal Dutch Airlines stopped flights to Tehran due to what they publicized as "negative results and financial outlook." Under the 2025 Tourism Vision Plan, the country is expecting to increase the number of tourism arrivals from 4.8 million in 2014 to 20 million.

<https://www.tehrantimes.com/news/429280/Iran-s-H1-foreign-arrivals-up-over-51-y-y>

Netanyahu Thanks Trump for Re-Imposing Sanctions on Iran *By GIL HOFFMAN, The Jerusalem Post, November 05, 2018*

In a Likud faction meeting on Monday, Prime Minister Benjamin Netanyahu thanked Trump for what he called a

courageous decision to withdraw from the Iran nuclear deal and took credit for it.

"The decision supports stability security and peace," he said. "This is a very big day for the State of Israel, the people of Israel and the future of Israel."

<https://www.jpost.com/Breaking-News/Netanyahu-thanks-Trump-for-re-imposing-sanctions-on-Iran-571110>

Israeli firm launches cyberattacks on Iran: ITC minister *Tehran Times, November 6, 2018*

TEHRAN – Telecommunications Minister Mohammad Javad Azari Jahromi announced on Monday that Internet Gold Golden Lines, an Israeli-based company, was involved in a wave of cyberattacks earlier in the day against Iran's network infrastructure, IRNA reported.

"The [Israeli] regime, with a notorious background in using cyber weapons in cases such as Stuxnet, was this time attempting to harm Iran's communications infrastructure," Azari Jahromi said in a tweet. He added, "But they had to go away empty-handed thanks to the vigilance of our technical teams. We will pursue this hostile move through international tribunals." Israel is widely believed to be behind cyberattacks on Iran's nuclear facilities in 2011

<https://www.tehrantimes.com/news/429298/Israeli-firm-launches-cyberattacks-on-Iran-ITC-minister>

Austrian labs key to future of Iran nuclear deal *Dawn, November 06, 2018*

One place that could feel the ramifications of Trump's decision is an unassuming lab complex near the Austrian town of Seibersdorf – at first sight a world away from geopolitical manoeuvring over Tehran's nuclear programme.

But the site houses the International Atomic Energy Agency's laboratories, which are key to verifying Iran's compliance with the Joint Comprehensive Plan of Action (JCPOA), signed in 2015 between Iran and world powers.

It's in these labs that the IAEA's scientists carry out their painstaking work of analysing the samples collected by their inspectors in the field.

There are two main sets of laboratories: one for testing declared nuclear materials and another to process "environmental" samples designed to pick up clues to possible undeclared nuclear activity.

For the former, samples are taken from containers of nuclear material up to hundreds of kilograms in weight. "By the time we go to the measurement lab, they'll be measuring millionths of a gram," explains Steve Balsley, head of the Nuclear Materials Laboratory.

<https://www.dawn.com/news/1443827>

Turkey: U.S. sanctions against Iran 'unfair' *Tehran Times, November 6, 2018*

TEHRAN – The U.S. sanctions against Iran are unfair, Turkish Vice-President Fuat Oktay said, Turkish media reported on Monday.

Oktay said it is not correct to expect that all countries in the world to join the decision of one state acting exclusively by its own interests.

The sanctions will cover the sphere of oil exports. Washington has voiced determination to bring the Iranian oil exports to zero, calling on all its buyers to abandon such purchases.

U.S. President Donald Trump announced in May his country's withdrawal from the 2015 Iran nuclear deal, and ordered reimposition of sanctions.

<https://www.tehrantimes.com/news/429308/Turkey-U-S-sanctions-against-Iran-unfair>

Iran able to Flourish Under Sanctions, Revolutionary Guards Say *REUTERS The Jerusalem Post, November 07, 2018*

Iran can flourish under sanctions and will defeat the United States in the economic war it has launched, the deputy head of the Revolutionary Guards said on. The United States re-imposed sanctions on Iran's oil, banking and transport sectors and threatened more action to stop Tehran's

missile and nuclear programs and curb its influence in countries such as Syria, Yemen and Lebanon..

"The enemy is trying to strike a blow against Iran through a soft war and an economic war but they will face a heavy defeat," Revolutionary Guards Brigadier General Hossein Salami was quoted as saying by the state news agency IRNA. "Iran has been able to advance in any area that the enemy has placed sanctions on Islamic Iran," he said

<https://www.jpost.com/Breaking-News/Iran-able-to-flourish-under-sanctions-Revolutionary-Guards-say-571333>

Iranian celebs launch #SanctionsTargetMe movement against U.S. sanctions *Tehran Times, November 09, 2018*

A large number of Iranian celebrities has launched #SanctionsTargetMe, a movement that takes aim at the sanctions reimposed by the United States on Iran. The campaign also warns that Iranian people's access to life-saving medication and medical supplies has been seriously jeopardized, said the organizers among them are veteran actors Reza Kianian and Parviz Parastui.

In a statement published by the celebrities, they wrote, "Trump claims the sanctions do not affect humanitarian aid and medicine in Iran, but this is a big lie. The sanctions on Iranian banks means nobody can engage in any international financial transactions. "Ordinary people are the ones who are most seriously suffering from the sanctions, which have created a grave burden on their sense of wellbeing."

A report released by the International Court in Hague on October 3, 2018, says, "It has become difficult if not impossible for Iran, Iranian nationals and companies to engage in international financial transactions to purchase goods." The celebrities have asked all the Iranian nationals and artists to join the movement.

<https://www.tehrantimes.com/news/429333/Iranian-celebs-launch-SanctionsTargetMe-movement-against-U-S>

Russia and Turkey promise to defy Trump's Iran sanctions *Tehran Times, November 9, 2018*

Turkey and Russia have both blasted President Donald Trump's latest round of sanctions against Iran, promising to find ways to defy the punitive financial measures.

"We will not obey such sanctions," Turkish President Recep Tayyip Erdogan said on Tuesday, adding that his government saw Washington's move as "violating the global balance," Russian news agency Tass reported. The Turkish leader underscored that the sanctions "contradict the norms of international law" and he did not wish "to live in an imperialistic world."

Voicing similar sentiments, Russian Foreign Minister Sergey Lavrov pledged on Tuesday that Moscow would find ways to circumvent the sanctions and continue financial ties with Tehran. The top Russian diplomat also called Washington's sanctions "unacceptable methods," *The Moscow Times* reported

<https://www.tehrantimes.com/news/429345/Russia-and-Turkey-promise-to-defy-Trump-s-Iran-sanctions>

Industry ministry unveils priorities in sanction era *Tehran Times, November 09, 2018*

Priorities of the ministry of industry, mine and trade under the imposed U.S. sanctions include "supply of basic goods besides regulating and controlling Iran's markets", "protecting domestic production and supplying raw material," "renovation of industries", and "supplying working capital of producers", Iranian deputy industry minister announced.

As Sadeq Najafi told IRNA, the ministry has the named priorities on agenda in all of its planned programs.

On November 4, the Trump administration has unveiled the full extent of its new sanctions on Iran, with targets including 50 banks and their subsidiaries, the national airline, and 200 members of the shipping industry and vessels.

<https://www.tehrantimes.com/news/429352/Industry-ministry-unveils-priorities-in-sanction-era>

Iran, S. Korea agree to cross-currency trade, ditching dollar

Tehran Times, November 09, 2018

The governments of Iran and South Korea have agreed to forgo the use of U.S. dollar in bilateral trade and instead switch to their respective national currencies in such transactions as Washington moves to ramp up sanctions pressure against Tehran.

According to Yonhap News Agency, the two countries "will restart the won-based settlement of bilateral trade transactions" using the accounts of the Central Bank of Iran at two South Korean banks: Woori Bank and the Industrial Bank of Korea.

<https://www.tehrantimes.com/news/429353/Iran-S-Korea-agree-to-cross-currency-trade-ditching-dollar>

Europeans slow to save nuclear deal: Iran *Tehran Times, November 9, 2018*

Iranian Deputy Foreign Minister Abbas Araqchi has said that Europeans have been slower than Iran expected to save the 2015 nuclear deal after the U.S. exited the multilateral agreement and ordered reimposition of sanctions on Iran.

"It is a reality that the Europeans have moved slower than we expected. The good political stance they adopted is another reality. They have not prepared practical mechanisms yet and have not fulfilled our expectations yet," he told the Young Journalists Club in an interview published on Friday.

<https://www.tehrantimes.com/news/429343/Europeans-slow-to-save-nuclear-deal-Iran>

Failure of nuclear deal will discredit Europe: Kharrazi *Tehran Times, November 10, 2018*

Kamal Kharrazi, head of Iran's Strategic Council on Foreign Relations, said on

Saturday that a failure of the 2015 nuclear deal, officially called the Joint Comprehensive Plan of Action, will discredit Europe.

“Definitely, it would not have been possible to reach the nuclear deal without Europe’s cooperation. In fact, failure of this agreement will discredit Europe,” Kharrazi, the former foreign minister in the Khatami administration, said during a speech at a conference in Vienna.

He noted that the Europeans’ move in designing mechanisms to save the JCPOA should be viewed as a “strategic and security approach” whose failure will cause many problems.

<https://www.tehrantimes.com/news/429403/Failure-of-nuclear-deal-will-discredit-Europe-Kharrazi>

Envoy likens U.S. sanctions to ‘crimes against humanity’ *Tehran Times, November 10, 2018*

TEHRAN – Iran’s Ambassador to London, Hamid Baeidinejad, on Saturday slammed new U.S. sanctions against Iran as “crimes against humanity”, calling for those implementing the sanctions to be brought to justice.

“US sanctions on Iran have no legal basis and thus are illegal. They affect the essential needs of all strata of Iranian society. Those involved in implementing them should be held accountable as persons perpetuating crimes against humanity, and brought to justice,” Baeidinejad said in a tweet.

Earlier this week, the U.S. government unleashed a second round of sanctions against Iran, months after it withdrew from the 2015 Iran nuclear deal.

<https://www.tehrantimes.com/news/429388/Envoy-likens-U-S-sanctions-to-crimes-against-humanity>

Brazil will stand with Iran in face of U.S. sanctions: ex-president *Tehran Times, November 11, 2018*

Collor de Mello, currently the head of the Committee of Foreign Affairs and National Defense at Brazil’s Federal Senate, made the

remarks during a meeting with Iranian Parliament Speaker Ali Larijani in Tehran. The senator stressed that Brazil like other BRICS members - namely Russia, India, China and South Africa - stands by Iran and seeks to develop bilateral relations in the fields of economy and trade.

The former Brazilian president also called for the enhancement of parliamentary ties between Tehran and Brasilia. Collor de Mello further said the international community and the UN should not remain silent while measures taken by US President Donald Trump imperil global relations.

<https://www.tehrantimes.com/news/429424/Brazil-will-stand-with-Iran-in-face-of-U-S-sanctions-ex-president>

U.S. granted Turkey 25% exemption from Iran sanctions: Turkish min. *Tehran Times, November 11, 2018*

Turkish Minister of Energy and Natural Resources said his country has been granted a 25-percent exemption from the U.S. sanctions on Iran, Mehr news agency reported citing a NDTV report.

“Of course 25 percent is still just an estimation and we haven’t received an exact number yet.” Fatih Dönmez said in an interview with Turkey’s NDTV.

The official further announced that Turkey will be able to continue purchasing Iranian gas for the next five or six years.

As Iran’s biggest natural gas customer, Turkey signed an agreement with the country in 1995 for importing natural gas from the Islamic Republic, the 20-year agreement was implemented in 2002 and Turkey will continue importing Iranian gas up to 2022.

The U.S. government reimposed the sanctions which had been lifted under a 2015 nuclear deal negotiated by President Barack Obama’s administration and five other world powers, on November 4

<https://www.tehrantimes.com/news/429438/U-S-granted-Turkey-25-exemption-from-Iran-sanctions-Turkish>

Iraq receives sanction waiver for importing gas, electricity from Iran

Tehran Times, November 12, 2018

Iraq has received a 45-day waiver over U.S. sanctions against Iran which allows the country to continue to import natural gas and electricity from Iran, Reuters reported citing the U.S. embassy in Iraq. "The United States has given Iraq a temporary relief from the sanctions for 45 days to continue purchasing natural gas and electricity from Iran," the U.S. Embassy in Iraq said in a video published on its official Facebook page on Thursday.

"This relief gives Iraq time to start taking steps towards energy independence," the video said. Iraq central bank officials said in August that the country's economy is so closely linked to Iran that Baghdad would ask Washington for exemptions from some of the sanctions.. The current temporary waiver is conditional on Iraq not paying Iran for imports in U.S. dollars. Sanctions, which had been lifted under a 2015 nuclear deal negotiated by President Barack Obama's administration and five other world powers, were reimposed on November 5.

<https://www.tehrantimes.com/news/429437/Iraq-receives-sanction-waiver-for-importing-gas-electricity>

The impact of U.S. sanctions on Iranian oil industry, market in focus

Tehran Times, November 12, 2018

Right from the day Trump withdrew from Iran's nuclear deal, announcing his plan for cutting Iranian oil exports to zero, the oil scholars and experts all around the world begun contemplating the impacts of this decision on the Iranian oil industry especially on the country's oil exports.

Today, near five months after Trump's announcement and while the U.S. has re-imposed sanctions on Tehran, still nobody has a clear idea about the outcomes of the U.S. actions against Iran, and there is still great disagreement over the magnitude of the impact on Iranian oil industry and especially on crude exports.

However, the oil markets have been through various changes in the past few months

based on which we can draw a relatively neat picture of what to expect in the future.

<https://www.tehrantimes.com/news/429474/The-impact-of-U-S-sanctions-on-Iranian-oil-industry-market>

Larijani urges Europeans to act more independently

Tehran Times, November 12, 2018

Iranian Majlis Speaker Ali Larijani said on Monday that Europeans should play a more independent role which will be more beneficial to them.

In a meeting with Sigmar Gabriel, the former German foreign minister, Larijani said, "U.S. President's [Donald Trump] behavior has caused chaos at the international arena and also caused problems for the Europeans."

Larijani also said that Iran-Europe ties have been promoted after the clinching of the 2015 nuclear deal, known as the Joint Comprehensive Plan of Action.

Gabriel said that Europeans are firm to keep the nuclear deal after the U.S. withdrawal from the agreement in May.

<https://www.tehrantimes.com/news/429487/Larijani-urges-Europeans-to-act-more-independently>

European failure to save nuclear deal will destabilize Mideast,

Kharrazi warns *Tehran Times,*

November 12, 2018

Kamal Kharrazi, head of Iran's Strategic Council on Foreign Relations, warned on Monday that a failure by Europe to save the 2015 nuclear deal, officially called the Joint Comprehensive Plan of Action, will destabilize the Middle East region.

"It is essential that Europe meets its commitments as soon as possible," he said during a meeting with former French Prime Minister Dominique de Villepin in Paris.

Kharrazi said Europeans' move in meeting their commitments to save the JCPOA will show whether they can be trusted.

For his part, De Villepin said that countries in the Middle East region should be vigilant to avoid more crises, noting that Europe is ready to cooperate in this respect.

<https://www.tehrantimes.com/news/429486/European-failure-to-save-nuclear-deal-will-destabilize-Mideast>

Zarif: U.S. cannot stop Iranian flights, tankers *Tehran Times,*

November 13, 2018

The Americans cannot stop Iranian flights or block the movement of Iranian tankers at sea, Foreign Minister Mohammad Javad Zarif says.

In an interview with The New Arab published on Monday, Zarif said, "We have many ways to ensure our flights continue operating and we intend to use them. We have tried and tested them before and we will use them again."

He said the U.S. sanctions on Iran, the second round of which were put into force on November 4, have an economic impact but "they will not affect our policies."

"We have started feeling the effects in the past six months after the U.S. withdrew from the nuclear deal, in fact since economic actors felt Mr. Trump was going to pull out [of the nuclear deal] following his remarks about a new 'Iran strategy' last year," he explained.

<https://www.tehrantimes.com/news/429521/Zarif-U-S-cannot-stop-Iranian-flights-tankers>

Gabriel: thousands of German SMEs can trade with Iran *Tehran Times,*

November 13, 2018

Former German foreign minister Sigmar Gabriel says small and medium-sized enterprises (SMEs) can continue trade with Iran despite U.S. sanctions on the Islamic Republic. Gabriel was visiting Iran at the head of an economic delegation of chief executives and representatives of Germany companies.

They met Iran's Central Bank Governor Abdolnaser Nemmati in Tehran late

Monday, where Gabriel reiterated Europe's determination to expand political and economic ties with Iran after US withdrawal from the 2015 nuclear agreement. "Thousands of small- and medium-sized German companies that have nothing to do with the United States can easily trade with Iran," IRNA news agency quoted him as saying.

Gabriel also sounded upbeat about opening a financial channel to continue trade with Iran in the face of new US sanctions on the Islamic Republic. The European Union has said it is creating a new payment mechanism to allow countries to transact with Iran while avoiding the US sanctions. Called the "special purpose vehicle" (SPV), the mechanism would aim to "assist and reassure economic operators pursuing legitimate business with Iran". Iran has welcomed the step but it is frustrated at the pace with which the SPV is being set up.

<https://www.tehrantimes.com/news/429532/Gabriel-thousands-of-German-SMEs-can-trade-with-Iran>

Iran, Europe to continue nuclear cooperation *Tehran Times,*

November 13, 2018

Behrooz Kamalvandi, spokesman for the Atomic Energy Organization of Iran (AEOI), has said that Iran and Europe will continue their nuclear cooperation in the next two years.

"Iran and the European Union have had cooperation in various spheres, especially in the area of nuclear safety, within the framework of the JCPOA (the official name for the 2015 nuclear deal)," Kamalvandi told ISNA in an interview published on Tuesday.

He said, "A center of nuclear safety is to be built in Iran. And I think the process of Iran-Europe cooperation will continue in the next two years."

<https://www.tehrantimes.com/news/429518/Iran-Europe-to-continue-nuclear-cooperation>

ISA chief: Iran keen on cooperation in international joint space projects

Iran Daily, November 14, 2018

Iran welcomes regional and international cooperation in all fields, including that of the space industry, and is willing to collaborate with other states in this sector, said the head of the Iranian Space Agency (ISA) on Wednesday.

Addressing the Asia-Pacific Space Cooperation Organization's (APSCO) 10th Anniversary High-Level Forum and 9th International Symposium (November 14-16) in the Chinese capital of Beijing, Morteza Barari invited all regional and international entrepreneurs, innovators as well as public and private businesses to, based on providing Iran with a long-term support, begin peaceful scientific and technical cooperation with the country in implementing joint space projects and offering space-based services, IRNA reported.

<http://www.iran-daily.com/News/234261.html>

Envoy: Iran has enough leverage to sell oil

Iran Daily, November 14, 2018

Iran's ambassador to the UK said that the US has failed to rally the world community behind its new sanctions against Iran, and that the Islamic Republic possesses "enough leverage" to keep its oil sales going despite US attempts to reduce them to "zero."

In the face of American sanctions, "We have lots of alternatives because we have had some experiences from the past," Hamid Baeidinejad told CNN's Christian Amanpour in an interview published on the network's website on Wednesday.

"We know that, in fact, the difference, this time, is that countries are not ready to comply with the United States' request. So, we have enough leverage to continue our exports," he said, according to Press TV.

The envoy said that the US intention of bringing Iranian exports to a halt has been "unsuccessful."

<http://www.iran-daily.com/News/234266.html>

Diplomat: U.S. officials' language against Iran is 'disastrous'

Tehran Times, November 14, 2018

Iran's ambassador to London said on Tuesday that the Trump administration has failed to create a consensus against Iran in order to exert more pressure against the country. "As you see, the exemptions that they have been providing for many states around the globe means that the United States has failed to create a kind of consensus among the countries to have unified sanctions against Iran," Hamid Baeidinejad told the CNN.

He said that the U.S has started psychological warfare to frighten the Iranian people and to sabotage the country's economy. "But gradually we can manage to find ways and means to guarantee and continue to export oil," he said.

<https://www.tehrantimes.com/news/429542/Diplomat-U-S-officials-language-against-Iran-is-disastrous>

Despite claims, U.S. sanctioning the Iranian people not the government, Kharrazi says

Tehran Times, November 14, 2018

The U.S. claims that it has sanctioned Iran's government, but in fact the people of Iran are being sanctioned, said Kamal Kharrazi, head of Iran's Strategic Council on Foreign Relations, in an interview with France24 broadcast. Commenting on the latest round of sanctions unleashed on Iran, Kharrazi said the U.S. withdrawal from the 2015 nuclear agreement has been condemned by everyone, including the Iranian people who are suffering from these sanctions.

"The U.S. has actually sanctioned the people, elderly, children, women, and certainly we have no choice but to resist," said Kharrazi who also acts foreign policy adviser to the Leader of the Islamic Revolution. Asked about why Iran still maintains some level of trust in the Europeans despite their failure to deliver on their promises including securing a

channel for conducting trades with Iran to date, Kharrazi said, "The other side has to be questioned that why they are hesitating."

<https://www.tehrantimes.com/news/429580/Despite-claims-U-S-sanctioning-the-Iranian-people-not-the-government>

Iran: US sanctions in contradiction with Europe's sovereignty *Iran Daily*, November 15, 2018

Following the signing of the Joint Comprehensive Plan of Action (JCPOA) between Iran and P5+1 in July 2015, relations between Tehran and Madrid has entered a new phase, said Iranian Deputy Foreign Minister for Political Affairs Abbas Araqchi, addressing media managers at a press conference in the Spanish capital on Friday, IRNA reported. Efforts are underway by more than 3,000 Spanish firms to begin long-term cooperation with Iran, he said.

Araqchi was in Spain to attend the second round of political consultative talks between the deputy foreign ministers of Iran and Spain. He stressed that the return of US sanctions is completely illegal and against the United Nations Security Council Resolution 2231 and the ruling of the International Court of Justice, adding that except for one or two countries, the rest of the international community have condemned the move. "We still hope that Europe will manage the present situation and we know that the European Union and the three European countries [Britain, France and Germany] are making serious attempts [to this end], under US pressure."

Commenting on US uttering threats against the Special Purpose Vehicle (SPV), Araqchi said, "We are waiting to see how Europe plans to defend its sovereignty against Washington's pressures." Araqchi said the US has turned its currency into a "weapon" and is using it to challenge the sovereignty of European nations, Press TV reported. "The dollar has become a weapon for the United States to force its illegitimate demands upon its European partners, practically

challenging their national sovereignty," he added. Araqchi made the remarks during a trip to Italy, where he discussed mutual ties as well as the future of cooperation between Tehran and Europe amid Washington's attempts to block trade between the two sides.

<http://www.iran-daily.com/News/234309.html>

Central Asia helping full implementation of Iran nuclear deal: EU's Mogherini *Iran Times*, November 24, 2018

European Union foreign policy chief Federica Mogherini says Central Asian countries are helping to ensure the full and effective implementation of a multilateral 2015 nuclear agreement. Addressing a press conference following the EU-Central Asia Ministerial meeting in Brussels, Mogherini once again reiterated the EU's commitment to the landmark nuclear deal, officially known as the Joint Comprehensive Plan of Action (JCPOA), reached between Iran and the P5+1 group of countries.

Mogherini thanked EU ministers for supporting the nuclear agreement, which she said was "a key element of the global nuclear non-proliferation architecture and crucial for the security of the region, for Europe, for Central Asia and beyond." The senior EU official emphasized that efforts by Central Asian countries were "also helping enormously to ensure that this implementation continues fully and effectively." Mogherini said foreign ministers of all the five Central Asian countries – Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan – confirmed this issue.

<http://www.iran-daily.com/News/234743.html?catid=3&title=Central-Asia-helping-full-implementation-of-Iran-nuclear-deal-EU-s-Mogherini>

I. Pakistan

Pakistan nuclear programme was manifestation of security challenges posed by India: Gen Ehsan *Pakistan Observer, November 07, 2018*

Observer, November 07, 2018

'Coercion and compulsion cannot influence the behavior of a state that is determined to secure its national security interests.' This was stated by Gen (R) Ehsan ulHaq at the Center for International Strategic Studies at the book launch ceremony co-hosted by the University of Lahore of *The Blind Eye: US Non-Proliferation Policy Towards Pakistan from Ford to Clinton* here in Islamabad.

He emphasized that Pakistan's nuclear program was not prestige driven but was a manifestation of the security challenges posed by India. He also underscored that the country's strategic community should talk on these issues to project Pakistan's narrative. Fortunately, in the evolving environment, Pakistan now has more strategic options, however, despite these strategic options Pakistan's relationship with the US is indispensable.

General Ehsan emphasized that Pakistan has to be cautious in framing this line of argument as the blind eye came at a significant cost to Pakistan and hence Pakistan does not have to pay back US for the 'blind eye to its nuclear program.

<https://pakobserver.net/pakistan-nuclear-programme-was-manifestation-of-security-challenges-posed-by-india-gen-ehsan/>

China to give Pakistan anti-corruption formula *The News International, November 08, 2018*

The News International, November 08, 2018

The two sides agreed to actively promote 2012-2020 Space Cooperation Outline between China National Space Administration (CNSA) and Pakistan Space and Upper Atmosphere Research Commission (SUPARCO). Expressing satisfaction on the launch of Pakistan Remote Sensing Satellite (PRSS) earlier this year, both sides agreed to further strengthen bilateral cooperation in space technology applications.

The two sides agreed to strengthen cooperation in the field of manned space, and the China Manned Space Engineering Office (CMSEO) and SUPARCO will sign a framework agreement on cooperation.

The two sides agreed that JCPOA is an important outcome of multilateralism and a good model of negotiated settlement of complex issues through dialogue and diplomacy. They called on parties to uphold their respective commitments and to resolve all issues through dialogue. They opposed unilateral measures and long-arm jurisdiction that is inconsistent with the principles of international law.

The two sides reaffirmed their commitment to multilateral, non-discriminatory arms control and non-proliferation endeavours. They noted with concern the continued pursuit of double standards in the application of non-proliferation norms and procedures and called for policies upholding rule of law and long-standing rules.

China appreciates and supports steps taken by Pakistan for strengthening the global non-proliferation regime. In this context, China supports Pakistan's engagement with the Nuclear Suppliers Group and welcomes its adherence of NSG Guidelines.

<https://www.thenews.com.pk/print/389712-china-to-give-pakistan-anti-corruption-formula>

J. Misc/Global

IAEA Concludes Long-Term Operational Safety Review at Argentina's Atucha Nuclear Power Plant *International Atomic Energy Agency, November 1, 2018*

International Atomic Energy Agency, November 1, 2018

An International Atomic Energy Agency (IAEA) team of experts has completed a review of long-term operational safety of Unit 1 at Atucha Nuclear Power Plant in Argentina. The Pre-SALTO (Safety Aspects of Long Term Operation) review mission was requested by the plant's operator, Nucleoelectrica Argentina. The 11-member team, whose review ended on

31 October, focused on aspects essential to the safe Long-Term Operation (LTO) of Unit 1, which went into commercial operation in 1974. The operator is preparing a license renewal application to the Argentinian Nuclear Regulatory Authority to extend the operating lifetime of Unit 1.

The SALTO team reviewed preparedness, organization and programmes related to LTO against IAEA safety standards. The team observed that the plant has made progress in the field of ageing management and preparedness for safe LTO. The team said the plant's LTO project already addresses several topics recommended by IAEA safety standards, with some activities partially implemented and many others already begun. The team found plant staff to be professional, open and receptive to suggestions for improvement.

<https://www.iaea.org/newscenter/pressreleases/iaea-concludes-long-term-operational-safety-review-at-argentinias-atucha-nuclear-power-plant>

K. Opinion/Reports

Indian nuclear forces, 2018 *By Hans M. Kristensen, Matt Korda, Taylor & Francis online, November 01, 2018*

India continues to modernize its nuclear arsenal with development of several new nuclear weapon systems. A study estimates that India currently operates seven nuclear-capable systems: two aircraft, four land-based ballistic missiles, and one sea-based ballistic missile. At least five more systems are in development. The development program is in a dynamic phase, with long range land- and sea-based missiles emerging for possible deployment within the next decade. India is estimated to have produced at least 600 kilograms of weapon-grade plutonium (International Panel on Fissile Materials 2015), sufficient for 150–200 nuclear warheads; however, not all the material has been converted into nuclear warheads.

Based on available information about its nuclear-capable delivery force structure and strategy, we estimate that India has produced 130–140 nuclear warheads. It will need more warheads to arm the new missiles

that it is currently developing. In addition to the operational Dhruva plutonium production reactor near Mumbai, India has plans to build at least one more plutonium production reactor. Moreover, the unsafeguarded Prototype Fast Breeder Reactor under construction at the Indira Gandhi Centre for Atomic Research (IGCAR) near Kalpakkam could potentially increase India's plutonium production capacity significantly in the near future if it achieves criticality as planned. The director of IGCAR has additionally stated that six more fast breeder reactors will come online within the next 15 years.

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2018, VOL. 74, NO. 6, 361–366

<https://doi.org/10.1080/00963402.2018.1533162>

Europe should work with Iran to counter U.S. unilateralism *Hassan*

Rouhani, Tehran Times, November 3, 2018

The U.S. administration's policies of unilateralism, racial discrimination, Islamophobia, and the undermining of important international treaties, including the Paris Climate Accord, are fundamentally incompatible with multilateralism and other socio-political norms valued by Europe. There is another critical matter aggravating transatlantic relations: the Iran nuclear deal. Known as the Joint Comprehensive Plan of Action, it was the product of two years of intensive negotiations between Iran and six other countries, including three from Europe.

As an annex to UN Security Council Resolution 2231, this agreement enjoys the approval of the overwhelming majority of the international community and, as part and parcel of international law, imposes certain obligations on all the members of the UN. Unfortunately, the U.S., through raising unfounded claims and in complete disregard for its international obligations, has abandoned the nuclear agreement and imposed extraterritorial and unilateral sanctions on Iran and, by extension, other countries. The U.S. is, in effect, threatening

states who seek to abide by resolution 2231 with punitive measures. This constitutes a mockery of international decisions and the blackmailing of responsible parties who seek to uphold them.

<https://www.tehrantimes.com/news/429176/Europe-should-work-with-Iran-to-counter-U-S-unilateralism>

China's Response to Nuclear Safety Postfukushima: Genuine or

Rhetoric? *Jacqueline CK Lam, Lawrence YL Cheung, Y. Han, and SS Wang, University of Cambridge, November 05, 2018*

Cambridge Working Paper in Economics 1866

The Fukushima crisis has brought the nuclear safety problem to the world's attention. China is the most ambitious country in the world in nuclear power development. How China perceives and responds to nuclear safety issues carries significant implications on its citizens' safety and security. This paper examines the Chinese government's promised and actual response to nuclear safety following the Fukushima crisis, based on (1) statistical analysis of newspaper coverage on nuclear energy, and (2) review of nuclear safety performance and safety governance.

The analysis shows that (i) the Chinese government's concern over nuclear accidents and safety has surged significantly after Fukushima, (ii) China has displayed strengths in reactor technology design and safety operation, and (iii) China's safety governance has been continuously challenged by institutional fragmentation, inadequate transparency, inadequate safety professionals, weak safety culture, and ambition to increase nuclear capacity by three-fold by 2050.

It suggests that China should improve its nuclear safety standards, as well as safety management and monitoring, reform institutional arrangements to reduce fragmentation, improve information transparency, and public trust and participation, strengthen the safety culture, introduce process-based safety regulations,

and promote international collaboration to ensure that China's response to nuclear safety can be fully implemented in real-life.

<http://www.econ.cam.ac.uk/research-files/repec/cam/pdf/cwpe1866.pdf>

Unfounded nuclear blackmailing threat

Zafar Nawaz Jaspal, Pakistan Observer, November 8, 2018

INDIA'S hysterical military build-up and current nuclear posturing neither establish its hegemony in South Asia nor construct its unbreakable defensive fence. It only intensifies the security dilemma between the strategic competitors that undermines the arms race stability between them. The arms race instability is a potent challenge to the deterrence stability between the belligerent neighbours. Prime Minister Narendra Modi proudly claimed that the country's first nuclear ballistic missile submarine INS Arihant has completed its first deterrence patrol.

<https://pakobserver.net/unfounded-nuclear-blackmailing-threat/>

Devilish Iran besieged

Hamoud Abu Taleb, Saudi Gazette, November 11, 2018

THE new US sanctions against Iran took effect on Nov. 5. Many countries bet that President Donald Trump did not have the intention to impose these sanctions and it was nothing but an empty threat.

They argued that the sanctions could not be effectively imposed because of international complications and conflicts of interest. President Trump, however, proved that he can go far and has the determination to impose these sanctions at a time when the Iranian leaders were making fun of him, believing until the last minute that the talk of sanctions was nothing more than a political maneuver.

Iran deserves tougher punishments because it is the biggest rogue country in the Middle East, especially after the honeymoon between Iran and the US administration under Barack Obama ended.

During the Obama era, the sanctions against Tehran were lifted, a nuclear deal was signed and money poured into the Iranian coffers. However, Tehran did not invest this money to develop Iranian society and repair relations with neighboring countries. Instead, its appetite to gain more control and spread more destruction grew bigger.

<http://saudigazette.com.sa/article/547654/Opinion/Local-Viewpoint/Devilish-Iran-besieged>

North Korean Nuclear Shell Game

The New York Times, November 13, 2018

President Trump, who styles himself a master deal maker and reader of people, claimed to have put an end to the North Korean nuclear threat with his meeting in June with the North Korean dictator, Kim Jong-un. “We fell in love,” he swooned in September after an exchange of follow-up letters with Mr. Kim. Mr. Trump’s closest advisers remained dry-eyed, and the evidence is mounting that they had reason.

The Center for Strategic and International Studies, a respected Washington think tank, published a study by its “Beyond Parallel” program showing that even as North Korea was touting some half steps to dismantle a missile launching site, it was operating and improving at least 13, and possibly as many as 20, bases housing mobile ballistic missile launchers. One mountain base on which the study focused, just 84 miles from Seoul, was “active and being reasonably well maintained by North Korean standards.”

None of that was a surprise to American intelligence agencies, which have been reporting a continuing buildup of North Korea’s missile stockpile. Nor should it have surprised Secretary of State Mike Pompeo, until recently the director of the C.I.A., who acknowledged at a Senate hearing in July that North Koreans “continue to produce fissile material.”

<https://www.nytimes.com/2018/11/13/opinion/north-korea-nuclear-trump-kim.html>

Pairing AI and Nukes Will Lead to Our Autonomous Doomsday

Lori Esposito Murray, Council on Foreign Relations, November 13, 2018

Advances in AI are on a fast track, and the United States is indisputably in an AI arms race with two of our most formidable competitors, both nuclear powers, China and Russia – the former with a smaller but growing nuclear arsenal in size and sophistication, and the latter, which along with the U.S., possesses 90 percent of the global nuclear weapons stockpile.

Early and determined U.S. leadership is essential to ensure that we are not just competing but also jointly cooperating with our nuclear-capable adversaries to ensure that AI does not destabilize nuclear command and control. The stakes are high; the consequences potentially existential.

While an autonomous nuclear command-and-control program might be easily dismissed as not realistic, the past is prologue. The history of the Cold War is riddled with near misses when accident, mistake or miscalculation due to computer errors in both the Soviet Union and the United States almost triggered nuclear war.

<https://www.cfr.org/article/pairing-ai-and-nukes-will-lead-our-autonomous-doomsday>

Arihant launch strengthens nuclear ‘triad’

G. PARTHASARATHY, The Hindu, November 14, 2018

Prime Minister Narendra Modi announced with justifiable national pride on November 6, that India’s first nuclear propelled submarine, INS Arihant, which was commissioned in 2016, was now operationally ready, as an integral part of its nuclear deterrent.

India’s nuclear doctrine stated that its nuclear weapons would only be used in retaliation against a major attack on Indian territory, or on Indian forces

anywhere, in which nuclear weapons are used. India also retains the right to use nuclear weapons in the event of major attacks on its territory, or on Indian forces anywhere, in which chemical or biological weapons are used. Pakistan, on the other hand does not have a formal nuclear doctrine.

While India has a well-organised, streamlined nuclear command structure headed by the Prime Minister and Cabinet Committee on Security, it needs to address serious issues on the archaic structure of its Ministry of Defence. Most importantly, the key military figure in the Nuclear Command structure is the Chairman of the Joint Chiefs of Staff Committee, who generally holds office for less than a year. This is hardly the time adequate for him to become fully familiar the complexities of our Strategic Nuclear Command.

<https://www.thehindubusinessline.com/opinion/columns/g-parthasarathy/arihant-launch-strengthens-nuclear-triad/article25497978.ece>

China and the New Strategic Nuclear Arms Race: The Forces Driving the Creation of New Chinese Nuclear Delivery Systems, Nuclear Weapons, and Strategy By

Anthony H. Cordesman, Centre for Strategic and International Studies, Final Review Edition: November 14, 2018

This study is available on the CSIS web site. This study is a major expansion and revision of a previous Burke Chair study that examines the changes taking place in Chinese nuclear delivery needs and their impact on China's stockpiles of nuclear weapons and weapons designs. It drew on a wide range of official open-source reporting, as well as a range of outside sources, including the Federation of American Scientists, Arms Control Association, IISS, SIPRI and analysts like Hans M. Kristensen and Robert Norris to examine these developments. The original study argued that a focus on China's expanding global influence, conventional forces, missile forces, emerging ASAT and cyber capabilities – and role in the South

China Sea – had led much of the analysis of Chinese military developments to ignore the key uncertainties surrounding its stockpile of nuclear weapons, and the fact that China is developing all the elements of a far more advanced strategic nuclear Triad – along with improved theater delivery system and missile defenses. It concluded that this lack of attention to the fundamental changes taking place in China's nuclear forces had several explanations. They were partly the result of the fact that the other symbols of China's emergence as superpower – like the situation in the South China Sea – were far more visible and seen as far more urgent. They were partly the result of the fact that China was slow to expand its nuclear missile forces and create a real Triad. And, partly a result of the fact that past estimates of its total holdings of nuclear weapons were so low – roughly at the level of British and French forces – and far below the levels held by the United States and Russia. This expanded version of the study focuses on the interactions between the improvements in Chinese nuclear forces and those taking place in U.S. and Russian nuclear forces. Rather than focusing on current Chinese nuclear developments, it summarizes the major changes taking place in U.S. nuclear forces as a result of the Nuclear Posture Review, and the changes taking place in Russian forces as reported in open-source material and by President Putin.

https://csis-prod.s3.amazonaws.com/s3fs-public/publication/181116_China_New_Arms_Race.pdf?W0ILjlyIM0CKu00nvtBxBn1SfuFop9Ok

Beijing's Nuclear Option: Why a U.S.-Chinese War Could Spiral Out of Control By *Caitlin Talmadge,*

Foreign Affairs, November/ December issue

As China's power has grown in recent years, so, too, has the risk of war with the United States. Under President Xi Jinping, China has increased its political and economic pressure on Taiwan and built military installations on coral reefs in the South China Sea, fuelling Washington's fears that Chinese

expansionism will threaten U.S. allies and influence in the region. U.S. destroyers have transited the Taiwan Strait, to loud protests from Beijing. American policymakers have wondered aloud whether they should send an aircraft carrier through the strait as well. Chinese fighter jets have intercepted U.S. aircraft in the skies above the South China Sea. Meanwhile, U.S. President Donald Trump has brought long-simmering economic disputes to a rolling boil.

<https://www.foreignaffairs.com/articles/china/2018-10-15/beijings-nuclear-option?cid=soc-tw>

The Nuclear Power Dilemma Declining Profits, Plant Closures, and the Threat of Rising Carbon

Emissions *Steve Clemmer Jeremy Richardson Sandra Sattler Dave Lochbaum Union of Concerned Scientists, November 2018*

For decades, nuclear power has provided most of the nation's carbon-free electricity. However, the owners have shut down many nuclear plants in the last five years or announced plans to close them well before their operating licenses expire, generating a discussion among policymakers and regulators about the impact of early retirements. The primary reasons for these early closures are the economic challenges brought on by cheap natural gas, diminished demand for electricity, falling costs for renewable energy, rising operating costs, and safety and performance problems. The possibility that the nation will replace existing nuclear plants with natural gas and coal rather than low-carbon sources raises serious concerns about our ability to achieve the deep cuts in carbon emissions needed to limit the worst impacts of climate change. As of the end of 2017, 99 reactors at 60 power plants provided 20 percent of US electricity generation.

The Union of Concerned Scientists (UCS) has assessed the economic viability and performance of most of the nuclear power plants operating in the United States, analyzing which ones are most at risk of early retirement and evaluating the main factors that affect competitiveness. It also

identified reactors that have been safe, reliable performers and those with troubled performance records. In addition, using a national model of the electricity sector, UCS has analyzed the impacts on the US electricity mix, CO2 emissions, and consumer electricity bills of three scenarios for retiring nuclear plants early and two scenarios based on the introduction of national policies to reduce carbon emissions.

<https://www.ucsusa.org/sites/default/files/attach/2018/11/Nuclear-Power-Dilemma-full-report.pdf>

Revealed: Emptying of the Iranian “Atomic Warehouse” at Turqz

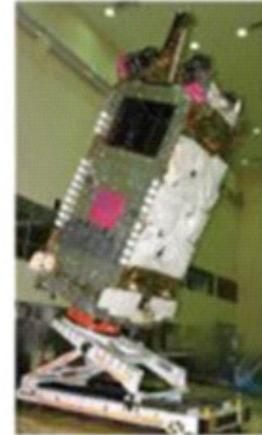
Abad *David Albright, Olli Heinonen, Frank Pabian and Andrea Stricker Foundation for Defence of Democracies, November 29, 2018*

On September 27, 2018, Prime Minister Benjamin Netanyahu of Israel revealed at the United Nations (UN) General Assembly the existence of a secret warehouse in the Turqz Abad district in Tehran, which he said held a range of equipment and materiel (as much as “300 tons”) in 15 shipping containers related to Iran's past or possibly on-going nuclear weapons efforts.^[1] He also stated that the facility had held 15 kilograms of radioactive material that Iran had since dispersed around Tehran. He criticized the International Atomic Energy Agency (IAEA) for not being willing to inspect the site after Israel had quietly provided the IAEA with evidence of the “Atomic Warehouse” and information about Iran's efforts to empty it. This emptying appears to have followed public revelations that Israel had seized a portion of Iran's separate “Atomic Archive,” or alternatively called the “Nuclear Archive,” containing nuclear weapons files and documentation.

https://www.fdd.org/analysis/2018/11/29/revealed-emptying-of-the-iranian-atomic-warehouse-at-turqz-abad/?utm_content=buffer24e01&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer

GSAT-11

GSAT-11 is the next generation high throughput communication satellite and is the heaviest satellite built by ISRO. GSAT-11 is the fore-runner in a series of advanced communications satellite with multi-spot beams covering Indian mainland and Islands. Use of Ka-band is introduced in India, for the first time through indigenous built GSAT-11 satellite.



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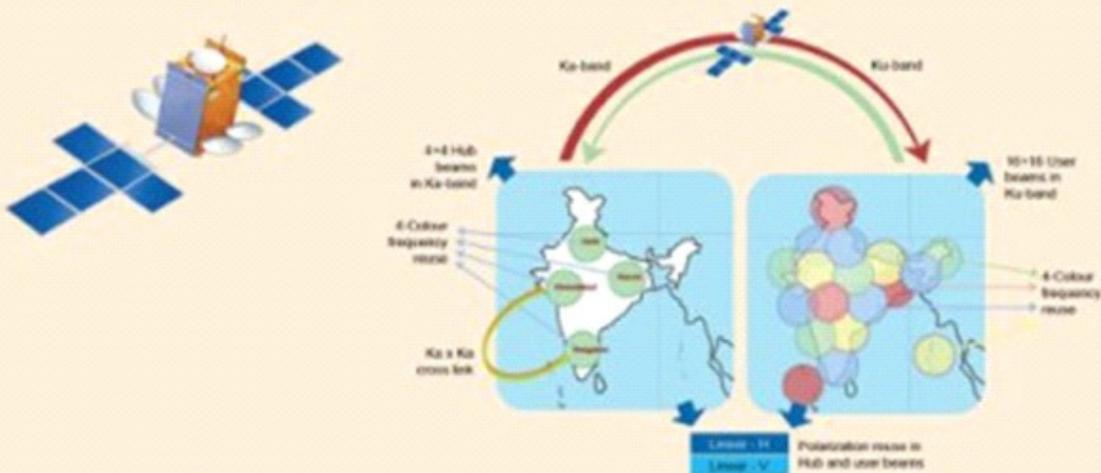
6 ton class
satellite of
ISRO

34th

Communication
Satellite built
by ISRO

Salient features

1. Lift of Mass : 5854 kg
2. Orbital Location : 74° E
3. Spacecraft Power : 13.6 kW
4. Payload : 32 user beams (Ku-band) & 8 Hub beams (Ka-band)
5. Throughput data rate : 16 Gigabits per second
6. Mission Life : 15 Years



- GSAT-11 provides high data rate connectivity for users over India using spot beams.
- It provides broadband connectivity to Gram Panchayats under BharathNet project, as part of Digital India programme.
- GSAT-11 also supports high data applications for enterprise network and consumer broadband applications.

Contribute Articles

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

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

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Prepared by :

Ms Deepika Sharma

The cover shows ISRO's Geosynchronous Satellite Launch Vehicle Mark III D2 (GSLV MK3 D2) Carrying The GSAT-29 Communication Satellite, taking off from the Satish Dhawan Space Centre, Sriharikota.

Courtesy: <https://www.oneindia.com/photos/isro-launches-gslv-mk-iii-d2-gsat-29-mission-56952.html#photos-3>

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