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SYLLOGE ON CHINA

Focus: Nuclear, Space, Missiles and other Security Issues

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Prepared By:

Kushal Agrawal

China, Pakistan to further promote military cooperation in various fields: Defense Spokesperson

China Military Online, March 31, 2022

The military-to-military relations, serving as the mainstay of the China-Pakistan friendship, have played an important role in the development of bilateral relations for a long time, said Senior Colonel Wu Qian, a spokesperson for China's Ministry of National Defense, at a regular press conference on Thursday. Senior Colonel Wu made the remarks when commenting on the reports that the Pakistani Air Force recently held a ceremony for receiving the Chinese J-10CE fighter jets, and that as commented by the Pakistani Prime Minister, the China-made aircraft would play an important role in correcting the "security imbalance" in the region. Wu added that the two militaries have achieved fruitful results in fields such as high-level visits, joint training and exercises, anti-epidemic cooperation and equipment technology, constantly enriching the connotation of bilateral strategic cooperation.

http://english.chinamil.com.cn/view/2022-03/31/content_10145115.htm

15th round China-India Corps Commander Level Meeting positive and constructive: Defense Spokesperson

China Military Online, March 31, 2022

China and India sides have agreed to properly handle the border issue through negotiation and consultation, firmly opposing interference from a third party, said Senior Colonel Wu Qian, spokesperson for the Chinese Ministry of National Defense (MND) at a regular press conference in Beijing today. Senior Colonel Wu made the remarks when commenting on the words by US Assistant Secretary of Defense for Indo-Pacific Security Affairs Ely Ratner, who said that India is facing a severe situation from the Chinese side along the Line of Actual Control (LAC), to which the US keeps close attention. On March 11, the Chinese and Indian militaries held the 15th round of China-India Corps Commander Level Meeting at the Moldo/Chushul border meeting point on the Indian side, during which the two sides held discussions on continuing to promote the settlement of relevant issues in the area along the Line of Actual Control (LAC) in the Western Sector of the China-India border. Wu commented that the meeting was positive and constructive.

http://english.chinamil.com.cn/view/2022-03/31/content_10145117.htm

Haiyang's aerospace industry gains provincial support

China Daily, March 30, 2022

The aerospace industrial cluster in Haiyang, a county-level city in the coastal city of Yantai in Shandong province, was listed in the second batch of 13 Shandong provincial-level strategic emerging industrial clusters on March 22. Due to its favorable geographical location, Haiyang is China's fifth rocket launch site and the country's only homeport for seaborne rocket launches. China successfully launched a Long March-11 rocket from a mobile launch platform in the Yellow Sea off Shandong province on June 5, 2019. It was China's first space launch from a sea-based

platform. The rocket was transported to the launch site from Haiyang Port in Yantai. Following the successful launch, Haiyang made a request for the construction of the Haiyang Oriental Aerospace Port and thoroughly investigated the development opportunities. The port's building has accelerated dramatically in the last two years, with a number of large projects already underway.

http://www.chinadaily.com.cn/m/shandong/yantai/2022-03/30/content_37550391.htm

Fuel loading completed at Hongyanhe 6

World Nuclear News, March 28, 2022

The process of loading the 157 fuel assemblies into the core of unit 6 of the Hongyanhe plant in Liaoning province has been completed, China General Nuclear (CGN) announced. The unit - the second of two ACPR-1000 reactors built as Phase II of the plant - is scheduled to begin operations later this year. The loading of the fuel began on 25 March and was completed on 28 March. CGN said the process was carried out under the supervision and approval of the Northeast Nuclear and Radiation Safety Supervision Station of the Ministry of Ecology and Environment. The National Nuclear Safety Administration conducted a comprehensive inspection of Hongyanhe 6 between 14 and 18 February prior to the issuance of an operating licence. "The completion of the first fuel loading marks that the unit has officially entered the stage of nuclear commissioning of the main system, and has taken an important step towards completion and production," the company said.

<https://www.world-nuclear-news.org/Articles/Fuel-loading-completed-at-Hongyanhe-6>

Chinese astronauts prepare for trip home after 6 months at space station

South China Morning Post, March 28, 2022

Three Chinese astronauts aboard the country's space station have started to prepare for their return to Earth as they near the end of their six-month mission in orbit. The trio, who were sent into orbit on the Shenzhou 13 spacecraft, have stayed on the Tianhe core module of China's Tiangong space station for more than 160 days. A source said they were expected to return in mid-April as planned. "The crew in orbit and search-and-retrieval team on the ground in Inner Mongolia are all preparing for their return," the source said. "So far, all is going smoothly."

<https://www.scmp.com/news/china/science/article/3172164/chinese-astronauts-preparing-trip-home-after-6-months-space>

US practices new war concepts with 100+ drills near China: think tank report

Global Times, March 27, 2022

The US held more than 100 large-scale military exercises near China last year, practicing and validating several new war concepts targeting the country, a Beijing-based think tank revealed on Sunday, shortly before the US and the Philippines are reportedly about to launch the "largest-ever" joint drills on Monday. A major reason behind the extensive drills with new tactics is that the US is aiming to contain China but is faced with the rapid development of the Chinese People's Liberation Army (PLA), and the US military is worried that its traditional instruments of war are

becoming obsolete facing the PLA, analysts said. Based on publicly available information, the US military conducted 95 exercises in and near the South China Sea in 2021, with the actual number exceeding 100, the South China Sea Strategic Situation Probing Initiative (SCSPI) said in a report released on Sunday. Among the 95 drills, 14 consisted solely of arms of the US military, including the Navy, Air Force, Marine Corps, Army and Coast Guard. They featured training courses including anti-ship, anti-submarine, anti-sea mine, amphibious, cyberspace and maritime situational awareness missions.

<https://www.globaltimes.cn/page/202203/1256918.shtml>

China's Tianzhou-2 cargo craft leaves space station core module

China Military Online, March 27, 2022

China's cargo spacecraft Tianzhou-2 separated from the core module of the country's space station Sunday afternoon, announced the China Manned Space Agency. At 3:59 p.m. Beijing Time, Tianzhou-2 left the core module of the Tiangong space station after completing all of its scheduled tasks, said the agency. During its operation in orbit, Tianzhou-2 carried out a series of extended application tests. It is now in good condition, and will enter the Earth's atmosphere at an appropriate time under ground control, the agency added. Tianzhou-2 is the first cargo ship sent into space in the key-technology verification phase of China's space station.

http://english.chinamil.com.cn/view/2022-03/27/content_10143841.htm

China determines over 40 elements in Chang'e-5 lunar samples, 'significant for Moon formation studies'

Global Times, March 27, 2022

China has determined more than 40 chemical elements in the lunar soil samples brought back by the Chang'e-5 mission with nuclear technology, a scientist team revealed on Sunday. The discovery will serve as an important reference for the study of the formation and evolution of the Moon and will also boost the utilization of lunar resources, experts said. The research team from China Institute of Atomic Energy (CIAE), affiliated with the China National Nuclear Corporation, used neutron activation analysis and found that the chemical substances contained in the Chang'e-5 lunar samples were very different from those on Earth, China Central Television reported on Sunday. "We mainly used nuclear reactors to study the samples, accurately testing over 40 chemical elements including macroelements, microelements, and trace elements in them," Guo Bing, head of the institute of nuclear physics at CIAE, was quoted as saying in the report.

<https://www.globaltimes.cn/page/202203/1256907.shtml>

China calls for restraint regarding nuclear issue on Korean Peninsula

China Daily, March 26, 2022

China on Friday called for restraint on the Korean Peninsula nuclear issue after the test launch of an intercontinental ballistic missile was conducted by the Democratic People's Republic of Korea the previous day. "Under the current circumstances, we call on the parties concerned to stay calm,

exercise restraint, stay on the right track of dialogue and consultation, and avoid taking any action that may exacerbate the tensions and lead to miscalculations," China's permanent representative to the United Nations Zhang Jun told the Security Council meeting on the situation of the Korean Peninsula. "As the peninsula's next door neighbor, China has been consistent in advocating and promoting the peninsula's peace and stability, its de-nuclearization, and the approach of seeking a solution through dialogue and consultation," Zhang said, adding that "we hope the United States and the DPRK will actively pursue dialogue and engagement in search of an effective solution to settle their differences."

<https://www.chinadaily.com.cn/a/202203/26/WS623e5cf6a310fd2b29e536d7.html>

Second Fuqing Hualong One enters commercial operation

World Nuclear News, March 25, 2022

Unit 6 of the Fuqing nuclear power plant in China's Fujian province - the second of two demonstration Hualong One (HPR1000) reactors at the site - has been put into commercial operation, China National Nuclear Corporation (CNNC) has announced. Unit 5 became the first Hualong One to enter commercial operation last year. The process of loading the 177 fuel assemblies into the core of Fuqing 6 began on 6 November 2021. The unit achieved first criticality on 11 December and was connected to the grid on 1 January. It reached full power output on 19 February. The 1000 MWe (net) pressurised water reactor completed a demonstration run lasting 168 hours on 25 March and has now entered commercial operation.

<https://www.world-nuclear-news.org/Articles/Second-Fuqing-Hualong-One-enters-commercial-operat>

Russia says it has agreed to coordinate with China on North Korea - RIA

Reuters, March 25, 2022

Russia and China have agreed to coordinate closely on the situation on the Korean peninsula after North Korea's launch of a new intercontinental missile, Russia's foreign ministry was quoted as saying on Friday. "Concern was expressed over the latest developments in the sub-region" at the meeting between Russian Deputy Foreign Minister Igor Morgulov and China's representative on the Korean Peninsula, Liu Xiaoming, the ministry was quoted by RIA news agency as saying. The talks emphasised the need to step up efforts to find fair political and diplomatic solutions to the problems of northeast Asia, and "it was agreed to maintain close coordination between Russia and China", the ministry said, according to RIA.

<https://www.reuters.com/world/asia-pacific/russia-says-it-has-agreed-coordinate-with-china-north-korea-ria-2022-03-25/>

Destroyer flotilla of PLA Eastern Theater Command carries out combat training

China Military Online, March 25, 2022

Recently, a group of naval vessels, headed by the guided-missile destroyer Zhengzhou (Hull 151)

attached to a naval destroyer flotilla under the PLA Eastern Theater Command, organized a multi-subject 24-hour combat training exercise in waters of the East China Sea. The training exercise tested the technical and tactical performance of weapons and equipment, strengthened the operational ability of the specialists, and improved the level of coordination and cooperation among system modules.

http://english.chinamil.com.cn/view/2022-03/25/content_10143520.htm

US Navy deploys 3 spy ships near China at once ‘in support of submarine warfare’

Global Times, March 24, 2022

The US Navy has reportedly deployed three spy ships simultaneously to sensitive waters near China over the past week in a provocative move experts said on Thursday aims to boost its submarine and anti-submarine warfare capabilities against the Chinese People's Liberation Army (PLA), after the US "acknowledged its shortcomings" with last year's undersea collision of the USS Connecticut nuclear-powered attack submarine in the South China Sea. Since March 17, three US surveillance ships have been simultaneously operating in and near the South China Sea: the USNS Bowditch ocean survey ship in waters south of Hainan Island, the USNS Effective ocean surveillance ship in waters north of Huangyan Island, and the USNS Loyal ocean surveillance ship in waters to the east of the island of Taiwan, according to the monitoring data released by the South China Sea Strategic Situation Probing Initiative (SCSPI), a Beijing-based think tank, on Wednesday. The US Navy has frequently sent spy vessels near China in recent years, but it is unusual to see so many of them present at the same time.

<https://www.globaltimes.cn/page/202203/1256713.shtml>

AI on its way to replacing humans in hypersonic weapon design: Chinese study

South China Morning Post, March 23, 2022

Chinese researchers have made significant progress in building an artificial intelligence (AI) system that can design new hypersonic weapons by itself, according to the team behind the project. The machine could identify most of the shock waves occurring in wind tunnel tests, even though it was not instructed on what to look for, the researchers said. Without human intervention, the AI machine built a knowledge base of its own to aid the development of new engines for hypersonic missiles or planes that could travel longer distances at much faster speeds, according to its creator. The research team, led by professor Le Jialing with China Aerodynamics Research and Development Centre in Mianyang, Sichuan, published its findings on March 16 in the *Journal of Propulsion Technology*, a peer-reviewed publication run by China's aerospace defence industry.

<https://www.scmp.com/news/china/science/article/3171533/ai-its-way-replacing-humans-hypersonic-weapon-design-chinese>

Nucleoeléctrica to support Chinese Candu refurbishment

World Nuclear News, March 23, 2022

Nucleoeléctrica Argentina has signed a contract with China National Nuclear Corporation (CNNC) to provide technical assistance to support retubing work as part of the refurbishment of China's Qinshan nuclear power plant. The Argentinean company said it is drawing on experience gained during work to extend the operating life of the Embalse nuclear power plant. Retubing is a key process in the refurbishment of Candu-type nuclear power plants, when the main components that make up the reactor are removed and replaced. Nucleoeléctrica said it is "providing advice" on retubing at Qinshan, which is beginning the first phase of its refurbishment. Embalse - a Candu 6 unit - returned to commercial operation in May 2019 after a three-year refurbishment and upgrade programme which will enable it to continue in operation for another 30 years.

<https://www.world-nuclear-news.org/Articles/Nucleoelectrica-to-support-Chinese-Candu-refurbish>

Australia launches Space Command to counter China's extra-terrestrial military ambitions

South China Morning Post, March 22, 2022

Australia's government on Tuesday launched "Space Command", a new defence agency with echoes of the United States' Space Force that has been tasked with securing the country's place in an "already contested" cosmos. Defence Minister Peter Dutton said the new defence arm would be modest to start with, though he gave no detailed staffing or budget figures. In a speech to the Australian Air Force, he said space "will undoubtedly become a domain that takes on greater military significance in this century". "Space is becoming more congested and is already contested, particularly as the boundaries between competition and conflict become increasingly blurred through grey-zone activities," the minister said. Dutton positioned Space Command as a clear counter to China and Russia's extraterrestrial military ambitions, namechecking both nations in his speech along with all "countries that see space as a territory for their taking, rather than one to be shared".

<https://www.scmp.com/news/asia/australasia/article/3171393/australia-launches-space-command-counter-chinas>

PLA fighter jets hold cross-regional drills over 5,000km, show capabilities

Global Times, March 22, 2022

The Chinese People's Liberation Army (PLA) Air Force recently organized a cross-day-and-night, cross-regional maneuver exercise that saw multiple types of fighter jets flying across more than 5,000 kilometers in less than 20 hours, covering different terrains including plateaus and the sea, demonstrating not only the outstanding capabilities of the pilots and warplanes, but also the strong logistics support capabilities of all air bases involved, experts said on Wednesday. Starting the drills, warplanes including the J-11B and the J-11BS attached to a brigade affiliated with the PLA Air Force took off from an air base in Central China and headed toward an unfamiliar region thousands of kilometers away, China Central Television (CCTV) reported on Tuesday. During the maneuver, the aircraft formation penetrated mock hostile aerial defenses, flew from the plains to the sea, and arrived at the designated air base overcoming fatigue from the extended flight, CCTV

reported.

<https://www.globaltimes.cn/page/202203/1257206.shtml>

China to expand deployment of nuclear power in clean, secure energy push

Global Times, March 22, 2022

China's National Development and Reform Commission (NDRC) on Tuesday issued the 14th Five-Year Plan (2021-25) for a modern energy system, in which it outlined clear targets for annual energy supply capacity while specifying measures to enhance the country's energy independence, including increasing nuclear power as the country is going greener. The latest government plan is in line with China's long-standing commitment to carbon emissions reduction targets, while securing energy supplies amid the ongoing COVID-19 pandemic and growing global uncertainties, analysts said. In a joint report issued by the NDRC and the National Energy Administration, explicit targets have been drawn for promoting the active development of nuclear power in a safe and orderly manner, aiming to achieve the installed capacity of nuclear power plants at about 70 million kilowatts by 2025. The operation of nuclear power is stable and reliable, and the refueling cycle is long, which makes it suitable for the base load of the grid and necessary load tracking, Lin Boqiang, director of the China Center for Energy Economics Research at Xiamen University, told the Global Times on Tuesday.

<https://www.globaltimes.cn/page/202203/1256556.shtml>