

November 18, 2021

# SYLLOGE ON CHINA

Focus: Nuclear, Space, Missiles and other Security Issues

An Initiative by Indian Pugwash Society and Centre for Nuclear Issues and Arms Control (MP - IDSA)



INDIAN PUGWASH SOCIETY



Prepared By:

Archita Anand

## **China vows to enhance energy cooperation with Russia**

Xinhua, November 17, 2021

Chinese Vice Premier Han Zheng called for enhanced energy cooperation with Russia at the 18th meeting of the China-Russia Energy Cooperation Committee. He called on the two sides to further deepen cooperation on nuclear energy, promote cooperation on projects such as oil and gas pipeline construction, expand new areas of energy cooperation, and gradually promote cooperation on renewable energy, hydrogen energy, energy storage and technological innovation.

[http://www.news.cn/english/2021-11/17/c\\_1310317147.htm](http://www.news.cn/english/2021-11/17/c_1310317147.htm)

## **China-Russia Consortium space weather centre established in Beijing to enhance intl influence**

Global Times, November 17, 2021

The China-Russia Consortium (CRC) space weather centre was established in Beijing on November 16, a move to accelerate the development of meteorological services for international civil aviation and enhance China's international influence in the sector, according to the China Meteorological Administration (CMA). The centre is jointly established and operated by the China Meteorological Administration, the Civil Aviation Administration of China and the Russian Federal Service for Hydrometeorology and Environmental Monitoring. It is the first global centre approved by the International Civil Aviation Organization in Chinese civil aviation meteorology and also the fourth global space weather centre. Space weather matters for high-tech systems like satellite operation, human health, and especially for aviation safety and communication, positioning and tracking. Meanwhile, the reliability of avionics might be seriously disrupted by space weather.

<https://www.globaltimes.cn/page/202111/1239157.shtml>

## **China sends long-range bomber to border with India**

Minnie Chan

South China Morning Post, November 16, 2021

The People's Liberation Army has deployed at least one long-range strategic H-6K bomber to its borders with India in a move meant as a warning to the Indian military not to escalate tensions over winter, analysts said. To mark the PLA Air Force's 72nd anniversary on November 11, state broadcaster China Central Television aired footage that included a brief shot of an H-6K flying over a mountain range, indicating the aircraft had been sent to the Himalayas. The aircraft was armed with short-range KD-63 missiles – and not the long-range CJ-20 cruise missiles that it is also designed to carry.

<https://www.scmp.com/news/china/military/article/3156258/china-sends-long-range-bomber-border-india>

### **Prospect of India's military reform remains dim**

Wang Xinjuan

China Military News, November 15, 2021

The Indian military has been quite busy recently, from commissioning the Rafale fighters to test-firing the Agni-V ballistic missile..., which Indian media described as the achievements of the country's latest military reform. However, the Indian military's reform toward streamlined, theatre-based and information-based armed forces might still face a host of obstacles.

During the reform, the Indian military tries to strengthen the communication and coordination between civil officials and military officers to squeeze the military's opinions into the government's decision-making system and change the situation that only the defence minister, who usually comes from a civil background, participates in the decision making. For a long time, the Indian military has always been led by civil officials, with only obligations to follow the government's decisions but no right to participate in policy-making, because the Indian government worries that having professional servicemen in important positions for the long term will increase the risk of them intervening in state governance. Now with the ongoing military reform, the military's opinions will be incorporated into the decision-making process, which will be a new test for both the government and the military.

[http://www.81.cn/jwywpd/2021-11/15/content\\_10108084.htm](http://www.81.cn/jwywpd/2021-11/15/content_10108084.htm)

### **China's L-15 advanced jet trainer showcased at Dubai Airshow, reflecting nation's attention to Middle East arms market**

Cui Fandi

Global Times, November 15, 2021

China displayed its L-15 advanced jet trainer at the Dubai Airshow in the United Arab Emirates (UAE) on November 14 along with other Chinese arms products, the first time that the Chinese military aviation sector has systematically exhibited its products in a large comprehensive international airshow outside the country since the COVID-19 pandemic.

<https://www.globaltimes.cn/page/202111/1238945.shtml>

### **Chinese navy fleet returns from Gulf of Aden escort missions**

Xinhua, November 15, 2021

A Chinese naval fleet November 15 returned to a military port in Zhoushan, east China's Zhejiang Province, after concluding escort missions in the Gulf of Aden and the waters off Somalia. The 38th naval escort fleet, comprised of missile destroyer Nanjing, missile frigate Yangzhou, and supply ship Gaoyouhu, weighed anchor on May 15 at a military port in Zhoushan. The last 185 days saw the fleet escort 45 Chinese and foreign ships and sail more than 90,000 nautical miles.

<http://www.news.cn/english/2021->

[11/15/c\\_1310312396.htm#:~:text=HANGZHOU%2C%20Nov.%202015%20\(Xinhua.and%20the%20waters%20off%20Somalia.](#)

### **U.S. Suspends Nuclear Trade with Chinese Group**

Arms Control Today, November 15, 2021

The U.S. Nuclear Regulatory Commission (NRC) has suspended shipments of radioactive materials to China's state-owned and -operated nuclear company, the China General Nuclear Power Group (CGN). The action includes restrictions on deuterium, a hydrogen isotope used in nuclear reactors and boosted nuclear weapons.

Concerned about China's growing nuclear weapons program, the NRC decided Sept. 27 that a suspension was "necessary to further the national security interests of the United States and to enhance the United States common defense and security consistent with the Atomic Energy Act of 1954." The nuclear cooperation act governs U.S. nuclear trade of sensitive nuclear materials with China and other countries and distributes licenses for "the exportation of nuclear material, reactors, and related technologies" if states party to the act meet specified standards. In 2015 the United States and China signed a 30-year cooperation agreement under terms of the act.

<https://www.armscontrol.org/act/2021-11/news-briefs/us-suspends-nuclear-trade-chinese-group>

### **India's plan to deploy BrahMos missile escalates border tension, but of no actual threat: observers**

Zhang Changyue

Global Times, November 14, 2021

Chinese observers slammed the Indian government's plan to deploy the BrahMos missile - its most advanced missile - at the India-China border, warning it would add new barriers in talks to peacefully address the border tension and further deteriorate ties. However, they noted that the new weapon would be only of theoretical use while posing no actual threat to China's security. The BrahMos is the most advanced supersonic cruise missile India has. Developed since 2007, it can be installed on ships, submarines, aircraft and ground vehicles and has a range of up to 290 kilometres and a maximum speed of Mach 3, according to Army Technology.

<https://www.globaltimes.cn/page/202111/1238935.shtml>

### **Shidaowan nuclear power plant reaches planned operational conditions**

Global Times, November 14, 2021

The No.2 reactor of the Shidaowan nuclear power plant in East China's Shandong Province, which is the world's first high-temperature gas-cooled reactor (HTGR) nuclear plant using a

pebble-bed module, has reached the critical stage of success, according to reports. Both the No.1 and No.2 reactors have reached planned normal operating conditions. The No.1 reactor is heading to the first connection with the power grid after it reached the critical stage in September, said China Huaneng Group Co, the operator of the plant. The Shidaowan plant is also the world's first commercial use of HTGR nuclear power technology, which is considered a relatively safe technology among the world's latest fourth-generation nuclear reactors.

<https://www.globaltimes.cn/page/202111/1238883.shtml>

### **Eighth Int'l Army Cadets Week held in Nanjing, China**

Wang Xinjuan

China Military News, November 12, 2021

The Eighth International Army Cadets Week was held on November 9 in Nanjing, capital of East China's Jiangsu Province. Cadets from foreign military academies of 12 countries, namely Brazil, Cambodia, Egypt, Hungary, Italy, Mexico, Pakistan, the Philippines, Romania, Serbia, Singapore and Thailand, and more than 10 Chinese military academies carried out three-day study and exchange activities via video link. This year's International Army Cadets Week was organized by the Army Engineering University of the Chinese People's Liberation Army (PLA). With the theme of "capabilities and cultivation of army officers in joint operations", the event aimed to build an international exchange platform and promote mutual learning among cadets from various countries.

[http://www.81.cn/jwywpc/2021-11/12/content\\_10107788.htm](http://www.81.cn/jwywpc/2021-11/12/content_10107788.htm)

### **City takes lead in heating with clean energy**

Zhao Ruixue

China Daily, November 12, 2021

The urban area of Haiyang, Shandong province, has started using heat generated by a nuclear power plant this winter, making it the first Chinese city to have carbon-free heating, State Power Investment Corp said. As China's first commercial nuclear heating project, it provides clean energy to more than 200,000 residents of Haiyang, a coastal city under the jurisdiction of Yantai. The new heating was put into operation on Tuesday, six days ahead of the scheduled start of the four-month winter heating period, due to recent cold weather.

[http://www.chinadaily.com.cn/m/shandong/yantai/2021-11/12/content\\_37548618.htm](http://www.chinadaily.com.cn/m/shandong/yantai/2021-11/12/content_37548618.htm)

### **Chinese-Kazakh joint venture starts production of nuclear fuel assemblies**

Xinhua, November 12, 2021

A nuclear fuel assemblies plant built by a Chinese-Kazakh joint venture was put into operation

on November 10 in the city of Ust-Kamenogorsk in the East Kazakhstan Region, the press service of China General Nuclear Power Corporation (CGNPC) Uranium Resources Co. Ltd said. With an operation period of 20 years, the project is jointly funded by CGNPC Uranium Resources and Kazakhstan's national atomic company Kazatomprom. The project officially started in December 2016. It is designed to produce 200 tons of uranium nuclear fuel components annually, which are used for generating thermal power inside a nuclear reactor. The fuel assemblies can satisfy the need of 8-million-kilowatt nuclear power units. The Chinese and Kazakh sides have also carried out cooperation in uranium resource extraction, trade and nuclear fuel core processing. Kazatomprom is one of the world's largest producers of uranium, with its attributable production accounting for 23 percent of the total global primary uranium production in 2020.

[http://www.news.cn/english/asiapacific/2021-11/12/c\\_1310305544.htm](http://www.news.cn/english/asiapacific/2021-11/12/c_1310305544.htm)

### **Hot functional tests completed at Karachi 3**

World Nuclear News, November 11, 2021

Hot functional testing of Karachi 3 in Pakistan was completed ahead of schedule on 4 November, China National Nuclear Corporation (CNNC) announced today. This means the second overseas Hualong One unit has entered the "fuel loading stage", the company said.

<https://www.world-nuclear-news.org/Articles/Hot-functional-tests-completed-at-Karachi-3>

### **PLA Eastern Theatre Command conducts combined cordon and patrol in Taiwan Strait**

Huang Panyue

China Military News, November 10, 2021

"The People's Liberation Army (PLA) Eastern Theatre Command conducted combined war-preparedness cordon and patrol in the Taiwan Strait on November 9, in order to test and improve the combat effectiveness of the troops of multiple services and arms in joint operations," said Senior Colonel Shi Yi, spokesperson for the PLA Eastern Theatre Command in a written statement released on Tuesday.

[http://www.81.cn/jwywpc/2021-11/10/content\\_10106522.htm](http://www.81.cn/jwywpc/2021-11/10/content_10106522.htm)

### **FM calls for safeguarding maritime order**

Zhou Jin

China Daily, November 10, 2021

State Councilor and Foreign Minister Wang Yi expressed opposition on November 10 to making the seas a tool for seeking unilateral hegemony, and he called for nations to jointly safeguard maritime order. Wang also called on countries to strictly deal with acts that damage the marine environment, such as discharges of nuclear sewage, in accordance with the law to

protect the oceans and promote green development.

<https://www.chinadaily.com.cn/a/202111/10/WS618b0291a310cdd39bc74565.html>

### **China could launch its third aircraft carrier 'in next 3 to 6 months'**

Teddy Ng

South China Morning Post, November 10, 2021

China's third aircraft carrier is expected to be launched in the next three to six months, with satellite images suggesting many components are nearly complete, a US think tank said, marking another step in the country's military modernisation.

A report by the Centre for Strategic and International Studies (CSIS) in Washington said there had been a significant shift in the appearance of the Type 003 vessel, based on satellite images taken between September 18 and October 23 at Jiangnan Shipyard in Shanghai. "The two large openings in the vessel's deck were sealed shut. These gaps allowed for large internal components, such as the engines and power plants, to be inserted into the hull," the report said.

<https://www.scmp.com/news/china/military/article/3155561/china-could-launch-its-third-aircraft-carrier-next-3-6-months>

### **China's latest WZ-7 recon drone deployed for combat training ahead of PLA Air Force's 72nd anniversary**

Global Times, November 10, 2021

As an important piece of equipment in the arsenal of the PLA Air Force's unmanned combat system, the domestically developed WZ-7 high-altitude reconnaissance drone has caught much attention since it made its debut at the Airshow China this year. The drone has been deployed for full combat training; the PLA Air Force announced on the eve of its 72nd anniversary.

The WZ-7 uses the "Φ type" tandem-wing aerodynamic configuration, the first time in the world that such design has been used in an aircraft. It has been tested in all kinds of environments and its reliability has been proven. It is "the second drone that can freely cross civil aviation routes," the state-owned Aviation Industry Corporation of China, the aircraft's manufacturer said in a statement sent to the Global Times at the Airshow China 2021.

<https://www.globaltimes.cn/page/202111/1238671.shtml>

### **Beijing responds to US lawmakers' Taiwan visit with joint forces patrol**

Teddy Ng and Minnie Chan

South China Morning Post, November 10, 2021

Beijing staged a joint combat readiness patrol towards Taiwan on November 09, coinciding with the arrival of a US congressional delegation – on board a military aircraft – to the self-ruled island. According to a brief notice issued by the PLA's Eastern Theatre Command, the

patrol was conducted near the Taiwan Strait to further improve the joint combat capability of “multiple military services and branches”.

“This military operation organised by the theatre forces is aimed at the serious wrong words and deeds of relevant countries on the Taiwan issue and the activities of the ‘Taiwan independence’ separatist forces. It is a necessary measure to safeguard national sovereignty,” theatre command spokesman Shi Yi said.

<https://www.scmp.com/news/china/military/article/3155498/beijing-responds-us-lawmakers-taiwan-visit-joint-forces-patrol>

### **New-type militia groups in Xizang help enhance defence capabilities**

Chen Zhuo

China Military Online, November 09, 2021

In late autumn, a joint search and rescue task was carried out on Kuoqiong Gangri glacier in Southwest China's Xizang Autonomous Region. At an altitude of 5,500 meters, members of the Snow Wolf Mountaineering Expedition, a new-type militia group founded just one year ago, collaborated with the mobile rescue troops under the Xizang Contingent of the People's Armed Police Force (PAP) and an aerial rescue squadron of an army aviation brigade for a joint search and rescue task. The snow-covered plateau in Xizang has been recognized as a life-forbidden zone. Being familiar with the geographical situation, social and folk conditions therein, the militias have always been the right-hand assistants for the military in fulfilling national defence missions.

[http://www.81.cn/jwywpc/2021-11/09/content\\_10106512.htm](http://www.81.cn/jwywpc/2021-11/09/content_10106512.htm)

### **China's military holds high-altitude drills near border with India**

Liu Zhen

South China Morning Post, November 09, 2021

China's military has conducted high-altitude exercises near the frontier with India, according to state television, as border tensions continue to simmer. They took place in recent days in the remote Tibetan Plateau region near the de facto border, known as the Line of Actual Control. The series of exercises involved the People's Liberation Army's Xinjiang and Tibet military districts as well as the air force under its Western Theatre Command. The training was said to have included some of the PLA's most powerful howitzers, the latest long-range rocket launchers, and air force bombers, while light tanks were used in assault training on mountainous terrain.

<https://www.scmp.com/news/china/military/article/3155452/chinas-military-holds-high-altitude-drills-near-border-india>

### **China's new J-16D electronic attack jet joins combat training with other warplanes**

Minnie Chan

South China Morning Post, November 09, 2021



China's new J-16D electronic attack jet has begun combat training alongside other advanced warplanes, according to state television, a dogfight strategy said to be inspired by that of the US Air Force. The J-16D – an electronic warfare version of the J-16 multirole strike fighter – was part of a joint combat drill soon after it made its public debut at the Zhuhai Airshow in late September. Wang Mingliang, a researcher at the PLA Air Force Command College in Beijing, told the state broadcaster that the new aircraft – which can carry a range of weapons, interference and surveillance devices – would be more effective when working with other warplanes like the J-20 stealth fighter jet.

<https://www.scmp.com/news/china/military/article/3155322/chinas-new-j-16d-electronic-attack-jet-joins-combat-training>