

Weekly Dispatch

20 April, 2020

# 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 (IDSA)



INDIAN PUGWASH SOCIETY



INSTITUTE FOR DEFENCE  
STUDIES & ANALYSES  
रक्षा अध्ययन एवं विश्लेषण संस्थान

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## **China to hold summit on big data application in military equipment**

China Military Online, April 20, 2020

It is learnt from the Equipment Development Department (EDD) of China's Central Military Commission (CMC) that the Chinese military is to hold the Equipment Big Data Summit 2020 in the coming September. The summit aims at further propelling application of such technological achievements as big data, cloud computing and AI in China's military equipment development, and upgrading the capability of modern governance system.

The summit will be hosted by the EDD's Equipment System Assessment Center. The organizers have now published notification on soliciting essays from big data practitioners inside and outside the military. And the essays to be solicited cover a wide range of areas, including data service system, data collection and storage, data governance and security, intelligent computing application, and block chain application.

[http://eng.chinamil.com.cn/view/2020-04/20/content\\_9796360.htm](http://eng.chinamil.com.cn/view/2020-04/20/content_9796360.htm)

## **China's FTC-2000G multirole combat aircraft bags first export contract**

Liu Xuanzun

Global Times, April 19, 2020

With its first export contract for delivery of the FTC-2000G multirole combat aircraft to an undisclosed Southeast Asian country, Guizhou Aviation Industry Corp can expect a surge in interested customers, aviation experts predicted on Sunday. Local media reports reposted Saturday to the WeChat account of the Guizhou Province-based developer affiliated to the state-owned Aviation Industry Corp of China (AVIC) said the deal was signed in late January, about 15 months after the domestically developed plane's first test flight.

The commercial process has been completed and the first batch will be delivered in early 2021, with full delivery expected to finish within two years, the reports said. The reports did not reveal further key details about the deal, such as the cost or the number of aircraft. "It took less than two years for the FTC-2000G from its test to signing its first export contract with a certain Southeast Asian country, which is an unprecedented speed in the history of AVIC's made-for-export warplane development," one report quoted Wang Wenfei, chairman of Guizhou Aviation Industry Corp, as saying. The deal shows the Chinese aircraft convinced the client with its performances, versatility and cost efficiency compared with competitors like the South Korea's T-50, said a Chinese military expert who asked for anonymity on Sunday. It is worth noting that COVID-19 did not hinder the deal, he told the Global Times.

<http://www.globaltimes.cn/content/1186043.shtml>

## **China's military draws on 6G dream to modernise fighting forces and plan wartime scenarios**

Kristin Huang

South China Morning Post, April 18, 2020

Technology exists only in theory but People's Liberation Army is already planning use on the battlefield. Analysts question whether China's military is evolved enough to handle advanced tech. China has discussed using 6G telecommunication technology to modernise its fighting forces, even though the country has just begun implementing 5G technology and 6G exists only in theoretical studies. Observers said there remained questions around whether the People's Liberation Army

(PLA) could shoulder such an ambitious and demanding transformation and how far the sixth-generation wireless technology could be adopted. An article titled “If 6G Were to be Used in the Future Battlefield”, published by the PLA’s China National Defence News on Monday, said 6G had a distinct technological edge and rich potential for military applications when compared to 5G.

“If [6G] technology is introduced into the military, it will surely have a major impact on military practices, such as war formation, equipment development and battlefield communications,” the article said. “Promoting the gradual application of 6G in the military might be one of the major focuses for the Chinese armed forces to adapt to the new military changes in the future.”

The terms 6G and 5G refer to the sixth- and fifth-generation of mobile wireless networks. While 5G is known to have data transmission speeds at least 10 times greater than 4G, rolled out in 2009, 6G is envisioned to have a speed 10 times greater than 5G.

<https://www.scmp.com/news/china/military/article/3080235/chinas-military-draws-6g-dream-modernise-fighting-forces-and>

### **China's Chang'e-4 probe resumes work for 17th lunar day**

China Military online, April 17, 2020

The lander and rover of the Chang'e-4 probe have resumed work for the 17th lunar day on the far side of the moon after "sleeping" during the extremely cold night. The lander woke up at 1:24 p.m. Friday (Beijing time), and the rover awoke at 8:57 p.m. Thursday. Both are in normal working order, according to the Lunar Exploration and Space Program Center of the China National Space Administration. The Chang'e-4 probe, launched on Dec. 8, 2018, made the first-ever soft landing on the Von Karman Crater in the South Pole-Aitken Basin on the far side of the moon on Jan. 3, 2019.

A lunar day equals 14 days on Earth, and a lunar night is the same length. The Chang'e-4 probe, switching to dormant mode during the lunar night due to the lack of solar power, has survived about 470 Earth days on the moon. The rover Yutu-2, or Jade Rabbit-2, has worked much longer than its three-month design life, becoming the longest-working lunar rover on the moon. Carrying scientific instruments such as panoramic camera, lunar penetrating radar, infrared imaging spectrometer and neutral atom detector, the rover will continue to move northwest to conduct scientific detection.

[http://eng.chinamil.com.cn/view/2020-04/17/content\\_9794696.htm](http://eng.chinamil.com.cn/view/2020-04/17/content_9794696.htm)

### **'China conducted nuclear tests' a US trick to push West-led treaty: Chinese expert**

Fan Lingzhi and Liu Xuanzun

Global Times, April 16, 2020

The Chinese Foreign Ministry on Thursday rubbished the US' accusation that China may have secretly conducted nuclear tests, and a Chinese nuclear disarmament expert said the groundless accusation is a US attempt to push China into a Western countries-led nuclear treaty while also diverting domestic pressures caused by the novel coronavirus. The Chinese statements came after the US State Department on Wednesday released the Executive Summary of 2020 Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments, which claimed that China may have secretly conducted low-level nuclear test blasts at the Lop Nur nuclear weapons test site throughout 2019. The report did not provide evidence for what it claimed to be "zero yield" nuclear test blasts, Reuters reported on Thursday.

The US' accusation is completely groundless, fictitious and not even worth refuting, Foreign Ministry spokesperson Zhao Lijian said at a regular press conference held on Thursday. Zhao said that China had been among the first countries to sign the Comprehensive Nuclear Test Ban Treaty, and China always supported the aim and purpose of the treaty, kept its promise of suspending nuclear tests, and made important contributions to the work of the treaty's Preparatory Commission. Zhao noted that the technical secretariat of the Preparatory Commission had given full affirmation to the data transmission work of observation stations in China. The US side ignored facts and made groundless speculation, and its accusation against China is irresponsible and reflects ulterior motives, Zhao said.

<http://www.globaltimes.cn/content/1185857.shtml>

### **China starts compiling PLA's weapons & equipment history**

Hou Guoquan and Zhang Bing

China Military Online, April 16, 2020

The Equipment Development Department (EDD) under China's Central Military Commission (CMC), in collaboration with the State Administration of Science, Technology, and Industry for National Defense (SASTIND) and the PLA Academy of Military Science, has officially launched the compilation of Weapons and Equipment History of the People's Liberation Army (PLA), which is expected to be completed in 2027. From the crude equipment when the People's Liberation Army (PLA) was established in 1927 to today's advanced weaponry, the Chinese PLA has achieved a great leap in weapons and equipment R&D over the past 93 years.

To objectively record the PLA's evolution from scratch to modernization step by step, and to provide historical reference and inspiration for the future, the PLA Equipment Development Department has taken the lead in compiling the PLA Weapons and Equipment History. It will chronicle the development of iconic equipment and milestone events through scientifically divided historical stages, and make comprehensive, objective and accurate description of the PLA's development process on weapons and equipment. Currently, the compilation team is making in-depth interviews with the retired leaders and veteran experts in the field of military equipment R&D, collecting extensive historical materials, and simultaneously performing systematic analysis to refine key entries.

[http://eng.chinamil.com.cn/view/2020-04/16/content\\_9793822.htm](http://eng.chinamil.com.cn/view/2020-04/16/content_9793822.htm)

### **China's nuclear, radiation safety remains stable: official**

China Daily, April 15, 2020

China has maintained an overall stable situation in nuclear and radiation safety with the world's second largest number of nuclear power generating units in operation, an official with the Ministry of Ecology and Environment (MEE) said Wednesday. The country's nuclear power development has remained safe in terms of technology use and environmental protection, said Guo Chengzhan, director of the MEE's department of nuclear facilities safety supervision.

The country's 47 nuclear power units in operation meet all safety standards, while the quality of the 15 sites under construction is also ensured, said Guo. A total of 18 nuclear fuel cycle facilities are in safe operation, with about 150,000 radioactive sources and nearly 200,000 radiation devices reporting normal safety conditions, he said. Guo said China will further strengthen its supervision

of nuclear facilities and management of radioactive sources, amid efforts to ensure its nuclear and radiation safety.

<https://global.chinadaily.com.cn/a/202004/15/WS5e971473a3105d50a3d167e7.html>

### **China looks for new radioactive waste disposal sites**

Hou Liqiang

China Daily, April 15, 2020

China will expand its three disposal sites for low- and medium-level radioactive waste and has been looking for new sites to address the country's inadequate disposal capacity for such waste, a National Nuclear Safety Administration official said. By the end of last year, a total of 16,000 cubic meters of low- and medium-level radioactive waste had been generated in the country's nuclear power stations, Jiang Guang, head of radioactive source management at the administration, said on Wednesday. With a combined disposal capacity of 76,000 cu m, the three disposal sites have received and disposed of 45,000 cu m of such waste, he added. By the numbers, China still has unused disposal capacity, but Jiang cautioned that "generally speaking ... the capacity is stressed and deficient".

In addition to the waste from nuclear power stations, there is still a large amount of waste left over from historical stockpiles and decommissioned nuclear facilities, he explained. Work has begun on selecting new sites, with the authorities preparing "to select locations and build new sites in provinces with relatively concentrated nuclear power development", he said. Jiang noted, however, that the work is confronted with challenges from the "not in my backyard" mindset and public fears about radiation.

<https://www.chinadaily.com.cn/a/202004/15/WS5e96bdc4a3105d50a3d166f8.html>

### **China's AG600 amphibious aircraft conducts test flights over sea**

China Military Online, April 14, 2020

China's independently-developed AG600 large amphibious aircraft has conducted test flights over the sea, according to its developer Tuesday. It represents a major step forward before the amphibious airplane model conducts its first taking off from the sea surface, which is planned within the year, said the state-owned plan maker Aviation Industry Corporation of China (AVIC). Through the test flights, crew members confirmed and familiarize themselves with the airspace and marine environment for the upcoming test flight missions. Codenamed "Kunlong," AG600 is designed to be the world's largest amphibious aircraft. Its development represents China's breakthrough in this field. AG600 conducted its maiden flight in December 2017 and completed its first takeoff and landing on the water in October 2018.

[http://eng.chinamil.com.cn/view/2020-04/14/content\\_9791711.htm](http://eng.chinamil.com.cn/view/2020-04/14/content_9791711.htm)

### **Robot warriors join Chinese military arsenal, will free soldiers from dangerous missions**

Liu Xuanzun

Global Times, April 14, 2020

More robot warriors are entering the arsenal of the Chinese military, with the latest additions being a small model that's equipped with a machine gun and a crane-like missile-loading robot, and experts said on Tuesday that robots will free human soldiers from heavy physical work and

unnecessary danger. The Chinese People's Liberation Army (PLA) is in possession of the small ground robot, which can traverse complicated terrains, accurately observe battlefield situations and provide ferocious firepower, the PLA Eastern Theater Command said on Sina Weibo on Monday when reposting a China Central Television (CCTV) report on the robot. The thigh-high robot looks like a small assault vehicle. It walks on tracks similar to a tank, allowing it to adapt to complicated terrains in open field combat, move quickly and climb stairs, CCTV reported.

Equipped with a machine gun, and observation and detection equipment including night vision devices, the robot can replace a human soldier in dangerous reconnaissance missions, the report said. Target practice results showed the robot has acceptable accuracy, and the use of weapons still requires human control. New robot warriors joining the Chinese military have gradually become the norm, CCTV said. The PLA Rocket Force is receiving a large, crane-like robot that can be used in lifting and loading missiles onto transporter erector launchers, enabling more missiles to be launched from the same launcher within short intervals, CCTV reported on Sunday. A conventional crane is less steady and requires human assistance when loading missiles, but the robot solves this problem, CCTV reported. Unmanned systems will gradually free human soldiers from heavy physical work and extreme danger and let them focus on making combat decisions and carrying out technical and tactical movements, a military expert who asked not to be identified told the Global Times on Tuesday. Combat robots may attract more public attention, but support robots like the one the Rocket Force is using are also important to the military's overall combat capability, the expert said.

<http://www.globaltimes.cn/content/1185595.shtml>

### **PLA flexes military muscle near Taiwan ‘in show of Covid-19 control’ to virus-hit US**

Minnie Chan

South China Morning Post, April 14, 2020

The People's Liberation Army has resumed regular military drills at home and overseas, moves that military experts say are a show of strength and control over the Covid-19 outbreak. The ground forces, navy and air force of the PLA's five theatre commands started military drills this month, with some exercises involving joint operations, according to several reports published by the PLA Daily in recent days. As the epidemic surged in China, the PLA was forced to suspend all large-scale joint drills because of disruptions to transport and allocations of military resources around the country.

“In the future, the Chinese navy will continue to organise similar training schedules to accelerate and improve the combat capability of its aircraft carrier strike groups,” navy spokesman Gao Xiucheng was quoted as saying in PLA Daily. It is the first time the Liaoning has reappeared in waters near Taiwan since sailors on four United States aircraft carriers sent to the Indo-Pacific region were infected by the coronavirus, making the Chinese carrier the only vessel of its kind active in the western Pacific. The reappearance of the Liaoning strike group prompted Taiwan to send warships, while the US sent a P-3C Orion anti-submarine aircraft to follow the Chinese flotilla. Taiwanese media reported that the aircraft was the seventh American warplane sent to the region in a week. Hong Kong-based military analyst Song Zhongping said the Liaoning's appearance near Taiwan was not only a demonstration of military deterrence to the independence-leaning ruling party in Taiwan, but also a gesture to show off the PLA's greater ability to contain the coronavirus pandemic than its American counterpart.

“Compared with the PLA, the United States military is weaker and lacks experience in dealing with non-traditional military operations such as battles against epidemics, because those aspects are

mostly carried by the US National Guard in various states,” Song said. “Since the threat of Covid-19 is decreasing, the PLA needs to return to their regular training to prepare for a war to reunify Taiwan by force when necessary. The possible war is very complicated as it [would] involve dealing with foreign militaries, such as US and Japanese navies.” Beijing-based military expert Zhou Chenming said that the PLA so far had been able to control the infection sources and channels among soldiers and officers, but that the threat of Covid-19 remained. In pictures published by the PLA Daily, PLA officers do not wear masks while conducting drills. Both Zhou and Song said that the Covid-19 pandemic had hit the US Navy and left a power vacuum in the region but that the PLA would not use the chance to attack Taiwan. “Using force to take Taiwan back is still the last step, not the first priority,” Zhou said. “How to manage and maintain Taiwan’s prosperity is the most important issue of the cross-strait relationship.” Song said the PLA still believed the US Navy had maintained a degree of combat capability even though hundreds of US sailors were infected by the novel coronavirus.

<https://www.scmp.com/news/china/military/article/3079898/pla-flexes-military-muscle-near-taiwan-show-covid-19-control>

### **China starts military conscription for second half of 2020**

China Military Online, April 14, 2020

China has officially started the military recruitment registration for the second half of 2020 in April. Affected by the COVID-19, the recruitment for the first half of the year has been postponed to the second half, with the tasks merged to be completed in one lump. This year's recruitment mainly targets young people with a high school or higher education background, giving priority to the highly educated and the fresh graduates. The age requirements also vary according to the level of education, ranging from 18 to 24 as max. Those graduates enlisted with college education or above will be financially compensated through governmental sponsorship or student loan mechanisms. Besides, high school graduates who have been admitted to colleges and universities this year will have their admission qualification retained, and enjoy the national tuition cut and exemption policy after decommissioning.

It is learnt that the recruitment of male soldiers has begun, lasting from April 1 to August 15. Unlike female soldiers, they must complete military recruitment registrations at first, with the deadline being June 30. This year's recruitment of female soldiers is to be run from June 26 to August 15, while the timing of non-commissioned officers' (NCO) recruitment has not yet been announced.

[http://eng.chinamil.com.cn/view/2020-04/14/content\\_9790888.htm](http://eng.chinamil.com.cn/view/2020-04/14/content_9790888.htm)