

February 08, 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: Diya Deep Singh

PLA conducts drills in Bohai Sea and Yellow Sea during Spring Festival

China Military Online, February 08, 2021

According to the notice released by China's Dalian Maritime Safety Administration on February 7, military drills will be held in waters of the Bohai Strait and northern Yellow Sea of China from February 7 to February 21, 2021.

http://eng.chinamil.com.cn/view/2021-02/08/content_9982993.htm

Pakistani, Cambodian armies among the first to receive COVID-19 vaccines from PLA

Zhao Yusha and Guo Yuandan

Global Times, February 07, 2021

The Chinese People's Liberation Army (PLA) handed over batches of COVID-19 vaccines to the Pakistani and Cambodian militaries on Sunday, making the two the first foreign armies to receive vaccines provided by the Chinese military. To realize China's pledges of making the COVID-19 vaccine as global public goods, and under the request of the Pakistani army, the PLA had offered it a batch of COVID-19 vaccines, said the Chinese Ministry of National Defense, noting the Chinese PLA will continue to make contributions to building a global community of health for all. Also, the PLA handed over a batch of COVID-19 vaccines to the Cambodian army, upon the request from the latter. The Global Times learned that the vaccines offered to those two countries were produced by Chinese pharmaceutical Sinopharm.

Offering vaccines to the Pakistani and Cambodian militaries, upon their requests, reflects the deep and solid ties between China and those two countries, said Li Haidong, a professor at the Institute of International Relations of the China Foreign Affairs University, noting that it also reflects their high level of mutual trust. He said that China first donated vaccines to governments of many developing countries because the public is in more urgent need of vaccines than the military. "Also because the strict management mode within the military, there are far less people infected in the military than among the public," Li noted.

Zhou Bo, former director of the Security Cooperation Center of the Office for International Military Cooperation at China's Ministry of National Defense, told the Global Times on Sunday that exchanges between militaries are closely linked with their countries' diplomatic relations. The same reason determinates that it is impossible for Chinese and US militaries to conduct such cooperation amid the pandemic, Zhou remarked. Last week, the first batch of 500,000 China-assisted COVID-19 vaccines arrived in Pakistan, 10 days after Chinese State Councilor and Foreign Minister Wang Yi promised Pakistan that China would assist Pakistan with vaccines and accelerate vaccines exports to the country. In addition to Pakistan, China has provided vaccine assistance to 13 developing countries, including Nepal, Myanmar and Sri Lanka. It also plans to offer assistance to 38 more developing countries, Wang Wenbin, spokesperson for China's Ministry of Foreign Affairs, said at the routine press conference on February 1.

<https://www.globaltimes.cn/page/202102/1215171.shtml>

Xi calls for enhanced combat readiness from Chinese military during holidays

Liu Xuanzun

Global Times, February 07, 2021

Chinese President Xi Jinping called for the Chinese military to enhance its combat readiness during the upcoming Spring Festival holidays when he recently inspected an aviation division of the People's Liberation Army (PLA) Air Force. Experts said other militaries should not have the illusion that they can make provocative moves during the holidays without meeting PLA's countermeasures. PLA warplanes continued their consecutive exercises near the island of Taiwan prior to the Spring Festival, and the high-altitude border defense troops of the Xinjiang Military Command received several new weapons and equipment including advanced howitzers and assault vehicles as "holiday gifts," media reports said.

Xi, also general secretary of the Communist Party of China Central Committee and chairman of the Central Military Commission, on Thursday inspected an aviation division of the PLA Air Force being stationed in Southwest China's Guizhou Province ahead of the Spring Festival, or the Chinese Lunar New Year, the Xinhua News Agency reported on Saturday. He said that PLA troops should enhance their combat readiness during the Spring Festival holidays and safeguard national security as well as the happiness and peace of the people.

While China has witnessed peace for a long time, provocative moves by other militaries had occurred during holidays in the past. During his inspection at the PLA Air Force aviation division, Xi inspected a special aircraft designed for information warfare. Special mission aircraft developed on the basis of Y-8 and Y-9, including reconnaissance aircraft, electronic countermeasures aircraft and anti-submarine warfare aircraft, can enable the PLA to gain informational advantage in future warfare, a military expert who asked not to be identified told the Global Times on Sunday. The expert noted that these types of aircraft have been frequent visitors near the Taiwan Straits since the start of PLA military exercises in the region in September 2020, which have become routine.

Last week, CCTV reported that the Xinjiang Military Command also received delivery of and commissioned its first batch of China's newly developed Type 15 light tanks in January. These weapons and equipment are particularly effective in plateau operations and will serve as a solid boost to the Chinese border defense troops' combat capabilities during and after the Spring Festival festivals, analysts said.

<https://www.globaltimes.cn/page/202102/1215211.shtml>

China's Chang'e-4 probe resumes work for 27th lunar day

Xinhua, February 07, 2021

The lander and rover of the Chang'e-4 probe have resumed work for their 27th lunar day on the far side of the moon. The lander activated at 4:48 p.m. on Saturday (Beijing time), and the rover Yutu-2, or Jade Rabbit-2, activated at 4:26 a.m. also on Saturday, according to the Lunar Exploration and Space Program Center of the China National Space Administration. Yutu-2 has traveled about 628.5 meters on the far side of the moon. It is currently located about 430 meters northwest of the landing site. A lunar day is equal to about 14 days on Earth, and a lunar night is of the same length. The solar-powered probe switches to dormant mode during the lunar night.

During the 27th lunar day, the panorama camera on the rover will take colored pictures of moon rocks and impact craters. The rover will move southwest toward a rock with a diameter of about 18 cm, which is about 17.8 meters away. The infrared imaging spectrometer will be used to

detect the rock and surrounding lunar soil. The neutral atom detector and lunar radar will continue to carry out scientific explorations.

http://www.xinhuanet.com/english/2021-02/07/c_139727894.htm

Mars ready for its close-up: China releases space probe's first image

Reuters, February 05,2021

China's maiden space exploration mission to Mars has captured its first image of the red planet, the space agency said on Friday, some six months after the probe left Earth. The uncrewed Tianwen-1 took the picture at a distance of around 2.2 million km (1.4 million miles) from Mars, according to the China National Space Administration (CNSA), which supplied a black-and-white image. The probe is now only half that distance away from Mars and around 184 million km from Earth after 197 days of the mission, the CNSA said in a statement, adding that its systems were in good condition.

The Tianwen-1 was launched in July from China's southern Hainan island and expected to reach the orbit of Mars this month. In May, it will try to land in Utopia Planitia, a plain in the northern hemisphere, and deploy a rover to explore for 90 days. If successful, the Tianwen-1 will make China the first country to orbit, land and deploy a rover in its inaugural mission to Mars, further boosting China's space credentials after it last year became the first nation to bring back samples from the moon since the 1970s. China previously made a Mars bid in 2011 with Russia, but the Russian spacecraft carrying the probe failed to exit Earth's orbit and disintegrated over the Pacific Ocean.

<https://www.reuters.com/article/us-space-exploration-china-mars/mars-ready-for-its-close-up-china-releases-space-probes-first-image-idUSKBN2A51Z9>

China conducts successful land-based mid-course missile interception test

CGTN, February 05, 2021

China on Thursday successfully conducted a land-based mid-course missile interception test, said the Ministry of National Defense. The test was for defensive purposes and not targeted at any country, the ministry said in a statement. The test on Thursday was the fifth land-based anti-ballistic missile (ABM) technical test China has publicly announced and the fourth land-based mid-course ABM technical test publicly known. Past ABM tests were carried out in 2010, 2013, 2014 and 2018 respectively, according to media reports and official statements. The flight of a ballistic missile usually consists of three phases in time order: boost phase in which the rocket booster will power the missile into sky, mid-course phase in which the booster stops as the missile traverses outside of the atmosphere, and reentry or terminal phase in which the missile reenters the atmosphere and dives onto its target.

It's technically easy to intercept a ballistic missile in the boost phase, because the missile is still close to the ground and accelerating, but it is difficult to get close to the launch site which is usually deep in hostile territory; in terminal phase, the interception is challenging because the speed of the diving missile is very high, observers said. Mid-course is the most vital phase in the interception of a ballistic missile, and a mid-course ABM means intercepting the missile while it is in its free flight phase outside of the atmosphere, Song Zhongping, a Chinese military expert and TV commentator, told the Global Times. One of the biggest difficulties of an

interception lies in the high trajectory as the duration of the mid-course phase is relatively long, Song said, noting that the target of interception is usually an intermediate-range or intercontinental ballistic missile. The latest test shows that China's ABM system is becoming mature with the success rate and reliability of interceptions increasing significantly, which is very important for China to build a complete ABM system, Song said.

<https://news.cgtn.com/news/2021-02-04/China-successfully-conducts-missile-interception-test-XCaJvPO7EQ/index.html#:~:text=China%20on%20Thursday%20successfully%20conducted,ministry%20said%20in%20a%20statement>

China declares success in latest anti-missile intercept test

Liu Zhen

South China Morning Post, February 05, 2021

China tested its capability of knocking out an incoming missile during midflight on Thursday, with the defence ministry declaring the exercise a success. It is the second country to develop the technology after the US. “The test was defensive in nature and not targeted at any particular country,” it said. No technical details were released about the exercise, which occurred a day after the Biden administration approved the extension of a key nuclear arms control deal with Russia and vowed to engage Beijing on nuclear risk reduction and arms control. The authorities issued a no-fly warning near the Taiyuan Satellite Launch Centre in north China before the test. Photos and videos of a bright and colourful westward parabolic trail were circulating on social media, claimed to be taken by witnesses from Beijing to Xinjiang. While the defence ministry said the test did not target any particular country, a source close to the PLA said the midcourse anti-ballistic missile test – which could intercept an incoming nuclear warhead – may be intended as a warning to India.

India is planning to deploy its longest range, most potent nuclear-capable ballistic missile Agni-V this year, The New Indian Express reported in January, citing defence sources. The report said the conflicts along the China-India border had fast-tracked the process. The Agni-V range is estimated to be over 5,000km. “This is a technology that China has been developing for a long while. The Thursday test could be aimed at warning India, which used to adopt nuclear blackmail strategy when dealing with China,” said the Chinese military source, who requested anonymity due to the sensitivity of the issue. “But to be honest, China’s midcourse anti-ballistic technology still can’t knock down nuclear missiles from the United States and Russia, as there is still a gap between the PLA and the two nuclear giants.”

<https://www.scmp.com/news/china/military/article/3120636/china-declares-success-latest-anti-missile-intercept-test>

China's latest weapon against Taiwan: the sand dredger

Yimou Lee

Reuters, February 05, 2021

Taiwanese coast guard commander Lin Chie-ming is on the frontline of a new type of warfare that China is waging against Taiwan. China’s weapon? Sand. On a chilly morning in late January, Lin, clad in an orange uniform, stood on the rolling deck of his boat as it patrolled in choppy waters off the Taiwan-run Matsu Islands. A few kilometers away, the Chinese coast

was faintly visible from Lin's boat. He was on the lookout for Chinese sand-dredging ships encroaching on waters controlled by Taiwan. The Chinese goal, Taiwanese officials say: pressure Taiwan by tying down the island democracy's naval defenses and undermining the livelihoods of Matsu residents.

The sand-dredging is one weapon China is using against Taiwan in a campaign of so-called gray-zone warfare, which entails using irregular tactics to exhaust a foe without actually resorting to open combat. Since June last year, Chinese dredgers have been swarming around the Matsu Islands, dropping anchor and scooping up vast amounts of sand from the ocean bed for construction projects in China. The ploy is taxing for Taiwan's civilian-run Coast Guard Administration, which is now conducting round-the-clock patrols in an effort to repel the Chinese vessels. Taiwanese officials and Matsu residents say the dredging forays have had other corrosive impacts - disrupting the local economy, damaging undersea communication cables and intimidating residents and tourists to the islands. Local officials also fear that the dredging is destroying marine life nearby. Besides Matsu, where 13,300 people live, the coast guard says China has also been dredging in the shallow waters near the median line of the Taiwan Strait, which has long served as an unofficial buffer separating China and Taiwan.

<https://www.reuters.com/article/us-taiwan-china-security/chinas-latest-weapon-against-taiwan-the-sand-dredger-idUSKBN2A51EJ>

Pakistani, Chinese navies play important roles in maintaining maritime order of Indian Ocean: Exclusive with Pakistan Navy chief

Liu Xuanzun and Guo Yuandan
Global Times, February 04, 2021

The Chinese People's Liberation Army (PLA) Navy is scheduled to participate in the Multinational Exercise AMAN-2021 hosted by Pakistan in February as dozens of navies around the world are about to gather in Karachi. Global Times reporters Liu Xuanzun and Guo Yuandan (GT) recently had an exclusive interview with Chief of the Naval Staff of the Pakistan Navy (PN) Admiral M Amjad Khan Niazi (Adm. Niazi), during which the Admiral shared his visions on topics including the PN's role in promoting regional maritime security, naval cooperation between the PN and PLA Navy, and the upcoming multinational exercise.

Prior to the interview, Admiral Niazi introduced the PN as a strong, agile and resolute navy that defends sea frontiers and protects maritime interests of the country. He said that in cognizance of Pakistan's geostrategic location in the Indian Ocean, at the doorstep of the Arabian Gulf, the PN has been playing an important role in promoting regional maritime security and good order at sea. "With the changing geostrategic realities in the region and operationalization of the China-Pakistan Economic Corridor (CPEC), the role and responsibilities of the PN are growing exponentially. The PN is steadily undertaking capability enhancement and capacity development to optimally deal with added responsibilities and evolving challenges."

<https://www.globaltimes.cn/page/202102/1214952.shtml>

Chinese naval escort taskforces conduct mission-handover in Gulf of Aden

China Military Online, February 02, 2021

The 36th and the 37th Chinese naval escort taskforces held a mission-handover ceremony in

the Gulf of Aden on January 31, local time. After the ceremony, the 37th taskforce officially replaced the 36th taskforce in carrying out escort missions in the Gulf of Aden and waters off Somali. At the handover ceremony, the command post of the 36th Chinese naval escort taskforce handed over relevant papers and equipment to its successor. Sailors of the two taskforces also exchanged views on escort tasks and training, political work and logistic support.

http://eng.chinamil.com.cn/view/2021-02/02/content_9979124.htm

Pakistan Navy releases Chinese-subtitled promotional video for AMAN-2021

China Military Online, February 02, 2021

On February 1, the Pakistani Navy released a Chinese-subtitled promotional video for the AMAN-2021 joint military exercise, which will be held on February 21, 2021. The AMAN exercise has been held every two years since it was launched in 2007. This year it will include naval forces from Pakistan, Russia, China, the US and the UK.

http://eng.chinamil.com.cn/view/2021-02/02/content_9978854.htm

Mighty Dragon: China's modified J-20 stealth fighter jet

Dennis Wong

South China Morning Post, February 2, 2021

Ten years after its maiden flight, China's stealth fighter will stop using Russian engines in favour of an upgraded home-grown engine.

<https://multimedia.scmp.com/infographics/news/china/article/3120147/j20-stealth-fighter/index.html>

China may seek to close nuclear gap after US and Russia agree to extend New START treaty

Minnie Chan

South China Morning Post, January 31, 2021

The deal between Moscow and Washington gives Beijing the chance to play catch-up, but it may face increasing pressure to join future talks on non-proliferation. One military source says the country now has around 1,000 warheads, but less than 100 of these are active. The extension of the New Strategic Arms Reduction Treaty (New START) between the United States and Russia to 2026 may not only prevent an out-of-control arms race but also gives China an additional five-year buffer period.

Chinese military experts and sources said the extension, announced by the White House on Tuesday, means the gap between China and the two nuclear giants, which own 90 per cent of the world's warheads, will not widen and Beijing can spend the next five years catching up.

In the 1980s, the US and former Soviet Union each possessed more than 10,000 warheads, but these stockpiles have been cut to between 5,000 to 6,500 under the New START, which aims to reduce the total to just 1,550 as the ultimate goal. China has not disclosed how many warheads it has, but an assessment by the Stockholm International Peace Research Institute put

the number at 320. China research finds flaws in US nuclear blast equation to protect shelters

However, a source close to the Chinese military said that its stockpile of nuclear warheads had risen to 1,000 in recent years, but less than 100 of them are active. “Both the US and Russia have competed with each other to upgrade their nuclear arms over the past few years, especially their intercontinental ballistic missiles [ICBMs], submarine-launched and airborne missiles, as well as other new weapons to upgrade their nuclear triad capability,” the source, who requested anonymity due to the sensitivity of the topic, said. A nuclear triad is a three-pronged structure that consists of ground-based ICBMs, plus submarine and air-launched missiles. “Since [late leader] Deng Xiaoping’s era, the Beijing leadership has believed that the country doesn’t need so many expensive weapons, because the exorbitant maintenance costs would drag down China’s economic development,” the source said.

The source said China has a strict nuclear arms control mechanism which means only the chairman of the Central Military Commission – now President Xi Jinping – has the right to decide the deployment of nuclear warheads. “Nuclear warheads would be distributed to the rocket force only when a war is likely to happen,” the source said. Hong Kong-based military affairs commentator and former PLA instructor Song Zhongping said Beijing might use the five-year period to narrow the nuclear modernisation gap with the US and Russia. “Based on the fact that China currently has only about 100 nuclear warheads in active service, it is not enough to completely destroy all major cities in the US,” Song said.

<https://www.scmp.com/news/china/military/article/3119913/china-may-seek-close-nuclear-gap-after-us-and-russia-agree>

China’s third Type 075 amphibious assault ship takes step closer to launch

Kristin Huang

South China Morning Post, January 31, 2021

The third of China’s Type 075 amphibious helicopter assault ship was towed to its new berth on Friday where it will be made ready for launch later in the year, state media reported. The assault vessel was moved to the Hudong-Zhonghua shipyard in Shanghai where it will be fitted with weapons systems, living accommodation and the other equipment it needs, Global Times reported. The Type 075 is a new generation of amphibious assault vessel and at 40,000 tonnes far larger than similar ships previously built for the Chinese navy.

As well as being able to carry up to 30 attack helicopters and armoured vehicles, its flat deck can accommodate vertical take-off and landing fighters such as the F-35B. It can also carry hundreds of troops and landing crafts. The Type 075 is the world’s third-largest amphibious assault ship, behind the United States’ Wasp and America classes. It is bigger than Japan’s Izumo class and France’s Mistral class. China plans to have three Type 075s to use for small-scale overseas missions. Its second was launched in April last year. Once the third is completed, the PLA will be able to have one Type 075 in operation, one undergoing maintenance and another on standby.

<https://www.scmp.com/news/china/military/article/3119972/chinas-third-type-075-amphibious-assault-ship-takes-step-closer>

China should use drones to patrol and defend contested seas, academics say

Kristin Huang
South China Morning Post, January 30, 2021

Report calls for unmanned systems above, on and below the water to strengthen Chinese coastguard power. Authors point to activities by claimants in South China Sea and East China Sea to make their case. Drones, driverless surface ships and underwater gliders are imperative if China is to protect its maritime interests, according to an academic report. The authors, from China's Naval Research Academy and Northwestern Polytechnic University's School of Marine Science and Technology, said cheap, advanced unmanned systems were needed to strengthen the country's coastguard power. Northwestern Polytechnic University is directed by China's Industry and Information Ministry and has been listed as a restricted entity by the US, which bars it from full research collaboration and exchanges with the United States.

<https://www.scmp.com/news/china/military/article/3119570/china-should-use-drones-patrol-and-defend-contested-seas>