

# SYLLOGE ON CHINA

Focus: Nuclear, Space, Missiles and other Security Issues

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### Chinese scientists say a cheap, lightweight foam could improve hypersonic weapons

Stephen Chen South China Morning Post, February 17, 2022

Chinese scientists say they may have found a coating material to improve the performance of future hypersonic weapons: carbon foam. The team at the China Aerodynamics Research and Development Centre said their testing – carried out in a wind tunnel – suggested the material could reduce the impact of shock waves by more than 20 per cent. And they said it could improve a weapon's aerodynamic stability by up to two orders of magnitude at the hypersonic speed of Mach 6.

https://www.scmp.com/news/china/science/article/3167292/chinese-scientists-say-cheap-lightweight-foam-could-improve

## Guangdong holds live-fire drill in archipelago amid crackdowns on trafficking and Covid-19

Minnie Chan South China Morning Post, February 17, 2022

The southern Chinese province of Guangdong has staged a live-fire drill in waters off the Pearl River Estuary, according to the maritime authority. The China Maritime Safety Administration's Guangdong bureau announced the exercise in a notice, saying it would take place between 9am and 6pm on February 17 in the southern Wanshan archipelago, about 100km (62 miles) off Hong Kong. The 80 sq km drill zone is the regular training area for the Guangdong coastguard, according to earlier reports. No details of the drill were disclosed, but observers said it was likely to have involved the coastguard.

https://www.scmp.com/news/china/military/article/3167442/southern-chinese-provinceholds-live-fire-drill-archipelago

#### **PLA's Ka-28 chopper appears near Taiwan, 'indicates joint operation'** Liu Xuanzun

Global Times, February 17, 2022

A Ka-28 anti-submarine helicopter of the Chinese People's Liberation Army (PLA) was spotted for the first time near the island of Taiwan on Wednesday, apparently operating from a warship sailing in the region, as Chinese mainland experts said Thursday that the PLA's routine drills near Taiwan likely often feature joint operations of aircraft and vessels, but the defense authority on the island only reported aircraft but failed to track vessels. Three PLA aircraft, namely a Y-8 electronic intelligence aircraft, a Y-8 electronic warfare aircraft and a Ka-28 antisubmarine warfare helicopter, entered Taiwan's self-proclaimed southwest air defense identification zone on Wednesday, Taiwan's defense authority said in a press release on the day.

### CGN Weighing Sale of \$2 Billion European Renewable Assets, Sources Say

Bloomberg, February 16, 2022

China General Nuclear Power Corp. is considering selling its portfolio of renewable energy assets in Europe in a deal that could fetch more than \$2 billion, people with knowledge of the matter said. The Chinese firm is working with Citic Securities Co. on the potential disposal of CGN Europe Energy, said the people, who asked not to be identified as the information is private. The state-backed giant has started sounding out industry players as well as private equity.

https://www.bloomberg.com/news/articles/2022-02-16/cgn-said-to-weigh-sale-of-2-billioneuropean-renewable-assets

#### Test ban meeting

Global Times, February 16, 2022

Brazilian Foreign Ministry Carlos Alberto Franca, Brazilian Defense Minister Walter Souza Braga Netto, Russian Foreign Minister Sergey Lavrov, Russian Defense Minister Sergei Shoigu attend a meeting in the "two plus two" format ahead of the Russian-Brazilian summit, in Moscow, Russia. Tass reported that both Russia and Brazil support the swiftest coming into effect of the Comprehensive Nuclear-Test-Ban Treaty.

https://www.globaltimes.cn/page/202202/1252443.shtml

#### Mainland Chinese Y-12 plane sent to test Taiwan's frontline response, island's defence ministry says

Minnie Chan South China Morning Post, February 15, 2022

Taiwan's defence ministry confirmed that a small civilian aircraft from mainland China flew close to a Taipei-controlled islet earlier this month in what the ministry said was a test of the self-ruled island's defences. Taiwanese air force chief of staff Huang Chih-wei said in Taipei that a Y-12 mainland transport plane flew very close to Dongyin, a frontline islet in Taiwan's Matsu island cluster, on February 5. Dongyin is just 16km (10 miles) from the mainland city of Fuzhou and hosts major missile and radar complexes, including the Tien Kung, or Sky Bow, and Hsiung Feng anti-aircraft missiles. The confirmation came 10 days after Dongyin residents told local media they had spotted an aircraft.

https://www.scmp.com/news/china/military/article/3167152/mainland-chinese-y-12-planesent-test-taiwans-frontline

#### China's latest portable missile shows world-class defense ability

Liu Xuanzun Global Times, February 14, 2022

The QW-12, an advanced portable air defense missile developed by China, recently demonstrated its outstanding performance in intercepting helicopters, jets and cruise missiles in a live-fire test, with experts saying on Monday that the weapon is world class, as it displayed an anti-decoy capability no foreign counterpart has ever shown. Held at a target range in North China recently, the test saw the QW-12 missile successfully shoot down a specially designed target aircraft built to simulate an attack helicopter by mimicking its infrared signal, China Central Television (CCTV) reported. As the QW-12 missile was approaching, the aircraft released eight decoy flares that resemble the infrared signal of the target aircraft in an attempt to disorient the missile. However, the missile ignored the flares and hit the aircraft, the CCTV footage shows. The process took only a few seconds.

https://www.globaltimes.cn/page/202202/1252237.shtml

### PLA Air Force holds drills across China, shows preparedness against provocations from US, allies

Liu Xuanzun Global Times, February 13, 2022

Chinese People's Liberation Army (PLA) Air Force units across all five theater commands recently conducted simultaneous exercises after the PLA Navy held concurrent drills in three major sea regions in a similar manner, in a move that displayed the Chinese military's high level of combat preparedness facing military provocations from the US and its allies, analysts said. Dispatching aircraft including a KJ-2000 airborne early warning and control system, a regiment affiliated with the PLA Eastern Theater Command Air Force organized flight drills on Thursday with the goal being testing the unit's combat capabilities, PLA-Airforce Online, an official social media account of the PLA Air Force, reported.

https://www.globaltimes.cn/page/202202/1252135.shtml

#### Destroyer fires at mock sea targets during training assessment

Global Times, February 13, 2022

A destroyer attached to a destroyer flotilla with the navy under the PLA Northern Theater Command fires jamming bombs to mask the movement and avoid the simulated missile attack during a three-day training assessment, which aims to hone the troops' actual combat capabilities, on January 18.

https://www.globaltimes.cn/page/202202/1252095.shtml

#### **Facebook video of 'new Chinese submarine' gets experts' tongues wagging** Minnie Chan

South China Morning Post, February 13, 2022

A submarine shown in a video posted on social media could be a new, smaller Chinese class prioritising stealth and low cost, and used to counter drones, experts said. Video footage posted on Facebook in a group called "Comments on the PLA" appeared to show an unknown type of Chinese submarine surfacing in a reservoir. It appeared to be undergoing early-stage trials, because the footage, posted by a user called Liu Chengliang, showed two white stripes printed on the sail, as is commonly seen on new Chinese submarines during early tests.

https://www.scmp.com/news/china/military/article/3166756/facebook-video-new-chinesesubmarine-gets-experts-tongues

#### China-Russia Statement: A quest for diversity

Andrey Kortunov Global Times, February 12, 2022

On February 4, on the sidelines of the opening ceremony of the Beijing 2022 Winter Olympic Games, Chinese President Xi Jinping and Russian President Vladimir Putin signed a Joint Statement on the International Relations Entering a New Era and the Global Sustainable Development. It is a rather lengthy document, outlining common approaches of China and Russia to some of the most fundamental issues of the modern world including regional and worldwide security, democracy and political inclusion, social justice and climate change, arms control and nuclear nonproliferation, national sovereignty and multilateralism.

https://www.globaltimes.cn/page/202202/1252068.shtml

#### **Chinese military plays game of drones from Himalayas to South China Sea** Minnie Chan

South China Morning Post, February 12, 2022

Drones are playing a growing role in China's military operations, from the Himalayan border areas to the depths of the seas off its eastern and southern coasts, as the People's Liberation Army embeds the technology in nearly every sphere of operations. Recent satellite images, as well as media and academic reports, have confirmed a significant stepping up in the deployment of drones, developed for an array of uses, in joint combat operations and strategies. Chinese state media have showed a range of drones undergoing high-altitude testing in the Himalayas, with a focus on studying joint operation tactics with different troops on the ground, intelligence collection and delivery of supplies.

https://www.scmp.com/news/china/military/article/3166475/chinese-military-plays-game-

#### drones-himalayas-south-china-sea

#### Chinese navy puts fleets through combat-readiness paces

Kristin Huang

South China Morning Post, February 11, 2022

The Chinese military embarked on three sets of simultaneous maritime exercises this week just days after the United States and Japan held a massive joint naval exercise in the western Pacific. In the East China Sea, China's Eastern Theatre Command carried out combat exercises to improve air defences and manoeuvrability and put main guns to the live-fire test, state broadcaster CCTV reported. The drill involved three destroyers including the Type 052D Xiamen, which is much more advanced than its predecessors.

https://www.scmp.com/news/china/military/article/3166690/chinese-navy-puts-fleets-through-combat-readiness-paces

### US holding fire on rail gun development but China takes aim with planned tests

Stephen Chen South China Morning Post, February 11, 2022

China is to step up its testing of rail guns to an unprecedented level, according to a military researcher, as the US gives up on the futuristic weapon after decades of research. A rail gun is a kinetic energy weapon that can fire a projectile at seven times the speed of sound with electromagnetic force and hit a target over 200km (125 miles) away – more than 10 times the typical range of a cannon. The technology faces a major challenge: the fast-moving projectile and high-voltage electric current could cause irreparable wear on the rail or inner wall, reducing the gun's lifespan and accuracy.

https://www.scmp.com/news/china/military/article/3166582/us-holding-fire-rail-gundevelopment-china-takes-aim-planned

### Was it Beijing testing Taiwan's defences with unidentified Matsu island flyover?

Minnie Chan South China Morning Post, February 11, 2022

Beijing could be trying to test Taiwan's self-defence counter-strike capabilities, Taiwanese military analysts said, after an unidentified aircraft recently flew over a Taipei-controlled island off mainland China's southeastern coast. Residents of Tungyin, a frontline islet under Taiwan's Matsu islands cluster, said they spotted an unidentified aircraft flying overhead at 2.45pm on February 5, while video footage from the watchtower monitor showed an aircraft crossing the skies and flying out towards the east. The military commanding centre of Tungyin confirmed

that "a fixed-wing twin-propeller aircraft [had] briefly entered the airspace and soon left". It said air-defence troops stationed on the island "had closely monitored the process throughout", but failed to give details on what type of aircraft it was, its take-off and landing points, or what kinds of action had been taken to deal with the intrusion.

https://www.scmp.com/news/china/military/article/3166762/was-it-beijing-testing-taiwans-defences-unidentified-matsu

#### Welding 'milestone' for Tianwan 7

World Nuclear News, February 11, 2022

Welding of circumferential seams on the upper half of the reactor vessel for unit 7 of the Tianwan nuclear power plant has begun, Russia's Atommash has announced.

https://www.world-nuclear-news.org/Articles/welding-milestone-for-Tianwan-7

#### PLA holds simultaneous drills after US, Japan exercise near Taiwan island

Liu Xuanzun Global Times, February 10, 2022

The Chinese People's Liberation Army (PLA) recently conducted simultaneous exercises in three major sea regions in a move experts said on Thursday displayed the Chinese military's combat preparedness after the US and Japan held massive, troublemaking exercises along the first island chain near the island of Taiwan as the Beijing 2022 Winter Olympics started. In the East China Sea, the Type 052C destroyer Changchun, the Type 052D destroyer Xiamen and the Type 054A frigate Yiyang attached to the PLA Eastern Theater Command Navy carried out realistic combat exercises with multiple training courses, including air defense, maneuvering and main gun live-fire shooting, China Central Television (CCTV) reported.

https://www.globaltimes.cn/page/202202/1251995.shtml

### Australia's hasty nuclear submarine plan to be outpaced by China's development: experts

Liu Xuanzun and Leng Shumei Global Times, February 08, 2022

In an attempt to contain China, Australian Defense Minister recently said that Australia could get the first nuclear submarine under the framework of AUKUS before 2038. However, Chinese military experts said on Tuesday that this delivery schedule is too hasty and China's rapid development during this period will outpace the Australian one. Australian Defense Minister, Peter Dutton, recently said that he was extremely confident that Australia would have its first nuclear-powered submarine before 2038, adding that recent discussions with the US and UK officials under the AUKUS agreement had reassured him that the submarines would be built

years earlier than many defense experts expected, the Sydney Morning Herald reported.

https://www.globaltimes.cn/page/202202/1251779.shtml