

August 20, 2022

# 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

## **China 'seriously concerned' with Japan's wastewater release: envoy**

CGTN, August 11, 2022

Japan's plan to release the Fukushima wastewater into the Pacific Ocean will cause "non negligible" consequences potentially affecting the marine ecological environment, food safety and human health, a Chinese envoy said. The Japanese government's unilateral decision is purely from economic cost consideration, without exhausting all means of safe disposal and without full consultation with neighbouring countries and international agencies, Chinese Ambassador for Disarmament Affairs Li Song said at the 10th Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons.

<https://news.cgtn.com/news/2022-08-11/China-seriously-concerned-with-Japan-s-wastewater-release-envoy-1cpDCx50B9e/index.html>

## **US Military 'Furiously' Rewriting Nuclear Deterrence to Address Russia and China, STRATCOM Chief Says**

Tara Copp

Defense One, August 11, 2022

The United States is "furiously" writing a new nuclear deterrence theory that simultaneously faces Russia and China, said the top commander of America's nuclear arsenal—and needs more Americans working on how to prevent nuclear war. Officials at U.S. Strategic Command have been responding to how threats from Moscow and Beijing have changed this year, said STRATCOM chief Navy Adm. Chas Richard. As Russian forces crossed deep into Ukraine this spring, Richard said he delivered the first-ever real-world commander's assessment on what it was going to take to avoid nuclear war. But China has further complicated the threat, and the admiral made an unusual request to experts assembled at the Space and Missile Defense Symposium in Huntsville, Alabama: "We have to account for three-party [threats]," Richard said. "That is unprecedented in this nation's history. We have never faced two peer nuclear-capable opponents at the same time, who have to be deterred differently."

<https://www.defenseone.com/threats/2022/08/us-military-furiously-rewriting-nuclear-deterrence-address-russia-and-china-stratcom-chief-says/375725/>

## **The nuclear arsenals of China, India and Pakistan are growing**

The Economist, August 11, 2022

For most of the 75 years since India and Pakistan became independent states, at midnight on 15th August 1947, nuclear weapons have cast a shadow over South Asia. China got the bomb in 1964, two years after thumping India in a border war and forcing its policymakers to confront their country's vulnerabilities. India showed it too could build one with a demonstrative explosion just a decade later. Pakistan was a

screwdriver's turn away by the 1980s. In 1998, both India and Pakistan conducted nuclear-weapons tests, making official what was already an open secret. Yet, in many ways, all three countries were hesitant nuclear powers. China did not deploy a missile capable of hitting the American mainland until the 1980s. When India and Pakistan fought a war over Kargil, in the disputed region of Kashmir, in the summer of 1999, India's air force, tasked with delivering the bombs if needed, was not told what they looked like, how many there were or the targets over which they might have to be dropped.

<https://www.economist.com/asia/2022/08/11/the-nuclear-arsenals-of-china-india-and-pakistan-are-growing>

## **China and Japan duel over 'liquid' batteries for green energy**

Shin Watanabe and Shimpei Nakamura

Nikkei Asia, August 11, 2022

China's Dalian Rongke Power is competing with Japan's Sumitomo Electric Industries in capturing demand for a unique type of storage battery that will be crucial to expanding the use of renewable energy. A power project in the city of Dalian began operations recently using a redox flow battery storage system developed by Rongke. The system offers a capacity of 400 megawatt-hours to contain power produced by wind turbines and other sources. Investment in the project totaled 1.9 billion yuan (\$281 million). The technology marks a radical break from conventional lithium-ion batteries. A "redox" flow battery, so named for employing chemical reduction and oxidation reactions, uses pumps to circulate electrolytes typically based on vanadium ions. The system promises better safety and a longer lifespan -- a unit can last more than 20 years, while typical lithium-ion batteries last for about a decade.

<https://asia.nikkei.com/Business/Technology/China-and-Japan-duel-over-liquid-batteries-for-green-energy>

## **China is defensive rather than offensive**

Chen Xiangyang

CGTN, August 12, 2022

Chinese State Councilor and Foreign Minister Wang Yi met with Park Jin, Foreign Minister of the Republic of Korea (ROK), in Qingdao, Shandong Province on August 9. During the meeting, the two diplomats appreciated the great achievements of China-ROK cooperation, underscored a strong political will to strengthen communication, and sincerely discussed a variety of sensitive issues, including the ROK's participation in the United States-initiated chip alliance which intends to exclude China from the global semiconductor supply chain, the ROK's deployment of the U.S. Terminal High Altitude Area Defense system (THAAD) and the nuclear issue on the Korean Peninsula.

<https://news.cgtn.com/news/2022-08-12/China-is-defensive-rather-than-offensive-1crtsGs9FHW/index.html>

## **Ukraine war distracts US from China, legitimizes nuclear bombs – opinion**

Efraim Inbar,

The Jerusalem Post, August 12, 2022

The United States' support for Ukraine and growing tensions with Russia pushed Moscow closer to Beijing. Moreover, the war also impacted the main feature of the international system, American-Sino competition. The growing American involvement in the European theater diverts American attention and resources from dealing with its rival – China. The US is seen in many quarters, with some justice, as at least partly responsible for the war because of the American-led eastward expansion of NATO, harming its international status. Furthermore, the weak presidency of US President Joe Biden appears unlikely to enable the US to compete successfully with China. In addition, Russia's war in Ukraine has set in motion an array of significant events making a lasting impact on the international order. The perception that the war has no end in sight only strengthens its long-term implications.

<https://www.jpost.com/opinion/article-714528>

## **China's Shenzhou-14 crew to conduct their first spacewalk in near future**

CGTN, August 13, 2022

China's Shenzhou-14 astronauts will conduct extravehicular activities (EVAs) for the first time in the next few days, China Media Group reported. The three-member crew has been working and living in orbit for 70 days since they were sent into space onboard the Shenzhou-14 spaceship and entered China's space station. The combination of China's space station is currently formed by the Tianhe core module, the Wentian lab module, the Shenzhou-14 spaceship and the Tianzhou-4 cargo craft. The Shenzhou-14 astronauts will venture out of the airlock cabin of the Wentian lab module for the first time, while their predecessors, Shenzhou-13 and Shenzhou-12 crew members, all exited from the Tianhe core module.

<https://news.cgtn.com/news/2022-08-13/China-s-Shenzhou-14-astronauts-to-conduct-extravehicular-activities-1ct0sXW6r6g/index.html>

## **U.S. CHIPS Act is the weaponized industrial policy**

Huang Yongfu

CGTN, August 13, 2022

On August 9, U.S. President Joe Biden signed into law the Chips and Science Act of 2022, which authorizes state subsidies of \$52.7 billion to boost chip manufacturing and research and funds about \$170 billion for space exploration, innovation and scientific research over the next decade. The bill is set to reduce the U.S. reliance on foreign suppliers for chips by revitalizing domestic manufacturing, while the U.S. industrial policy is suppressing Chinese semi-conductor development, while blocking China out of advanced chip-making and decouple chip-making industries between China and the West.

<https://news.cgtn.com/news/2022-08-13/U-S-CHIPS-Act-is-the-weaponized-industrial-policy-1cssCOTI1K/index.html>

## **China's recent white paper on Taiwan question must be read by Americans who do not want war**

Franz Gayl

Global Times, August 15, 2022

Following US House Speaker Nancy Pelosi's provocative trip to the Taiwan Island, another US congressional delegation landed on the island on an unannounced two-day visit. The US and Democratic Progressive Party (DPP) drums pound louder to incite further provocation against One China principle. DPP-allied neoconservatives dominate President Biden's national security state and Congress. Their frenzied, media-amplified calls to fight China conveniently mask US debacles including the Afghanistan withdrawal and the US' role in the Ukraine conflict. The Doomsday Clock metric shows just over a minute remaining before a nuclear holocaust is triggered in Europe or the Indo-Pacific. Americans still have time to read China's White Paper titled "The Taiwan Question and China's Reunification in the New Era" to change course.

<https://www.globaltimes.cn/page/202208/1273012.shtml>

## **China-Thailand joint air force training exercise Falcon Strike - 2022 begins**

China Military Online, August 15, 2022

The opening ceremony of the China-Thailand joint air force training exercise Falcon Strike - 2022 was held at Udorn Royal Thai Air Force Base (Udorn RTAFB) in Thailand on August 14, 2022. The general commanding officers for the joint training from the Chinese and Thai air forces delivered their speeches respectively at the ceremony. Members of the joint training commanding group, representatives of the participating troops, and officials of the Chinese Embassy in Thailand attended the opening ceremony. The Falcon Strike - 2022 is the fifth joint training exercise conducted by the air forces of China and Thailand, for which the Chinese side sent fighter jets, fighter-bombers and early warning aircraft, and the Thai side sent fighter jets and early warning aircraft, etc. The major training subjects of the Falcon Strike – 2022 include the air support, strikes on ground targets, and small- and large-scale troop deployment operations. The joint training exercise is aimed at enhancing mutual trust and friendship between the two air forces, deepening pragmatic cooperation and jointly protecting regional security and stability.

[http://eng.chinamil.com.cn/view/2022-08/15/content\\_10178391.htm?yikikata=df6f8c1a-89f8022916655c5209436b5666314f5f](http://eng.chinamil.com.cn/view/2022-08/15/content_10178391.htm?yikikata=df6f8c1a-89f8022916655c5209436b5666314f5f)

## **Defense Ministry spokesperson Wu Qian remarks on US senator's visit to Taiwan**

China Military Online, August 15, 2022

Senior Colonel Wu Qian, spokesperson for the Chinese Ministry of National Defense, made remarks on the United States Senator Ed Markey's visit to Taiwan. The following is the full text of the remarks: On August

14, the US Senator Ed Markey and his entourage visited China's Taiwan region, which has brazenly violated the one-China principle and the provisions of the three China-US joint communiqués, infringed China's sovereignty and territorial integrity, and sent erroneous signals to the "Taiwan independence" separatist forces, fully revealed that the US is the true spoiler and saboteur of peace and stability in the Taiwan Straits. In response, the Eastern Theater Command of the Chinese People's Liberation Army has organized joint combat-readiness security patrol and combat drills involving troops of multiple services and arms in the waters and airspace around the Taiwan Island, which represents the strong hit back and solemn deterrent against the collusion and provocations of the US and the Taiwan authorities.

[http://eng.chinamil.com.cn/view/2022-08/15/content\\_10178356.htm?yikikata=7593b487-e571aa197f9a58947e98a2458a2124be](http://eng.chinamil.com.cn/view/2022-08/15/content_10178356.htm?yikikata=7593b487-e571aa197f9a58947e98a2458a2124be)

## **China's space lab module powered by huge, flexible solar panels**

Xinhua, August 15, 2022

The China Manned Space Agency (CMSA) has revealed that the first lab module of China's space station is being powered by a "pair of wings" composed of huge, flexible solar arrays. The Wentian module, a structure about the size of a Beijing subway car, was flung into space and later docked with the combination of China's space station in July, becoming the heaviest ever single-cabin active spacecraft in orbit. The CMSA provided technical details of huge solar arrays on the space experiment platform, with multiple cabinets and more than 40 approved research projects. Wentian has a solar wingspan of over 55 meters. A single wing spreads to about 110 square meters, making the total expanded area two times larger than the core module Tianhe, onto which Wentian has been docked.

<https://english.news.cn/20220815/476fc0b891d8461f94dd7bbe124cd35e/c.html>

## **Sri Lanka gives clearance to deferred arrival of Chinese scientific research vessel: reports**

Global Times, August 15, 2022

Sri Lanka's foreign ministry announced on Saturday the conveyance of clearance to the deferred arrival of the Chinese "Yuan Wang 5" scientific research vessel at the port of Hambantota between August 16 to 22, according to local media. The scientific research vessel was initially scheduled to make the port call for replenishment purposes between August 11 to 17. Indian media reported that the initial plan was deferred due to Indian pressure on Sri Lanka, citing so-called "national security concerns." "In light of certain concerns raised with" the foreign ministry, the Sri Lankan government requested that the Chinese embassy defer the vessel's visit until further consultations on the matter, without naming New Delhi. "It is completely unjustified for certain countries to cite so-called 'security concerns' to pressure Sri Lanka," Foreign Ministry spokesperson Wang Wenbin told a regular press conference in Beijing on August 8, when asked to comment on the delayed visit.

<https://www.globaltimes.cn/page/202208/1272973.shtml>

## **US Air Force conducts nuclear missile test delayed amid China tension**

Stephen Losey

Defense News, August 16, 2022

The U.S. Air Force early carried out a test of an unarmed intercontinental ballistic missile, which was already delayed 12 days to avoid inflaming tension with China. Air Force Global Strike Command said in a release that the Minuteman III missile was launched from Vandenberg Space Force Base in California by the 576th Flight Test Squadron a little before 1 a.m. Pacific Standard Time. The ICBM was equipped with a test re-entry vehicle, the release said, which splashed down about 4,200 miles from its original launch point in the Kwajalein Atoll in the Marshall Islands, the command said. The command added the test verified the Minuteman III is accurate and reliable, and produced data that will help ensure the nation's nuclear deterrent is safe, secure and effective. Squadron commander Col. Chris Cruise said in the release that the test shows the nuclear triad — which also includes the ability to launch nuclear weapons from submarines and drop them from nuclear-capable bombers such as the B-2 Spirit stealth bomber — is the “cornerstone” of national security for the U.S. and its allies.

<https://www.defensenews.com/air/2022/08/16/us-air-force-conducts-nuclear-missile-test-delayed-amid-china-tension/>

## **Chinese defense minister addresses tenth Moscow Conference on International Security**

China Military Online, August 16, 2022

Chinese State Councilor and Defense Minister Wei Fenghe delivered a speech on August 16 at the 10th Moscow Conference on International Security via video link upon invitation. Gen. Wei said that as the world enters a new period of turbulence and transformation, the right choice is to join hands to build a community with a shared future for mankind. Countries in the world must strengthen solidarity and coordination, uphold fairness and justice, safeguard peace and stability, join hands to reject act of hegemony, highhandedness and bullying, and work together to safeguard regional and global peace and tranquility. Amid the profound changes in the global situation and rampaging COVID-19 pandemic, China has been courageous to shoulder the mission of a responsible major country and made great efforts to add stability and inject positive energy to the cause of peace and development of mankind, Wei said.

[http://eng.chinamil.com.cn/view/2022-08/16/content\\_10178641.htm](http://eng.chinamil.com.cn/view/2022-08/16/content_10178641.htm)

## **Over 2 billion would die in an India-Pakistan nuclear conflict. 5 billion in a US-Russia one, study finds**

South China Morning Post, August 16, 2022

As escalating tensions among the United States, Russia and China revive old fears of nuclear war, some researchers are warning that even a limited-scale exchange between such nations as India and Pakistan

could have catastrophic consequences for global food supplies and trigger mass death worldwide. A nuclear conflict involving less than 3 per cent of the world's stockpiles could kill one-third of the world's population within two years, according to a new international study led by scientists at Rutgers University. A larger nuclear conflict between Russia and the US could kill three-fourths of the world's population in the same time frame, according to the research published in Nature Food. "It's really a cautionary tale that any use of nuclear weapons could be a catastrophe for the world," said climate scientist and study author Alan Robock, a distinguished professor in Rutgers' Department of Environmental Sciences.

<https://www.scmp.com/news/asia/article/3189013/over-2-billion-would-die-india-pakistan-nuclear-conflict-5-billion-us>

## **Nuclear Energy: China is building world's 1st commercial land-based SMR**

CGTN, August 16, 2022

The world's first commercial land-based small modular reactor, or SMR, is under construction in southern China's Hainan Province. China's building the demonstration project of the "Linglong-1," a small modular reactor in the country's southern island province of Hainan. It's the world's first such type of nuclear reactor approved by the IAEA, hoping to serve the region's diverse power needs, including remote towns. According to Qu Yong, Chief engineer of Linglong-1 Hainan Nuclear Power, "we believe that it will be a trend of nuclear energy because it could be close to the load centers and based on customization. We call it SMR (small modular reactor). Each standard module of SMR could provide the load of 100 megawatts, and it could be perfectly coupled with user's needs."

<https://news.cgtn.com/news/2022-08-16/VHJhbnNjcmlwdDY3ODgy/index.html>

## **Transcript of Ambassador Qin Gang's Interview with the US Mainstream Media**

Global Times, August 17, 2022

On August 16, Ambassador Qin Gang took a joint interview of the US mainstream media in Washington DC, including Reuters, Associated Press, Bloomberg, National Public Radio, The Washington Post, The Wall Street Journal, The New Yorker, The Hill, POLITICO, Axios, Defense One, and he answered questions on China-US relations, the Taiwan question, Hong Kong-related issues, and China's diplomacy. The transcript of the interview is as follows.

<https://www.globaltimes.cn/page/202208/1273260.shtml>



## **Chinese troops to take part in Vostok-2022 strategic drills in Russia**

China Military Online, August 17, 2022

According to the annual China-Russia military cooperation plan and consensus reached by the two sides, the Chinese People's Liberation Army will send some troops to Russia to take part in the Vostok (East)-2022 strategic exercise. Countries including India, Belarus, Tajikistan, and Mongolia will also send troops for the exercise. The Chinese military's participation in the exercise is unrelated to the current international and regional situation, but designed to deepen practical and friendly cooperation with the militaries of participating countries, enhance the level of strategic coordination and strengthen the ability to cope with various security threats.

[http://eng.chinamil.com.cn/view/2022-08/17/content\\_10178936.htm?yikikata=7593b487-e571aa197f9a58947e98a2458a2124be&yikikata=df6fa307-cbff25b49a7eb32750acc1f3cae9e461](http://eng.chinamil.com.cn/view/2022-08/17/content_10178936.htm?yikikata=7593b487-e571aa197f9a58947e98a2458a2124be&yikikata=df6fa307-cbff25b49a7eb32750acc1f3cae9e461)

## **If Biden Wants to Talk Nuclear Weapons, China Says U.S. Needs Less of Them**

Tom O'connor

Newsweek, August 17, 2022

As tensions over Taiwan continue to rage with the second visit by U.S. lawmakers in as many weeks to the disputed island, the United States and China remain at odds over Washington's efforts to add limits to Beijing's growing nuclear weapons arsenal, officials from both sides told Newsweek. The People's Republic said that if President Joe Biden's administration wants to engage in nuclear talks in good faith, he must first take steps to reduce his own country's far larger arsenal. The U.S. push for China to join in arms control measures began under former President Donald Trump, whose administration nearly allowed the last remaining bilateral non-proliferation treaty with Russia to expire over Chinese refusals. Biden renewed the pact, known as the New Strategic Arms Reduction Treaty (New START), shortly after taking office and days before it would have collapsed, but he too has called for Beijing to enter into discussions as the Tenth NPT Review Conference continued in New York.

<https://www.newsweek.com/if-biden-wants-talk-nuclear-weapons-china-says-us-needs-less-them-1734277>

## **US fleet commander's groundless accusation against PLA exercises rebutted; US urged to return to three joint communiqués**

Global Times, August 17, 2022

Top US fleet commander's accusation against recent military drills of Chinese People's Liberation Army (PLA) near the island of Taiwan is groundless and meaningless, said Chinese international relations experts. The accusation will not make a difference to the situation across the Taiwan Straits like the commander might have wished, they said. US' Seventh Fleet Commander Vice Admiral Karl Thomas described China

as "the gorilla in the room" during a news conference in Singapore where the US was taking part in a regional training exercise, and claimed that the PLA's launching missiles over the Taiwan island is irresponsible, according to Bloomberg. However, Chinese experts immediately pointed out that Thomas' accusation is groundless and meaningless, as the Chinese military's exercise is completely in line with international laws and common practices.

<https://www.globaltimes.cn/page/202208/1273250.shtml>

## **US bid to impede China's technological advancement is doomed**

Wen Sheng

Global Times, August 17, 2022

The US government, following a year's meticulous planning, has crafted a new law to heavily subsidize America's private semiconductor manufacturers. Billed as the CHIPS and Science Act which US President Joe Biden signed a week ago, the law would provide a total of \$52.7 billion for American semiconductor research, development, manufacturing and workforce development. The White House, in a statement, boasts the new law will help lower American production costs, strengthen its own supply chain, as well as counter China's rise. A key provision of the act imposes limits on advanced semiconductor production in China for subsidy recipients. Like all recent US legislation meant to address its supply chain anxiety, the most prominent behind-the-scenes driver of the act is China. Or more precisely, fear of China.

<https://www.globaltimes.cn/page/202208/1273224.shtml>

## **Chinese space-tracking ship docks at Sri Lanka's Hambantota port**

Global Times, August 18, 2022

China's space-tracking ship Yuanwang-5 has docked at Sri Lanka's Hambantota International Port (HIP) for replenishment purposes. Chinese Ambassador to Sri Lanka Qi Zhenhong, Sri Lankan government officials and representatives of Chinese enterprises greeted the ship at the pier. Qi told the welcoming ceremony that the Hambantota port is a key cooperation project between China and Sri Lanka under the Belt and Road Initiative. The visit of Yuanwang-5 after sailing for more than 30 days shows that the traditional friendship between China and Sri Lanka is deep-rooted and everlasting, said the ambassador. The Sri Lankan president's representative Sarath Weerasekera said that the relationship between Sri Lanka and China has a long history and he believes that the call of Yuanwang-5 on Sri Lanka would help consolidate and strengthen the traditional friendly relations between the two countries.

<https://www.globaltimes.cn/page/202208/1273272.shtml>

## **CSIS' inflammatory games expose it has no clue how core China's sovereignty is to its 1.4 billion citizens**

Franz Gayl

Global Times, August 18, 2022

The Center for Strategic and International Studies (CSIS) is ranked as the world's top defense and national security think tank. It was therefore a surprise when it was reported in the open press that CSIS-hosted war games which permitted players to exercise a ground invasion of sovereign China. Eager to demonstrate the value in fighting China, the Marine Corps have been marketing a dubious new doctrine to stake out and service turf in defense of Taiwan Island. In exercising their doctrine, retired Marine players liberally simulated numerous scenarios with only one prohibition, namely no nuclear weapons. One of the selected courses of action was the amphibious assault of a Marine Littoral Regiment on Taiwan, and subsequent combat with Chinese ashore. A US ground invasion of Taiwan was consistent with the US' new strategy for the 1st Island Chain. But CSIS' permitting that inflammatory game move and then cavalierly broadcasting it in the open press was disastrous.

<https://www.globaltimes.cn/page/202208/1273287.shtml>

## **Domestic combat drone gets upgrade**

China Military Online, August 18, 2022

The Caihong-4, China's top-selling unmanned combat aircraft, will soon have a more powerful engine that is expected to greatly improve its operational capability, according to its maker. The China Academy of Aerospace Aerodynamics in Beijing, a subsidiary of China Aerospace Science and Technology Corp, said in a news release that a prototype equipped with a new type of heavy-fuel piston engine has recently completed all required tests to verify the drone's autonomous take-off and landing, load capacity, flight ceiling and radius, as well as other functions. The successful completion of the test flights confirmed that the upgraded drone is ready for operational deployment. The new version can be deployed on plateaus and islands and will also prove useful in civilian operations such as providing a signal relay in emergencies, extinguishing forest fires and obtaining data for city authorities, the academy said.

[http://eng.chinamil.com.cn/view/2022-08/18/content\\_10179086.htm](http://eng.chinamil.com.cn/view/2022-08/18/content_10179086.htm)

## **US, Australia lead joint drills to flex muscles, upend regional stability amid tensions in Taiwan Straits**

Global Times, August 19, 2022

Exercise Pitch Black, a military drill participated in by the US, Australia and other 15 countries, reportedly started on August 19 with the US' purpose being to pull more countries into an anti-China united frontline and show the "unity" of the West to pressure China over the Taiwan question. However, analysts noted that

it is impossible for the US to form an alliance through one military exercise as participants have no shared goal and frequent US-led military drills will destabilize the regional environment. This year's Exercise Pitch Black will run from August 19 to September 8, and over 100 aircraft and 2,500 personnel from Australia, Canada, France, Germany, Indonesia, India, Japan, Malaysia, the Netherlands, New Zealand, the Philippines, South Korea, Singapore, Thailand, the UAE, US and UK will take part, in an effort to "enhance interoperability and develop strong relations between participating military forces," according to the Australian air force. According to information from Australia, the exercise will include day and night flying. It will be conducted in the Northern Territory of Australia, with forces primarily based from RAAF Base Darwin and RAAF Base Tindal.

<https://www.globaltimes.cn/page/202208/1273420.shtml>

## **World's 1st Hualong-1 nuclear power units operating smoothly in SE China**

Zheng Yibing

CGTN, August 20, 2022

China's first power unit using the country's self-developed third-generation Hualong-1 technology has completed the very first phase of its commercial operation in Fuqing, southeast China's Fujian Province. The advanced unit, the fifth in the plant, began construction in 2015, went into commercial operation in January 2021 and offers important experiences for quantity production. The third-generation technology features both active and passive safety measures to avoid potential accidents like what happened to the 2nd-generation units of the Fukushima power plant. With a design life of 60 years, the Hualong-1 reactor has 177 reactor cores that need refuelling every 18 months. It meets the strictest safety standards in the world, according to the China National Nuclear Corporation.

<https://news.cgtn.com/news/2022-08-20/World-s-1st-Hualong-1-power-units-operating-smoothly-in-SE-China-1cEFnGXuDHW/index.html>

*Sylloge on China is compiled by Mr. Niranjana C. Oak with inputs  
from Mr. Stephen James and Mr. Kushal Agrawal*

**Nuclear and Arms Control Centre, MP-IDSA  
And  
Indian Pugwash Society**