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)





A Brief Technical History of PLAN Nuclear Submarines

Christopher P. Carlson and Howard Wang

US Naval War College, CMSI China Maritime Reports, August 2023

After nearly 50 years since the first Type 091 SSN was commissioned, China is finally on the verge of producing world-class nuclear-powered submarines. This report argues that the propulsion, quieting, sensors, and weapons capabilities of the Type 095 SSGN could approach Russia's Improved Akula I class SSN. The Type 095 will likely be equipped with a pump jet propulsor, a freefloating horizontal raft, a hybrid propulsion system, and 12-18 vertical launch system tubes able to accommodate anti-ship and land-attack cruise missiles. China's newest SSBN, the Type 096, will likewise see significant improvements over its predecessor, with the potential to compare favorably to Russia's Dolgorukiy class SSBN in the areas of propulsion, sensors, and weapons, but more like the Improved Akula I in terms of quieting.

https://digital-commons.usnwc.edu/cmsi-maritime-reports/30/

Biden Describes China as a Time Bomb Over Economic Problems

Michael Shear

The New York Times, August 11, 2023

President Biden warned that China's struggles with high unemployment and an aging work force make the country a "ticking time bomb" at the heart of the world economy and a potential threat to other nations. "When bad folks have problems, they do bad things," the president told a group of donors at a fund-raiser in Park City, Utah. Mr. Biden's comments are the latest example of the president's willingness to criticize China — often during fund-raising events with contributors to his presidential campaign — even as his administration seeks to ease tensions between the world's two largest economies.

https://www.nytimes.com/2023/08/11/us/politics/biden-china-criticism-economy.html

New Zealand says it knows of China-linked intelligence activity in country

Nikkei Asia, August 11, 2023

New Zealand said it is aware of intelligence activity linked to China in and against the island nation and the Pacific region. "This is a complex intelligence concern for New Zealand," the New Zealand Security Intelligence Service (NZSIS) said in its annual report. The Chinese Embassy in Wellington said it was "strongly dissatisfied with and firmly opposed" to the China-related content in the report, claiming the

Chinese government was conducting "normal" exchanges with overseas Chinese citizens in accordance with international law. China hopes relevant countries can create an open, inclusive and non-discriminatory environment for Chinese citizens overseas and local Chinese, the embassy said in a statement.

https://asia.nikkei.com/Politics/International-relations/Indo-Pacific/New-Zealand-says-it-knows-of-Chinalinked-intelligence-activity-in-country

China set to prosecute national for spying for CIA

Edward White

Financial Times, August 11, 2023

China says it is prosecuting a Chinese national employed by a military-industrial group for spying for the US, in a case that highlights espionage activities between the two superpowers. According to a rare statement by China's Ministry of State Security detailing the recruitment of a Chinese citizen by the Central Intelligence Agency, a man in his early 50s surnamed Zeng agreed to provide military secrets to the CIA in Rome, in exchange for cash and help with the immigration of his family to the US. The case comes a week after Californian prosecutors charged two US Navy sailors for passing sensitive military information to the Chinese government.

 $\underline{https://www.ft.com/content/ce0b1c77-6d28-4ec6-b6a8-f09fc3b20ece\#post-87adb6e1-170e-43f7-aefe-c092d9639fa9}$

Japan, China eye fall summit as tensions shadow treaty anniversary

Nikkei Asia, August 12, 2023

The Japanese and Chinese governments are exploring an opportunity for their leaders to meet face to face this autumn, hoping to improve chilled relations as the two countries mark the 45th anniversary of their peace treaty. Japanese Prime Minister Fumio Kishida and Chinese President Xi Jinping are expected to attend the Group of 20 summit in India this September. The two sides are weighing a potential meeting on the sidelines of the event. Another option is for Kishida and Xi to meet at the Asia-Pacific Economic Cooperation summit in the U.S. this November.

https://asia.nikkei.com/Politics/International-relations/Japan-China-eye-fall-summit-as-tensions-shadow-treaty-anniversary

China condemns US' arrangement for Lai Ching-te's 'stopover'; DPP candidate a 'dangerous troublemaker to bilateral ties'

Yang Sheng and Chen Qingqing

Global Times, August 13, 2023

China sent a firm signal to the US as Washington deliberately arranged a "stopover" in the US for the deputy regional leader of Taiwan island Lai Ching-te, who is also a candidate of the separatist Democratic Progressive Party (DPP) for 2024 Taiwan regional election, with analysts saying that China-US relations face new challenges due to the trouble made by Taiwan separatist forces. The Eastern Theater Command of the Chinese People's Liberation Army (PLA), via its WeChat public account, released information about combat drills conducted by fighter jets of the air force.

https://www.globaltimes.cn/page/202308/1296199.shtml

China's Wang Yi visits Cambodia, meets with Hun Sen and son

Nikkei Asia, August 13, 2023

China's foreign minister visited Cambodia over the weekend to reaffirm his country's commitment to the Southeast Asian country after its incumbent prime minister handed off the job to his son following a one-sided election last month, officials said. Wang is the first foreign leader to visit Cambodia, days after Hun Sen's announcement that his 45-year-old son and the country's army chief, Hun Manet, is replacing him. A video of the meeting was posted on Hun Sen's Telegram channel. Eang Sophalleth, Hun Sen's spokesman, told reporters after the meeting that Wang expressed China's willingness to cooperate with the newly appointed prime minister.

https://asia.nikkei.com/Politics/International-relations/China-s-Wang-Yi-visits-Cambodia-meets-with-Hun-Sen-and-son2

Chinese military scientists claim to have achieved a 'huge breakthrough' on laser weapon technology

Stephen Chen

South China Morning Post, August 13, 2023

Chinese military scientists have announced a major breakthrough in laser weapon technology, claiming they have developed a new cooling system that allows high-energy lasers to operate "infinitely" without

any build-up of waste heat. According to scientists at the National University of Defence Technology, in Changsha, Hunan province, the new cooling system completely eliminates the harmful heat that is generated during the operation of high-energy lasers. The issue has been a major technical challenge for laser weapon development.

https://www.scmp.com/news/china/science/article/3230589/chinese-military-scientists-claim-have-achieved-huge-breakthrough-laser-weapon-technology

Chinese spies who read State Dept. email also hacked GOP congressman

Joseph Menn

The Washington Post, August 14, 2023

The suspected Chinese hackers who forged Microsoft customer identities to read the emails of State Department employees also obtained the personal and political emails of Rep. Don Bacon, a moderate Republican from Nebraska on the House Armed Services Committee. Bacon tweeted Monday that he had been notified by the FBI that his emails were hacked by Chinese spies who took advantage of a Microsoft mistake for a month between mid-May and mid-June, which lines up with when investigators said the other breaches occurred.

https://www.washingtonpost.com/technology/2023/08/14/microsoft-china-hack-congress/

China launches world's first high-orbit synthetic aperture radar satellite for disaster monitoring

CGTN, August 14, 2023

China sent a new satellite into space, the China National Space Administration (CNSA) announced. The satellite is also the world's first high-orbit synthetic aperture radar (SAR) satellite entering the project implementation stage, and it will be mainly used to provide remote sensing information services. Compared with low-orbit satellites and optical satellites, the L-SAR4 01 satellite has advantages of short high-orbit observation revisit period and wide imaging width with microwave observation that are not limited by climate (all-weather) and light (all-day).

 $\underline{https://news.cgtn.com/news/2023-08-13/China-launches-world-s-1st-high-orbit-SAR-satellite-fordisaster-watch-1 mefMA4BdE4/index.html$

Chinese security ministry attacks 'selfish, hegemonic and disingenuous' US over criticism of anti-spying law

Jack Lau

South China Morning Post, August 14, 2023

China's counter-intelligence ministry has defended a new anti-spying law in a rare commentary that directly singles out the United States for criticism. "The US often uses national security to hype up the China threat," the Ministry of State Security said in a post published on the social media platform WeChat. "Recently, it again attacked the newly amended Counter-Espionage Law, distorting the truth and making up claims that China threatened the national security of the United States. This fully shows the selfish, hegemonic and disingenuous core of US national security."

https://www.scmp.com/news/china/politics/article/3231034/chinese-security-ministry-attacks-selfish-hegemonic-and-disingenuous-us-over-criticism-anti-spying

The US-China decoupling story is not over

Rana Foroohar

Financial Times, August 14, 2023

Tech decoupling between the US and China is about many things, but chief among them is the notion that western technology should not feed Chinese military modernisation and expansion. Why should US money, products and expertise aid the military strength of its chief strategic adversary? That's the rationale for last week's new executive order from the White House limiting US investment into China in areas of technology that pose the most acute national security risks, like semiconductors, quantum computing and artificial intelligence. The idea is to expand on existing export bans to China, as well as limits on Chinese acquisition of US technology, by also restricting how US investors put capital into the most strategic sectors in China.

https://www.ft.com/content/f07921e7-c334-427f-bc50-bda9e0530eb4

China's investment in new nuclear power plants to reach 231 billion yuan by 2025

Global Times, August 15, 2023

China's investment in new nuclear power plants is expected to hit 231 billion yuan (\$31.80 billion) by 2025, CITIC Securities said. The investment scale is coordinated with China's development plan for the nuclear

power sector, Lin Boqiang, director of the China Center for Energy Economics Research at Xiamen University, told the Global Times. "The construction period of a nuclear power plant is usually six to seven years, and the investment covers the whole period and relevant industries," said Lin.

https://www.globaltimes.cn/page/202308/1296285.shtml

Americans are unwittingly funding China's military expansion

Josh Rogin

The Washington Post, August 15, 2023

There is already a bipartisan effort on Capitol Hill to address another huge loophole that allows the Chinese military and companies linked with it to get money from Americans. Wall Street firms are using money from U.S. investors to fund Chinese companies that are working against U.S. interests and values, and lawmakers want to push back. "It makes no sense that we restrict the export of sensitive technologies to China but allow Wall Street to fund Chinese companies trying to overtake us in these same technologies with clear military applications," Rep. Mike Gallagher (R-Wis.), chairman of the House select committee on the Chinese Communist Party, said.

https://www.washingtonpost.com/opinions/2023/08/15/biden-china-investment-technology-restrictions/

China invited to witness Russia's Luna-25 launch, further space cooperation expected

Global Times, August 16, 2023

Wu Yanhua, the chief designer of China's major deep space exploration project, led a delegation to the Vostochny Cosmodrome in Russia's Far East to attend the launch event of the Luna-25 lunar lander at the invitation of Russia's state space agency Roscosmos. He congratulated Russia on its first lunar mission in nearly 50 years, and exchanged views on jointly deepening bilateral cooperation on deep space exploration. Yury Borisov, the director general of Roscosmos, warmly welcomed the delegation and introduced the development process, launch preparations and exploration tasks for Luna-25, as well as subsequent plans for the lunar exploration project.

https://www.globaltimes.cn/page/202308/1296358.shtml

China's defence chief pushes PLA as force for peace during Russia trip, blames US for 'chaos and disaster'

Jack Lau

South China Morning Post, August 16, 2023

China's military will work more closely with other countries on hi-tech weapons and equipment, logistics support and international counterterrorism, the country's defence minister said during a trip to Moscow. At the Moscow Conference on International Security, General Li Shangfu also said in a speech that China was willing to hold more military exercises and training with other countries and expand the scope of the drills. These combined exercises are a core part of China's military diplomacy.

https://www.scmp.com/news/china/military/article/3231262/chinas-defence-chief-pushes-pla-force-peace-during-russia-trip-blames-us-chaos-and-disaster

US-Japan-ROK summit sparks security concerns

Zhao Ruinan

China Daily, August 17, 2023

The United States, Japan, and the Republic of Korea are planning to initiate a series of joint projects in technology and defense during the leaders' meeting at Camp David, according to senior US administration officials, amid increasing concerns about the tense situation and regional divisions in Northeast Asia. Zhan Debin, an international relations professor at Shanghai University of International Business and Economics, said that Washington is deliberately further stirring up regional instability through the trilateral alliance. Li Nan, a researcher specializing on the Korean Peninsula at the Chinese Academy of Social Sciences, expressed concern that the "institutionalization" of the trilateral alliance would intensify the polarization in Northeast Asia.

https://www.globaltimes.cn/page/202308/1296421.shtml

South China Sea: Beijing appears to be building runway on disputed island claimed by Vietnam

Jack Lau

South China Morning Post, August 17, 2023

China appears to be building a runway on an island also claimed by Vietnam, according to satellite images, in Beijing's latest move to build military facilities in contested South China Sea territory. A new airstrip

started to appear in mid-July on Triton Island, the southernmost and westernmost of the Paracel Islands, known in Chinese as the Xisha Islands and in Vietnamese as the Hoang Sa Islands. Vietnam also claims the islands, as does Taipei, whose South China Sea claims mostly overlap with those of Beijing. Triton Island is the closest in the Paracel archipelago to Vietnam's east coast.

https://www.scmp.com/news/china/diplomacy/article/3231431/south-china-sea-beijing-appears-bebuilding-runway-disputed-island-claimed-vietnam

Taiwan's secret missile for striking deep in China

Gabriel Honrada

Asia Times, August 17, 2023

Taiwan has just unveiled one of its secretive cruise missiles, part of a long-range arsenal that ensures conventional deterrence and counterstrike capabilities in the event of a Chinese invasion. The Warzone report further states that while it is unconfirmed that an HF-2E was launched from Jiupeng, the base is a known missile test facility and hub for Taiwan's National Chung-Shan Institute of Science and Technology (NCSIST), a top research institute understood to be responsible for the HF-2E's development.

https://asiatimes.com/2023/08/taiwans-secret-missile-for-striking-deep-in-china/

U.S., Japan and South Korea to reveal new joint defences against Chinese and North Korean missiles

Dan De Luce and Megan Lebowitz

nbc News, August 17, 2023

The U.S., Japan and South Korea plan to announce groundbreaking steps to bolster mutual security ties at a summit this week in Maryland, including sharing intelligence about ballistic missile threats from North Korea and China and holding regular joint military exercises, senior Biden administration officials said. A shared concern over China's aggressive actions in the region and North Korea's growing missile arsenal has fueled a historic rapprochement that experts believe could usher in a new era for all three countries.

https://www.nbcnews.com/news/asia/us-japan-south-korea-reveal-new-joint-defenses-chinese-north-korean-mi-rcna100331

China again urges Japan to halt plan to discharge nuclear-contaminated water after latest reported leak: Chinese FM

Global Times, August 17, 2023

The Chinese Foreign Ministry said that the latest reported leak of Fukushima nuclear-contaminated water has again heightened international concerns over the competence of the Tokyo Electric Power Company (TEPCO) and the lack of effective regulation from the Japanese government. China again urges Japan to stop pushing ahead with the dumping plan, and to dispose of the nuclear-contaminated water in a responsible way, the ministry said. TEPCO recently confirmed there was a leak of the nuclear-contaminated water from the Fukushima Daiichi nuclear power plant as a result of a crack in the hose used to transport the water, according to media reports.

https://www.globaltimes.cn/page/202308/1296502.shtml

General Says Deterring Two 'Near Peer' Competitors Is Complex

Jim Garamone

U.S. Department of Defence, August 17, 2023

U.S. Strategic Command is focusing on extended deterrence during a time when the country faces two near-peer rivals, said Air Force Gen. Anthony J. Cotton. The command continually assesses the threats and examines the command "for sizing and the right force posture to meet the challenges which we would face," he said during U.S. Strategic Command's Deterrence Symposium in Omaha, Nebraska. China today has around 350-400 nuclear weapons, and Chinese leaders have announced a program to have more than 1,000 nuclear weapons by 2030. Cotton said officials at U.S. Strategic Command take this development seriously. "What we assess and what we look at day-in and day-out is where are [the Chinese] on their readiness? Where are they on the total number of forces?" he said.

 $\underline{https://www.defense.gov/News/News-Stories/Article/Article/3496656/general-says-deterring-two-near-peer-competitors-is-complex/$

China's current nuclear expansion underlines quest for status, says UK forum

Centre for Arms Control and Non-proliferation, August 17, 2023

"The risk is real, and mounting. We use the phrase 'Great power competition' about China and the West," said John Erath, senior policy director for the Center for Arms Control and Non-Proliferation. This is

descriptive but not definitional, as there is also great power cooperation in terms of trade, finance, business, etc. So too much emphasis on competition does a disservice. When we consider nuclear weapons, we must consider them as components of a larger security situation. No country ever builds a nuclear force without an important security reason to do so.

https://armscontrolcenter.org/chinas-current-nuclear-expansion-underlines-quest-for-status-says-uk-forum/

US tightens export controls of nuclear power items to China

Timothy Gardner

Reuters, August 18, 2023

The Biden administration has tightened controls on the export of materials and components for nuclear power plants to China, saying it would ensure the items were used only for peaceful purposes and not the proliferation of atomic weapons. The steps are among the latest signs of strained relations between Washington and Beijing, which have clashed over spying allegations, human rights, China's industrial policies, and U.S. export bans on advanced technologies.

https://www.reuters.com/world/us/us-tightens-export-controls-nuclear-power-items-china-2023-08-18/

U.S. nuclear boss says China's arms program not slowing down

Ken Moriyasu

Nikkei Asia, August 18, 2023

U.S. Strategic Command, the department responsible for America's nuclear weapons program, is monitoring China's nuclear development "day in and day out," its chief said this week. What they observe from the command's headquarters at Offutt Air Force Base, Nebraska, is Beijing's determination to establish a full-fledged nuclear triad of land-, sea- and air-based delivery platforms. "We're not seeing any indication that they're slowing down," Gen. Anthony Cotton told a media roundtable on the sidelines of the 2023 U.S. Strategic Command Deterrence Symposium held in Omaha.

https://asia.nikkei.com/Politics/Defense/U.S.-nuclear-boss-says-China-s-arms-program-not-slowing-down

Taiwan slams Chinese 'bully next door' amid military drills

DW News, August 19, 2023

The Taiwanese Defense Ministry strongly condemned the military drills, saying they do not "help peace and stability in the Taiwan Strait." Taipei also said that the drills showcase China's "militaristic mentality." The defense ministry's statement asserted that it would deploy the necessary forces and possesses the capability, resolve, and confidence to safeguard national security. Taiwan's presidential office stated that the nation's military and security forces have a "complete grasp" of China's military actions, emphasizing that China is neglecting "its international duties" with its threats.

https://www.dw.com/en/taiwan-slams-chinese-bully-next-door-amid-military-drills/a-66575685

Dangerous progression of US-Japan-South Korea cooperation must be stopped

Xiang Haoyu

Global Times, August 19, 2023

US President Joe Biden hosted Japanese Prime Minister Fumio Kishida and South Korean President Yoon Suk-yeol for a trilateral leaders' summit at Camp David. Some observers from Japan and South Korea are excited, using wordings likes "historic" and "breakthrough" to describe the event. It must be pointed out that the US is evidently attempting to enlist Japan and South Korea to collectively confront China. Domestic analyses in South Korea suggest that the country's foremost direction should be the peaceful reunification of the Korean Peninsula. And it necessitates cooperation and support from China. Economically, South Korea's reliance on China is greater than that on the US and Japan.

https://www.globaltimes.cn/page/202308/1296577.shtml

U.K. 'committed' to nuclear power despite China funding concerns

Sayumi Take

Nikkei Asia, August 19, 2023

The U.K. government is "absolutely committed" to boosting nuclear power as a key energy source, but national security is paramount as Chinese investment in new plants raises concerns, the minister in charge of the sector told Nikkei Asia. Most of the U.K.'s existing nuclear plants are to be retired by the end of this decade, while a new generation of reactors is still under construction, according to the World Nuclear

Association, a global industry body. However, major projects already underway are mired in controversy over funding from Chinese investors, given tense relations between London and Beijing. China's state-owned CGN initially held a 20% stake in the 3.2-gigawatt Sizewell C nuclear plant, which, it is hoped, will generate enough electricity to power 6 million homes.

https://asia.nikkei.com/Business/Energy/U.K.-committed-to-nuclear-power-despite-China-funding-concerns2

Chinese military launches drills around Taiwan as a 'warning' after a top island official went to US

Associated Press, August 20, 2023

The Chinese military launched drills around Taiwan as a "stern warning" over what it called collusion between "separatists and foreign forces," its defense ministry said, days after the island's vice president stopped over in the United States. Taiwanese Vice President William Lai's recent trip to Paraguay to reinforce relations with his government's last diplomatic partner in South America included stops in San Francisco and New York City. The mainland's ruling Communist Party claims democratic Taiwan as part of its territory and says it has no right to conduct foreign relations.

 $\frac{https://apnews.com/article/china-taiwan-military-drills-william-lai-stopover-071388b22ab2bba8fa5293697541e880$

South China Sea: China warns of external influence in lead-up to code of conduct talks

Jack Lau

South China Morning Post, August 20, 2023

Beijing is prepared to speed up talks with Asean on a long-delayed South China Sea code of conduct, the Chinese foreign minister said on the weekend while warning against external interference in the region. "China is willing to work with Asean countries to ... make effective and meaningful regional rules that can make the South China Sea a sea of peace, friendship and cooperation," Wang Yi told his Thai counterpart, Don Pramudwinai, in Beijing. A new round of talks is scheduled to get under way in the Philippine capital Manila. Wang added that Asean countries should be "vigilant of powers outside of the region of stirring up bloc confrontation", according to the ministry.

 $\underline{https://www.scmp.com/news/china/diplomacy/article/3231690/south-china-sea-china-warns-external-influence-lead-code-conduct-talks}$

