March 10, 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)





Prepared By:

Kushal Agrawal

China needs Nasa, SpaceX hotline to avoid space collision scares, Chinese scholar says

South China Morning Post, March 9, 2022

China should consider setting up communication mechanisms with SpaceX and Nasa – even a hotline – to avoid collisions in outer space, a Chinese scholar has advised. Wu Riqiang, associate professor at Renmin University's School of International Studies, also rejected the theory that the US military tried to spy on China when SpaceX's Starlink satellites came too close to the Chinese space station in July and October. Rather, the near-collision with the satellites – operated by tech billionaire Elon Musk's SpaceX aerospace company – were "more like incidental technical accidents", said Wu, a former missile engineer with the China Aerospace Science and Industry Corporation. His analysis was part of an article published in the latest edition of World Affairs, a journal affiliated to the Chinese foreign ministry.

https://www.scmp.com/news/china/diplomacy/article/3169849/china-needs-nasa-spacex-hotline-avoid-space-collision-scares

US fails to get China to back UN text against North Korea missile 'violations' South China Morning Post, March 8, 2022

The US and European allies on the United Nations Security Council failed Monday to convince China and Russia to back a text noting North Korea's "violations" of resolutions on missile technology. North Korean state media said Pyongyang carried out a test Saturday for what it said was a reconnaissance satellite, but which analysts said was a thinly veiled ballistic missile launch, just days before a presidential election in South Korea. "We would love to have China and Russia join us in this room" to adopt the text, US Ambassador to the UN Linda Thomas-Greenfield told Agence France-Presse after a closed-door Security Council meeting.

https://www.scmp.com/news/asia/east-asia/article/3169621/us-fails-get-china-back-un-text-against-north-korea-missile

Hypersonic missile failures cast doubt on US bid to catch up with China and Russia

South China Morning Post, March 8, 2022

US efforts to catch up with China and Russia in developing hypersonic weapons may be set back after Lockheed Martin Corp.'s air-launched missile suffered three consecutive test failures that left it on a tight schedule. That has put in doubt the Pentagon's goal to declare it America's first combat-ready hypersonic weapon and approve initial production by September 30. China and Russia have conducted test launches and fielded their versions of the new weapons, which can travel five times the speed of sound and manoeuvre in flight like a cruise missile, making them harder to detect and shoot down.

https://www.scmp.com/news/world/united-states-canada/article/3169619/hypersonic-missile-failures-cast-doubt-us-bid-catch

North Korea reactivating closed nuclear test site, satellite images suggest South China Morning Post, March 8, 2022

Commercial satellite imagery shows construction at North Korea's nuclear testing site for the first time since it was closed in 2018, US-based analysts said on Tuesday, amid fears the country could resume testing major weapons. Images captured by satellite on Friday showed very early signs of activity at the new site, including construction of a new building, repair of another building, and what is possibly some timber and sawdust, specialists at the California-based James Martin Centre for Nonproliferation Studies (CNS) said in a report. "The construction and repair work indicate that North Korea has made some decision about the status of the test site," the report said. Punggyeri has been closed since North Korea declared a self-imposed moratorium on nuclear weapons tests in 2018. Leader Kim Jong-un, however, has said he no longer feels bound by that moratorium as denuclearisation talks are stalled.

https://www.scmp.com/news/asia/east-asia/article/3169634/north-korea-reactivating-closed-nuclear-test-site-satellite

China to carry out Phase-4 lunar probe missions before 2030, build permanent station by 2035: project chief designer and political advisor Wu Weiren Global Times, March 8, 2022

China plans to conduct several landings on the south pole of the moon in its Phase-4 lunar program, in pursuit of building a basic structure of a lunar research station in the region, Global Times has recently learned from Wu Weiren, the chief designer of China's lunar exploration program. The Phase-4 of the national lunar probe program obtained state approval at the end of 2021, and would be carried out in three steps, namely the Chang'e-6, -7, and -8 missions before 2030, Wu, who is also a member of the Standing Committee of the National Committee of the Chinese People's Political Consultative Conference (CPPCC), the country's top political advisory body, detailed amid the ongoing two sessions. The research and development of the three missions, according to Wu, the key figure of national deep space exploration program, were very smooth.

https://www.globaltimes.cn/page/202203/1254281.shtml

Chinese firm forges nation's first low-Earth orbit broadband communication test constellation

Global Times, March 6, 2022

Chinese companies sent seven satellites into space from the Xichang Satellite Launch Center in Southwest China's Sichuan Province on Saturday, aiming to build the nation's first low-Earth orbit (LEO) broadband communication test constellation. Six satellites were produced by Beijing-based start-up GalaxySpace and a commercial remote sensing satellite was launched by a Long March-2C carrier rocket and entered their planned orbits. The six broadband communication satellites will form China's first LEO broadband communication test constellation together with the first

satellite of GalaxySpace, and build a satellite-ground fusion 5G test network, codenamed "Minispider Constellation," capable of providing communication services for more than 30 minutes each time.

https://www.globaltimes.cn/page/202203/1254110.shtml

Pakistan power project using China's Hualong One connected to grid Global Times, March 5, 2022

The K-3 unit of the Karachi Nuclear Power Project in Pakistan, the fourth entity to use a Chinadesigned third-generation nuclear reactor, was successfully connected to the grid on Friday, laying solid foundations for commercial operation. All four of the units adopting China's Hualong One nuclear reactor are now connected to the grid and are generating electricity, China National Nuclear Corp (CNNC) said in a statement on Friday. The success in construction and operation of the nuclear reactors in Pakistan will make the Hualong One technology better received in the global market, especially in countries and regions participating in the Belt and Road Initiative, observers said. The K-2 unit of the Karachi Nuclear Power Plant in Pakistan, which also uses Hualong One, officially started commercial operation on May 20 last year.

https://www.globaltimes.cn/page/202203/1253974.shtml

China boosts defense budget by 7.1% for 2022 amid complex global situation Global Times, March 5, 2022

China announced on Saturday its plan to boost the country's defense budget by 7.1 percent, to a total of 1.45 trillion yuan (\$230 billion) in 2022, with analysts saying that the proposed budget growth is steady and reasonable at a time when China needs to modernize its military capabilities to safeguard national sovereignty and territorial integrity amid severe external threats and an unstable security environment. The defense budget increase was mentioned in a draft budget report issued at the opening of the annual session of the National People's Congress (NPC), the country's top legislature, on Saturday.

https://www.globaltimes.cn/page/202203/1254011.shtml

PLA warships wrap up far sea drills after Australia's laser incident hype Global Times, March 4, 2022

Warships of the Chinese People's Liberation Army (PLA) Navy wrapped up a series of combat alert patrols and far sea drills on Thursday that covered the South China Sea, the East Indian Ocean and the West Pacific, the PLA Navy announced after Australia falsely accused one of the Chinese ships of pointing a laser at an Australian patrol aircraft last month. Under the command of the PLA Southern Theater Command Navy, the far sea joint training flotilla, consisting of the Type 052D guided missile destroyer Hefei, the Type 054A guided missile frigate Huangshan, the Type 071 amphibious landing ship Jinggangshan, the Type 903A comprehensive replenishment ship Honghu and vessel-borne helicopters, successfully completed its mission and returned to a port in

Zhanjiang, South China's Guangdong Province on Thursday morning, the PLA Navy said in a press release on Thursday.

https://www.globaltimes.cn/page/202203/1253905.shtml

New experimental satellite Tiankun-2 set to be launched soon: NPC deputy Global Times, March 3, 2022

The experimental Tiankun-2 satellite is set to be launched in the near future, the Global Times has learned from Ma Jie, Party chief of the Second Academy of China Aerospace Science & Industry Corporation (CASIC). Ma is also a deputy of the 13th National People's Congress (NPC), China's top legislature. Inheriting the high functional density of Tiankun-1, the first experimental satellite independently developed by CASIC, which was sent into orbit in March 2017, Tiankun-2 has lower manufacturing costs and is smaller in size. The development of the new Tiankun-2 satellite has come to a final testing stage and it is expected to be launched in the near future, according to Ma. To meet increasing demand for construction of satellite constellations, the company has focused on key stages in satellite designing and manufacturing.

https://www.globaltimes.cn/page/202203/1253881.shtml

Chinese envoy says IAEA's resolution on Ukraine undermines agency's independence

Global Times, March 3, 2022

The resolution on Ukraine's nuclear security, adopted by the International Atomic Energy Agency (IAEA), undermines the agency's independence as a professional international organization, China's Permanent Representative to the United Nations in Vienna Wang Qun said Thursday. Wang made the remarks after voting against the resolution at a meeting convened by the IAEA Board of Governors to discuss the situation in Ukraine. The resolution on nuclear safety, security and safeguards implications of the situation in Ukraine, proposed by Canada and Poland, was adopted by the IAEA board at the meeting. The Chinese envoy said the resolution has "obviously gone beyond the IAEA's mandate by introducing many politicized elements."

https://www.globaltimes.cn/page/202203/1253878.shtml

China's nuclear power related shares rally, after establishment of 'Guohe No 1' alliance

Global Times, March 2, 2022

Nuclear power-related shares rose on Wednesday after the industry-chain alliance of China's advanced nuclear power technology brand named "Guohe No 1" was officially established in Shanghai on Monday. Experts noted that the alliance will improve the safety and integrity of the domestic nuclear power industry chain, which will contribute to the country's dual carbon target while enhancing the global influence of China's nuclear power industry. The alliance said that with a design life of 60 years, the probability of a serious accident of Guohe No.1 nuclear power unit is 100 times lower than that of the second-generation nuclear power plants. Moreover, the annual

power generation capacity of a single unit can meet the electricity demand of more than 22 million residents, and can reduce greenhouse gas emissions such as carbon dioxide by more than 9 million tons per year. By 2025, the alliance is expected to build the third generation of nuclear power industry chain with "the most advanced and safest technology and fully independent and controllable equipment."

https://www.globaltimes.cn/page/202203/1253693.shtml

Russia's Ukraine invasion forces Japan to confront its nuclear taboo – but while Abe's keen on a US umbrella, Japanese public is 'simply not ready' South China Morning Post, March 2, 2022

The spectre of nuclear weapons being deployed in Ukraine, combined with the leaps that both China and North Korea have made in recent years in atomic weaponry, has emboldened some on the right in Japan to call for the nation's non-nuclear principles to be reconsidered. The question of Japan developing and deploying its own nuclear weapons has long been an undercurrent in the nation's security discussions, but came to the fore this week when former prime minister Shinzo Abe proposed that Tokyo open discussions with the United States on a nuclear-sharing agreement, similar to the way in which non-nuclear members of Nato are able to rely on the organisation's nuclear-capable states. Speaking on television on Sunday, Abe said, "It is necessary to understand how the world's security is maintained. We should not put a taboo on discussions about the reality that we face." Those hawkish views were met with immediate resistance from the present prime minister, with Fumio Kishida telling a session of the Japanese parliament, the Diet, the very next day that it would be "unacceptable" for Japan to pursue an arrangement to share nuclear weapons.

https://www.scmp.com/week-asia/politics/article/3168919/russias-ukraine-invasion-forces-japan-confront-its-nuclear-taboo