



GROUND GAME OF AUTHORITARIAN SPACE POWERS

Underwritten by U.S. Investors?



Ground Game of Authoritarian Space Powers

Underwritten by U.S. Investors?

Executive Summary

There is a new space race between the United States and its foremost strategic adversary, and it is not only taking place in space, but also on the ground. Unlike the Cold War version of the 1960s, focused on manned missions, today's celestial contest is for a global network of ground-based assets that can provide military advantage both in space and here on Earth. China, sometimes working with Russia, seeks to infiltrate and influence the national space sectors of an estimated 123 countries -- through some 800 deals to date -- including dozens of U.S. allies. It is centered on Chinese enterprises that serve as a front for China's military and its ambitious space program. These Chinese military space companies have already tapped into U.S. capital markets and private equity funds to finance a sizable portion of their malevolent activities, including a possible effort to militarize the Moon by the end of the decade.

The *Ground Game of Authoritarian Space Powers* was prepared by the Coalition for a Prosperous America (CPA) in conjunction with the Prague Security Studies Institute (PSSI). The findings of this report are supported by proprietary research on the PLA's penetration, creation, and support of foreign space programs through what may appear to be normal cross-border commercial deals.

China has repeatedly gained access to the space sectors of foreign nations by offering vertically integrated "package deals" involving equipment, technologies, and services through companies that pose as ordinary private sector entities. Not surprisingly, these same companies are heavily involved in China's weaponization of space and the Chinese Communist Party's (CCP) broader plan to modernize the PLA for an asymmetric war against the United States.

China's strategy of "space sector capture" is funded in part by millions of unwitting American investors despite the obvious threat to U.S. national security. This report provides examples of PLA-controlled space companies that have successfully secured American capital through publicly traded securities and private investment vehicles, including offshore funds registered within China's borders.

China also uses corporate actions, like mergers and acquisitions, to access U.S. and allied space companies with sensitive technologies. Congress should pass legislation that prevents Chinese military companies and their subsidiaries from accessing U.S. capital markets and private equity funds. To do otherwise is to knowingly allow American investors to underwrite China's hostile military space program -- as is the case today.

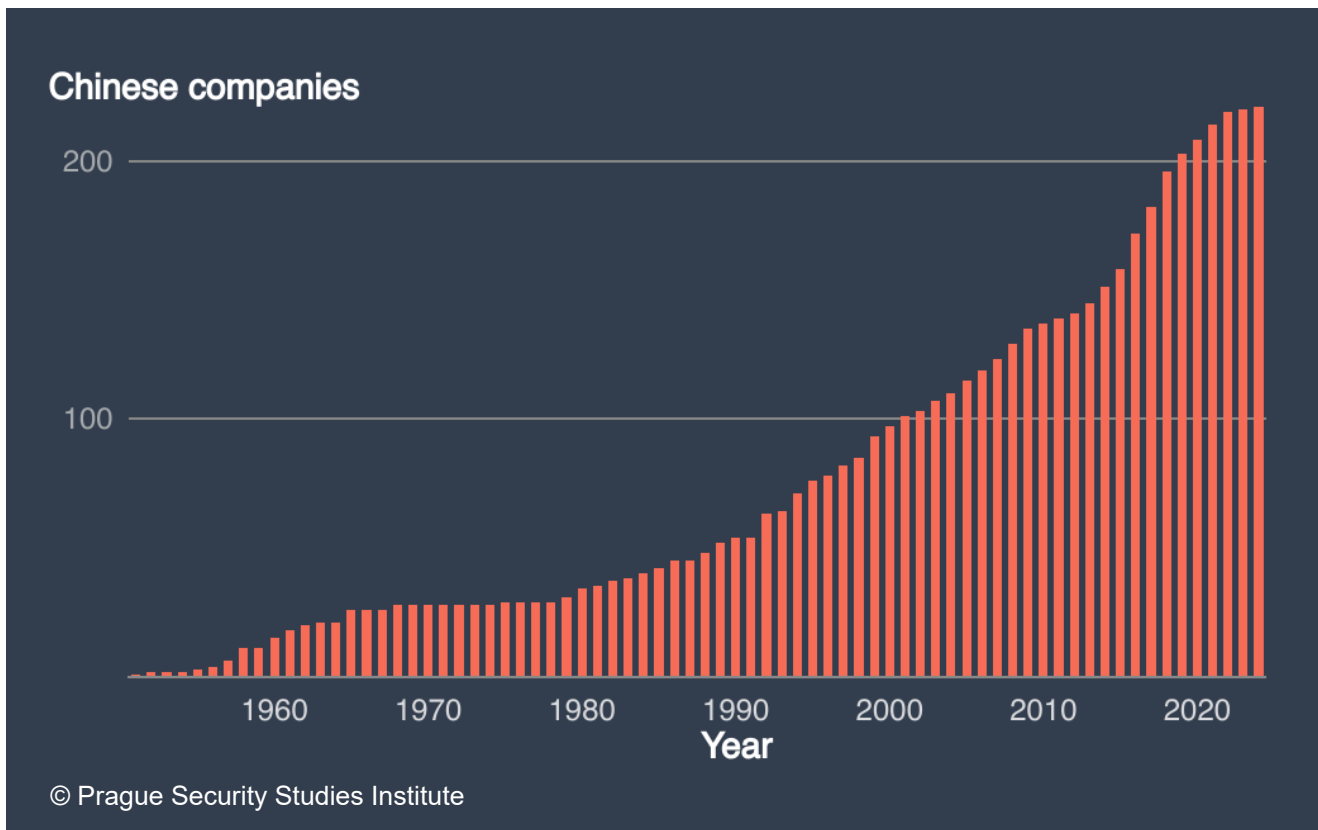
CPA and PSSI seek to underscore three major trends that threaten core U.S. national security interests:

1. China is using its corporate enterprises to penetrate and compromise foreign space sectors and programs to advance Beijing's strategic space agenda;
2. These same PLA-tied space companies routinely -- and without penalty -- bypass U.S. sanctions and blacklists to secure capital through publicly traded securities and private investment vehicles, including offshore funds registered inside the PRC itself; and
3. China's successful penetration of foreign space programs represents an asymmetric advantage in the militarization of the space domain and a strategic threat to the national security of the United States.

The key findings of this report are based on nearly thirty years of data collected by PSSI, a leader in space security research. CPA's joint *China Space Security Initiative* analyzed global capital flows into Chinese space companies controlled by the PLA. This first-of-its-kind case study clearly demonstrates China's weaponization of space-- and possibly the Moon -- using American and allied funding.

Disguised "Civilian" Space Industry

The centerpiece of China's current strategy for defeating the United States in the twenty-first-century space race is its corporations. This was not always the case. China's space sector was generally limited to state-owned enterprises (SOE) until 2014, when the PRC opened it up to so-called "private interests". Today, the CCP actively encourages Chinese companies to enter the space industry, in part to meet Chairman Xi Jinping's ambitious goal of a manned lunar landing by 2030. Roughly 250 "private" space companies now form the backbone of China's PLA-controlled space program, more than twice as many as 20 years ago.

FIGURE 1: Cumulative number of Chinese space-related companies (annually)

Most Chinese space companies not formally designated as SOEs still behave as state assets. PSSI's analysis of more than 400 space-related entities found that roughly three-quarters misrepresented themselves as "private sector" companies. These entities are essentially controlled by the PLA, staffed by former government personnel, or involved in state-led initiatives, including the "Military-Civil Fusion" (MCF) program. By operating under civilian guise, many of these entities have obtained financing from U.S. institutions that might have faced public scrutiny were the true nature of their investments brought to light.

Military control over Chinese space companies is most often established at inception. One example is Chang Guang Satellite Technology (CGST), a remote-sensing satellite manufacturer that also offers unmanned aerial vehicles (UAV) and mapping services – capabilities used for intelligence, surveillance, and reconnaissance (ISR) missions. CGST was initially launched with funding from the provincial government of Jilin and a national institute within the Chinese Academy of Sciences (CAS).

While its name suggests a benign institution of higher learning, CAS is the world's largest military research organization, an arm of the Chinese government that serves as a science and technology hub for the PLA. After its separation from CAS, Chinese sources claimed that CGST was "built upon a foundation of military-civil fusion," with its satellites offering "broad applications in national defense."¹

¹ Matt Bruzese and Peter W. Singer, "A closer look at the Chinese space company accused of helping the Houthis," *Defense One*, 7 May 2025.

Unsurprisingly, Chinese space companies spun off from direct state control operate in concert with the PLA against U.S. national security interests. CGST, for example, has knowingly provided satellite imagery to Iran-backed Houthi terrorists targeting American naval vessels in the Red Sea, including the USS Harry S. Truman aircraft carrier, according to the U.S. Department of State.² The company was earlier sanctioned by the Treasury Department for providing high-resolution observation satellite imagery to Russian forces in the early stages of its war against Ukraine.³ Although CGST has publicly downplayed its military connections in recent years, the company openly participates in the central government's MCF program, a U.S. Air Force research institute reports.⁴

China's Strategic "Space Sector Capture"

The rapid growth in Chinese space enterprises partnered with the PLA has helped Beijing capture foreign space programs at an unprecedented rate over the last decade. Companies like CGST help the PLA penetrate foreign space sectors by making "too-good-to-refuse" offers backed by the Chinese government. The deals are consistent with the Belt and Road Initiative (BRI), Beijing's strategy for coopting global infrastructure through "development finance with Chinese characteristics," a mix of asset-backed loans, public-private partnerships, and below-market interest rates. As with the BRI, China offers space services, equipment, and technology at deeply discounted prices, often with little or no money up front.

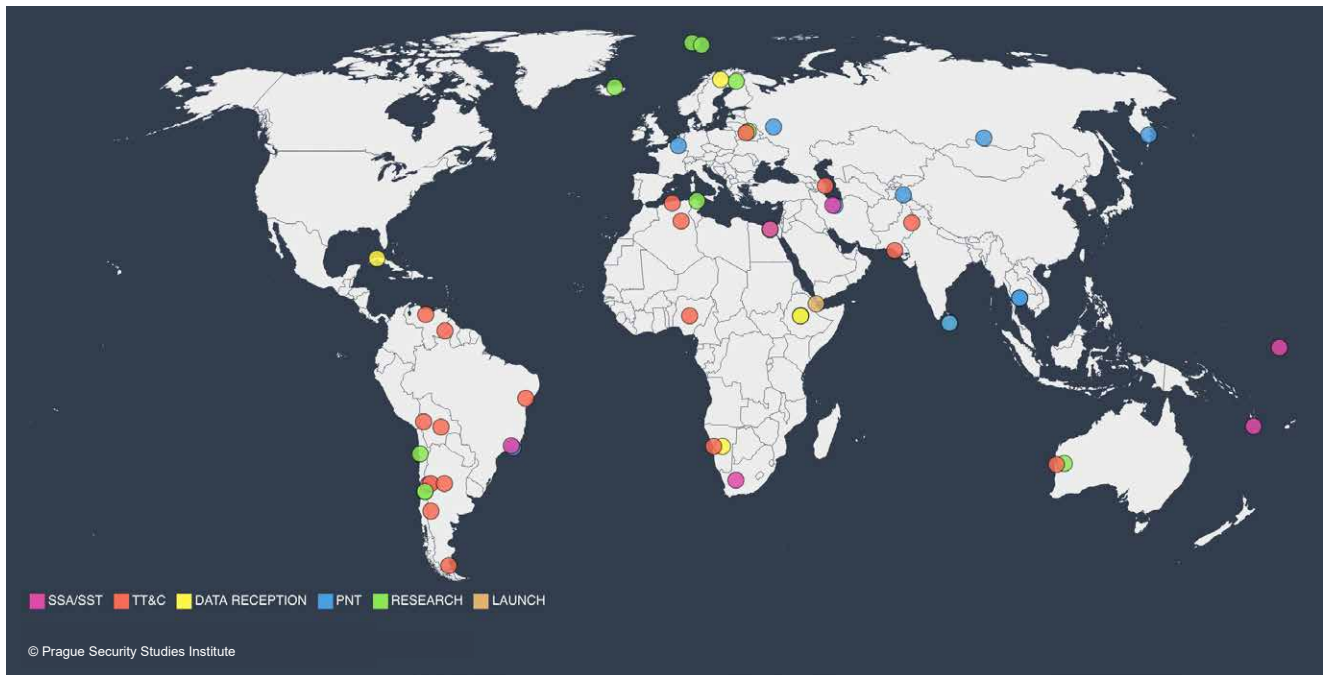
Basically, the Chinese "pitch" is that they can provide the satellite launch services, positioning, navigation, and timing (PNT) services, ground stations, operating personnel, training, and below-market financing in a neatly "bundled" long-term contract. What they fail to disclose is the creation of fully dependent, "captive" customers saddled with sole-source contracts and obligatory voting with Beijing in multilateral space fora. We term this debilitating dependency "space sector capture".

Penetrating and capturing the space sectors of foreign nations is an integral part of Beijing's goal of becoming the dominant global space power. Control over permanent ground-based space stations on every continent, including Antarctica, has helped the PLA develop a persistent ISR capability far from mainland China. Managing ground-based segments overseas expands China's ability to detect, track, access – and possibly target – the satellites of perceived adversaries, especially the United States. Such a capability would enable a Pearl Harbor-style attack on U.S. space-based and ground-based assets designed to blind our armed forces ahead of a conflict.

² U.S. Department of State, "Department Press Briefing," 17 April 2025.

³ U.S. Department of Treasury, "Press Release: Treasury Imposes Sanctions on More Than 150 Individuals and Entities Supplying Russia's Military-Industrial Base," 12 December 2023.

⁴ Matthew Bruzzese, "Chang Guang Satellite Technology," *China Aerospace Studies Institute (U.S. Air Force)*, March 2024.

FIGURE 2: Global map of planned and active Chinese ground segment

Control over foreign space sectors allows the PLA to track U.S. military satellites anywhere around the world – a capability it would need to initiate a “Space Pearl Harbor” attack.

PSSI data shows how China’s strategy of space sector capture has been a resounding success. Once a distant second place to Russia, China is now the leader in global space deals, signing about twice as many contracts in recent years. China expands market share by offering the vertically-integrated package deals described earlier, while Russia focuses on narrow technology sales. This means that Chinese space companies generally propose purchase plans that combine a satellite with the ground-based segment needed to control it. China also offers research and development relationships that can amount to valuable technology transfers, at least in the eyes of the host country.

FIGURE 3: Distribution of total Chinese and Russian space-related deals by city & source country

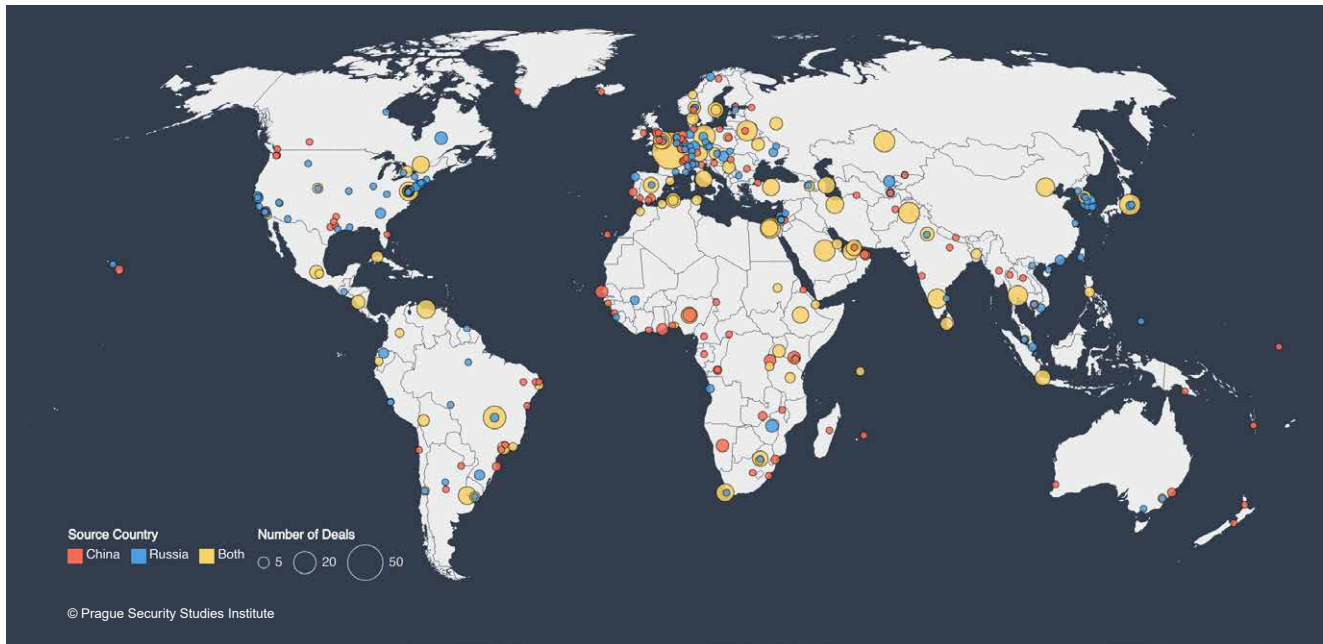
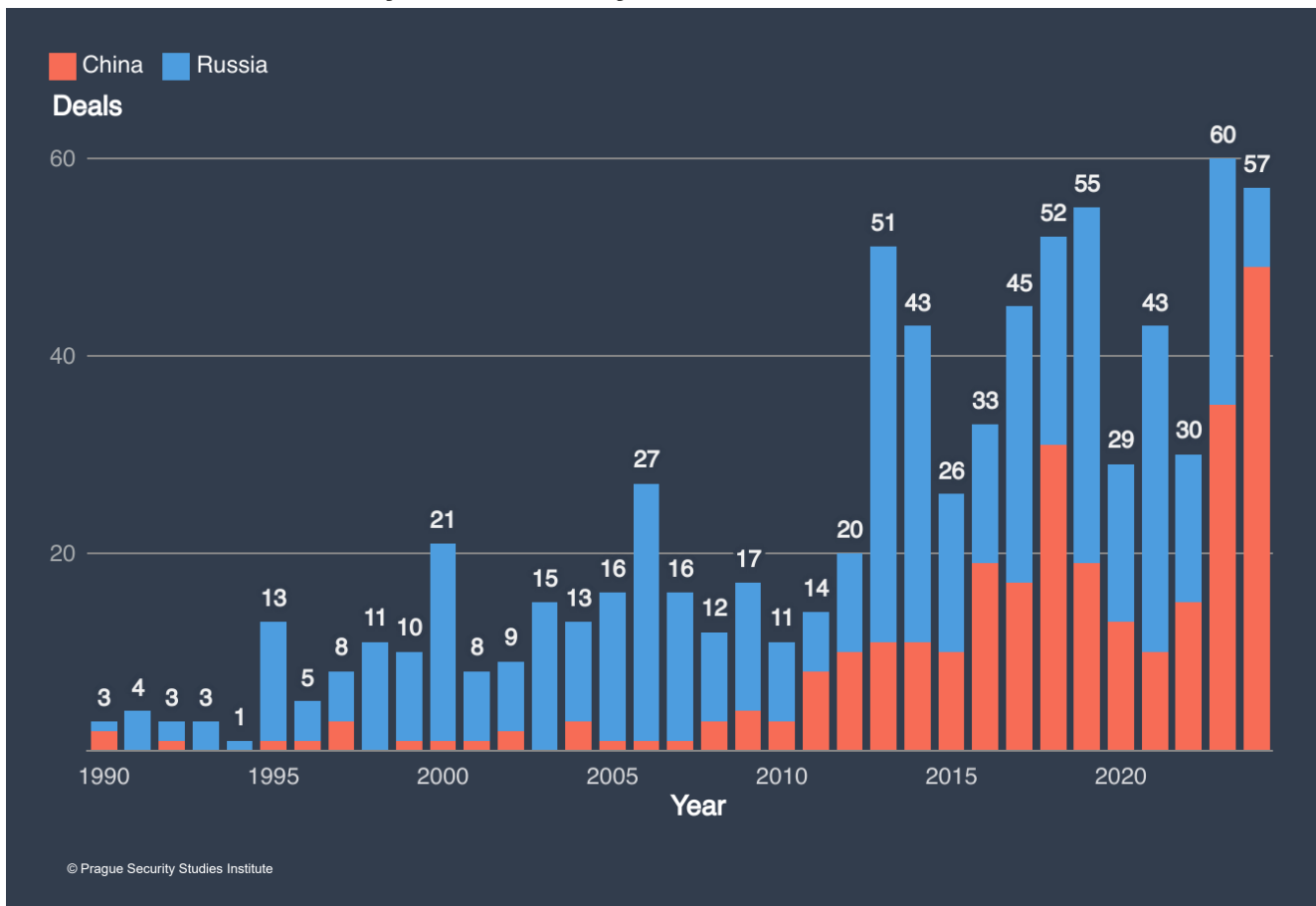


FIGURE 4: Annual deals by source country



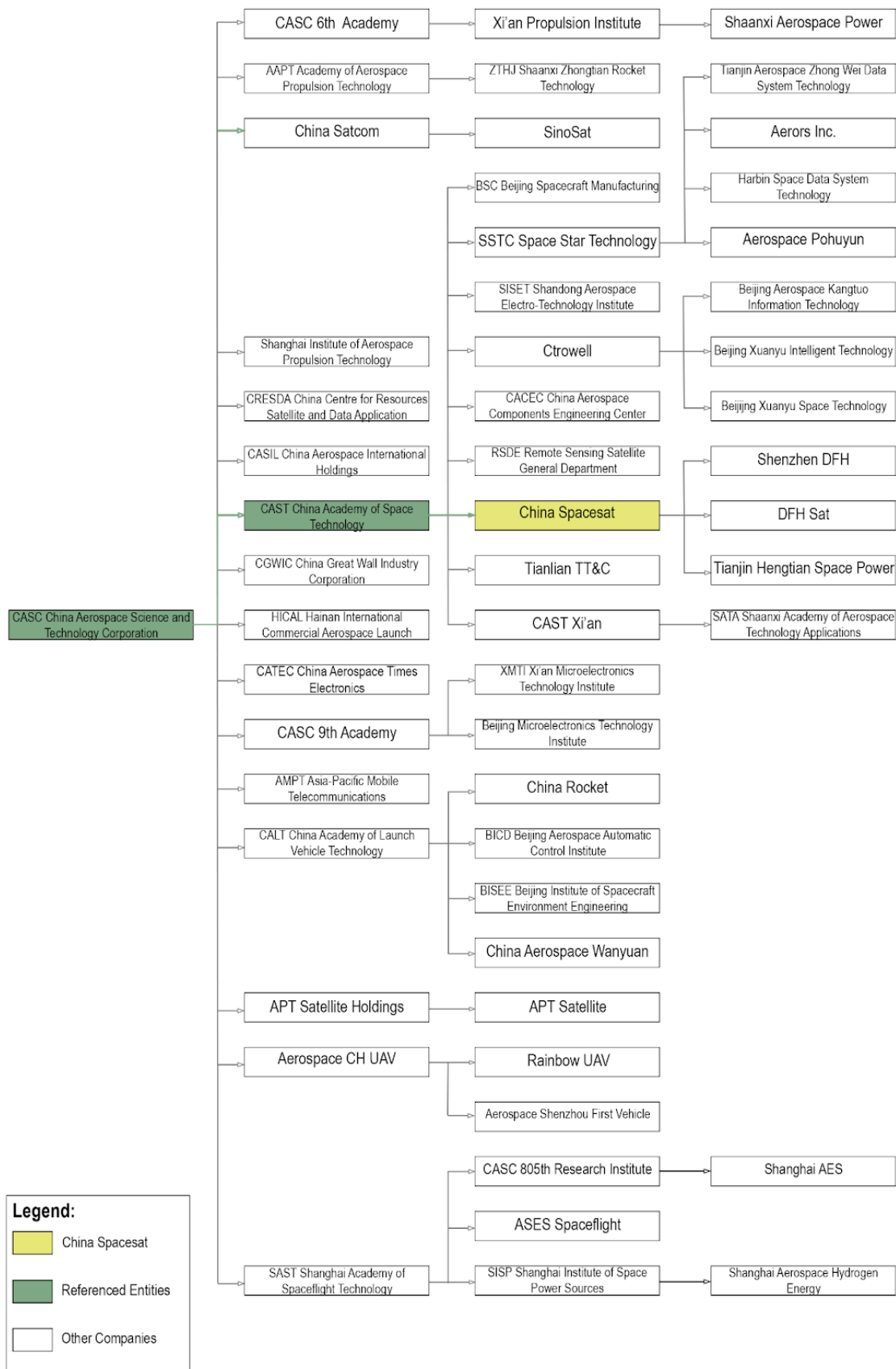
The Role of American and Allied Capital

The shift in China's space subsector from traditional SOEs to commercial entities under PLA control has opened an important funding stream previously unavailable: Wall Street. U.S. investment managers and their counterparts in allied nations routinely fund Chinese military space companies with explicit ties to the PLA. In most cases, it is not illegal to do so thanks to the formidable Wall Street lobby and conflicted government regulators drawn from its ranks. Witness that only a handful of Chinese space companies are subject to Treasury Department sanctions that would place them off-limits to American investors worldwide. Those that are sanctioned can usually access American capital through subsidiaries.

China Aerospace Science and Technology Corporation (CASC), an SOE that originated from the PRC Ministry of Defense, provides launch vehicles, satellites, manned space vehicles, and missiles to the PLA. CASC is directly controlled by the benign-sounding China Academy of Space Technology (CAST), the main manufacturer of spacecraft and satellites for the PRC since its first successful launch in 1970. CASC has 56 space-related entities in its corporate family tree, but just one – China Spacesat Co. – is subject to U.S. sanctions.⁵ China Spacesat specializes in developing and manufacturing remote sensing satellites that are militarily useful for ISR missions.

⁵ The CASC corporate tree is based on affiliate relationships in PSSI's dataset of Chinese space companies.

FIGURE 5: CASC corporate tree with referenced companies highlighted. (Source: PSSI)



CAST benefits from U.S. and allied investment despite its direct control over China Spacesat, a PLA defense contractor subject to Treasury sanctions.

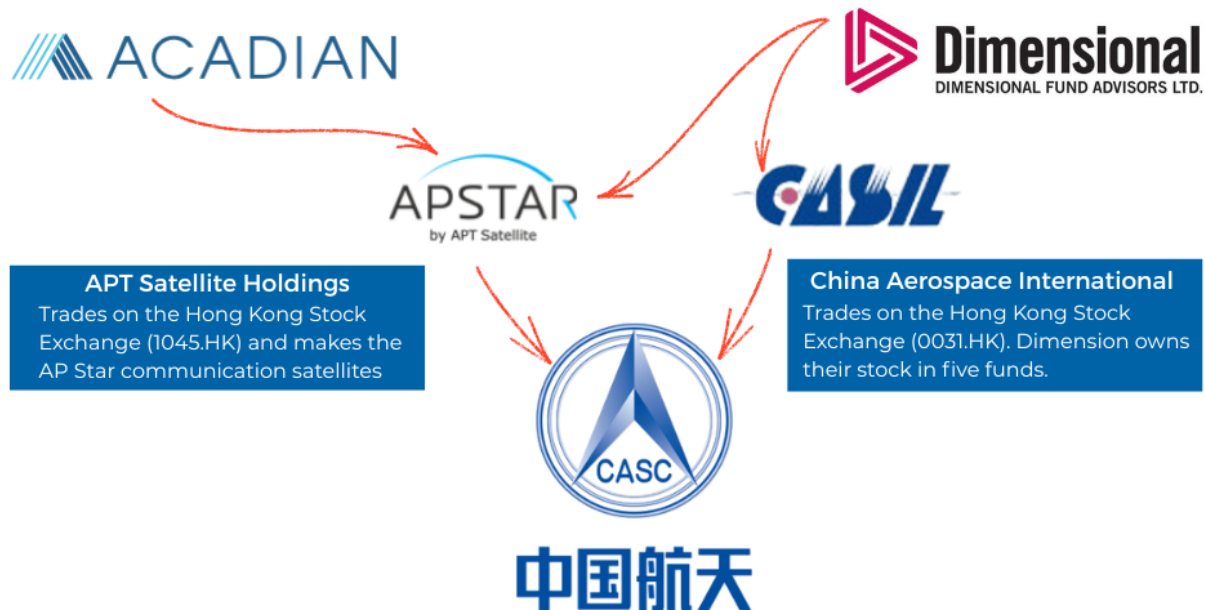
China Spacesat and its parent CASC are on the Non-SDN Chinese Military-Industrial Complex (CMIC) sanctions list managed by the Treasury Department's Office of Foreign Assets Control (OFAC).⁶ CAST is on the Commerce Department's Entity List that requires a license for all items covered by Export Administration Regulations. U.S. persons are legally prohibited from funding CASC and Spacesat, as they are covered by OFAC, *but there are no investment restrictions on companies that are solely on the Entity List.* For example:

- CAST affiliates can legally attract capital from U.S. persons through its commercial affiliates despite holding a majority stake (51%) in OFAC-sanctioned China Spacesat;
- China Spacesat is financially dependent on CAST, deriving roughly two-thirds of its revenue from the parent company; and
- China Spacesat also supplies China Aerospace Science and Industry Corporation Limited, an OFAC-sanctioned missile manufacturer, and Beijing UniStrong Science & Technology Co., Ltd., a satellite navigation and positioning service provider on the Entity List.

⁶ The Non-SDN Chinese Military-Industrial Complex Companies List covers companies involved in the PRC military-industrial complex that are not listed as "Specially Designated Nationals."

How Sanctioned China Space Companies Attract American Investment

China Aerospace Science and Technology is sanctioned by Treasury but its Hong Kong listed subsidiaries are not off limits to American capital. This is one way China state-owned space giants can capture foreign investment, despite export controls and investment bans.



CASC has a large family tree of unsanctioned defense firms open to American investors. One such subsidiary is China Aerospace International Holdings Limited (CASIL), a holding company involved in the PLA's ballistic missile program. CASIL is a Hong Kong-listed holding company that describes itself as engaged in the research, development, manufacturing, and commercialization of space technology products such as launch vehicles and satellites.⁷ Texas-based Dimensional Fund Advisors holds CASIL stock in 18 emerging market funds available to investors in the United States, Canada, the United Kingdom, and the European Union.⁸

APT Satellite Holdings, another CASC company, operates a fleet of satellites under the APSTAR brand. The two largest holders of its Hong Kong-listed shares are New York-based International Value Advisers and Dimensional Fund Advisors. Other institutional investors include Mercer Global Investments Europe Ltd and SEI Investments Co. of Pennsylvania.⁹

⁷ Barron's, "China Aerospace International Holdings Ltd."

⁸ Bloomberg, China Aerospace Security Ownership, accessed 8 August 2025.

⁹ Bloomberg, APT Satellite Ownership, accessed 8 August 2025.

"Elite Capture" Leads to Space Sector Capture

China is successfully exploiting U.S. and allied capital to help fund its military space companies, but in some cases, the primary objective of attracting U.S. and allied equity may be strategic influence rather than financial.

One example of this behavior is USPACE Technology (USPACE), which offers integrated space packages to foreign customers around the world. USPACE is the only publicly traded subsidiary of Hong Kong Aerospace Technology Group (HKATG), a satellite maker and launcher that works closely with the Chinese government.



USPACE has a market capitalization of about \$55 million, roughly half of which is available for public trading. The relatively small size of this "float" suggests that stock is not the principal way USPACE funds operations and growth. It is more likely that USPACE uses the sale of its securities to gain strategic influence with prominent institutions around the world. The two main USPACE stockholders outside of China are JPMorgan Chase, the largest commercial bank in the United States, and Macquarie Group Ltd., Australia's leading mergers and acquisitions firm, which collectively hold 5% of the shares available for public trading, according to corporate filings.¹⁰

¹⁰ Bloomberg, USPACE Technology Group Ltd, Security Ownership, accessed 8 August 2025.

The USPACE group of businesses has also received capital through U.S. and UK private equity firms. In September 2023, California-based Oaktree Capital Group bought a minority stake (49%) in a USPACE subsidiary named Aspace through a London affiliate for about \$20 million, leaving Hong Kong Aerotech with a controlling majority of shares.⁸ USPACE and its subsidiaries are not presently under any U.S. sanctions regime.

USPACE in 2024 established another headquarters in Dubai, where it is reportedly seeking a secondary stock exchange listing. The company appointed H.H. Shaikh Mohammed Maktoum Juma Al-Maktoum of the Dubai royal family as Deputy Chairman in 2023. The next year, the company named H.E. Mohamed Ben Amor, General Director of the Arab Information and Communications Technologies Organization, as Executive Director and Chairman of the Board. The same year, their subsidiary Aspace signed a joint venture agreement to build satellites in Saudi Arabia. And last May, the company announced it had added a prominent SpaceX investor to its Board of Directors.

USPACE's influence campaign in Dubai appears to have paid off. In 2024, the company signed an agreement with the Abu Dhabi Ports Company to construct, operate, and manage the Abu Dhabi Space Eco City, a project aimed at integrating over 1,000 commercial aerospace enterprises for joint services worldwide. This initiative could ultimately represent a Chinese version of Cape Canaveral.

Chinese Corporate Contributors to Space Sector Capture

One way that China obtains Western space technology is by acquiring interests in companies through large conglomerates with no obvious industry ties. A prime example of this strategy is Fosun International Limited (Fosun), a holding company that offers consumer services and products ranging from nouveau entertainment to traditional healthcare. Fosun Tourism Group – part of the parent company's "Happiness" line of businesses – counts Club Med and its sixty worldwide locations among its holdings. Fosun even owns majority stakes in Cirque du Soleil and the Wolverhampton Wanderers Football Club of the English Premier League. Fosun Pharmaceutical Group was one of a handful of Chinese drug firms licensed to make generic versions of the Pfizer and Merck Covid-19 medications.¹¹

Fosun has also secured interests in foreign space companies. In 2017, it participated in the \$15 million seed round for I-Space Technology (I-Space), a private launch company that has used government funding coupled with expertise from OFAC-sanctioned CASC to develop and manufacture its own rocket family. In 2018, Fosun entered a \$15 million Series A round for Airui Wireless Technology (Xiamen), a Chinese telecommunications company developing satellite two-way communication modules.

Fosun's stock is traded in Hong Kong and is owned by U.S. retail investors through emerging markets funds managed by Vanguard, BlackRock, T. Rowe Price, Dimensional Fund Advisors,

¹¹ Daniel Ren, "China's Fosun posts 26 per cent jump in net profit, gets ready to make generic Pfizer and Merck Covid-19 pills," *South China Morning Post*, 24 March 2022.

State Street, and others. American investors are the largest group of foreign investors in Fosun equity, with nearly 8% of its outstanding shares.¹²

U.S. Private Equity Backs Chinese Space Companies

Privately held American companies have taken advantage of perilously loose government restrictions on outbound capital to back Chinese space start-ups with military ties. One example is Matrix Management Corporation, a venture capital firm that invests in advertising, media, mobile, and security sectors. The Massachusetts-based company in 2008 established a Chinese branch under the name Matrix Partners China (MPC) that is still active today.¹³ MPC-owned funds and subsidiaries have since participated in the early investment rounds of at least eight companies active in China's space sector.

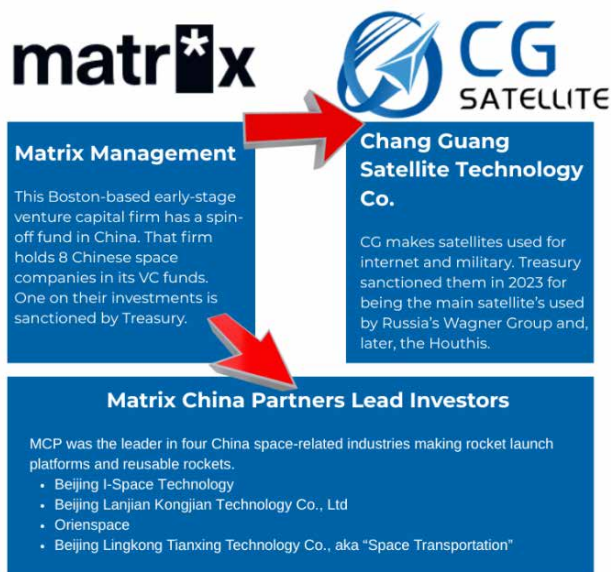
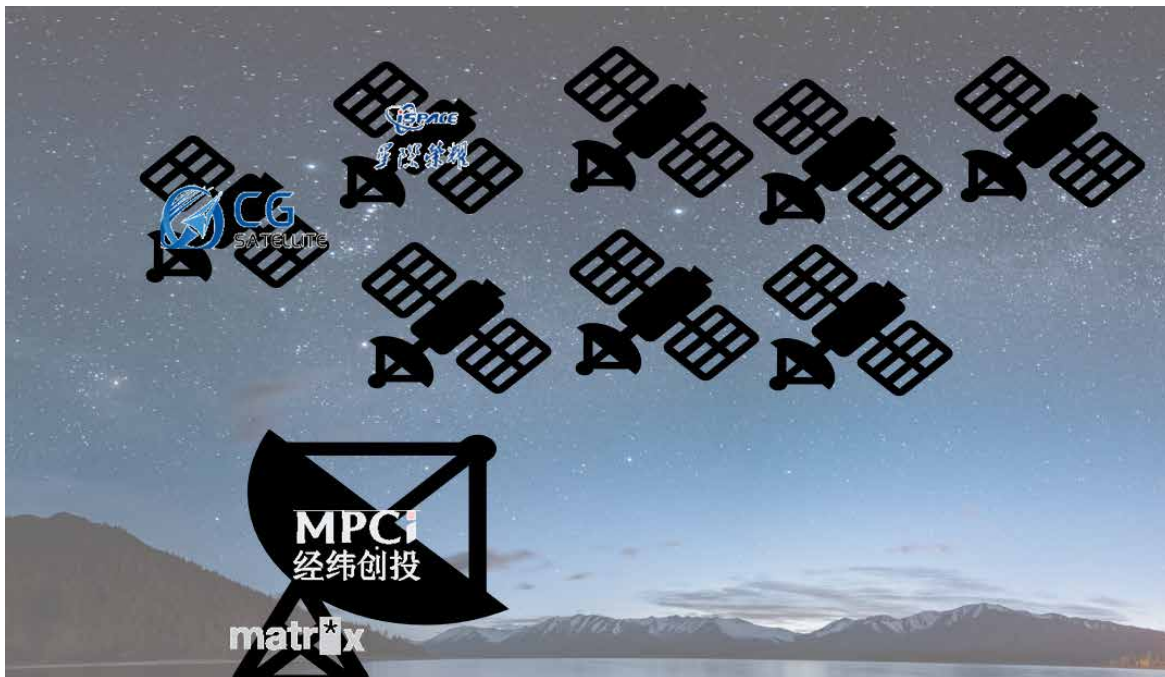
Several MPC-funded companies are regular defense contractors for the PLA, including CASC, I-Space, and CGST. MPC's Hangzhou Chuangqian Investment Enterprise Fund participated in a Series A funding round that raised about \$375 million in capital for CGST in 2020.¹⁴ Also involved in the transaction was iFlyTek, the notorious UAV maker now on the Pentagon's List of Chinese Military Companies Operating in the United States.

Another MPC-backed company is Spacety Co., Ltd. (Spacety), a CAS spinoff that is currently working with OFAC-sanctioned China Electronics Technology Group on a synthetic aperture radar remote sensing constellation with obvious military applications. Like CGST, Spacety has provided satellite imagery to the mercenary Wagner Group, resulting in the imposition of U.S. sanctions. MPC participated in Spacety's Series A and B funding rounds that totaled some \$22 million. Despite the intent of Congress to protect our national security interests, U.S.-based venture capital firms can legally fund Chinese space companies that are denied access to sensitive technologies by the Commerce Department as long as they are not also sanctioned by the Treasury Department.

¹² Bloomberg, Fosun International Ltd Security Ownership, accessed 8 August 2025.

¹³ Cheyenne Dong, "Matrix Partners rebrands China unit as MPC, emphasizes independence," *technode*, 2 July 2024.

¹⁴ Deng Yi, "Chinese Investors Bullish About Space as Satellite Startup Pockets \$375 Million in Pre-IPO Funding Round," *CX Tech*, 1 December 2020.



Conclusions & Recommendations

The 20th-century space race between the United States and the Soviet Union ignited a massive U.S. government investment effort that led to the development of cutting-edge technologies in common use today. The scientific discoveries and advancements of the past have enabled succeeding generations of space pioneers, like Elon Musk, to pursue a manned mission to Mars, the development of new rocket technologies, commercial products like Starlink and Google Maps, and much more.

“The space race of the 21st century is very different,” observes David Cavossa, President of the Commercial Space Federation, a leading U.S.-based trade association. “The Apollo program inspired thousands of young people to dedicate themselves to studying engineering, science, and computing – the workforce America needed to lead the world in high-tech fields,” but now “there is no one destination to win and no finish line... It is critical for national security, technology dominance, economic growth, and soft power diplomacy. There is no one space technology we need to dominate, but rather all of them – launch, operations infrastructure, remote sensing, satellite communications, in-space operations and mobility, and resource utilization to name a few.”

China’s space program is designed to challenge the United States by developing asymmetric instruments of warfare. China’s authoritarian political system and business model mean that national priorities -- especially pursuing space dominance -- can be quickly developed. China overtaking Russia in global space-related deals in 2023 should serve as a wake-up call for U.S. policymakers.

China’s militarization of the Moon would not only be an acute and lasting national embarrassment for the United States but also represent an incalculably vast strategic setback. The PLA in space can be expected to behave as it has in the disputed South China Sea, claiming territory to which it has no internationally recognized rights, but this time in places like the Shackleton Crater, a promising location for a long-term outpost. China would then likely demand that the United States gain its permission to orbit, land on, or operate in select lunar locales.

***Beijing’s stated goal is to make China
a world leader in space by 2050.***

Of immediate concern is China’s two non-geostationary communications constellations: “Guowang” and “Thousand Sails.” These constellations are multiple satellites working in unison to provide internet, voice, or data solutions to their users. Guowang is government-owned; Thousand Sails claims “private” ownership, but is financially underwritten by the Shanghai municipal government and the Chinese Academy of Sciences. Both constellations will likely launch hundreds of satellites in the next two years, with Thousand Sails likely to launch hundreds of satellites just this year (they currently have around 90 in orbit). Backed by central government funding, these two constellation systems will be the main driver of China’s

commercial space sector over the next several years, according to testimony provided to the U.S.-China Economic and Security Review Commission.

President Trump's *America First Investment Policy* of February 2025 aims to stop U.S. investors from financing Chinese military-linked firms worldwide. The National Security Memorandum laid out a positive agenda for outbound investment controls, but the policy has yet to be made into an Executive Order or legislation. In the meantime, Wall Street continues to fund Chinese military companies, recently raising more than \$5 billion for Contemporary Amperex Technology Co. Ltd. on the Hong Kong Exchange over congressional objections.¹⁵ This flagrant underwriting of the PLA by scores of millions of unwitting American investors through Wall Street investment products is a recipe for strategic failure in space.

Over the past two decades, trillions of dollars of American capital has flowed to the coffers of the Chinese Communist Party and the PLA, largely courtesy of U.S. fund managers and their index providers. The underwriting of the United States' primary adversary in the vital space domain cannot be permitted to continue another day. A recent Fox Nation documentary hosted by Maria Bartiromo, *The Enemy Above*, should be required viewing for those Americans intent on protecting *their investments*, while defending America's leadership in space.

¹⁵ Contemporary Amperex Technology Co. Limited (CATL) controls some 37% of the global power battery market, and maintains clear ties to Chinese Civil Military Fusion and PLA modernization. CATL itself is also implicated in human rights abuses in Xinjiang. As a result of these troubling facts (and several more) Chairman John Moolenaar of the House Select Committee on the CCP, called on the CEOs of J.P.Morgan Chase and Bank of America to withdraw from their lead manager roles in the CATL Hong Kong IPO.

Disclaimer

The information contained in this document is based in whole or in part on publicly available, open-source materials that are believed to be accurate as of the date of preparation. Users of this document are solely responsible for verifying the information before relying on it for any purpose. No warranty, express or implied, is made regarding the completeness, reliability, accuracy, or timeliness of the information.

This document includes opinions and conclusions of the publishers based on facts and inferences drawn from an analysis of open-source materials and is designed to contribute to public discourse on national security, investor protection, and human rights. Nothing in this report should be construed as an allegation of legal wrongdoing.

The authors and publishers of this document, to the fullest extent permitted by applicable law, disclaim any and all liability for the accuracy and completeness of, and any errors or omissions with respect to, the information in this document and for any acts or omissions made based on, and any outcomes resulting from the use of, such information. By accessing or using this document, the reader agrees that neither the authors nor the publishers shall be held liable for any direct, indirect, incidental, consequential, or other damages arising from reliance on the information contained herein.

This document is provided for informational purposes only and does not constitute legal, financial, or professional advice. No person or entity should rely on the contents of this publication without first obtaining their own professional advice.