Congress of the United States

House of Representatives

COMMITTEE ON OVERSIGHT AND ACCOUNTABILITY
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March 13, 2024

The Honorable Bill Nelson Administrator National Aeronautics and Space Administration 300 E Street SW Washington, D.C. 20546

Dear Administrator Nelson:

The Committee on Oversight and Accountability (Committee) is investigating the Chinese Communist Party's (CCP or Party) increasing influence in space and the work that the National Aeronautics and Space Administration (NASA) is doing to protect NASA employees, scientists, and the commercial space industry from the threats posed by the CCP to American intellectual property (IP), data, and technology. As Administrator, you have acknowledged, "It is a fact: we're in a space race" with China. This reality underscores serious risks to American national security, leadership, and scientific progress around the world – particularly when the People's Republic of China's (PRC) space program is properly understood for what it is: an arm of its military, the People's Liberation Army (PLA).

Broader Committee Investigation

The Committee is conducting oversight of the federal government's work to protect the American people from CCP "political warfare" and nefarious influence operations. For decades, the CCP has sought to infiltrate and influence every aspect of American society. ⁴ The

¹ Edward Helmore, 'We're in a space race': Nasa sounds alarm at Chinese designs on moon, The Guardian (Jan. 2, 2023).

² See USCC Ann. Rep. 2-3 (2023) ("China continues to pour resources into its unprecedented military buildup. The PLA places particular emphasis on achieving technological breakthroughs in missiles, space, under-sea warfare, and artificial intelligence, among other areas, in hopes that these might enable it to deter or defeat the forces of the United States and its allies.").

³ Political warfare "seeks to influence emotions, motives, objective reasoning, and behavior of foreign governments, organizations, groups, and individuals in a manner favorable to one's own political-military objectives." Mark Stokes, Project 2049, *The People's Liberation Army General Political Department: Political Warfare with Chinese Characteristics* (Oct. 14, 2013).

⁴ See generally Constantine C. Menges, China The Gathering Threat (2005); Report of the Select Committee on U.S. National Security and Military/Commercial Concerns With The People's Republic of China ("Cox Report") (Jan. 3, 1999); Robert Spalding, War Without Rules (2022); Col. Grant Newsham, When China Attacks: A Warning to

CCP's goal is plain: defeat the "main enemy," which counterintelligence officials have identified as America.⁵ The fronts are multiple; according to the CCP itself: "[t]he battlefield will be everywhere." And the tools are myriad, with the "united front" leading as one of the PRC's "magic weapons," as described by General Secretary Xi Jinping, to advance the Party's aim of global domination. United front work (UFW), which may be executed by the United Front Work Department (UFWD) or elsewhere in the Party, is a "unique blend of engagement, influence activities, and intelligence operations" that the CCP uses to "influence other countries' policy toward the PRC and to gain access to advanced foreign technology." UFW "generally involves covert activity and is a form of interference that aids the CCP's rise." United front "networks" are used "to carry out relationship-focused influence campaigns through a multitude of proxies."

Despite years of false promises to the West, the CCP openly seeks to achieve its destructive ambition. In 1999, two PLA Air Force colonels authored *Unrestricted Warfare*, which has been described as a strategic military vision for the PRC to defeat America through political warfare. Retired Brig. Gen. Robert Spalding, who has served in senior positions in strategy and diplomacy with the U.S. Departments of Defense and State for decades, characterizes the book as "the main blueprint for China's efforts to unseat America as the world's economy, political, and ideological leader," which "shows exactly how a totalitarian nation set out to dominate the West through a comprehensive, long-term strategy that includes everything

America (2023); Kerry K. Gershaneck, Political Warfare: Strategies for Combating China's Plan to "Win without Fighting" (2020); see also Larry Diamond and Orville Schell, China's Influence & America's Interests: Promoting Constructive Vigilance, Hoover Institution (2019).

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⁵ Menges, *supra* note 4; Gershaneck, *supra* note 4 ("The PRC is engaged in war against the United States. It is not mere competition or malign influence, but war by PRC definition."); Newsham, *supra* note 4 at 60 (The CCP "seeks global domination" and "will fight its main enemy, the United States, to achieve it.").

⁶ Qiao Liang and Wang Xiangsu, *Unrestricted Warfare: China's Master Plan to Destroy America* (Beijing: PLA Literature and Arts Publishing House, Feb. 1999) (military colonels describing twenty-four varieties of warfare).

⁷ "While the CCP's United Front Work Department has functional responsibility for these [warfare] operations and activities, PRC united front work is a task of all CCP agencies and members." Gershaneck, *supra* note 4 at 22.

⁸ It is essential to understand that Xi Jinping has removed any "veneer of separation between the [CCP] and the Chinese state." Gershaneck, *supra* note 4 (quoting Ann-Marie Brady, *Exploit Every Rift: United Front Work Goes Global*, in David Gitter et al., *Party Watch Annual* Report, Center for Advanced China Research (2018)).

⁹ Ann-Marie Brady, *Magic Weapons: China's political influence activities under Xi Jinping*, Wilson Center (Sept. 18, 2017); *see also* The Select Committee on the Chinese Communist Party, *Memorandum: United Front 101*, https://selectcommitteeontheccp.house.gov/sites/evo-subsites/selectcommitteeontheccp.house.gov/files/evo-media-document/uf-101-memo-final-pdf-version.pdf.

¹⁰ Alex Joske, *The party speaks for you: Foreign interference and the Chinese Communist Party's united front system*, Australian Strategic Policy Institute (2020) (quoting Xi Jinping at 2015 Central United Front Work Meeting).

¹¹ See, e.g., Newsham, supra note 4 at 43 ("The People's Republic of China may settle for dominance rather than occupation, but it does indeed aim to rule us all.").

¹² United Front 101 Memo, *supra* note 9 at 1.

¹³ Joske, *The party speaks for you, supra* note 10.

¹⁴ Alex Joske, Spies and Lies: How China's Greatest Covert Operations Fooled the World (2022) at 63.

¹⁵ Gershaneck, *supra* note 4.

from corporate sabotage to cyberwarfare to dishonest diplomacy; from violations of international trade law and intellectual property law to calculated abuses of the global financial system." ¹⁶ Kerry Gershaneck, former counterintelligence officer who wrote a seminal book on combatting PRC Political Warfare, has explained that *Unrestricted Warfare* details CCP use of "any methods" where "the boundaries between war and non-war and between military and non-military affairs [have] systemically broken down." ¹⁷ To successfully combat these highly organized and pervasive warfares spawned by China, federal agencies must first recognize and understand them.

The CCP "know[s] the strength of the American people, of the American idea, and that's why China has launched so many warfares to try to weaken us, divide us, and get us to hate ourselves and each other." ¹⁸ Retired Col. Grant Newsham, former U.S. Marine Liaison Officer to the Japan Ground Self-Defense Force and U.S. Foreign Service Officer, has advised that "the way out of this is to rediscover why we are an exceptional country, get to know each other better, and fight side by side." ¹⁹

As all Americans are targets of the PRC's warfare, ²⁰ federal agencies have responsibilities to (1) conduct outreach to citizens about the dangers they may encounter, and (2) provide appropriate incentives for Americans to proactively protect themselves—their communities, schools, houses of worship, businesses, finances, food, and more—from the threat. Federal agencies must prepare Americans to "take action." To stop the CCP's "destructive actions," retired Brig. Gen. Spalding advises that it will "take macrolevel strategic changes by our government, but also microlevel actions by individuals, businesses and other civic institutions." The Committee is surveying each agency's role to secure Americans and their communities.

Congress has recognized the threat posed by the PRC for some time. Notably, in 1999, the U.S. House Select Committee on U.S. National Security and Military/Commercial Concerns

¹⁶ Spalding, War Without Rules, *supra* note 4 at xii; *see also* Robert Spalding, Stealth War at 12-13 (2019) (*Unrestricted Warfare* "should be required reading for all branches of the US government and for business leaders, because it outlines, in no uncertain terms, the strategy behind China's policies," including stating that the "new principles of war" are "no longer 'using armed force to compel the enemy to submit to one's will,' but rather are 'using all means, including armed force or non-armed force, military and non-military, and lethal and non-lethal means to compel the enemy to accept one's interests.").

¹⁷ Gershaneck, *supra* note 4 (quoting Qiao Liang and Wang Xiangsu, *supra* note 6).

¹⁸ Newsham, *supra* note 4 at 341.

¹⁹ *Id*.

²⁰ "The Three Warfares, the traditional foundation of PRC political warfare, include public opinion/media warfare, psychological warfare, and legal warfare." Gershaneck, *supra*, note 4. It "requires efforts to unify military and civilian thinking, divide the enemy into factions, weaken the enemy's combat power, and organize legal offensives." Elsa Kania, *China Brief: The PLA's Latest Strategic Thinking on the Three Warfares*, Jamestown Foundation (Aug. 22, 2016).

²¹ Spalding, War Without Rules, *supra* note 4 at 214.

²² *Id.; see also* Peter Mattis and Matt Schrader, War On the Rocks, *America Can't Beat Beijing's Tech Theft With Racial Profiling* (July 23, 2019) ("The U.S. government's difficulties in telling a convincing story about the Chinese Communist Party point to a[n] important step: addressing a serious lack of 'China literacy,' both within the enforcement portions of the federal bureaucracy, and in U.S. society as a whole.").

with the People's Republic of China concluded that in the preceding decade, the PRC used a "variety of techniques including espionage, controlled commercial entities, and a network of individuals that engage in contact with scientists, business people and academics" as part of its warfare operations.²³

With varying degrees of effort and success, federal agencies have sought to address the CCP's attack on what Col. Newsham has aptly described as "[t]he core of America." However, the threat is grave and work must be done across agencies to protect America. Peter Mattis, former staff director of the Congressional-Executive Commission of China and counterintelligence analyst at the CIA counsels that

Only by being clear in public about the actions and intentions of the Chinese party-state, and being publicly accountable for the actions the U.S. government takes in response, will the United States be able to address Beijing's challenges while upholding our democratic commitment to fair, transparent justice for all Americans.²⁶

To this end, the Committee is conducting this investigation and implores each federal agency to uphold its duty to the American communities for whom they are responsible.

CCP Space Warfare

The PRC's decision to embed its space program in its military is significant.²⁷ The PLA released a 2020 edition of the *Science of Military Strategy*, which concludes that space is "inseparable from the outcome of war," and explicitly states that space power is "not only the glue of the modern integrated battlefield, but also the glue of the modern military power system." The U.S. began to take this threat more seriously when it established the U.S. Space Force, ²⁹ but NASA retains great responsibility in securing American interests in space.

²³ Menges, *supra* note 4; *see generally* Cox Report, *supra* note 4.

²⁴ Newsham, *supra* note 4 at 33.

²⁵ See Newsham, supra note 4 at 309 ("We need to know, value, protect and build the strengths of the United States of America, and shed the light of truth on the corruption, in every sense of the word," of the CCP. "That could mean in discussions with family, community, at school or wherever that understanding needs bolstering." Education courses on PRC political warfare would benefit "[a]ny decision-makers who work with China."); see Gershaneck, supra note 4 (outlining such courses to "build[] internal defenses").

²⁶ Mattis and Schrader, *supra* note 22.

²⁷ See PLA Perspectives on Network Warfare in "Informationized Local Wars": Testimony Before USCC, 117th Cong. 2 (statement of Dean Cheng, Senior Research Fellow for Chinese Political and Security Affairs, The Heritage Foundation) ("the PLA deems it likely that its future wars will likely be joint... The PLA's forces will need to interoperate in not only the traditional land, sea, and air domains, but also outer space and the electromagnetic domain."); See Richard Fisher, Jr., In Space, China Seeks Galactic Hegemony, Center for Security Policy (Mar. 25, 2021) ("To dominate the Moon, Chinese sources indicate the PLA-controlled space program will deploy a constellation of navigation and communication satellites around the Moon. Chinese sources also say the Moon will be used to observe the Earth, or more precisely, which they do not say, track all of the crucial satellite systems in between that contribute to America's current margin of military superiority.").

²⁸ Ashley Lin, *The Chinese military's skyrocketing influence in space*, RealClear World (Nov. 11, 2023).

²⁹ Jim Garamone, *Trump Signs Law Establishing U.S. Space Force*, DOD News (Dec. 20, 2019).

U.S.-China collaboration on space matters is limited by the Wolf Amendment, which prohibits most of the use of NASA funds for projects with the PRC and Chinese-owned companies.³⁰ The commercial space industry, however, openly cooperates with the PRC³¹—a notable fact given that NASA increasingly relies on and delegates work to the private sector.³² Companies including SpaceX, Boeing, Blue Origin, and Virgin Galactic are collaborating with NASA on space initiatives or leading their own space-oriented projects.³³ The space industry, public and private, must account for the PRC's tactical approach to space, the risk its ambitions pose to American intellectual property, and certain cooperation that could dangerously aid PLA growth.

U.S.-China "collaboration" is characterized by unequal contribution of information by the U.S. and theft of American intellectual property, trade secrets, and technology by the CCP. The PRC takes advantage of open science in America while stonewalling the rest of the world and stealing American IP and trade secrets.³⁴ In fact, over the last several years, the Federal Bureau of Investigation has recorded a 1300% increase in investigations relating to PRC efforts to steal IP, trade secrets, and other intelligence.³⁵

National security officials are sounding alarms about the dangers of CCP activities in space. The Office of the Director of National Intelligence's 2023 threat assessment identified that the PRC, and more specifically the CCP, is using space specifically to erode U.S. global influence.³⁶ To do so, the PRC is taking advantage of the lack of a robust legal regime in space and the "relatively few industrial standards, behavior norms, or standard operating procedures governing space operations at the international level," to establish a CCP-favored legal regime.³⁷

³⁰ Dennis Normile, *NASA opens door to cooperation with China on Moon rock research*, ScienceInsider (Dec. 7, 2023); Department of Defense and Full-Year Continuing Appropriations Act, Pub. L. No. 112-10, tit. III, §1340, 125 Stat. 38, 123 (2011).

³¹ See Marcin Frackiewicz, The Relationship Between SpaceX and China's Space Program, TechnoSpace2 (March 8, 2023).

³² See Matthew Weinzierl and Mehak Sarang, *The Commercial Space Age Is Here*, Harvard Business Review (Feb. 12, 2021).

³³ Weinzierl and Sarang, *supra* note 32; Jim Cawley, *Boeing's Starliner Makes Progress Ahead of Flight Test with Astronauts*, NASA (Aug. 28, 2020); Press Release, Blue Origin, NASA Selects Blue Origin National Team to Return Humans to the Moon (April 30, 2020); Jeff Foust, *Virgin Galactic prepares to transition to operations*, SpaceNews (Nov. 5, 2020).

³⁴ See USCC Ann. Rep. 201 (2021) ("In practice... the CCP views scientific research as a zero-sum contest.") ("Since China's track record has not been that of a trusted and reciprocal partner, this could challenge the U.S. tradition of open scientific ecosystems and eventually give China an insurmountable advantage..."); See generally Andrew Jones, NASA chief says cooperation with China in space is up to China, Space.com (Sept. 20, 2022) (Administrator Nelson has said that "Cooperation with China is up to China... There has to be an openness there, and that has not been forthcoming.").

³⁵ FBI Director Convenes Five Eyes Summit on Protecting Innovation, Preventing Economic Espionage, The AZB (Oct. 18, 2023).

³⁶ Lin, *supra* note 28 ("China's space activities are designed to advance its global standing and strengthen its attempts to erode US influence across military, technological, economical, and diplomatic spheres.").

³⁷ Dean Cheng, China and Space: The Next Frontier of Lawfare, United States Institute of Peace (Aug. 2, 2023).

While the U.S. continues to lead in satellite launches, the PRC is rapidly increasing its presence in space. In 2022, China's space program launched an Earth-orbiting space station in addition to lunar orbiting and sample-retrieving missions.³⁸ Earlier this year, China launched forty-one satellites at once.³⁹ It has been reported that "China has already begun leading the world in military launches, sending forty-five defense-related satellites into orbit in 2022."⁴⁰ Comparatively, the U.S. launched only thirty defense-related satellites.⁴¹ By 2025, China plans to launch a lunar research station.⁴² Lastly, the CCP aspires to land Chinese astronauts on the moon by 2030.⁴³

It has been reported that the PRC operates its military and space plans under a "veil of secrecy." The PRC has reportedly been "more secretive than most when it comes to space." Following its completion in October 2022, the CCP has withheld information about its astronauts' activities at the Tiangong space station. This is exemplified by a March 2023 Chinese spacewalk for which the CCP provided after-the-fact notice and sparse details, in stark contrast to the International Space Station's advance notice and live-streaming of all spacewalks.

The CCP does not view space as an area for collaboration, but a place for competition. The CCP has repeatedly rebuffed international efforts to set safety and other norms for space. Recently, the CCP opposed the Artemis Accords, which seek to create a "principles, guidelines, and best practices in carrying out activities in outer space," to "increase the safety of operations, reduce uncertainty, and promote the sustainable and beneficial use of space for all humankind." The CCP framed "the agreement as an attempt by the United States to unilaterally set ground rules for lunar behavior and arguing that the United States is attempting to foment a new space race." Further, China objects to international efforts to mitigate space debris and to "safety

³⁸ Helmore, *supra* note 1.

³⁹ Lin, *supra* note 28.

⁴⁰ See generally, Lin, supra note 28 (Secretary of the U.S. Air Force Frank Kendall has expressed that the CCP's increasing ability to use satellites to track U.S. military troops and other entities may allow the CCP to collect intelligence from space).

⁴¹ Theresa Hitchens, *China tops US in defense-related satellites orbited in 2022: Report*, Breaking Defense (Jan. 6, 2023).

⁴² Helmore, *supra* note 1.

⁴³ *Id*.

⁴⁴ Hitchens, *supra* note 41 ("The caveat is that it is hard to be certain about the number of Chinse military satellites... because of Beijing's veil of secrecy surrounding its national security space efforts... eight Shiyan satellites were successfully launched to low Earth orbit in 2022 with unknown missions."); *See* Lin, *supra* n. 28. ⁴⁵ The Economist, *China is unusually secretive about its space programme*, The Economist (May 18, 2023).

⁴⁶ *Id*. ⁴⁷ *Id*.

⁴⁸ Principles for the Cooperation in the Civil Exploration and Use of the Moon, Mars, Comets, and Asteroids for Peaceful Purposes, Austl.-Can.-It.-Japan-Lux.-U.A.E.-U.K.-U.S., Oct. 13, 2020. ⁴⁹ USCC, *supra* note 2 at 198.

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zones" in which countries would "coordinate zones of noninterference for the purpose of deconfliction of lunar activities." ⁵⁰

Despite these risks, NASA is encouraging scientists it funds to apply to China's space agency to access the 1.7 kilograms of lunar soil gathered by China in a sample-retrieving mission in 2020.⁵¹ By doing so, NASA is encouraging American scientists to traverse loopholes to avoid a U.S. law, which prohibits the use of NASA funds for projects with China, or Chinese-owned companies, excluding instances in which NASA certifies to Congress that there is no risk of the transfer of technology or data, and that the relevant studies do not include Chinese officials participating in human rights violations.⁵²

In 2022, you stated, "As to a détente with China... there is nothing thus far to indicate that China is in any way willing to be less secretive about their space program and the military aspects of their space program." It is essential that the U.S. be the world leader in space and not anticipate that the PRC will be forthcoming with its access or research progress. Importantly, we must garner what David Goldman, Deputy Editor for the Asia Times and Washington Fellow at the Claremont Institute's Center for the American Way of Life described as the "divine spark in the individual" and "restore the culture of innovation, and mobilize human and corporate resources to do this." By inspiring generations of creators and innovators, America can lead, once again, in space.

To assist the Committee in investigating this matter and to help our Committee understand how NASA is inspiring Americans to lead in space, and training its employees, scientists, and the commercial space industry to protect America from CCP's efforts to hinder that success, we request a briefing from NASA with Committee staff as soon as possible, but no later than March 20, 2024. This briefing should address:

- 1. How NASA strives to inspire and equip Americans to strengthen their communities, innovate, and create the technologies and phenomena that will secure a strong and prosperous future for our nation;
- 2. How NASA leadership ensures from the top down that all NASA employees are aware of CCP warfare and influence operations against America, and are equipped to address them wherever they arise;
- 3. How NASA conducts outreach to the commercial space industry about the threat posed by the CCP and the PLA to U.S. intellectual property, data, technology, and national security;

⁵⁰ *Id*.

⁵¹ Normile, *supra* note 30.

⁵² Id

⁵³ Jeffrey Kluger, NASA Boss Bill Nelson On a Space Race With China, the Future of the Space Station, and More, Time (Jan. 5, 2022).

⁵⁴ David P. Goldman, You Will Be Assimilated: China's Plan to Sino-Form The World 201, 205 (2020).

- 4. NASA efforts to train its employees and scientists about the dangers of the CCP's destructive ambitions in space and the risks posed by collaboration with the PRC's space program to their research, testing, and development given the PRC's continuous theft of American intellectual property, data, and technology;
- 5. Any NASA programs, processes, or mechanisms to incentivize the commercial sector to protect U.S. intellectual property and report CCP influence operations as well as IP or trade secret theft by the CCP and its entities; and
- 6. NASA research and development to secure American leadership in space and protect national security.

To schedule the briefing or ask any related follow-up questions, please contact the Committee staff at (202) 225-5074. The Committee on Oversight and Accountability is the principal oversight committee in the U.S. House of Representatives and has broad authority to investigate "any matter" at "any time" under House Rule X. Thank you in advance for your cooperation with this inquiry.

Sincerely,

James Comer

Chairman

Committee on Oversight and Accountability

cc: The Honorable Jamie B. Raskin, Ranking Member Committee on Oversight and Accountability