



VOLUME 25 • ISSUE 19 • OCTOBER 18, 2025

IN THIS ISSUE:

PRC Shift Signals 'Reverse Constraint'

By Matthew Johnson.....pp.2–9

CMC Reshapes PLA Political Work System

By K. Tristan Tang.....pp.10–15

Beijing Deepens Footprint in Central Asia

By Matthew Fulco.....pp.16–20

Onward March of PRC Robotics Firms

By Sunny Cheung.....pp.21–28

CHINA BRIEF NOTES:

New Emphases in the PLA's Operational Centers of Gravity

By K. Tristan Tang.....pp.29–33

Cronyism and Failed Promotions: Xi's PLA Purge

By K. Tristan Tang.....pp.34–37

PRC Shift Signals ‘Reverse Constraintment’

By Matthew Johnson



The PRC Ministry of Commerce. Along with MIIT, MSS, and other agencies, MOFCOM is part of a coordinated effort to turn control of rare earths and related technologies into an instrument of strategic denial. (Source: Zhi News, October 11)

Executive Summary:

- Trade between the United States and the People’s Republic of China (PRC) is now defined by selective weaponization, not interdependence or decoupling. Both sides are learning to use high-value channels of exchange—technology, materials, and capital—as instruments to shape the other’s behavior.
- Neither seeks full decoupling; instead, each exploits the persistence of trade ties to impose costs and extract concessions. Trade now carries an overtly strategic rationale as well as an economic one.
- The PRC’s rare-earth control regime represents the material counterpart to U.S. semiconductor restrictions. Xi Jinping’s long-term economic doctrine redefined dependence as a countermeasure, treating supply-chain dominance as a form of deterrent power.
- Beijing has built a centralized architecture of control over rare earths, transforming fragmented measures into a coherent national system. The new framework is anchored by MOFCOM, MIIT, and SASAC. It integrates licensing power, enterprise control, and data oversight under a national security mandate, allowing Beijing to regulate global supply chains in real time.
- In October, Beijing’s export-control regime completed the transition from ambiguous export tightening and trade leverage to full strategic confrontation—and deterrence. MOFCOM’s export control announcements exposed the system’s full operational reach and its intended target, U.S. military power, positioning “reverse constraintment” as its answer to Washington’s technology controls.
- The result is a short- to medium-term strategy of strategic denial. With global substitution years away, Beijing can now slow adversaries’ industrial and defense mobilization on demand, testing the limits of coercive interdependence and shaping the strategic environment ahead of potential flashpoints such as Taiwan.

During the 2020s, the focus of the trade relationship between the United States and the People's Republic of China (PRC) has shifted from managing interdependence to competing for dominance in critical technologies and supply chains. The change reflects a deeper structural shift: the narrowing of the technological and industrial gap between the two powers. As the PRC's manufacturing and innovation capacity has converged with that of the United States, the logic of cooperation that governed globalization for three decades has given way to one of strategic denial and control. Both sides have entered a new phase in which supply chains have become instruments of coercion; Washington through technology export restrictions and Beijing through material leverage.

For Washington, this has meant using export controls, investment restrictions, and supply-chain reshoring to deny the PRC access to the tools of technological dominance. For instance, the U.S. Department of Commerce's comprehensive package of semiconductor export controls aimed at constraining the PRC's advanced-computing and chip-manufacturing capacity combined several tools: new restrictions on exports of advanced logic and memory chips, licensing requirements for U.S. persons supporting Chinese fabrication facilities, limits on manufacturing equipment and components, and an expansion of the Foreign Direct Product rule to cover items made abroad with U.S. technology ([Industry and Security Bureau \(BIS\)](#), October 13, 2022). Together, these measures effectively cut Chinese firms off from the hardware, software, and technical expertise required for state-of-the-art semiconductor production. Over 2023, additional rules extended to lithography, electronic design automation (EDA) software, and AI accelerators, effectively sealing off the PRC's path to cutting-edge semiconductor fabrication ([BIS](#), October 25, 2023).

Beijing's response emerged from long-range planning to weaponize supply-chain dependencies, an effort years in the making that aimed to turn the architecture of globalization itself into an instrument of state power. As early as April 2020, General Secretary Xi Jinping had already begun conceptualizing the "international industrial chain's dependence on China" (国际产业链对我国的依存关系) as a mechanism for launching "powerful countermeasures and deterrence capabilities" (强有力反制和威慑能力) against external competitors ([Qiushi](#), October 31, 2020). Within Xi's doctrine of long-term "struggle" (斗争) with capitalism, interdependence was not a vulnerability to be escaped but a weapon to be wielded ([Foreign Affairs](#), November 30, 2022). Supply chain control over the materials, components, and logistics that anchor the world economy was framed as both an offensive and defensive capability: the means by which Beijing could deter coercion and impose costs on those who sought to contain it.

Between 2023 and 2025, this idea took institutional form. Beijing's policymakers moved from rhetoric about "supply-chain resilience" to building an architecture of counter-constraint grounded in control over critical minerals.

1. **Testing Leverage (2023–2024):** Following U.S. chip restrictions, the PRC introduced export controls on gallium, germanium, graphite, tungsten, and antimony, testing the leverage of raw-material scarcity and the diplomatic cost of deploying it. In December 2023, Beijing banned the export of rare-earth separation technologies, signaling that it could freeze Western capacity expansion at will.
2. **Building the Architecture (April–May 2025):** The release by the Ministry of Commerce (MOFCOM) of Announcement No. 18 and the State-owned Assets Supervision and Administration Commission of the State Council (SASAC) decision to mobilize China Minmetals transformed a decade of fragmented

resource management into a centralized minerals strategy. Enforcement campaigns in May institutionalized “full-chain control,” linking export licensing, discipline of state-owned enterprises (SOEs), and data traceability.

3. **Operational Consolidation (June–September 2025):** Under the guise of “law-based export management” (依法进行贸易管理) MOFCOM’s selective approval process and the Ministry of Industry and Information Technology (MIIT) decision to implement a new “total-volume control” (总量控制) system demonstrated the state’s ability to control real earth exports in real time.
4. **Reverse Constraint Unveiled:** On October 9–12, Beijing unveiled four new export control directives that extended jurisdiction abroad—in essence, its own Foreign Direct Product regime. These explicitly identified rare earths as materials of significance to national defense. This completed the transformation of resource governance into an instrument of deterrence.

Together, these stages constitute what may be termed the PRC’s reverse-constraint strategy: a systematic effort to impose friction on Western industrial and defense mobilization just as the United States has sought to slow the PRC’s technological rise.

While U.S. and allied initiatives to rebuild rare earth and critical mineral capacity outside the PRC are advancing, most independent estimates place viable large-scale substitution three to ten years away. Beijing’s calculus may operate on a much shorter horizon. If the aim is to shape strategic conditions in the next few years – especially across a potential Taiwan contingency window – then even temporary supply disruptions or compliance-induced delays could have disproportionate effect. Rare-earth control is therefore a strategic time-management weapon, designed to slow the pace at which adversaries can mobilize industrially and militarily.

The Evolution of Beijing’s Rare-Earth Strategy

Beijing’s rare earths strategy emerged as a deliberate counterpart to U.S. semiconductor restrictions and is designed to offset U.S. technological chokeholds.

In 2010, Beijing first demonstrated its willingness to weaponize rare earths when, following the Senkaku/Diaoyu trawler incident, it held back rare earths bound for Japan at PRC ports ([CRS](#), December 10, 2021). While analysts later debated the extent to which shipments were formally stopped, the effect over the ensuing decade was that Japan’s dependence on PRC exports of scandium, yttrium, cerium, lanthanum, ferrocenium, and metaldehyde fell from over 78 percent of total imports to under 40 percent ([Vox EU/CEPR](#), July 19, 2023). The episode prompted Tokyo to diversify supply and alerted Beijing that threatened restrictions could achieve strategic outcomes even without an outright embargo.

For the following decade, the PRC relied mainly on quotas and environmental regulations to manage output, while Washington and its allies failed to rebuild processing capacity. But as the United States intensified semiconductor and manufacturing-equipment controls in 2022–2023, Beijing’s calculus changed. In October 2022, the Biden administration unveiled sweeping restrictions on chip exports, expanding the Foreign Direct Product rule to bar the PRC from obtaining advanced logic and memory semiconductors ([CRS](#), September 19). Throughout 2023, additional rules targeted lithography, EDA software, and AI hardware, closing off Beijing’s path to cutting-edge fabrication.

Beijing's answer was gradual but unmistakable: mirror-image constraints in the material domain. Beginning in mid-2023, the PRC started a rolling series of export restrictions on strategic inputs essential to semiconductors, batteries, and defense components: gallium, germanium, graphite, tungsten, and antimony ([CSIS](#), April 14). Each measure was framed as a routine adjustment undertaken “to safeguard national security and interest” (为维护国家安全和利益). Collectively, however, they revealed a coherent design, intended to make Washington's supply chain interdictions reciprocally costly.

In December 2023, the U.S. House Select Committee on Strategic Competition Between the United States and the Chinese Communist Party released a report titled *Reset, Prevent, Build: A Strategy to Win America's Economic Competition with the Chinese Communist Party*. It argued that America's dependence on Chinese rare-earth magnets represented a “critical vulnerability” and called for tax incentives to rebuild domestic production ([Select Committee on the CCP](#), December 12, 2023). Beijing's strategists may have read that report as further confirmation that the United States was preparing to delink. The following week, the PRC banned the export of technology to make rare-earth magnets, adding it to a preexisting ban on exporting rare-earth extraction and separation technologies in which the PRC held a significant lead ([Reuters](#), December 21, 2023). Because alternative facilities were years from completion, the obvious intent of the bans was to delay or freeze Western capacity expansion.

By early 2024, Beijing had signaled it could slow the material basis of Western re-industrialization, just as Washington was slowing the PRC's semiconductor advances. What remained was to formalize this counter-denial into law and embed it within the SOE system.

Building and Testing the Architecture of Leverage

The formal consolidation of the PRC's rare-earth regime began in April 2025. This marked the transition from episodic retaliation to a coordinated, broadly institutionalized system of control.

On April 4, MOFCOM issued Announcement No. 18 (第 18 号 公布), placing seven medium-to-heavy rare-earth elements under immediate export-license control ([MOFCOM](#), April 4). **[1]** The measure directly targeted the alloys and magnetic materials essential for electric vehicle (EV) motors, precision drones, and missile guidance systems, thereby reaching deep into the industrial foundations of both the green and defense sectors. This new licensing regime triggered an estimated ~70 percent collapse in magnet and processed exports, causing “real industrial disruptions” across global automotive and defense supply chains ([East Asian Institute, NUS](#), September 12). The strategic significance of this episode was that MOFCOM's statements had crossed the threshold from low-cost warnings to credible indices of intent.

Two weeks later, on April 16, SASAC director Zhang Yuzhuo (张玉卓) inspected China Minmetals (中國五礦), issuing what amounted to a national mobilization order. Zhang explicitly tied Minmetals' mission to national resource security and industrial control. He instructed the conglomerate to “build complete industrial chains” (打造完整产业链) and “convert resources into materials, materials into products, and products into industries” (将资源变成材料、材料变成产品、产品形成产业) ([SASAC](#), April 16). His insistence on “full-tier penetrating supervision” (全级次穿透式监管) tasked Minmetals officials with security oversight. This transformed the country's largest mining SOE into an enforcement arm of the critical minerals regime.

By May 2025, the system had entered full implementation. A multi-ministry campaign, including MOFCOM, the Ministry of State Security (MSS), Customs, and MIIT, launched coordinated inspections in Changsha and Shenzhen to enforce “full-chain control” (全链条管控) ([China Brief](#), May 23). At the same time, the Ministry of Natural Resources expanded domestic exploration to secure upstream reserves.

Beijing Prepares for Conflict, Promises Stability

By early summer 2025, the formal structure of Beijing’s revamped rare-earth control regime was in place; what followed was a series of administrative decisions and public statements meant to signal the credibility of that system. MOFCOM’s external posture, however, was defined by a veneer of low-cost reassurance, a pattern that would recur across multiple economic and security domains that year.

On June 7, MOFCOM released a carefully worded press Q&A responding to international concern over the April 4 export controls. The spokesperson repeated that rare earths are “dual-use” (军民两用属性) materials and that the measures were “consistent with international practice” (符合国际通行做法) ([MOFCOM](#), June 7). But the statement also signaled new operational maturity: “China ... has lawfully approved a certain number of compliant export applications,” they said, “and will continue to strengthen review of compliant cases” (中国 ... 依法批准一定数量的合规申请，并将持续加强合规申请的审批工作).

The phrasing implied two facts at once. First, that the licensing apparatus was functioning, confirming that export approval had become a central gatekeeping mechanism. Second, that the system’s credibility derived precisely from its selectivity: Beijing could slow or accelerate approvals to calibrate pressure without overtly violating trade rules. To foreign audiences, the statement conveyed reassurance. Behind the scenes, however, shipment times lengthened, and magnet exporters reported repeated requests for supplementary documentation ([Reuters](#), May 26; [Reuters](#), June 5; [CNBC](#), July 21).

The second phase of tightening came not through MOFCOM but via MIIT. In late September 2025, the ministry announced the introduction of a “total-volume control” (总量控制) and “traceability information” (追溯信息) system for rare-earth production ([China Brief](#), September 25). The rules abolished provincial quotas and required all firms to submit output and transaction data to the new system, creating a national-level digital map of resource flows ([Xinhua](#), August 2; [MIIT](#), September 2025). The data feed now allows Beijing to monitor inventories and adjust export licensing in near real time, enabling an evolution from quota planning to continuous surveillance. For local producers, the change curtailed flexibility. For central regulators, it created a foundation for the next step: compression of regional autonomy and the alignment of all industrial activity with national security objectives.

The summer period demonstrated that Beijing’s new framework could inflict real friction on global supply chains while remaining legally defensible. Strict licensing enforcement meant slower customs clearance, higher compliance costs, and lost revenue for Chinese exporters—a price Beijing willingly paid to establish deterrent authority ([Bloomberg](#), June 17; [Reuters](#), October 14). The willingness to bear these costs made the signal believable. By late September, Beijing had achieved what SASAC’s Zhang Yuzhuo called in April a “complete industrial chain ... targeting national strategic resources” (瞄准国家战略性资源，超前布局谋划，打造

完整产业链)。Rare-earth governance had become both a compliance regime and a deterrence mechanism; an apparatus capable of modulating global industrial tempo in response to geopolitical developments.

This administrative hardening set the stage for the October storm, when the full logic of Beijing's strategy of reverse constraint through material denial would be revealed in a sequence of sweeping extraterritorial controls and direct confrontation with the United States.

Strategic Equivalence: Unveiling the Reverse Constraint System

By early October 2025, Beijing moved from calibrated enforcement to open confrontation. On October 9, the Ministry of Commerce issued two landmark directives, Announcements No. 61 and No. 62. These extended the PRC's rare-earth controls beyond its borders and into the realm of extraterritorial jurisdiction. They amounted to a declaration that Beijing would now claim legal authority over any foreign-made product containing PRC-origin materials or derived from PRC rare earth technology.

Announcement No. 61 required foreign entities—"specific overseas exporters" (境外特定出口经营者)—to obtain export licenses before transferring or re-exporting any item containing 0.1 percent or more of Chinese-origin rare-earth content or produced using Chinese separation or metallurgical technology ([MOFCOM](#), October 9). In effect, Beijing created a mirror of the U.S. Foreign Direct Product rule, extending PRC jurisdiction across global rare earths supply chains.

Announcement No. 62 imposed parallel controls on rare-earth technologies themselves: extraction, separation, refining, magnet manufacturing, and recycling. The rule covered not only material transfers but also intangible forms, such as data, drawings, simulation models, and design parameters. This means that knowledge transfer is now regulated as stringently as physical exports ([MOFCOM](#), October 9).

In parallel, announcements No. 56 and No. 57 extended control to the equipment and raw materials that underpin rare-earth production itself. No. 56 restricted the export of centrifugal extraction units, intelligent precipitation systems, and high-temperature roasting kilns used in refining and separation ([MOFCOM](#), October 9). No. 57 added oversight of key raw and auxiliary inputs for smelting and magnet fabrication ([MOFCOM](#), October 9). Together, these rules close the technological and upstream gaps left by earlier regulations, ensuring that foreign firms could neither reproduce the PRC's processing capacity abroad nor access the machinery needed to do so.

Together, these measures marked the first time the PRC had explicitly claimed authority over derivative foreign production, a clear signal that it viewed minerals—like data—as a security asset rather than a commodity ([Hoover Institution](#), April 2023).

MOFCOM held a press briefing on the morning the announcements were released. The official explanation for the measures repeated the now-familiar phrasing that "rare earths are dual-use materials" and that "export control is consistent with international practice." But in the Q&A, the ministry spokesperson introduced a decisive narrative shift. They claimed that foreign actors had transferred PRC-origin materials for military use, causing "major damage or potential threats to China's national security and interests" (对中国国家安全和利益造成重大损害或潜在威胁) ([MOFCOM](#), October 9). To Washington and allied defense industries, this

conveyed a clear warning. Beijing now possesses an effective veto over the material inputs of Western defense production. Reporting from Caixin noted that, immediately after the October 9 announcements, PRC customs officials and MIIT offices began conducting additional pre-shipment verifications, effectively slowing exports even of non-restricted products ([Caixin](#), October 10).

Three days later, on October 12, MOFCOM addressed both the new controls and the U.S. response. The tone was no longer defensive. Statements described the controls as a “normal act of improving China’s export-control system” (完善自身出口管制体系的正常行为). But they also explicitly identified the military relevance of rare earths, acknowledging that “medium and heavy rare earths have important applications in the military field” (中重稀土相关物项在军事领域有重要应用) ([MOFCOM](#), October 12). In response to Washington’s proposed retaliatory measures (a new 100 percent tariff on PRC rare-earth exports and new software restrictions), MOFCOM’s statement threatened open confrontation: “We do not wish to fight, but we do not fear fighting” (我们不愿打，但也不怕打). The statement then accused the United States of “typical double standards” (双重标准), pointing out that the U.S. control list covered more than 3,000 items compared with the PRC’s 900, and that the United States had long used minimum-content rules down to zero percent. The implication was deliberate: the PRC had achieved systemic parity with U.S. export-control law and would henceforth apply it reciprocally.

Conclusion

By mid-October, the PRC had created what amounts to a fully articulated reverse constraint strategy. Under this doctrine, Beijing seeks to slow Western industrial and defense mobilization just as Washington seeks to slow the PRC’s technological ascent. Through this system of material denial, Beijing now possesses the capacity to impose delay across sectors dependent on its rare-earth ecosystem: EVs, turbines, robotics, avionics, and advanced weapons platforms. Even temporary licensing delays can create months-long supply gaps in complex manufacturing chains. The world’s largest producer of rare earths has, in effect, declared that the material foundations of advanced industry are now part of its national security perimeter.

The October storm thus crystallized a new equilibrium of coercive interdependence. In this model, the United States controls information and computation while the PRC controls matter and materials. Competition now plays out at the level of the design of constraint systems themselves. Each seeks to shape the other’s industrial time horizon.

Looking ahead, the next stage will test how far Beijing can sustain and scale this system without triggering complete decoupling. Having asserted jurisdictional parity with the United States, the PRC is now likely to move from defensive restriction to selective activation, using licensing delays, sector-specific exemptions, and bilateral “supply assurances” as bargaining tools. The logical next step would be a modular sanctions architecture in which rare earths, graphite, and advanced alloys are deployed interchangeably to reward compliance or punish alignment with U.S. controls. Whether this evolves into a stable deterrent equilibrium or a rolling contest of escalation will depend on how quickly Western economies can reconstitute non-PRC processing capacity. It will also hinge on Beijing’s confidence in its ability to manage the economic costs of its own leverage.

Dr. Matthew Johnson is a Senior Fellow at the Jamestown Foundation. He specializes in China's elite politics, strategic thinking, technology policy, and political control over the economy. He is the author of China's Grand Strategy for Global Data Dominance (Hoover Institution Press, 2023).

Notes

[1] The seven elements included samarium, gadolinium, terbium, dysprosium, lutetium, scandium, and yttrium.

CMC Reshapes PLA Political Work System

By K. Tristan Tang



The Central Military Commission, located in Beijing. (Source: Netson)

Executive Summary:

- The PLA's new regulation on political cadres aims to reform a deeply entrenched political work system by emphasizing impartial personnel management and personal discipline.
- The regulation defines behavioral standards for political cadres across three main categories: core political logic, operational priorities, and personal conduct and leadership principles, while placing special emphasis on improving personnel management.
- Overall, the regulation reflects a broader reform of the PLA's political work system, rather than a targeted purge of individual senior leaders. It identifies inappropriate interpersonal relationships and their downstream effects as key obstacles to professionalizing the personnel process.
- In essence, the regulation suggests that He Weidong and Miao Hua likely lost Xi Jinping's trust due to shortcomings in political work and personnel management.
- By more extensively embedding political cadres into frontline operations on a larger scale, the new regulation can further reinforce command redundancy. This will ensure operational continuity through layered leadership and distributed command resilience.

On July 21, the PLA Daily announced new regulations aimed at imposing stricter standards and responsibilities on political cadres in the military ([PLA Daily](#), July 21). The *Regulations on Vigorously Promoting Fine Traditions, Thoroughly Eliminating Toxic Influences, and Reshaping the Image and Authority of Political Cadres* (关于大力弘扬优良传统、全面肃清流毒影响 重塑政治干部形象权威的若干规定) seek to address entrenched problems within the military's political work system, correct inappropriate personal relationships and their associated issues, and place personnel management at the center of reform.

The People's Liberation Army (PLA) Central Military Commission (CMC), which issued the regulations, did not publish their full text. This is consistent with recent practice, in which the PLA has withheld the full versions of regulatory documents. But the surrounding context suggests that the regulations are linked to ongoing purges within the military apparatus. CMC Chair Xi Jinping likely lost trust in senior political officers because they failed to deliver results in personnel management and in correcting long-standing institutional bad habits. Xi may leave these senior combat or political positions unfilled for the foreseeable future, as he needs time to assess whether the political work system is undergoing meaningful change and whether the officers it promotes can earn his trust.

A Moral Code to Stamp out Corruption

The new regulations consist of seven sections. So far, only the titles of four have been publicly released. These are strengthening political loyalty (强化政治忠诚), upholding Party principles (恪守党性原则), promoting fairness in personnel decisions (公道正派用人), and leading by example (身先示范). The PLA also has stated that the regulations contain 22 provisions, though it has disclosed none.

An analysis of 18 official articles published between July 21 and late September sheds some light on the content of the regulations. These include a seven-part series in the PLA Daily on "Establishing the Image and Authority of Political Cadres" (牢固树立政治干部形象威信系列谈), as well as other pieces in the dedicated column "Carrying Forward Fine Political Work Traditions and Setting a Good Example for Political Cadres" (践行政治工作好传统 立起政治干部好样子) (PLA Daily, [July 21](#), [July 21](#), [July 22](#), [July 23](#), [July 24](#), [July 24](#), [July 25](#), [July 28](#), [July 29](#), [July 30](#), [July 31](#), [August 8](#), [August 16](#), [August 24](#), [August 29](#), [September 6](#), [September 13](#), [September 18](#)).

The regulations' seven sections can be divided into three broader categories based on their substance. The first two sections relate to the core logic and principles underpinning military service. The next three concern operational priorities. And the final two discuss personal conduct and leadership principles (see Table 1 below).

The first section of the regulations discusses strengthening political loyalty. It explicitly demands loyalty to the Party Center. In other words, to Xi Jinping himself. One PLA Daily commentary warns that once loyalty is diluted or compromised, complex struggles and tests of competing interests can push cadres to betray their original aspiration to join the military and their oath to the Party. The article urges cadres to have higher standards and stricter discipline for implementing the "Chairman Responsibility System" (军委主席负责制) and to take the lead in rejecting corrupt political practices such as trading favors, engaging in bureaucratic maneuvering, and breaking unwritten rules. A historical example serves as a warning. In 1935, Zhang Guotao (张国焘), a founding member of the Chinese Communist Party, attempted to rival Mao's leadership during the Long March.

Zhang tried to persuade senior commander Zhu De (朱德) to defect, but Zhu refused, insisting on following the authority of the Party Center ([Qiushi](#), May 16, 2018; [PLA Daily](#), July 22). Zhang lost power and, in 1937, was purged.

The second section is upholding Party principles. This requires political cadres to act with selflessness and to reject any pursuit of personal gain. A PLA Daily article states that when individuals place personal interests above all else, they inevitably disregard the interests of the Party and the military. Political cadres must ground their conduct in Party discipline, speak honestly, and handle matters truthfully. The article illustrates this with a well-known example from 1980. That year, Huang Kecheng (黄克诚), then the Executive Secretary of the Central Commission for Discipline Inspection, discovered that a long-serving subordinate had used public funds to host a banquet. Huang acted swiftly and, despite his personal ties to the errant official, took disciplinary action ([CPC News](#), March 11, 2016; [Qiushi](#), February 4, 2022; [PLA Daily](#), July 23).

Table 1. Possible Content of the Seven Areas in the Regulation

Area	Likely Category	Likely Underlying Logic
Strengthening Political Loyalty (强化政治忠诚)	Core Logic	Absolute Loyalty to the Party Center— meaning Xi Jinping personally
Upholding Party Principles (恪守党性原则)		Selflessness and Rejection of Personal Gain
Promoting Fairness in Personnel Decisions (公道正派用人)	Operational Priorities	Impartial Enforcement of Personnel Management Duties
Adhering to Pragmatism (实事求是)		Pragmatic Execution of Political Work
Reinforcing a People-Centered Mindset (树牢群众观念)		Responsiveness to Grassroots Needs and Accountability to the Rank and File
Maintaining Integrity in Personal and Professional Relationships (纯洁内外交往)	Personal Conduct and Leadership Principles	No Exchange of Favors or Interests in Personal Relationships
Leading by Example (坚持身先示范)		Hands-On Leadership by Example

(Source: Compiled by the author)

The second part of the regulations contains three sections that focus on operational priorities. The first of these is promoting fairness in personnel decisions and the impartial execution of personnel management. As an article in the PLA Daily explains, officials must fully implement the Party's criteria for selecting qualified officers. Political cadres must resist favoritism, nepotism, and vested interests to identify and assign capable officers in a timely and appropriate manner ([PLA Daily](#), July 24). The next section focuses on adhering to the principle of

“seeking truth from facts” (实事求是). It calls for pragmatic leadership in political work. According to the PLA Daily, this means that political cadres must take the lead in adopting a correct view of success. They must devote their energy to concrete results and practical work while avoiding the pursuit of short-term achievements, rigid bureaucratic attitudes, and obstructionist approaches to problem-solving ([PLA Daily](#), July 25). The final section here concerns reinforcing a “people-centered mindset” (群众观念). This requires political work to reflect the needs of the PLA’s grassroots and withstand scrutiny from the rank and file. Relevant PLA Daily coverage emphasizes that political work, at its core, is mass work. Whether a political officer can reach the rank and file, engage directly with enlisted personnel, and address their concerns serves as a basic test of competence. Reaching again for inspiring historical analogies, the article cites a case from the Long March when political officers noticed that many soldiers were marching barefoot. They immediately came up with a plan to solve the problem and promptly directed political organs to guarantee the plan’s full implementation ([PLA Daily](#), July 28).

The final two sections of the regulation are centered on personal conduct and leadership principles. The first of these concerns maintaining integrity in personal and professional relationships. It prohibits political cadres from engaging in exchanges of favors or pursuing private interests. According to the PLA Daily, a political officer’s every word and action reflects on the Party. Cadres must avoid flattery, sycophancy, and opportunism. They must uphold principled and disciplined relationships, remain alert to political rules and boundaries, and never trade away core values for personal gain ([PLA Daily](#), July 29). The second section relates to leading by example. It calls on political cadres to personally carry out their duties rather than delegate or seek privilege. The PLA Daily asserts that CCP members have no right to special treatment, only the obligation to resist it. Political cadres must embody a spirit of hard work and self-sacrifice. Only then, the article argues, can they possess the moral authority and popular appeal to rally others to action ([PLA Daily](#), July 30).

Structural Reforms Target Personnel Management Issues

Since 2023, the PLA has purged tens of senior military officers ([China Brief](#), July 26). But the new regulations take the view that, at root, problems within the PLA’s political work system are mainly structural and cultural. The focus therefore should be on cultivating a better class of political officers, rather than on issues at the top of the military hierarchy. To provide guidance on how grassroots political officers should conduct themselves, the regulations have been supplemented by a series of eight case studies. None of these articles examine political work issues within the CMC or high commands. Most focus on improving operations and reinforcing personal discipline among political cadres.

Official reporting indicates that the central problem within the political work system lies not in financial corruption but in inappropriate interpersonal relationships. This is reflected in the regulations themselves, of which only one section makes an explicit reference to financial issues and, even then, only as one element within a broader discussion of appropriate relationship boundaries. Commentaries in the PLA Daily and its online “Strong Military” (强军) forum explain that the regulations aim to draw red lines for political conduct, boundaries for the use of power, limits for social interactions, and warnings for clean governance (PLA Daily, [July 21](#), [July 24](#)). Financial matters are just one part of this larger framework. By contrast, the provisions on political loyalty and Party principles stress that cadres must remain loyal only to the CCP Central Committee—meaning Xi Jinping personally—and must demonstrate absolute selflessness. The regulations also emphasize the importance of

promoting talent without bias, pursuing truth over expediency, and ensuring that work passes the test of the grassroots.

The regulations also indicate that personnel management appears to be Xi Jinping's top priority within the political work system. Promoting fairness in personnel decisions is one of the regulations' seven sections. They also discuss more general work styles such as adhering to pragmatism and strengthening officers' people-centered mindset. This signals that Xi places greater emphasis on personnel management than on other responsibilities traditionally assigned to political officers and sees it as crucial for rebuilding credibility. One of the published case studies perfectly encapsulates this emphasis. Instead of focusing on an individual political officer's experience, it uses an example from a naval unit implementing an aspect of the regulations to highlight the operational functions of the political work system itself ([PLA Daily](#), August 24).

Grassroots Scrutiny, A Wait for New Leadership, and the Operational Role of Political Officers

Failures in personnel management appear to be central reasons for the dismissal of top PLA leaders involved in political work, such as He Weidong (何卫东) and Miao Hua (苗华), among others ([China Brief](#), April 11). The new regulations' focus on personnel management reinforces this interpretation. The lack of alignment between PLA officer conduct and Xi's expectations are now forcing political officers to be subject to grassroots-level scrutiny. The Central Commission for Discipline Inspection's authority over personnel matters also has been expanded to deal with certain cases ([China Brief](#), May 23).

Where senior PLA leadership positions have been vacated in recent purges, Xi may not rush to fill them. A large number of high-ranking officers—including those responsible for political affairs, such as the CMC vice chairman for political work, the director of the CMC Political Work Department, and the Navy's political commissar—have been removed from their positions. But if problems within the political work system responsible for managing personnel are as entrenched as these purges and the new regulations indicate, they will not be fixed by filling the positions with officers not vetted by a new evaluation system. This logic could explain why Dong Jun (董军), despite having served as Minister of National Defense for nearly two years, has not yet been appointed to the CMC: Xi is continuing to assess his reliability.

The regulations' emphasis on pragmatism and leading by example effectively expands the operational responsibilities of political cadres, giving them even greater oversight than they had previously. This is made clear in the case studies, five of which highlight political officers directly participating in or leading frontline training and operational tasks. Some even describe political cadres temporarily assuming command positions or formally transitioning into commanding posts. While these accounts undoubtedly function in part as propaganda, they nonetheless reflect a growing expectation that political officers must strengthen their capacity for operational leadership. The PLA now appears to demand not only ideological discipline from its political cadres, but also greater hands-on command experience and mission-oriented competence.

Conclusion

Personnel purges within the political work system, the introduction of new behavioral standards for political cadres, and the evolving approach to promotions and personnel management are having a dual impact on the PLA. First, despite short-term blows to morale due to disruption of the promotion system, the reforms could

ultimately boost morale if they succeed in eliminating deeply entrenched bureaucratic habits and restoring professional standards. Second, the political work system's growing emphasis on operational competence—and the shift toward more pragmatic and mission-oriented political training—may enhance the PLA's overall combat effectiveness. This is because the political apparatus now appears to reinforce—rather than merely monitor—the PLA's operational readiness. By strengthening the role of political cadres at the front line, the PLA could enhance its command redundancy through stronger layered leadership and distributed resilience.

The latest regulations on their own are unlikely to eradicate corruption in personnel promotions altogether. Corruption remains a problem throughout the Party-state system, not just in the military, and it will not be possible to remove it from one area without doing so throughout the rest of the country. The reforms nevertheless have the potential to improve the institutional mechanisms and internal culture of the PLA's political work system. They may also raise the standard of personnel management and bolster the professional capacity of the PLA officer corps.

K. Tristan Tang is an Associate Fellow at the Research Project on China's Defense Affairs, Secure Taiwan Associate Corporation, and a member of the Pacific Forum's Young Leaders Program. He is also the co-founder and project lead for wargaming at the Taiwan Defense Studies Initiative. His research focuses on China's defense industry, the People's Liberation Army, and Chinese foreign policy. You can connect with him on X: @KTristanTang.

Beijing Deepens Footprint in Central Asia

By Matthew Fulco



Xi Jinping stands with Central Asian leaders at the China–Central Asia Summit in June. (Source: State Council Information Office)

Executive Summary:

- The People's Republic of China's (PRC) influence in Central Asia is growing, and it presents a greater challenge to Russia, the traditional regional hegemon, through multilateral summits such as the Shanghai Cooperation Organization (SCO) and the China–Central Asia Summit.
- PRC–Central Asia cooperation is strongest in the economic sectors in which Beijing excels, such as energy, transport, and mining, with \$25 billion worth of agreements being signed at the June summit.
- While the SCO Summit provided the PRC with the opportunity to present itself as a global leader, the China–Central Asia Summit produced more concrete results.

In the last week of September, the People's Republic of China (PRC) and Uzbekistan held the latest iteration of an annual bilateral trade and investment forum in Tashkent. A large delegation of companies from Shenzhen participated, many for the first time. Products such as commercial drones are in high demand in Central Asia, according to reporting from state-owned media outlet the Hong Kong Commercial Daily. This reporting frames the forum as a “concrete measure” (具體舉措) to solidify outcomes from both the second China–Central Asia Summit that took place in Kazakhstan in June and the Shanghai Cooperation Organization (SCO) Summit that concluded in Tianjin on September 1 ([China Brief](#), September 5; [Hong Kong Commercial Daily](#), September 26).

The two summits were a reminder of the PRC's deepening ties with the five Central Asian states of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan. They also showcased Beijing's growing geopolitical clout in a strategically important part of the world where Russia's influence is waning. The SCO Summit saw the PRC's vision of multipolarity gaining at least rhetorical acceptance across the former Soviet republics, all of whom endorsed President Xi Jinping's new Global Governance Initiative (全球治理倡议). The summit in Kazakhstan delivered more substantive wins for the PRC, with economic cooperation agreements signed in the energy sector, focusing in particular on green technologies ([The Astana Times](#), June 17). These extend the growing engagement kickstarted by the One Belt One Road (OBOR) initiative that Xi first announced in 2013.

Beijing's Leadership on Display at Regional Summits

SCO Summit

Under Xi, the SCO has become an increasingly important vector for the construction of an alternative international system centered on Beijing. Speaking at the organization's 25th summit in Tianjin, Xi implicitly criticized the trade and security policies of the United States. He critiqued “Cold War mentality, bloc confrontation, and bullying practices” (反对冷战思维、阵营对抗和霸凌行径) and instead called for the construction of a “more just and equitable global governance system” (更加公正合理的全球治理体系) ([Xinhua](#), September 1). This criticism remained consistent with Xi's speech in 2023, and with other SCO statements dating back to the organization's founding in 2001 ([Xinhua](#), July 4, 2023; [China Brief](#), September 5).

The most significant outcome of the summit was the decision to establish a new development bank ([Shanghai Academy of Social Sciences](#), September 11). Details about the bank are still scant. Xi Jinping has said that it should be established as soon as possible, and that its purpose will be to facilitate economic cooperation among member states and provide stronger support for their security ([HK01](#), September 1). Coming roughly a decade after the establishment of the Beijing-led Asian Infrastructure Investment Bank (AIIB)—and about the same length of time after the idea for an SCO development bank was first proposed—this new institution could cement PRC leadership in regional development finance. When the idea was initially proposed in 2010, some member states objected, citing the organization's priority of promoting regional security. Xu Feibiao (徐飞彪), a researcher at the China Institutes of Contemporary International Relations (a leading think tank under the PRC's Ministry of State Security), argues that the change in calculus has been spurred by the West's “weaponizing” (武器化) of the U.S. dollar to “pressure adversaries” (敲打对手) and by the Trump administration's unilateral and protectionist trade policies ([Workers Daily](#), September 5).

China–Central Asia Summit

The second China–Central Asia Summit, held in Kazakhstan in June, was narrower in scope than the SCO Summit. In some ways, Beijing used it in the same way as a vehicle to push an anti-Western agenda. In a keynote speech, Xi said that Central Asia had always been the “priority direction” (优先方向) of the PRC’s neighborhood diplomacy. He also reiterated support for Central Asian countries “playing a bigger role in international affairs” (发挥更大作用) and “opposing hegemonism and power politics” (反对霸权主义和强权政治) ([Xinhua](#), June 17).

In terms of concrete outcomes, however, it was significant. Beijing signed 58 agreements totaling nearly \$25 billion with its five partner governments, according to local media reports ([The Astana Times](#), June 17). Sectors in which Beijing excels featured prominently, including energy, transport, and mining. Comprehensive energy cooperation was a particular focus. Beijing appears to be expanding beyond its traditional investment in the region’s fossil fuels to court Central Asia as a strategic partner in raw materials, nuclear, and renewables, “expanding cooperation across the entire energy supply chain” (扩大能源全产业链合作) ([Ministry of Foreign Affairs \[MFA\]](#), June 18).

PRC and Central Asian firms signed several new energy deals during the forum. The state-owned China Southern Power Grid (中国南方电网) signed a memorandum with Kazakh partners to jointly develop projects in high-voltage direct current (HVDC) transmission, digital energy solutions, and pumped-hydro energy storage. Kazakhstan also signed a power purchase agreement with China Energy Overseas Investment (Hong Kong) (中能建海外投資香港) to supply electricity generated by the firm’s plant in the Turkistan Region. Another project will see stakeholders including China Energy International (中国国际能源), Shanghai Jiaotong University, and local Kazakh entities collaborate on hydrogen technologies and research and development initiatives ([The Astana Times](#), June 16).

The focus on energy cooperation illustrates the PRC’s determination to become a paramount player in renewables and nuclear energy. The latter ambition puts the PRC in competition with the historical regional hegemon Russia—also its close strategic partner—while the former illustrates a desire to address excess capacity problems at home, which is consistent with OBOR’s *raison d’être*. Renewables are also integral to the PRC’s industrial upgrade and are one of the sectors targeted in its Made in China 2025 blueprint to dominate high-technology manufacturing ([State Council](#), May 8, 2015). PRC firms with significant renewable energy capabilities see strong potential in Central Asia, where countries friendly to Beijing are seeking to leverage their abundant natural resources to generate economic growth and upgrade industries.

One Belt One Road Remains Pillar of Cooperation

In the first half of 2025, the five Central Asian countries attracted more OBOR investment—\$25 billion—than any other part of the world except Africa. Kazakhstan attracted \$23 billion—almost all of that investment. Of that money, \$7.5 billion is for copper and \$12 billion is for a green aluminum project ([Green Finance and Development Center](#), July 17). The copper investment follows a June 2024 agreement between the two countries to build one of Central Asia’s most advanced copper smelting facilities by the end of 2028 ([Eurasia Daily Monitor \[EDM\]](#), April 3).

The aluminum project is led by the Chinese conglomerate East Hope Group (东方希望). It is part of a plan to establish a vertically integrated green aluminum supply chain in the country that will create 10,000 jobs and align with national development goals, according to state media in Kazakhstan. In a statement, Kazakh Prime Minister Olzhas Bektenov lauded the project as “a unique initiative” that will contribute to the country’s industrial development ([The Astana Times](#), June 9). East Hope CEO Liu Yongxing (刘永行) positioned the investment under the OBOR initiative, noting that Kazakhstan plays an important role as a logistics center in Eurasia ([Kazinform](#), June 9).

Separate from the summit, the PRC is also deepening its presence in Kazakhstan’s energy sector through investments in tungsten mines and nuclear facilities. A \$300 million investment in the country’s Bukuta tungsten mine by Jiangxi Copper Group (江西铜业) will account for 10 percent of global tungsten concentrate production, according to forecasts by Goalfore Advisory (国复咨询). Goalfore believes that Jiangxi Copper may be using opening the mine in part to circumvent anti-dumping duties imposed by the European Union on PRC tungsten products ([Goalfore Advisory](#), July 14). Kazakhstan’s third nuclear energy plant will now be led by China National Nuclear Corporation (中国核工业集团), according to an announcement in August by Kazakh First Deputy Prime Minister Roman Sklyar. The firm previously had won the contract for Kazakhstan’s second nuclear power plant. Kazakhstan hopes that the new facility will help offset its growing electricity deficit, which reached 5.7 billion kilowatt hours in January 2025, up over 100 percent from 2.4 billion kWh a year earlier ([The Times of Central Asia](#), August 1). With the PRC stepping up its involvement in Kazakhstan’s nuclear sector, Astana will become more dependent on Beijing, yet will also diversify its sources of atomic energy, which traditionally have been provided by Russia. This move is part of a shift in Kazakhstan’s diplomacy under President Kassym-Jomart Tokayev from broad multivector diplomacy to a more strategically minded, neutral approach to foreign affairs ([EDM](#), July 9).

The PRC and Russia Compete in Central Asia

The PRC’s move into Kazakhstan’s nuclear energy sector is only one example of how its growing presence in Central Asia puts it in competition with Russia. Moscow remains the principal security partner in the region, conducting regular military exercises with Kazakhstan and Uzbekistan, cooperating on defense-industrial development, and supplying most of both countries’ imported arms. It also maintains close ties with local security forces and is capable of interfering in the region’s internal affairs through the post-Soviet Collective Security Treaty Organization (CSTO) ([EDM](#), February 26, 2024).

Russia is ceding influence to the PRC on the economic and technological fronts. Beijing is the largest trading partner for four of the five Central Asian states, with Tajikistan the only exception. Even on more sensitive areas of cooperation, such as nuclear energy, Russia is losing ground. Astana awarded its first nuclear power plant project to Russia’s Rosatom in June and held the groundbreaking ceremony in early August. But the second and third facilities will both be built by Chinese partners. This makes sense, given that Russian energy companies face the risk of Western sanctions over Moscow’s ongoing invasion of Ukraine ([The Astana Times](#), August 4; [Xinhua](#), August 9). The resulting boost to Beijing’s influence in the region indicates the downstream effects of engaging in a costly conflict, even one taking place thousands of miles from Central Asia.

The PRC and Russia have managed to maintain close relations. But this “no-limits” partnership continues to be constrained by strategic caution, regional rivalry, and the need to manage external economic blowback ([China Brief](#), May 14). The two Eurasian powers’ interests in the Central Asia occasionally align. For instance, both have a stake in countering separatist and terrorist threats that could impact their investments, and both seek to prevent the Central Asian states from tilting toward the West. But Russia’s tolerance for PRC encroachment in its traditional sphere of influence likely extends only so long as Beijing supports Russia in its war.

Conclusion

Developments in 2025 indicate that PRC–Central Asia ties are deepening. Beijing sees the five countries as key nodes in its OBOR framework and in multilateral institutions it is using to remold the international system. Growing influence along economic, infrastructural, ideological, and strategic lines are boosting Beijing’s ambitions of dominating the Eurasian landmass. By positioning itself as the leading technological and industrial partner for the region and offering valuable collaboration in energy and other attractive investments, PRC influence will continue to grow.

Unlike in other parts of the developing world, the PRC’s growing presence in Central Asia has not faced international pushback or concern from Western policymakers. This may be attributed in part to the autocratic nature of most of the Central Asian regimes, which are largely keen to benefit from the PRC’s offerings. Absent a significant geopolitical shift, Central Asia is likely to remain receptive to the PRC’s growing presence, undergirded by the economic, technological, and diplomatic benefits its countries believe they can derive from partnering with Beijing.

Matthew Fulco is a journalist and geopolitical analyst who worked in Taipei from 2014–2022 and Shanghai from 2009–2014, and is now based in the United States. He formerly served as a Taiwan Contributor for the Economist Intelligence Unit and his writing has frequently appeared in The Japan Times and AmCham Taiwan’s Taiwan Business Topics magazine.

New Gains in PRC Robotics Software & Hardware

By Sunny Cheung



A humanoid robot, developed by Shenzhen-based UBTech, operating in a BYD factory. (Source: CnEVPost)

Executive Summary:

- A humanoid robotics ecosystem is developing in the People's Republic of China (PRC). A vertically integrated supply chain is improving global competitiveness and market share in core component technologies.
- In most segments, Western firms remain dominant. PRC firms note that they are constrained by foreign dependence on certain technologies, machine tools, and data quality.
- Software, simulation, and multimodal AI remain particular chokepoints. But reliance on Nvidia's physical AI stack and foreign cloud infrastructure is substantial.

Humanoid robotics made headlines throughout the People's Republic of China (PRC) in September with a bold push to collect high-quality training data. Across key hubs in Beijing, Henan, and Jiangsu, the country is steadily cultivating firms and building supply chains that can rival global leaders ([Shanghai Observer](#), September 30). National and provincial-level policies promote the localization of hardware production and seek to reduce vulnerabilities stemming from reliance on imports. Advances in sensor technologies, as well as in the component parts of robots' "muscles" are notable. For now, Western companies dominate many parts of the value chain, including in machine tools. But Chinese firms are starting to erode these positions. In cases, such as software, the use of U.S. systems is allowing companies to advance rapidly.

Catching up with Leading Western Sensor Firms

Humanoid robots depend on sensors for basic functionality. These come in two types. Self-sensing sensors tell the robot what its own body is doing. World-sensing sensors, meanwhile, refer to devices that recognize objects and map environments. Robots rely on complex analysis of integrated data points from each of these sensors to perform basic activities.

In the PRC, national policy has supported the growth of humanoid robots. Central government directives have labeled "bionic sensors" (仿生传感) as a priority, backing the sector with funding and pilots to localize supply chains ([International Center for Science & Technology Innovation \[NCSTI\]](#), November 3, 2023). Well-known Chinese vendors like Hesai Technology (禾赛科技) and RoboSense Technology (速腾聚创) now lead the global automotive LiDAR market. Other Chinese firms also have made gains. But because they are less frequently addressed in policy discussions, they have flown largely under the radar ([Yole Group](#), April 11).

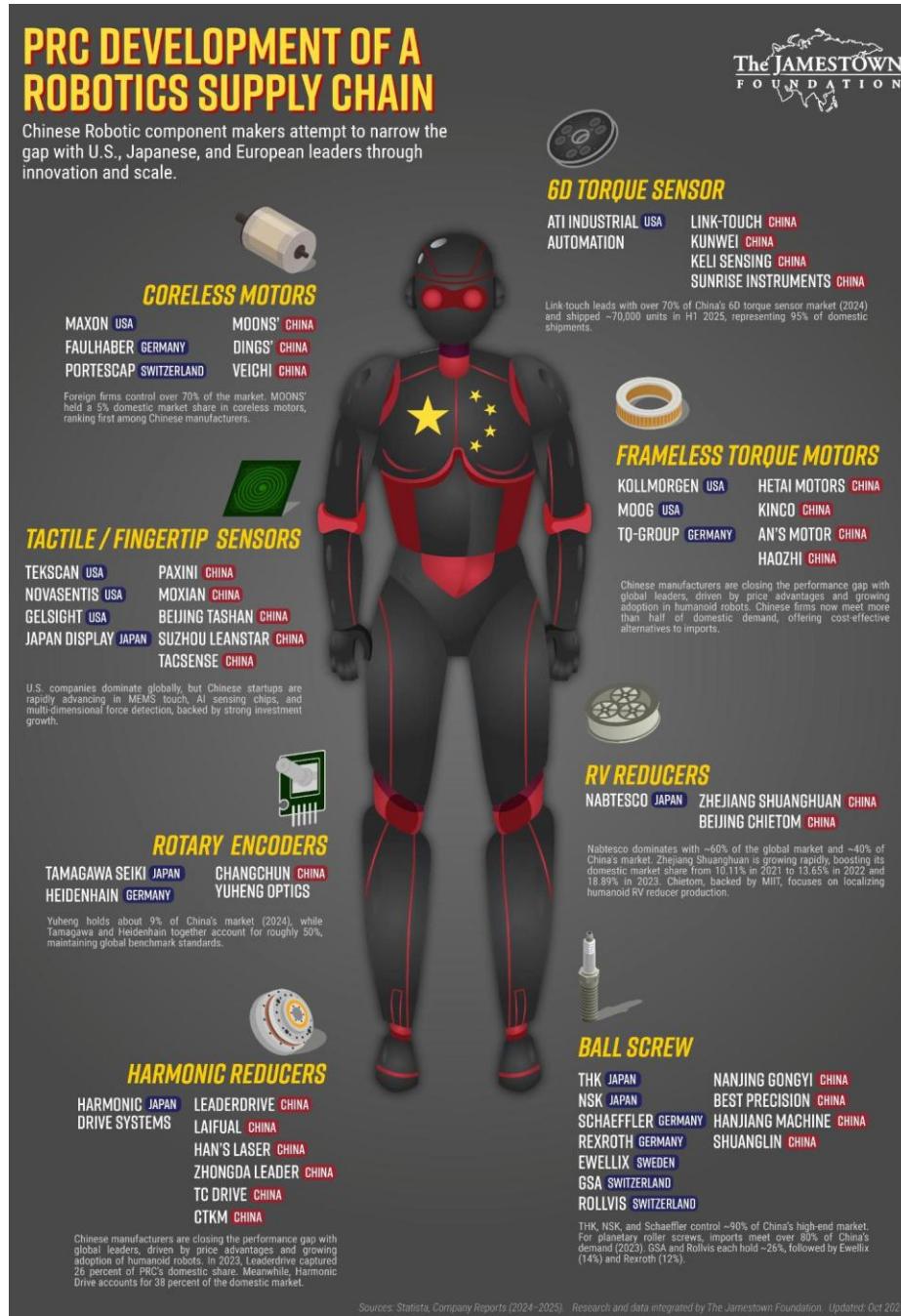
Changchun Yuheng Optics (长春禹衡) is the leading domestic manufacturer of rotary encoders—devices that sit at a robot's knee or elbow and ensures it knows exactly how far the joint has moved. Yuheng Optics is a national "little giant" (小巨人) enterprise, and currently comprises about 9 percent of domestic market share ([Jiuyan Gongshe](#), December 22, 2024; [Changchun Evening News](#), May 21). Nearly half of the domestic market remains dominated by foreign enterprises, though, with Japan's Tamagawa Seiki and Germany's Heidenhain the leaders. These firms also set international standards for encoders ([Baijiahao](#), November 4, 2024).

A similar story exists for force/torque sensors. U.S.-based ATI Industrial Automation continues to lead the global market in the most advanced kind of torque sensor, the six-dimensional sensor. By capturing both force and torque in three directions, 6D sensors are especially useful for complex tasks like handling delicate objects. Chinese firms are starting to catch up. Leading domestic companies include Keli Sensing (柯力传感), Sunrise Instruments (SRI; 宇立仪器), Link-touch (蓝点触控), and Changzhou Kunwei Sensing Technology (Kunwei; 坤维科技). Kunwei is now able to produce sensors at 30 percent lower costs than ATI equivalents while maintaining quality for humanoid and surgical robotics ([Xueqiu](#), May 11). Link-touch's share of the PRC's humanoid robot 6D torque sensor market surpassed 70 percent in 2024. And in the first half of 2025, it shipped 70,000 units, accounting for over 95 percent of total domestic shipments ([Zhihu](#), July 21).

Western firms also have an edge in the development of tactile sensors. These mimic human touch, detecting things like pressure, temperature, and humidity. Fingertip sensors are particularly important because they are a key step for commercializing dexterous robotics hands, something policymakers have prioritized ([NCSTI](#),

November 3, 2023). U.S. firms currently lead in this segment. But an industry is emerging in the PRC. Key players like Suzhou Leanstar (苏州能斯达电子), Beijing Tashan Technology (北京他山科技), PaXini Tech (帕西尼), and Moxian Technology (墨现科技) all produce cutting-edge tactile sensors, AI-powered touch chips, and multi-dimensional force detection technologies. They also have secured funding to fuel further growth ([China Daily](#), January 9; [Xinhua](#), March 28; [Sina](#), July 17; [Sina](#), September 25).

Figure 1: The PRC's Robotics Industry Supply Chain



(Source: Author research)

PRC Firms Begin to Flex Robotic Muscles

Humanoid robots depend on a device known as an actuator to mimic the movement of human muscles. Actuators are effectively the “muscle system,” whose component parts ensure that a robot’s joint function correctly. Contained within an actuator is a motor, which converts energy into motion, and a reducer, which works similarly to a gearbox to reduce the speed of the motor and increase torque. An additional critical feature is the ball screw, which employs ball bearings to facilitate rotational movement. The PRC has spent several years building its domestic industry across the value chain for these components. It has made progress in many areas, but in others remains reliant on external suppliers, either for the components themselves or for the machine tools to manufacture them. [1]

Motors

Most humanoid robots use two kinds of motors: coreless motors and permanent-magnet synchronous motors (PMSMs). Coreless motors are usually found in fingers, eyes, and lightweight grippers, as they are suited for delicate tasks requiring minimal vibration. For instance, Tesla’s Optimus has 12 coreless motors in each hand ([Lammotor](#), August 15, 2024). PMSMs are used in knee, hip, and shoulder joints. They are larger than coreless motors, but provide strong, smooth motion that more effectively mimics muscle-like movement. They also are more energy efficient than coreless motors.

The National Robot Standardization Technical Committee (全国机器人标准化技术委员会) is led by experts from the Chinese Academy of Engineering and tech giants such as UBTech CTO Xiong Youjun (熊友军). At the end of 2024, it released the 2024 Humanoid Robot Standardization White Paper. This highlighted coreless motors as a critical area to master, in part to reduce dependence on foreign suppliers. [2] Current global leaders include the Swiss firm Maxon, Faulhaber in Germany, and Portescap in the United States. Together, these three firms comprise more than 70 percent of global market share ([Baogao Dating](#), January 3). For frameless torque motors, top players include U.S. firms Kollmorgen and Moog, and German firm TQ-Group. PRC firms now support over half of the domestic market, frequently offering lower prices than foreign counterparts. These include coreless motor producers like MOONS’ (鸣志电器), DINGS’ (鼎智科技), and VEICHI (伟创电气), and frameless torque motor manufacturers like HeTai Motors (合泰电机), Kinco Automation (步科自动化), Han’s Motor (大族电机), and Haozhi (昊志机电) ([Caifuhao](#), March 12; [Baijiahao](#), March 13).

Reducers

Humanoid robots usually contain 20–30 precision reducers ([Arxiv](#), February 28, 2024; [HDS](#), accessed September 30). These include harmonic reducers, which are often found in arm, finger, and neck joints and ensure that joint movements are smooth and precise, and rotary vector (RV) reducers, which instead are found in leg, hip, and shoulder joints, and are designed for heavy lifting and to have long lifespans.

Reducers are one of a number of target technologies for indigenization, according to the Ministry of Industry and Information Technology (MIIT) ([NCSTI](#), November 3, 2023). The 2024 National Robot Standardization Technical Committee white paper also acknowledged that RV reducers remain reliant on foreign suppliers, with

significant growth potential for domestic players to close the gap. This focus is based on an assessment of reducers' importance to humanoid robotics, but also on an acknowledgment that the PRC remains heavily reliant on foreign suppliers. Globally, Japanese firms Harmonic Drive Systems and Nabtesco dominate the market for harmonic and RV reducers, respectively. Harmonic Drive Systems held around 85 percent of global market share in 2023 ([HDIN Research](#), April 18, 2024). Nabtesco, meanwhile, claims that it provides around 60 percent of the world's reducers for medium-to-large robot joints ([Nabtesco](#), accessed September 30).

The PRC has already reduced its external dependence on harmonic reducers. In 2023, Leaderdrive (绿的谐波) captured 15 percent of global market share and 26 percent of domestic share for its products. By comparison, Harmonic Drive Systems accounted for 38 percent of the PRC's domestic market in 2022 ([Weibo](#), February 27, 2024). Smaller players occupy 1–5 percent of the global market ([Caifuhao](#), June 6). [3]

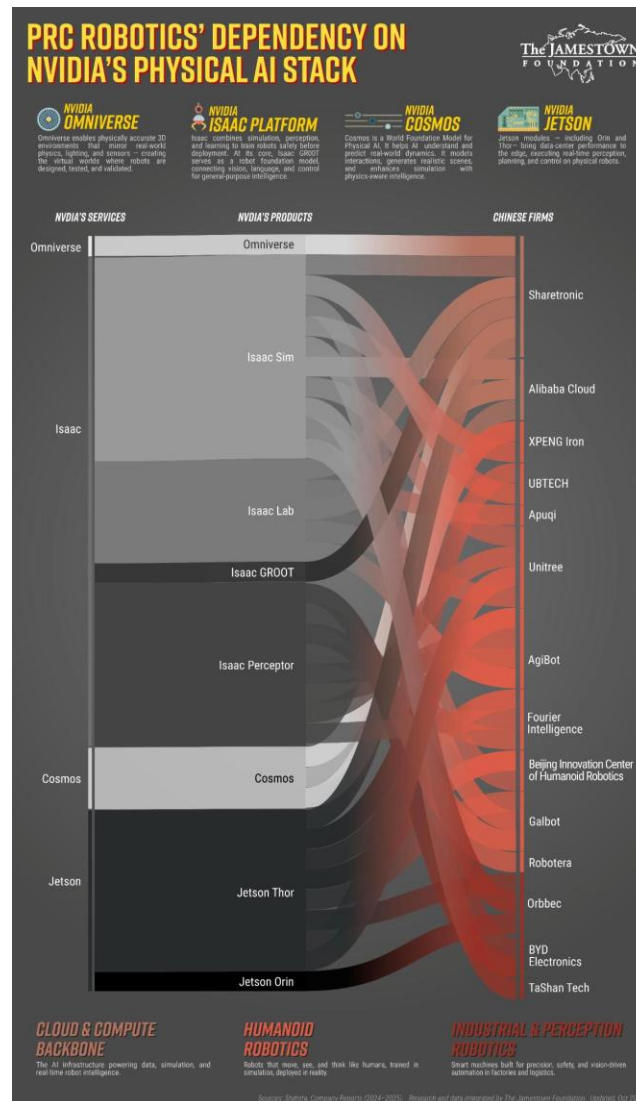
Attempts to localize production of RV reducers, however, remains a long way from achieving full import substitution. One firm, Beijing Chietom Precision Transmission Technology (Chietom; 北京智同精密传动科技/智同科技), has received government backing to scale production and establish humanoid-specific bases. The company's chief scientist, Zhang Yueming (张跃明), is optimistic, noting that over 80 percent of RV reducers are manufactured within the PRC. However, the country remains almost completely dependent on foreign machine tools, importing around 90 percent of equipment, mostly from Japan ([36kr](#), January 17). Another domestic player, Zhejiang Shuanghuan Company (浙江双环传动), leads an MIIT project to localize both RV and harmonic reducers. It now supplies reducers to Tesla's Optimus robot and Unitree's G1-series robots. It is steadily building market share at a time when foreign firms, such as Nabtesco, are seeing their market share decline ([163](#), November 27, 2024; [Caifuhao](#), September 18).

Software and Data Chokepoints Remain

The hardware surveyed above provides the brawn for humanoid robots. Beijing is also keen to indigenize production of software, which provides robots' brains. Large language models (LLMs) and multimodal artificial intelligence (AI) play two roles here. First, they provide task understanding and planning. LLMs parse human instructions and translate them into structured goals. Vision-language models (VLMs) then align those goals with what the robot sees. And visual navigation models (VNMs) collect 3D environmental data to generate an optimal path for acting on the original instructions. Second, LLMs can generate motion-control code, producing the low-level commands that drive actuators. Compared with other kinds of rules-based or reinforcement-learning-based controllers, LLMs are much better at interpreting intent. However, they also require much higher computing power and energy demand. A compromise solution for humanoid robots is edge-cloud collaboration, whereby only large-scale reasoning is offloaded to run on the cloud.

Tasks like grasping objects requires integrating and analyzing data from a range of inputs. Tactile and visual sensors all provide information that can be used to train vision–touch–language–action (VTLA) models for these purposes ([Baijiahao](#), November 1, 2024). In September, three Hubei-based robotics organizations established the PRC's first open-architecture, large-scale multimodal tactile data engine and cognitive training center. The center aims to address tactile data gaps and tackle long-standing challenges caused by fragmented and low-quality data ([Baijiahao](#), September 8).

Figure 2: The PRC Robotics' Industry Depends on Nvidia's Physical AI Stack



(Source: Author research)

Paucity of data, especially high-quality data, remains a problem (MIT, April 30, 2024). Data for robotics differ fundamentally from those used in AI language models, comprising three-dimensional, multimodal, and bionic perception inputs to mimic human experience and interaction. Collecting this data is often costly and slow, requiring humans to wear motion-tracking gear or sensor gloves to repeat the same actions thousands of times. Simulation increasingly fills this gap, allowing virtual experiments to run in parallel. PRC institutions are pushing to generate, standardize training data sets and pipelines for robotics. In 2024, Agibot, together with top national research institutes, unveiled the world's first open-source real-world humanoid robotics dataset, encompassing over 80 categories of everyday skills (Baijiahao, December 30, 2024). And this summer, the largest embodied intelligent robot data collection factory was built in Tianjin. Spanning 130,000 square feet, it is the world's largest hub for embodied intelligent data collection and model training. Its core focus includes tactile sensor

development, humanoid robot manufacturing, and the production of high-precision data sets ([People's Daily](#), June 24).

Currently, Nvidia is leading the charge in building open-source models, such as Isaac GR00T N1, and platform, such as Cosmos, for robotics development. The U.S. firm is also collaborating with Google DeepMind and Disney Research on Newton, a GPU-accelerated, differentiable physics engine that enables robots to learn how to handle complex tasks ([Nvidia](#), March 18). Nvidia's platform is rapidly reducing training times. Earlier this year, it enabled the GR00T N1.5 model to be updated in just 36 hours. With traditional data collection methods, this would have taken several months ([Nvidia](#), May 18).

PRC robotics developers are increasingly turning to Nvidia's physical AI stack to power their own products ([EET](#), May 13). This obviates the need for Chinese developers to reinvent core infrastructure, accelerating the nation's advance towards embodied intelligence. At CES 2025, one of the world's largest trade shows for new technologies, Nvidia CEO Jensen Huang highlighted 14 leading robotics companies that use its Cosmos platform. Of these, six were from the PRC ([Global Times](#), January 9; [Nvidia](#), accessed September 30). [4]

At the cloud layer, Alibaba Cloud and Sharetronic Data (协创数据) use GR00T for model training. And before its addition to the U.S. government's entity list, Inspur (浪潮信息) provided Nvidia with digital infrastructure to build a simulation model ([GMW](#), August 24, 2022; [Caifuhao](#), August 26; [Baijiahao](#), September 25). At the application layer, leading humanoid developers—Unitree, Fourier, AgiBot, UBTECH, Galbot, and the Beijing Humanoid Robotics Innovation Center—also use Nvidia models for training purposes (Nvidia, [June 2, 2024](#), [August 9](#); AgiBot, accessed [September 30](#)). Even components firms such as Orbbec (奥比中光), BYD Electronics, and Apuqi (阿普奇) use these tools for sensing and control (Nvidia, [August 9](#); [Sina](#), October 16; [Apuqi](#), accessed October 16).

Conclusion

Robotics competition is a key part of U.S.-PRC technological competition. The PRC's robot supply chain is advancing rapidly, with domestic strengths in cost-effective sensors, reducers, and motors. These are frequently driven by central and local policy support in terms of subsidies and other incentives. But chokepoints persist. The PRC remains reliant on external partners for high-precision manufacturing equipment for high quality RV reducers, advanced coreless motor technology, high end ball screws, and software and simulation tools for AI training. In key parts of the value chain for humanoid robotics components, firms in the United States, Europe, and Japan remain clear leaders. This lead is unlikely to remain over the medium-to-long term, however, without policies that restrict PRC access to leading-edge technology and reduce collaboration in this critical sector.

Sunny Cheung is a Fellow for China Studies at The Jamestown Foundation.

Notes

[1] There are several different kinds of ball screw. In general, the high-end market in the PRC remains dominated by Japanese and European players, with Germany's Schaeffler and Japan's THK and NSK together constituting 90 percent of market share ([Sina](#), January 12). In 2023, four out of five planetary roller screws—a specific type of ball screw—sold in the PRC were imported. But even here, domestic competitors are emerging, such as Nanjing Technology and Equipment Manufacturing (南京工艺), Best Precision (博特精工), Hanjiang Machine Tool (汉江机床) and Shuanglin (双林份).

[2] Humanoid Robot Standardization White Paper 2024 (人形机器人标准化白皮书 2024), National Robot Standardization Technical Committee, December 2024. Available on Scribd here: <https://www.scribd.com/document/864882725/%E4%BA%BA%E5%BD%A2%E6%9C%BA%E5%99%A8%E4%BA%BA%E6%A0%87%E5%87%86%E5%8C%96%E7%99%BD%E7%9A%AE%E4%B9%A6-2>.

[3] These include Zhejiang Laifual Drive (浙江来福谐波传动), Han's Laser (大族激光), Ningbo ZhongDa Leader Intelligent Transmission (宁波中大力德智能传动), TC Drive (同川精密), and CTKM Harmonic Drive (中技克美谐波传动).

[4] These included Star Era's Star1, Zhiyuan's Expedition A2, Fourier's GR-2, Galaxy General's G1, Unitree's H1, and XPENG's Iron.

New Emphases in the PLA's Operational Centers of Gravity

By K. Tristan Tang



The PLA Army Command College, located in Nanjing. (Source: Window to Chinese Universities)

Executive Summary:

- Like many militaries around the world, the People's Liberation Army (PLA) places strong emphasis on Clausewitz's concept of the center of gravity—the single most important and decisive operational problem to the PLA in a given phase or time window.
- A recent PLA Daily article places new emphasis on information-centric centers of gravity, time-sensitive targeting, and the requirement for higher-level approval.
- These three shifts reflect intensified preparations for operations against Taiwan, as well as suggesting an ongoing breakdown of trust between military authorities and frontline officers.

Carl von Clausewitz's concept of the center of gravity remains a key analytic tool for military and operational planning that is used by armed forces worldwide. The 19th century theorist of war derived the term (*Schwerpunkt*, or "main point" in the original German) from its use in the physical sciences. He used it metaphorically to refer to a focal point in an enemy's forces when its acts with a substantial degree of unity (Echevarria, 2003). [1] In military discourse within the People's Liberation Army (PLA), analysts define a "center of gravity" (作战重心) as the single most important and decisive "operational problem" (作战问题) in a conflict's given phase or time window. Analyzing operational problems can uncover the nature and patterns of a military confrontation. This analysis focuses on real adversaries, the PLA's own capabilities, and potential battlefields, while studying key issues such as guidance, methods, and deployment. The aim is to ensure victory in future wars and keep pace with the evolution of warfare (PLA Daily, [July 7, 2022](#); [November 24, 2022](#); [July 8](#)).

On October 2, Xu Shiyong (许世勇), likely a professor at the PLA Army Command College, published an article on the concept of operational centers of gravity in the PLA Daily ([PLA Daily](#), October 2). According to Xu's operational definition, operational or tactical planners who apply the concept well can seize the initiative on the battlefield and ultimately achieve their operational objectives (PLA Daily, [April 23, 2024](#); [October 2](#)). Xu had previously written a piece on the concept that appeared in April 2024 ([PLA Daily](#), April 23, 2024). [2] A comparison of the two articles suggests an evolution in the understanding of this concept within the PLA. The more recent piece focuses more on information-centric gravity, time-sensitive targeting, and approval from higher authorities. This shift in emphasis carries implications for potential operations against Taiwan as well as for recent controversies surrounding the PLA's personnel management.

Three Aspects of 'Center of Gravity'

Since the formation of the current Central Military Commission after the 20th Party Congress in 2022, the PLA Daily's "Military Forum" (军事论坛) has published four articles focusing on the concept of "operational centers of gravity" (作战重心). In addition to Xu Shiyong's two pieces that emphasize the operational application of the concept, two other articles describe its theoretical foundations (PLA Daily, [May 30, 2023](#); [August 15, 2024](#)).

Xu Shiyong's two articles emphasize different aspects of the concept, but both follow a similar framework that divides analysis into three areas: anticipation (预判), strike (打击), and control (调控). Each contains several subcomponents that largely overlap, though specific elements vary due to the difference in focus of the two articles (see Table 1 below). The different emphases of the two articles means that there has not necessarily been a shift in the PLA's overall discourse on the center of gravity concept. However, the October 2025 article introduces several ideas not found in the previous three pieces. These differences deserve closer attention.

First, Xu's second article prioritizes centers of gravity for employing "new quality combat forces" (新质战斗力). New quality combat forces refer to information-system-based, system-level combat capabilities ([China Brief](#), March 15, 2024). A Chinese military researcher, writing in the People's Daily, used artificial intelligence as an example, noting that machine learning and big data analytics can enable real-time situational awareness and anticipatory assessment of the battlefield, thereby improving decision-making precision, strengthening command and control, and increasing the likelihood of success in combat ([People's Daily](#), August 1). The article also prioritizes adjustments to a conflict's center of gravity to secure an advantage in the effectiveness of new

quality combat forces against the enemy. The piece marks the first time a discussion has linked the two concepts. It indicates that analysts must treat the information dimension as the primary consideration when assessing centers of gravity and make information-oriented adjustments the top priority.

Table 1: Comparison of Three Aspects in Xu's Articles

Aspects	Emphasizing the Grasp of Centers of Gravity Amid Operations (April 2024)	Emphasizing the Planning and Application of Centers of Gravity (October 2025)
Anticipation	• Based on operational objectives. • Around the operational progression. • Performing real-time capability assessments.	• Based on operational objectives. • Based on changes in enemy situation. • Integrating battlefield environment.
Strike	• Blind and disrupt the enemy through network-electronic means. • Conduct diverse, precision strikes. • Employ forces skillfully to annihilate targeted elements.	• Blind and sever enemy systems through network-electronic operations. • Deliver precise, lightning fires. • Launch surprise force attacks to encircle and destroy.
Control	• Shift the center of gravity in a timely manner. • Reconstruct the center of gravity as conditions require. • Control the center of gravity according to operational circumstances.	• Flexibly shift the center of gravity. • Reconstruct the center of gravity at the appropriate time. • Modify the new-quality center of gravity.

(Source: Compiled by the author)

Second, the article emphasizes striking the enemy's "time-sensitive targets" (时敏目标)—battlefield objectives whose value depends on timing and typically consist of highly mobile, high-value enemy platforms that pose a serious threat to one's forces and demand immediate response. According to PLA writers, destroying time-sensitive targets is decisive for reversing a deteriorating situation, seizing the initiative, and securing victory. Striking these targets requires strengthening strike capabilities that are fast, precise, and efficient and built on networked information systems, enabling near-instant neutralization through rapid, well-executed actions (PLA Daily, [April 21, 2022](#); [June 6, 2023](#)). Writings on centers of gravity have not previously discussed this topic.

Third, the article argues that any change to the assessed center of gravity must be reported immediately to higher authorities and must receive their approval. This requirement signals that senior PLA leaders intend to strengthen real-time control over subordinate operational units because changes to the center of gravity can alter existing operational plans. New quality combat forces are supposed to make this reporting-and-approval requirement feasible. On this point too, Xu's article is the first to discuss this aspect of chain of command protocols in the center of gravity literature.

Discussion Reflects Taiwan Focus, Distrust Within the PLA

The latest discussion of Clausewitz's concept partly reflects the PLA's intensified preparation for potential operations against Taiwan, which remains the PLA's primary—and most likely—adversary in any future conflict. The reference to gaining an advantage over the enemy in new quality combat forces also could point to Taiwan. Compared with the United States, Japan, or South Korea, Taiwan's information and communication capabilities represent a domain where the PLA likely feels more confident that it can gain superiority. The PLA also appears to be strengthening its training for time-sensitive strikes against Taiwan. As Taiwan expands its asymmetric weapons, such as coastal anti-ship missiles, the PLA counters by using long-endurance unmanned aerial vehicles (UAVs) for reconnaissance and strikes along Taiwan's coast. Eight UAV circumnavigation flights took place during this year's Joint Combat Readiness Patrols—up from three in 2024, all of which occurred in August. This could reflect the PLA's growing focus on detecting and engaging time-sensitive targets.

A second implication is that tighter control over frontline units' adjustments to operational plans partly reflects senior PLA leaders'—and possibly Xi Jinping's—current distrust of the military. The PLA has long emphasized Party control, where top-down authority is considered essential and typically highlighted early in official writings. Yet of the four PLA Daily articles on centers of gravity, the first three made no mention of closely following higher-level orders or securing timely approval. This implies that assessing changes to the center of gravity in a conflict and adjusting based on real-time battlefield conditions was previously left to frontline commanders. An apparent reversal in the latest article to now requiring approval for any adjustment suggests Xi Jinping's dissatisfaction with recent personnel management has eroded trust in frontline officers, prompting tighter central oversight in a domain once defined by initiative and flexibility.

K. Tristan Tang is an Associate Fellow at the Research Project on China's Defense Affairs, Secure Taiwan Associate Corporation, and a member of the Pacific Forum's Young Leaders Program. He is also the co-founder and project lead for wargaming at the Taiwan Defense Studies Initiative. His research focuses on China's defense industry, the People's Liberation Army, and Chinese foreign policy. You can connect with him on X: @KTristanTang.

Notes

[1] Echevarria II, Antulio J. "Clausewitz's Center of Gravity: It's Not What We Thought." *Naval War College Review*, Winter 2003, Vol. LVI, No. 1.

[2] Xu Shiyong's current position and title remain unclear, but he published research under the affiliation of the PLA Army Command College in both 2016 and 2019. See: Xu Shiyong and Ke Lisha (2016), "The Impact of Offensive–Defensive Transitions on Informatized Operations and Countermeasures (攻防转换对信息化作战的影响及对策)," National Defense Technology (国防科技); Xu Shiyong, Xu Lisheng, and Li Zongkun (2019), "Strategic Considerations for Accelerating the Development of the Army's Power Projection Capability (加快陆军投送能力建设的战略思考)," National Defense Technology (国防科技).

Cronyism and Failed Promotions: Xi's PLA Purge

By K. Tristan Tang



Miao Hua, former Director of the Political Work Department of the Central Military Commission, was among those dismissed from the Party on October 17. (Source: CNA)

Executive Summary:

- The Ministry of National Defense announced on October 17 that nine generals—including Central Military Commission Vice Chairman He Weidong and Political Work Department Director Miao Hua—had been expelled from the Party and the military.
- The purge centers on personnel mismanagement and alleged job-related crimes, highlighting systemic corruption within the PLA's political work and promotion system.
- Many of the officers shared prior service ties in the Eastern Theater Command area and the former 31st Group Army, forming an improper network around He and Miao.
- The campaign marks Xi Jinping's most visible effort yet to tighten control over the PLA's personnel system, raising the question of whom Xi can still trust within his own military ranks.

On October 17, the People's Republic of China (PRC) Ministry of National Defense announced the results of investigations into nine generals. All were expelled from both the Communist Party and the military. The list includes vice chairman of the Central Military Commission (CMC) He Weidong (何卫东), director of the CMC Political Work Department Miao Hua (苗华), executive deputy director of the CMC Political Work Department He Hongjun (何宏军), executive deputy director of the CMC Joint Operations Command Center Wang Xiubin (王秀斌), commander of the Eastern Theater Command Lin Xiangyang (林向阳), former political commissar of the Army Qin Shutong (秦树桐), former political commissar of the Navy Yuan Huazhi (袁华智), former commander of the Rocket Force Wang Houbin (王厚斌), and former commander of the People's Armed Police Wang Chunling (王春宁) ([Xinhua](#), October 17).

This is not the first time that the authorities have announced investigations or disciplinary actions against these generals. For example, in June this year, the standing committee of the National People's Congress announced the removal of Miao Hua from his position as a member of the CMC ([Xinhua](#), June 27). But the connection between the purges has never previously been explained. Today's announcement in effect confirms that He Weidong, Miao Hua, and others faced purges due to alleged factionalism and misconduct in personnel appointments.

Mismanagement of Personnel within the Political Work System

The statement from the Ministry of National Defense suggests that the nine generals were likely purged over personnel management and promotion issues. While other parts of the statement consistently mention all nine, He Weidong, Miao Hua, and He Hongjun appear to be the key figures. They are singled out for "strict disciplinary action" (严肃处理).

The most specific charge listed in the statement is "serious job-related crimes" (涉嫌严重职务犯罪), indicating that this is likely the principal reason for the purge. Other parts of the statement refer to more general offenses such as seriously violating Party discipline, and those involving particularly large sums, that are extremely serious in nature, and that have caused extremely adverse effects.

The common link between Miao Hua, He Weidong, and He Hongjun, and the charge of "serious job-related crimes," lies in the PLA's personnel management system. He Weidong served as the CMC vice chairman overseeing personnel affairs, while Miao Hua and He Hongjun were the top two officials in the CMC Political Work Department, which manages personnel matters. In other words, problems in the evaluation and promotion of general officers appear to be the central issue ([China Brief](#), April 11).

Improper Personal Network Led by Miao Hua and He Weidong

The removal of the nine generals is the most prominent case to date linked to the PLA's broader personnel management problems. The nine appear to have formed an improper network centered around Miao Hua and He Weidong. Among them, Miao Hua advanced the fastest. He was promoted to general in 2015 and took over the CMC Political Work Department around September 2017, where he oversaw personnel management and promotions across the entire military until his suspension in November 2024. Except for He Weidong and Wang Chunling, who were promoted to lieutenant general in July 2017, the remaining six rose from the rank of major

general to general during the period when Miao Hua oversaw personnel affairs. Table 1 below shows the promotion histories of the nine generals.

Table 1: Promotion Histories of the Nine Generals

Name	Year Promoted to Lt. General	Year Promoted to General	Source
He Weidong	2017	2019	(The Paper , August 4, 2017; Lianhe Zaobao , April 27)
Miao Hua	2012	2015	(People's Daily , September 8, 2017; Lianhe Zaobao , April 30)
He Hongjun	2019	2024	(The Paper , May 6, 2017; The Epoch Times , July, 26, 2024)
Wang Xiubin	2019	2021	(Xinhua, September 4, 2016 ; July 5, 2021 ; Secret China , August 2, 2024; Mainland Affairs Council , October 2021)
Lin Xiangyang	2020	2021	(Lianhe Zaobao , October 1, 2022; The Epoch Times , November 28, 2024; Mainland Affairs Council , October 2021)
Qin Shutong	2019	2022	(Lianhe Zaobao , January 22, 2022; Xinhua , January 21; The Paper , June 28, 2019)
Yuan Huazhi	2019	2022	(Xinhua , January 21, 2022; People's Daily , December 14, 2019)
Wang Houbin	2019	2023	(Lianhe Zaobao , July, 31, 2023)
Wang Chuning	2017	2020	(The Paper , August 4, 2017)

(Source: Compiled by the author)

Among the nine generals, seven previously served in the Eastern Theater Command area. Some, such as He Weidong, Miao Hua, and Lin Xiangyang, spent extended periods in the former 31st Group Army, now reorganized as the 73rd Group Army. This indicates a degree of geographic and operational overlap that likely fostered personal connections during training and exercises. He Weidong was promoted to general in 2019 and served as commander of the Eastern Theater Command until his reassignment in 2022. During that period,

both Wang Xiubin and Lin Xiangyang served as deputy commanders of the Eastern Theater Command before being reassigned in 2021 to command the southern and central theater commands, respectively.

The two whose public records show no prior service in the Eastern Theater Command, Yuan Huazhi and He Hongjun, both had direct subordinate relationships with Miao Hua. During Miao's tenure as political commissar of the Navy in 2014–2017, when he oversaw naval personnel affairs, Yuan served directly under him, holding positions as political commissar of the Naval Equipment Research Institute and later of the Marine Corps. After Miao became director of the CMC Political Work Department in 2017, He Hongjun continued to serve as one of his deputies and was later promoted in 2024 to executive deputy director along with his promotion to general.

Conclusion

The purge of these nine generals represents one of the most visible examples of CMC Chairman Xi Jinping's ongoing effort to overhaul and tighten control over the PLA's personnel management system. Xi aims to address the military's long-standing problems in promotion and personnel oversight. This explains why political work and discipline within the PLA this year have placed extraordinary emphasis on personnel management (China Brief, [May 23](#); [October 17](#)). Accordingly, the official statement released on October 17 explicitly noted that the purge of the nine generals once again demonstrates the firm resolve of both the Party Central Committee and the CMC to carry the anti-corruption struggle through to the end, and emphasized that corruption will find no shelter within its ranks.

The latest announcement signals the end of one set of investigations. The probes into senior generals that began with the CMC Equipment Development Department in 2023 appear to have reached a temporary pause following the disciplinary overhaul of political and personnel work—and the punishment of CMC vice chairman He Weidong, who oversaw these areas. But similar investigations and purges will likely continue in the foreseeable future. The key question is this: if Xi Jinping can no longer trust the confidants who came up with him in the old 31st Group Army in Fujian Province, who can he still trust?

K. Tristan Tang is an Associate Fellow at the Research Project on China's Defense Affairs, Secure Taiwan Associate Corporation, and a member of the Pacific Forum's Young Leaders Program. He is also the co-founder and project lead for wargaming at the Taiwan Defense Studies Initiative. His research focuses on China's defense industry, the People's Liberation Army, and Chinese foreign policy. You can connect with him on X: @KTristanTang