



AMERICAN FOREIGN POLICY COUNCIL

DEFENSE TECHNOLOGY PROGRAM BRIEF

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HIGHLIGHTS

China's Deterrence

Mechanism: China's anti-access/area denial (A2/AD) capability seeks to deny U.S. freedom of maneuver within the first island chain, and increasingly out to the second island chain.

Conventional Sensing and Strikes: China has developed a robust and lethal arsenal of strike capabilities that rely on accurate targeting data to reach their targets.

UAS-Bolstered ISR: The PLA's diverse ISR-equipped UAS enable more persistent and redundant intelligence collection, thus making U.S. forces operating within China's near-abroad more targetable.

Lethal Strikes: The PLA's short-range one-way attack drones and advances strike UAS enhance the lethality of PLA Rocket Force, Air Force, and Navy strikes.

Policy Responses: Rapidly invest in counter-UAS systems, modernize Tactics, Techniques, and Procedures, and integrate lessons learned from ongoing conflicts.

HOW CHINA'S UNMANNED AERIAL SYSTEMS THREATEN U.S. FORCES

ROBERT PIERCE, BRAYDEN BURGE, AND TAPLIN SEELBACH

China's rapidly advancing anti-access/area denial (A2/AD) capabilities are increasing the risk to U.S. and allied forces operating within the First Island Chain and increasingly out to the Second Island Chain and beyond. A key component of Beijing's effort to modernize its military into a force capable of deterring and preventing U.S. military intervention during a conflict in its near abroad is the introduction of unmanned aerial systems (UAS) that enhance the People's Liberation Army's (PLA) ability to find, fix, and finish adversary forces across multiple domains.

While the PLA Rocket Force (PLARF) missile arsenal remains the backbone of China's deterrence and counter-intervention strategy, the integration of next-generation UAS into the PLA force structure adds low-cost, mass-producible, attritable, and

persistent intelligence, surveillance, and reconnaissance (ISR), electronic warfare (EW), and strike options that complement manned assets and complicate U.S. and allied freedom of maneuver. By improving the PLA's ability to maintain target custody, preserve sensor-to-shooter connectivity in contested environments like the South China Sea, and provide low-cost strike options, the introduction of increasingly sophisticated UAS could make the PLA's existing missiles, ships, and aircraft far more effective. For U.S. forces and policymakers, the integration of UAS into PLA force posture raises the potential costs of intervention in a conflict with China.

BACKGROUND

China's development of a robust A2/AD posture capable of imposing

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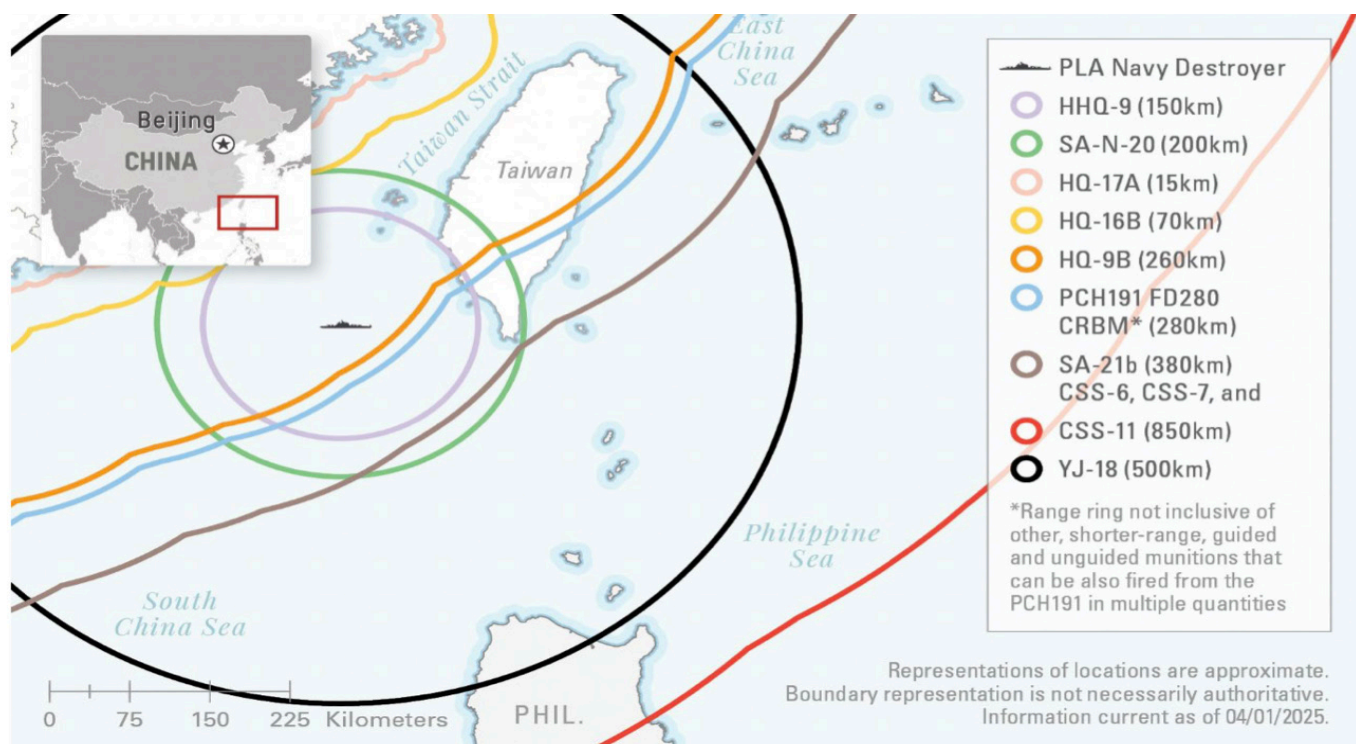
significant costs on U.S. and allied forces operating in the Western Pacific is the result of a decades-long strategy designed to mitigate and ultimately negate the threat of U.S. military intervention in its near abroad. Following the “traumatic trifecta” of 1989 to 1991—during which the global response to the Tiananmen Square massacre, the Soviet Union’s collapse, and the First Gulf War left China feeling isolated and vulnerable on the international stage—China developed a strategy to lessen America’s relative power advantage in the Western Pacific and ultimately develop the combat power necessary to deter American intervention in the First Island Chain, and especially over one of its core interests: Taiwan.¹

The hard-power disparity demonstrated during the United States’ Gulf War victory became impossible to ignore in the 1995-1996 Taiwan Strait Crisis, during which Beijing’s missile tests in the waters surrounding Taiwan led the Clinton administration to deploy two Carrier Battle Groups in the vicinity of the Taiwan Strait. The largest deployment of American naval power to Asia since the Vietnam War exposed Beijing’s inability to effectively contest U.S. carrier operations off its shore. Realizing that matching U.S. combat power would take decades, China invested in “assassin’s mace” weapons such as anti-ship ballistic missiles (ASBMs), submarines,

coastal defense cruise missiles, and mines. These systems were developed explicitly to hold U.S. naval forces at risk at increasing ranges while still providing political leaders cover to maintain their “hide and bide” posture.²

As these systems came online and were integrated into the PLA joint force structure, China shed its “hide and bide” strategy in favor of a mandate to “actively accomplish something.”³ China’s A2/AD architecture matured into a layered defense-in-depth, which in turn allowed the PLA to act more confidently and assertively in its near abroad. By the mid-2000s, with the U.S. distracted by the Global War on Terrorism, China’s A2/AD posture began to modernize into a formidable network of overlapping sensors and shooters capable of threatening adversarial forces based on or ingressing into the First Island Chain. Over time, the PLA would field high-quantity and increasingly high-quality long-range surveillance assets such as over-the-horizon radar and space-based assets, precision strike weapons, and command-and-control (C2) networks capable of holding U.S. and allied forces operating even beyond the First Island Chain at high risk. Before assessing how UAS further augment the PLA’s A2/AD architecture, the following section examines its core conventional components.

Figure 1. PLA CRBM, SRBM, and SAM Coverage Over the Taiwan Strait



SOURCE: U.S. DEPARTMENT OF DEFENSE

PLA A2/AD CORE COMPONENTS

The PLA now maintains a mature, layered defense-in-depth system capable of disrupting the ability of U.S. and allied forces to effectively communicate and maneuver in the Western Pacific. Far from being able to park two aircraft carriers off the Chinese coast with relatively low risk to U.S. personnel as occurred during the 1995-96 Taiwan Strait Crisis, U.S. and allied forces operating within the first island chain (FIC) and increasingly well beyond are held at risk by the PLARF’s missile arsenal, the PLA Navy’s (PLAN) rapidly expanding fleet, and the PLA Air Force’s (PLAAF) strike capability. With the help of radars and space-based assets, the PLA can deliver lethal combat power as part of a comprehensive A2/AD.⁴ Critically, effective fires can only occur so long as the PLA maintains the ability to detect and track adversarial forces while communicating time-sensitive targeting data.

The Rocket Force

The PLARF is the backbone of Beijing’s A2/AD, and its missile arsenal constitutes the most lethal PLA threat to U.S. forces. A land-based nuclear and conventional missile branch of the PLA, the PLARF maintains a diverse and robust arsenal of ballistic and cruise missiles ranging from short-range to intercontinental weapons. Munitions such as the DF-21D “carrier killer” anti-ship ballistic missile (ASBM) and the longer-range DF-26 “Guam Express” are capable of threatening U.S. ships and regional bases throughout the FIC and across much of the Western Pacific.⁵ In fact, many in the West now question the utility of carrier-centric warfare in a potential fight with China due to the potential for the PLA to render them combat ineffective with one strike before the fighters on the carrier are even within range of their likely targets.

Other systems, including the hypersonic glide vehicle (HGV) equipped DF-17, are capable of using speed, maneuverability, and less predictable flight profiles to frustrate U.S. and allied missile defenses in places with a heavy concentration of U.S. personnel like Okinawa or the Philippines.⁶ While PLARF missiles can undoubtedly deliver substantial destructive capacity, it is important to recognize that their lethality depends on the PLA’s ability to provide the requisite targeting data. One arena where UAS may strengthen PLA lethality, then, is by supporting

Figure 2. Numbers for PLA Navy and U.S. Navy Ships, 2020-2040

Ship type	2020	2025	2030	2040	2040 change from 2020
Ballistic missile submarines	4	6	8	10	+6
Nuclear-powered attack submarines	6	10	14	16	+10
Diesel attack submarines	47	47	46	46	-1
Aircraft carriers	2	3	5	6	+4
Cruisers and destroyers	41	52	60	80	+39
Frigates and corvettes	102	120	135	140	+38
LHA-type amphibious assault ships	0	4	4	6	+6
LPD-type amphibious ships	7	10	14	14	+7
LST-type amphibious tank landing ships	30	24	24	15	-15
TOTAL for China of types shown above	239	276	310	333	+94
TOTAL number of U.S. Navy battle force ships	296	287	294	378	+82
U.S. total above compared to China total above	+57	+9	-16	+45	-12

Sources: For PLA Navy ships: U.S. Navy data provided to CRS by Navy Office of Legislative Affairs, reflecting data as of October 26, 2020. For U.S. Navy ships: U.S. Navy data—actual for 2020, and projections for subsequent years shown in Navy’s FY2025 30-year shipbuilding plan.

ISR operations, maintaining target custody, and transmitting time-sensitive targeting data.

Navy

Now the world’s largest navy by hull count, the PLAN contributes to A2/AD by serving as a mobile extension of the PLA’s sensor, air-defense, and strike networks. Its most capable surface combatants include the Type 055 Renhai cruisers—each equipped with 112 vertical launch system (VLS) cells, advanced radars, and advanced munitions—and many Type 052D Luyang III destroyers equipped with anti-ship missiles like the YJ-18.⁷ China’s three commissioned aircraft carriers further extend the geographic reach of PLA airpower and ISR. Additionally, a growing fleet of nuclear and conventional submarines adds survivable strike and sea-denial options that could be used to protect critical sea lines of communication or target U.S. assets attempting to enter the FIC during conflict. While the PLAN is unable to power project as a blue water navy in a manner akin to the U.S. Navy, it has been purpose-built to win a fight on home territory, and the amount of naval combat power the PLAN can bring to the fight within the FIC likely far exceeds what the U.S. could power project into the region.

Together with the PLARF, the PLAN puts vital sea lanes into contention, compresses engagement time-lines, and forces U.S. decision-makers to either operate at greater distances or accept higher risk in a conflict, whether that be over Taiwan or the South China Sea. Like the PLARF, however, the PLAN’s ability to conduct long-range strikes, especially against mobile targets, depends on the ability to effectively target beyond the

SOURCE: CONGRESSIONAL RESEARCH SERVICE

ships’ organic sensors, functions that UAS may help perform.⁸

The Air Force

The PLAAF maintains the air component of the PLA’s Integrated Air Defense System (IADS) alongside an increasingly capable fleet of aircraft designed to threaten U.S. and allied forces in the Western Pacific. Its most advanced operational aircraft is the J-20, a fifth-generation stealth fighter (built with the help of stolen F-35 designs) designed to contest U.S. air operations and threaten adversary aircraft through advanced sensors and air-to-air weapons.⁹ Alongside the J-16 fighter, the J-20 strengthens the PLAAF’s ability to defend Chinese airspace and place critical U.S. airborne assets at risk, while H-6 bomber variants like the H-6K extend the PLA’s ability to conduct long-range strikes.¹⁰ Meanwhile, PLA IADS comprising of ground-based radars, C2 networks, fighters, and advanced surface-to-air missile systems threaten aerial targets at progressively longer ranges.¹¹ The PLAAF also operates increasingly capable airborne early-warning and control platforms, most notably the KJ-500, which extends radar coverage, tracks targets, and helps coordinate fighters and ground-based defenses.¹²

Together, these capabilities allow the PLAAF to contest airspace throughout the FIC and complicate U.S. efforts to achieve air superiority, as the U.S. managed to accomplish during Operation Epic Fury in just a matter of days. UAS could strengthen this architecture by extending surveillance and communications coverage, conducting strike or electronic warfare operations, or flying alongside manned aircraft without putting additional crew at risk.

Space-Based Assets

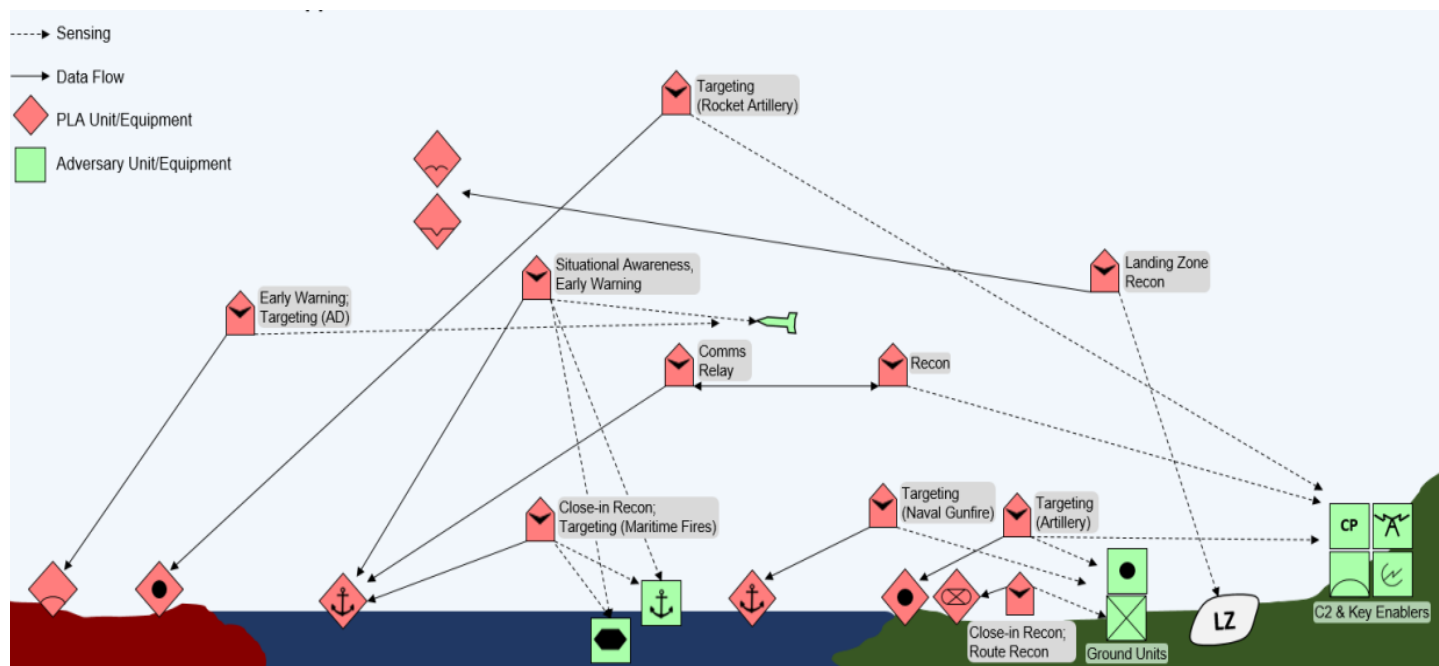
Lastly, the PLA operates a series of space and counter-space assets that augment its ground, sea, and air-based A2/AD systems.¹³ China’s ISR satellites provide electro-optical, synthetic-aperture radar, and signals intelligence capabilities, helping the PLA detect, identify, and track U.S. and allied forces across the Western Pacific. Communications and navigation satellites further support C2 and precision strikes, while counterspace capabilities are designed to disrupt assets critical to U.S. wartime functionality. Space-based coverage, however, may be intermittent or even degraded during conflict, as the U.S. would likely prioritize reducing China’s ability to effectively communicate. UAS can thus help supplement

Figure 3. PLA Reconnaissance Drone Classifications

UAV	Year of Introduction	Service Ceiling	Maximum Range	Endurance	Speed	Intelligence Collected	Other Capabilities
High-Altitude, Long-Endurance (HALE)							
WZ-7 "Soaring Dragon"	2018	18,000 m	7,000 km	10 hours	750 km/h	ELINT	EW; Communications Relay
WZ-9 "Divine Eagle"	2015	25,000 m	Unknown	35 hours	860 km/h	ELINT; SIGINT; IMINT	Air and Surface Tracking and Targeting; Communications Relay; AEW
BZK-005 "Giant Eagle"	2006	8,000 m	2,400 km	40 hours	190 km/h	ELINT; IMINT	
Medium-Altitude, Long-Endurance (MALE)							
ASN-207	2002	5,100 m	600 km	16 hours	250 km/h	ELINT; IMINT	EW; Communications Relay
Wing Loong-1	2007-08	5,000 m	4,000 km	20 hours	280 km/h	ELINT	Air-to-Surface Strikes
Medium-Altitude, Medium-Endurance (MAME)							
ASN-209 "Silver Eagle"	2011	5,000 m	200 km	10 hours	40 km/h	ELINT; IMINT	Targeting; Communications Relay; EW
Tactical UAVs							
ASN-217	Unknown	4,000 m	20 km	1.5 hours	120 km/h	IMINT	Damage Assessment

SOURCE: ROB PIERCE, BRAYDEN BURGE, AND TAPLIN SEELBACH

Figure 4. Notional PLA UAV ISR-T Support Missions



SOURCE: CAROLINE Y. TIRK AND ELI B. TIRK

the broader PLA A2/AD efforts by providing persistent and localized surveillance and communications relay, helping the PLA find, fix, and finish when satellite support is limited or unavailable.¹⁴

Altogether, PLARF, PLAN, PLAAF, and supporting space assets create a formidable A2/AD posture. But the efficacy of this integrated network of sensors and shooters depends on the PLA's ability to maintain target custody, transmit timely information across contested networks, and generate sufficient strike capacity against dispersed and mobile forces. UAS can help address these dependencies by adding persistence, redundancy, electronic effects, and low-cost mass across the PLA's reconnaissance-strike architecture.

HOW UAS BOLSTER PLA A2/AD

Every PLA service and theater command now employs UAS for missions ranging from ISR and EW to strike, communications, and logistics.¹⁵ These UAS platforms support operations across the entire kill chain, from detecting and tracking targets to deploying low-cost systems en masse to overwhelm enemy air defenses. Furthermore, their persistence, versatility, and attritability enable them to bridge gaps in the kill chain by

coordinating with manned forces and the more exquisite systems and sensors of the PLARF, PLAN, and PLAAF. The ISR, EW, and strike capabilities of these platforms enhance the PLA's ability to find, fix, and finish adversarial forces and increase the risks to U.S. and allied forces operating within the PLA's A2/AD umbrella.

ISR

The introduction of ISR-capable UAS into China's joint force strengthens the PLA's ability to find, fix, track, and identify adversarial forces.¹⁶ The PLA now operates advanced UAS that operate at high, medium, and low altitudes. This enables layered collection across vast swaths of territory and ocean while also providing the ability to perform more localized surveillance of particular targets such as a U.S. naval destroyer or cruiser entering the FIC.¹⁷ High-altitude platforms like the WZ-7, for instance, are utilized to conduct long-range reconnaissance operations far from China's coastline.¹⁸ The lower flight profiles of medium-altitude and low-altitude tactical UAS like the TB-001 and BZK-005, meanwhile, allow for more precise tracking and targeting.¹⁹ Thus, the PLA's ISR UAS network provides both broad and localized aerial coverage while enabling layered, multi-INT collection. How the PLA is integrating these various UAS

classes is evident around the Senkaku Islands in the East China Sea, where Japan routinely observes these platforms conducting reconnaissance, oftentimes alongside manned platforms.²⁰

UAS also serve as communications relays and airborne sensor nodes, extending the range of ground-based Line of Sight (LoS) radars while bolstering network resilience in degraded conditions. When linked with AEW&C aircraft or direct data and satellite links, UAS provide a comprehensive, well-organized relay of data to operators, making adversary forces more detectable and targetable.²¹ The PLA will continue to modernize its ISR capabilities, including by taking lessons from the Russia-Ukraine war that has demonstrated in a battle-tested environment how inexpensive UAS can locate targets, relay coordinates, adjust fires, and conduct battle damage assessment.²² Critically, UAS have proven to significantly compress the sensor-to-shooter timeline and increase the lethality of existing weapons. In the coming years, the PLA will continue to incorporate UAS into exercises and real-world surveillance operations in the East and South China Sea, signaling its intent to fully incorporate UAS into its broader ISR network.

EW

In addition to conducting ISR missions, certain PLA UAS are reportedly equipped for electronic warfare and electronic intelligence missions, potentially strengthening the PLA's ability to fix targets and degrade enemy C2 nodes. While the maturity and prevalence of these systems remain uncertain, recent incidents involving Chinese UAS flight operations near Japanese airspace likely provide evidence of this nascent capability. During two separate incidents in the summer of 2024, Japan scrambled F-15s to intercept the first known regional flights of a WL-10 and a new variant of the BZK-005.²³ Based on imagery from these encounters, both the WL-10 and a new variant of the BZK-005 were speculated to have EW pods under their fuselage.²⁴ By outfitting UAS with electronic intelligence and EW capabilities, the PLA is adding platforms that may be able to geolocate adversary emitters and/or potentially jam adversary communications and radar systems. When integrated into their force posture, these capabilities could enable the PLA to move beyond mere detection and tracking and towards disrupting and degrading adversarial C4ISR networks.

Strike

The PLA's UAS modernization efforts also support the final stages of the kill chain through strike platforms such as Unmanned Combat Air Vehicles (UCAVs) and loitering munitions (LMs). These systems are intended to enhance the lethality of existing air- and sea-based fires, add attritable options to the PLA's arsenals, and shift the cost-exchange ratio in China's favor.²⁵ China's most prominent UCAV development is the GJ-11, a stealth platform derived from the earlier Sharp Sword series that could perform strike, ISR, or EW missions in contested environments.²⁶ The PLA's various LM models, meanwhile, function similarly to cruise missiles, while also being capable of ISR and jamming.²⁷ LMs are significantly cheaper than most alternative platforms and are mass producible, which could enable the PLA to deploy significant quantities of these munitions against US forces operating within close range of the Chinese mainland in wartime. The PLA is also seeking to enhance the mobility of these strike systems by facilitating catapult launches from trucks and amphibious assault ships, enabling PLAA and PLAN forces to deploy them across a variety of terrain.²⁸ These systems may also act as a force multiplier through integration within an intelligent strike network.²⁹

The PLA is reportedly making strides to equip its UCAVs with loyal wingman capabilities. Multiple recent exercises may have been used to help integrate UAS with the PLAAF's manned fighters and bombers. If operational, these collaborative combat aircraft (CCAs) could defend manned aircraft from air defenses and help coordinate strikes.³⁰ Additionally, China's newest LM models are speculated to be capable of semi-autonomous swarming. A batch of truck-launched Feilong-60A LMs, for example, is reportedly capable of fanning out during the loitering phase, autonomously identify and track targets, and then coordinate among units on which targets to strike, in what order of priority, and so on.³¹ While these capabilities are still in development, they signal China's intent to make intelligentized strike UAS a key feature of its broader strike portfolio. If China can field these systems in the future, likely augmented by continued advances in AI, they will act as a force multiplier and enhance the lethality of the PLAAF and PLARF strike networks.

Recent conflicts demonstrate the operational effects China may be seeking to replicate through the introduction of these systems. Houthi attacks in the Red Sea, for instance, have combined UAS with cruise and

ballistic missiles to generate mixed threats, disrupt vital sea lanes, and impose sustained defensive demands on the U.S. fleet.³² And Ukraine's Operation "Spider's Web" demonstrated how relatively inexpensive UAS launched from unexpected locations can circumvent traditional air-defense assumptions and threaten strategic military assets deep inside enemy territory.³³

PUTTING UAS IN PERSPECTIVE

The versatility of UAS enables them to perform across the ISR, EW, and strike mission sets. That they act as persistent, attritable, low-cost platforms that reduce risks to manned aircraft adds to their inherent value. Collectively, these capabilities generate a new vector of threat to U.S. and allied forces attempting to navigate an increasingly complex PLA A2/AD structure.

On the other hand, the existence of advanced UAS technologies does not necessarily ensure that the PLA can integrate or employ them effectively in a wartime environment in a way that meaningfully augments its A2/AD architecture. Several of these capabilities, such as swarming and CCA, are still likely developmental.³⁴ UAS also rely heavily on functioning communications relays, satellite accessibility, and C2 systems that the U.S. would likely attempt to degrade during combat operations. The PLA's centralized command structure may also hinder its ability to integrate intelligent platforms into its C2 structure because of its potential to decentralize decision-making, thus reducing political control and weakening the force multiplier effect of intelligent UAS in a rapidly changing battlespace.³⁵ Still, UAS development will continue apace, and even partial integration of UAS assets capable of ISR, EW, and strike poses serious concerns for U.S. and allied warfighters operating within the reach of the PLA A2/AD envelope.

POLICY RECOMMENDATIONS

The PLA's introduction of advanced UAS capable of ISR, EW, and strike missions constitutes a significant potential threat to U.S. and allied forces if conflict were to occur and may further constrain those forces' access and maneuverability within the first and second island chains. Given that China and the PLA remain the most existential external threat to U.S. power, it is imperative that U.S. policymakers and military leaders prepare for this modern and rapidly advancing vector of warfare.

First, the U.S. must rapidly innovate counter-drone technologies by incentivizing the domestic defense industrial base. The U.S. cannot afford an unfavorable

cost-exchange ratio in which American troops are forced to engage low-cost PLA UAS with expensive missiles. Low-cost, mass-producible UAS must instead be met with low-cost, mass-producible counter-drone munitions.

Second, the stand-up in the Department of War of the DRPM-UxS is a step in the right direction and demonstrates the gravity with which the U.S. is treating unmanned systems.³⁶ But now it is time to execute. DRPM-UxS must streamline our counter-drone efforts by consolidating requirements, preventing duplicative efforts, accelerating procurement of the best technologies, and moving those proven technologies into mass production so that our warfighters have the best equipment when they need it most. The U.S. must always maintain technological superiority—we should never be interested in a fair fight.

Third, the U.S. must dedicate itself to studying, learning from, and then executing on the lessons learned from ongoing conflicts in which UAS feature prominently, namely the Russia-Ukraine war. Many of the PLA capabilities discussed above are direct results of China's involvement in the war—thus, learning from this conflict will both inform our own doctrine and tactics and our understanding of our adversary.³⁷ The U.S. must prepare for emerging PLA capabilities by ensuring our troops, especially those who would be on the front lines during a China conflict like ship crews, SEALs, and Marines, are well-versed in these lessons learned and are best prepared to tactically engage with adversary UAS.

Fourth, the U.S. must continue to develop high-power microwaves and lasers and ensure they are readily accessible to our warfighters in places like the Philippines and Japan. The U.S. is moving in the right direction, having already fielded the Integrated Fires Protection Capability–High Power Microwave system to the 1st Multidomain Task Force in February 2024 and tested it against drone swarms in the Philippines during Balikatan 2025.³⁸ This capability must be refined and dispersed to disparate units throughout the Pacific.

Fifth, the U.S. should diversify its sea vessel inventory to account for increasingly persistent Chinese ISR. By continuing to integrate smaller manned combatants and unmanned surface vessels (USVs) into its fleet, the U.S. can strain China's ISR network, increase targeting difficulty, strengthen air defense networks, and field attritable platforms to augment its larger, costlier sea vessels. The Navy's recent sea-rescue operation in Iran demonstrated the U.S.'s capability to field these

systems—what follows is scaling and adapting them in a way that would meaningfully dilute the efficacy of China’s kill web.

Lastly, the U.S. must develop concepts and capabilities to disrupt the backend of China’s kill chain: the ground-control stations, datalinks, satellite connections, etc. that make UAS effective. As discussed throughout this paper, munitions are only effective so long as they can target effectively. UAS can only help that targeting effort if they can communicate. During combat, the U.S. should target the PLA’s ability to communicate, thus weakening their ability to target. ♦◆

ENDNOTES

1. Rush Doshi, *The Long Game: China’s Grand Strategy to Displace American Order* (Brookings Institution Press, 2021).
2. Stan Grant, “China’s Era of ‘Hide and Bide’ Is Over,” *ABC News*, January 30, 2018, <https://www.abc.net.au/news/2018-01-30/chinese-military-asia-south-china-sea-geopolitical-conflict-us/9372972>.
3. Rush Doshi, “Hu’s to Blame for China’s Foreign Assertiveness?,” Brookings Institution, January 22, 2019, <https://www.brookings.edu/articles/hu-to-blame-for-chinas-foreign-assertiveness/>.
4. Sunny Cheung, “AI Strategies in the PLA’s Coastal and Air Defense,” Jamestown Foundation, September 22, 2023, <https://jamestown.org/ai-strategies-in-the-plas-coastal-and-air-defense/>.
5. DefenseNewsArmy2025, “China’s Anti-Access Area Denial Architecture Is Reshaping Power in the Indo-Pacific,” *Army Recognition*, October 17, 2025, <https://www.armyrecognition.com/archives/archives-land-defense/defense-news-army-2025/chinas-anti-access-area-denial-architecture-is-reshaping-power-in-the-indo-pacific>.
6. U.S. Department of Defense, *Military and Security Developments Involving the People’s Republic of China 2024: Annual Report to Congress* (Washington, DC: U.S. Department of Defense, December 18, 2024), <https://media.defense.gov/2024/Dec/18/2003615520/-1/-1/0/MILITARY-AND-SECURITY-DEVELOPMENTS-INVOLVING-THE-PEOPLES-REPUBLIC-OF-CHINA-2024.PDF>.
7. Eric Wertheim, “Type 055 Renhai-class Cruiser: China’s Premier Surface Combatant,” *Proceedings* 149, no. 3 (March 2023), <https://www.usni.org/magazines/proceedings/2023/march/type-055-renhai-class-cruiser-chinas-premier-surface-combatant>.
8. Brendan S. Mulvaney, ed., *PLA Aerospace Power: A Primer on Trends in China’s Military Air, Space, and Missile Forces*, 5th ed. (Maxwell Air Force Base, AL: China Aerospace Studies Institute, Air University, May 2026), <https://www.airuniversity.af.edu/Portals/10/CASI/documents/2026-05-01%20PLA%20Primer%205th%20Edition.pdf>.
9. Steve Balestrieri, “China’s J-20 Stealth Fighter: ‘Made in America’ (As in Stolen F-35 and F-22 Designs),” *19FortyFive*, April 19, 2025, <https://www.19fortyfive.com/2025/04/chinas-j-20-stealth-fighter-made-in-america-as-in-stolen-f-35-and-f-22-designs/>.
10. Brendan S. Mulvaney, ed., *PLA Aerospace Power*.
11. Justin Bronk, *Modern Russian and Chinese Integrated Air Defence Systems* (London: Royal United Services Institute, January 2020), https://static.rusi.org/20191118_iads_bronk_web_final.pdf.
12. Admin, “China’s ‘All-Seeing’ KJ-500 AWACS is Rewriting Indo-Pacific Airpower—U.S. and Allies Face Compressed Kill Chains and Stealth Exposure,” *Defence Security Asia*, April 23, 2026, <https://defencesecurityasia.com/en/china-kj500-awacs-indo-pacific-kill-chain-airpower-shift/>.
13. “DoD Report: China’s ISR Fleet Swells to 510+ Satellites, ‘Informatized’ Warfare Accelerates,” *SatNews*, December 24, 2025, <https://satnews.com/2025/12/24/dod-report-chinas-isr-fleet-swells-to-510-satellites-informatized-warfare-accelerates/>.
14. Andrew S. Erickson, “Latest ‘Space Threat Fact Sheet’ & Annex from Headquarters Space Force Intelligence,” Andrew S. Erickson, April 8, 2025, <https://www.andrewerickson.com/2025/04/latest-space-threat-fact-sheet-annex-from-headquarters-space-force-intelligence/>.
15. John S. Van Oudenaren, *Taking Flight: China’s Military Unmanned Aerial Vehicle (UAV) Industry* (Maxwell Air Force Base, AL: China Aerospace Studies Institute, Air University, May 2025), <https://www.airuniversity.af.edu/Portals/10/CASI/documents/Research/Infrastructure/2025-05-05%20UAV%20Industrial%20Base.pdf>.
16. Thomas R. McCabe, “Chinese Intelligence, Surveillance, and Reconnaissance Systems” (Maxwell Air Force Base, AL: Air University Press, March 8, 2021), <https://www.airuniversity.af.edu/JIPA/Display/Article/2528263/chinese-intelligence-surveillance-and-reconnaissance-systems/>.
17. Kyle Mizokami, “To Spy on Chinese Submarines, the U.S. Is Resurrecting a Cold War-Era Surveillance System,” *Popular Mechanics*, September 22, 2023, <https://www.popularmechanics.com/military/a45249176/integrated-undersea-surveillance-system-explained/>.
18. Bonny Lin, Brian Hart, Leon Li, and Truly Tinsley, “Tracking China’s Increased Military Activities in the Indo-Pacific in 2025,” *ChinaPower*, Center for Strategic and International Studies, February 5, 2026, <https://chinapower.csis.org/china-increased-military-activities-indo-pacific-2025/>.
19. BZK-005 Giant Eagle, *GlobalMilitary.net*, last updated August 5, 2026, <https://www.globalmilitary.net/aircraft/bzk-005/>; Philip Wood and Joshua Kite, “China’s UAS Revolution Advances from Prototype to Practical Application,” *OE Watch*, U.S. Army, 2025, <https://oe.t2com.army.mil/product/chinauasrevolution/>.

20. Olli Pekka Suorsa and Adrian Ang U-Jin, "How China Integrates Drones into PLA Operations Surrounding Taiwan," *The Diplomat*, May 24, 2023, <https://thediplomat.com/2023/05/how-china-integrates-drones-into-pla-operations-surrounding-taiwan/>.
21. Caroline Y. Tirk and Eli B. Tirk, PLA Information Support to the Battlefield: UAV Employment Concepts and Challenges (Maxwell Air Force Base, AL: China Aerospace Studies Institute, Air University, April 14, 2025), https://www.airuniversity.af.edu/Portals/10/CASI/documents/Research/Other-Topics/2025-04-14%20UAS%20Information%20Support%20to%20the%20Battlefield_Employment%20Concepts%20and%20Challenges.pdf.
22. Howard Wang and Brett Zhakeim, China's Lessons from the Russia-Ukraine War (Santa Monica, CA: RAND Corporation, May 22, 2025), https://www.rand.org/pubs/research_reports/RRA3141-4.html.
23. John Feng, "US Ally Intercepts Chinese Military Attack Drone," *Newsweek*, May 29, 2024, <https://www.newsweek.com/japan-air-force-intercepts-china-attack-drone-1905175>.
24. Akhil Kadidal, "China Fields EW-Equipped BZK-005 UAV Variants for Long-Range ELINT Operations," *Janes*, May 15, 2026, <https://www.janes.com/defence-intelligence-insights/defence-news/air/china-fields-ew-equipped-bzk-005-uav-variants-for-long-range-elint-operations>.
25. Lyle Goldstein and Nathan Waechter, "Chinese Strategists Evaluate the Use of 'Kamikaze' Drones in the Russia-Ukraine War," RAND Corporation, November 7, 2023, <https://www.rand.org/pubs/commentary/2023/11/chinese-strategists-evaluate-the-use-of-kamikaze-drones.html>.
26. Thomas Newdick, "China's Stealthy GJ-11 'Mysterious Dragon' Soars Out of the Shadows," *The War Zone*, November 11, 2025, <https://www.twz.com/air/chinas-gj-11-mysterious-dragon-stealth-drone-soars-out-of-the-shadows>.
27. OE Watch: Foreign News & Perspectives of the Operational Environment, March 17, 2026, https://oe.t2com.army.mil/site-content/OEE/OE%20Watch/2026/17MAR2026_T2COM_OEW2.pdf.
28. Caitlin Campbell, China Primer: The People's Liberation Army (PLA), Congressional Research Service In Focus IF11719 (Washington, DC: Congressional Research Service, 2026), <https://www.congress.gov/crs-product/IF11719>.
29. Jack Watling and Sidharth Kaushal, Requirements for the Command and Control of the UK's Ground-Based Air Defence (London: Royal United Services Institute, 2024), <https://static.rusi.org/GBAD-OP-April-2024-final-for-web.pdf>.
30. John Chen and Emilie B. Stewart, PLA Concepts of UAV Swarms and Manned/Unmanned Teaming (Maxwell Air Force Base, AL: China Aerospace Studies Institute, Air University, April 21, 2025), <https://www.airuniversity.af.edu/CASI/Display/Article/4147751/pla-concepts-of-uav-swarms-and-mannedunmanned-teaming/>.
31. Jean Roukoz, "DSA 2026 – Feilong 60A, China's Rocket-Launched 'Thinking Swarm' for Deep Precision Fires," *European Defence Review*, 2026, <https://www.edrmagazine.eu/dsa-2026-feilong-60a-chinas-rocket-launched-thinking-swarm-for-deep-precision-fires>.
32. Council on Foreign Relations, "Conflict in Yemen and the Red Sea," Global Conflict Tracker, accessed August 5, 2026, <https://www.cfr.org/global-conflict-tracker/conflict/war-yemen#Background-0>.
33. Kateryna Bondar, "How Ukraine's Operation 'Spider's Web' Redefines Asymmetric Warfare," Center for Strategic and International Studies, June 2, 2025, <https://www.csis.org/analysis/how-ukraines-spider-web-operation-redefines-asymmetric-warfare>.
34. John Chen and Edward Stewart, PLA Concepts of UAV Swarms and Manned/Unmanned Teaming.
35. Caroline Y. Tirk and Eli B. Tirk, PLA Information Support to the Battlefield.
36. U.S. Department of War, "Department of War Establishes Direct Reporting Portfolio Manager for Unmanned Systems to Ensure American Drone Dominance," press release, 2026, <https://www.war.gov/News/Releases/Release/Article/4531728/departement-of-war-establishes-direct-reporting-portfolio-manager-for-umanned-s/manned-s/>.
37. Institute for the Study of War, Lessons-Learned with Chinese Characteristics: Understanding the Limits of PLA Efforts to Adapt to Contemporary Warfare, April 6, 2026, <https://understandingwar.org/research/china-taiwan/lessons-learned-with-chinese-characteristics-understanding-the-limits-of-pla-efforts-to-adapt-to-contemporary-warfare/>.
38. Ian Sandall, "U.S. Army Conducts Live-Fire Test of High-Powered Microwave for Exercise Balikatan 2025," *U.S. Army Pacific*, May 2, 2025, <https://www.usarpac.army.mil/Our-Story/Our-News/Article-Display/Article/4173305/us-army-conducts-live-fire-test-of-high-powered-microwave-for-exercise-balikata/>.

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