



Russian reserve sergeants test for their final certification 5 August 2021 during the final stage of their training at the military training center at Tambov State University. (Photo by G. R. Derzhavin, Tambov State University)

Through the Looking Glass

Missing the Mark by Mirror-Imaging Competitors' Reserve Forces

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Our system was expressly designed to ensure the Army can't go to war without all three components, which requires the support and involvement of our country as a whole. Armies don't win wars; nations win wars.

—Gen. Mark A. Milley

Prior to Operation Desert Storm, the United States Joint Reserve Force (JRF) was envisioned as a strategic force. In support of Desert Storm, each of the military services' Reserve Components (RC) provided limited operational warfighting or logistical capability. After Desert Storm, each service resumed a strategic RC operational support posture—until 11 September 2001. September 11 fundamentally changed the JRF model. By necessity, each service reoriented its RC to augment the Active Component in Global War on Terrorism operations. This new structure provided functionally trained personnel in a rapidly evolving and unpredictable environment, and the JRF gained tactical and operational expertise through regular mobilizations in support of the wars in Iraq, Afghanistan, and elsewhere.

In 2018, the Department of Defense's (DOD) *National Defense Strategy* refocused on great power competition, prioritizing a “2+3” construct of China and Russia as principal strategic competitors, with Iran, North Korea, and violent extremist organizations as secondary threats. Secretary of Defense Lloyd Austin further focused the DOD with his 4 March 2021 message to “Prioritize China as the Pacing Challenge.”¹ This refocusing clearly has implications for the JRF. U.S. force structure planners are contemplating the man, train, and equip challenges associated with the potent capabilities posed by the restructuring of Russia and China's active-duty forces. In reviewing China as the pacing challenge in theory, and as we actively oppose Russian malign influence in the field, DOD analysis should also include a closer look at our RC model and our opponents' reserve force capabilities and goals.

In recent years, China and Russia have continued significant force structure reforms in their active forces, downsizing from large conscript armies with a defensive, regional, and strategic conflict focus to a more flexible, complex hybrid of active and reserve volunteer forces augmented by militias, foreign proxies, and contractors. This structure is far from a

mirror image of our own; accordingly, strategists must understand the fundamentally different conceptual approaches that China and Russia are taking—different from the United States, from their Cold War models, and from each other. While Russia employs a more colorful, free-wheeling confederation of rogues as their “secondary forces”—neo-Cossacks, Chechen militias, international motorcycle gangs—the emerging Chinese model is far more controlled at the state level.² The recent growth and employment of China's maritime militia to press the advantage in disputed territorial waters is relatively well known and studied.³ However, emerging research and reporting reveal that China is expanding its land-based militia operations in restive regions, emphasizing the role of technical militia units, and establishing a burgeoning private military security industry.⁴ In the aggregate, these developments portend an increasingly complex opposing force landscape, the details of which are ignored at the peril of U.S. national security.

The U.S. Reserve Model

Both in response to U.S. battlefield success and due to their own internal dynamics, China and Russia are reforming their militaries to mirror the U.S. military in many respects. Both nations have downsized their standing conscript armies to shift toward smaller, higher-tech, professional volunteer forces and secondary forces as an economy of force measure, to calibrate escalation and deterrence, and to confound American notions of opposing force doctrine, tactics, order of battle, and the applicability of the law of war.⁵ Within the DOD, U.S. military reserves are viewed as an essential strategic and operational reserve that enable sustained expeditionary operations. In the past twenty years, U.S. RC forces have been used extensively during the Global War on Terrorism. Currently, the DOD is attempting to pivot back to preparing for large-scale combat operations with China and Russia as potential opponents. With only 1.3 million active-duty service members, the United States would rely heavily on reserve forces in a large-scale combat operation against China or Russia. Given the massive reduction in their active-duty numbers since the end of the Cold War—Russia's active forces number nine hundred thousand and China's number two million—it is reasonable to assume Russia and China would also rely on their reserves.



Newly mobilized Russian reservists train on a rifle range 4 October 2022 in Rostov region, Russia. (Photo by Sergey Pivovarov, Reuters via Alamy Stock Photo)

China and Russia are peer military competitors with one another and the United States. Both nations possess large and capable conventional, active-duty military forces that have rough parity with one another. As a result, the capacity of those nations' reserve forces is particularly cogent. Any extended combat operation undertaken by these nations will implicate their reserve force structure, with success determined in no small part by their reserve components. However, Russia and China have taken a significantly different approach than the United States and from one another regarding secondary force development. China has a robust formal reserve but also relies on a militia system—interwoven with towns, villages, and corporations—that encompasses civil defense, cyberwarfare, and provocative actions on the high seas. In contrast, Russia has a small formal reserve but has relied on a complex collection of militias, mercenaries, contractors, proxies, and criminal gangs that de facto augment their uniformed reserve component.

For both China and Russia, to the extent that any literature discusses these forces, they are treated as footnotes or oddities as opposed to the integral part of Chinese and Russian military strategy that they have become. Furthermore, it is important to understand both on their unique terms. Existing U.S. military doctrine is insufficient in training leaders to fight the complexity of these evolving forms of force structure. In recent years, the U.S. Army updated its training doctrine to reflect the changing nature of war. Training Circular (TC) 7-100, *Hybrid Threat*, seeks to “describe hybrid threats and summarize the manner in which such future threats may operationally organize to fight U.S. forces.”⁶ While significant, the updated doctrine fails to fully capture the nuances of Russian and Chinese integration of “secondary forces” into their military operations. In TC-700, the hybrid threat is described as consisting of two or more of the following: military forces, nation-state paramilitary forces, insurgent groups, guerilla units, and criminal organizations. However, a companion manual—TC 7-100.4, *Hybrid*

Threat Force Structure Organization Guide—provides a different framework.⁷ In TC 7-100.4, “threat forces” are those directly controlled by the nation-state, including active-duty armed forces, reserves, paramilitaries, and police forces. “Irregular forces” consist of insurgents, guerillas, criminals, and “noncombatants.” In turn, “noncombatants includes armed and unarmed non-combatants,” including “private security contractor organizations.”⁸ Of note, contractors are not mentioned at all in TC 7-100, a notable omission given the Wagner Group’s extensive ground combat operations in Syria and Ukraine.⁹ Continuing on in TC 7-100.4, “noncombatants” includes criminals and militias, both of which were already included in the TC as part of the irregular or threat forces categories. To further confuse matters, an additional category—“other combatants”—that was not in the introductory paragraph of the “irregular forces” section later appears in the body of the larger chapter, with categories yet again overlapping with other previously enumerated categories.

Perhaps related to this type of confusion, some have begun to criticize the “hybrid warfare” term. Some suggest that “hybrid warfare” both erases

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the nuance of contemporary Russian operations and ignores the long history of asymmetric warfare by Russia.¹⁰ If the “hybrid threat” concept is internally inconsistent within U.S. Army doctrine, and if “hybrid warfare” is considered a weak term of art within academia to describe Russian doctrine, it likely fails to adequately prepare U.S. Army leaders to face complex Russian threats. Furthermore, it is undoubtedly inadequate as an umbrella concept with which to additionally describe the fundamentally different approach to secondary force structure utilized by another peer competitor—China.

Alternative constructs do exist to better comprehend complex opposing force structure. Vladimir Rauta categorizes irregular forces regarding their “relational morphology” and “relational embeddedness”

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Three alleged Russian mercenaries (*right*) are shown in an undated photo from a French military handout taken in northern Mali. Russia has engaged in clandestine military operations in at least half a dozen countries in Africa over the past decade using the Wagner Group, a mercenary force with the reputed aim of expanding Russian influence in strategic areas globally. (Photo by the French Army via Associated Press)

to the nation-state actor.¹¹ “Embeddedness” relates to the degree to which a secondary force is integrated into state-actor force structure, and “morphology” relates to the degree to which secondary forces replace state-actor force structure or provide a novel capability the state actor otherwise lacks. As a result, he designates secondary forces as “auxiliary,” “affiliate,” “surrogate,” or “proxy” forces. Presumably, the relationship to the state actor is less malleable and more relevant than the “type” of secondary force involved in each conflict. As a result, this construct is potentially more helpful for intelligence gathering and operational targeting. Rauta uses Russian-aligned forces in the Russo-Ukrainian war as an example. In Ukraine, he details how auxiliary, proxy, affiliated, and surrogate forces became involved in the conflict in sequence. While a strictly linear relationship is far too simplistic to describe the events of the Russo-Ukrainian war, the events offer a potential map for the “road to war” that a peer competitor might use as it employs “secondary forces” in sequence.

While there is a general understanding that opposing forces will integrate secondary forces into their overall campaign, U.S. Army doctrine treats

these organizations as separate and distinct entities at the operational level. The on-ground reality is more complex. The active integration of proxies into primary tactical-level formations is an overlooked aspect of contemporary Chinese and Russian military power. To that end, Phillip Karber’s work in Ukraine is invaluable and insightful. He found that in Ukraine, when Russian battalion and brigade formations deployed to Ukraine, the headquarters and leadership structure left their conscripts back in Russia, with Ukrainian separatist and Chechen militias filling out those formations’ ranks.¹² Karber’s observations reveal a significant way in which the employment of Russian forces significantly diverge from U.S. “hybrid threat” doctrine.

However, Karber’s recommendations ultimately lean toward the practical and tactical and less toward the abstract and strategic. Karber’s focus is one of immediacy—how do we win?—versus the larger question: how did we get here? To that end, Volker Franke’s “Decision-Making under Uncertainty: Using Case Studies for Teaching Strategy in Complex Environments” and Celestino Perez’s “Errors in Strategic Thinking: Anti-Politics and



Members of Sansha City's maritime militia receive weapons training in 2013 in the Hainan Provincial Military District, People's Republic of China. (Photo courtesy of China National Radio)

the Macro Bias” discuss the importance of case studies to inform military education and training.¹³ This stands in contrast to the intent behind the U.S. Army’s TC 7-100 manual—a generic, one-size-fits-all approach to opposing forces—and fictional opponents the U.S. Army uses in training exercises. An unsurprising conclusion can be drawn. Rather than using generic “hybrid threat” doctrine to fight “Donovian” or “Atropian” foes, U.S. Army leaders would be better prepared to fight China or Russia with detailed study of the Russian and Chinese secondary force threat.

It is imperative that the DOD gain a better understanding of these forces regarding Chinese and Russian means, ways, risk, and strategic ends. Within the means, ways, risk, and ends construct, we believe China and Russia use “secondary forces” for the following reasons:

- **Means.** For both China and Russia, employing secondary forces is an economy-of-force measure, employing lesser-trained expendable forces in lieu of their primary forces, saving money and materiel.
- **Ways.** For both China and Russia, the very employment of secondary forces is an asymmetric measure that confounds Western media and

governments. They also provide an escalatory ladder short of full warfare as their operations can be disavowed more easily than those of primary forces.

- **Risk.** For China and its opponents, risk is significantly lower. Chinese secondary forces—specifically the maritime militia—engage in circumspect operations on the periphery of Chinese territory. In contrast, Russia’s secondaries pose a risk both to the Russian state and their opponents. Russian secondaries operate across the globe, are more loosely linked to the Russian government, and even occasionally fight one another.
- **Ends.** While the “ways” still confound opponents, there is little reason to believe the Chinese Communist Party does not closely control the actions of their secondaries. The nature of Russian secondaries undermines the legitimacy of the Russian government, and they may act against Russian interests. Chinese secondaries accomplish the “positive” ends of Chinese foreign policy by pushing territorial claims or achieving international cyberwarfare effects. Russian secondaries accomplish the “negative” ends of Russian foreign



Students attending the 5th National Student Military Training Camp receive a briefing on aviation weapons and equipment at the Engineering University of the People's Liberation Army Air Force. The training camp was held from 31 July to 11 August 2018. (Photo by Lin Congyi, China Military Online)

policy primarily by foiling the foreign policy goals of other nations.

Chinese Secondary Forces

In August 2021, the U.S. Army published, for the first time, Army Technical Publication 7-100.3, *Chinese Tactics*, which effectively captures much of the nuance described below.¹⁴ Whether this information is reflected in military education programs, dynamic wargames, or training exercises waits to be seen. Despite the thoroughness of the publication, China has developed unique solutions in response to the regional and ethnic challenges it faces that evade easy characterization.

The emerging Chinese model for the employment of their reserves and other “secondary forces” is one of tight control at the national level. The People’s Republic of China employs multiple security services to enforce internal order as well as potentially project offensive power. The Ministry of Public Security is the primary

domestic civil police force. People’s Armed Police (including the Chinese Coast Guard) are the national paramilitary forces capable of augmenting the People’s Liberation Army, which has a sizeable, multidivision reserve component. Additionally, China has a massive land- and sea-based militia force and a burgeoning private security contractor industry, both of which are evolving and must be considered when evaluating the Chinese threat.¹⁵

As of 2011, China’s active-duty forces fielded thirty-five armor and infantry divisions and thirty-nine separate ground combat brigades. The reserves provide an additional seventeen infantry divisions and infantry brigades, as well as seventeen antiaircraft artillery divisions, eight antiaircraft artillery brigades, two artillery divisions, and eight artillery brigades. While only one-third of a reserve unit undergoes thirty days of training in a given year and only 1 percent of the defense budget goes to China’s reserves, in sheer numbers alone, this force structure significantly

extends China's military capabilities and competitive advantage.¹⁶ In recent years, China has adopted many U.S. military concepts such as embracing jointness, a geographic combatant command structure, and even a National Training Center-like institution.¹⁷ Much like the United States views the RC as an inviolable component of national defense, China is likely to invest more in its reserve components as it reduces its active forces.

China presses its advantage in disputed territorial waters with the maritime militia. Originally founded in the aftermath of the Chinese revolution, the Chinese People's Armed Forces Maritime Militia (PAFMM) was conceived and employed in the same vein as their land-based counterparts—a grassroots, people's force, with their strength in numbers and zeal in lieu of materiel, tactics, or training.¹⁸ Defensively focused, their initial purpose was defeating any invasion attempts launched from Taiwan by Nationalist Chinese forces.¹⁹ However, the maritime militia also has a history of offensive operations that have been occurring with increasing frequency. The first notable offensive use of the PAFMM came during the 1974 Battle of the Paracel Islands, as militia vessels transported hundreds of Chinese troops in an amphibious operation.²⁰ Since then, the militia has participated in the harassment, encroachment, or seizure of the Senkaku Islands (1978), Mischief Reef (1995), USNS *Impeccable* (2009), USNS *Howard O. Lorenzen* (2014), Ogasawara and Izu Islands (2014), Scarborough Reef (2012), Second Thomas Shoal (2014), Senkaku Islands again (2016), the Sandy Cay shoal (2017), Paracel Islands (2018), Malaysian exploration vessels (2020), and Whitsun Reef (2021).²¹

China has historically established militia units in villages and factories, and new efforts are underway to establish technically inclined militia units specializing in cyber operations, operating unmanned aerial vehicles, or missile maintenance, albeit with mixed results.²² Research and reporting reveals that China recently employed its land-based militia in an offensive role, sending five squads into an area disputed with India called the Eastern Ladakh region, potentially portending an emerging land-based analogue to the PAFMM's operations.²³

Active in Xinjiang since the mid-1950s, the Xinjiang Production and Construction Corps is a vast quasi-civilian, paramilitary force that number over 2.7 million

personnel that is equal parts militia, internment force, and multi-billion-dollar business entity that controls multiple cities across the restive region. While the Xinjiang Production and Construction Corps is essential to the repression of the Uighurs, it is possible that this sizeable force could be mobilized to support contingencies elsewhere.²⁴ Such policies are not ancient history; according to a Tibetan independence organization, currently “78% of all Tibetan students from ages six to 18” are schooled in residential boarding schools, described as “military-style boot camp[s].”²⁵ Since the 2020 border standoff with India, China has been actively recruiting among underemployed Tibetan youth to form border defense militias to oppose the Indian Army, reportedly due to the difficulty that Chinese recruits had fighting in extremely high altitude combat.²⁶ The first militia contingent of one hundred personnel—operating without uniforms or ranks—has allegedly been deployed to the Chumbi Valley region where China shares a border with India, Nepal, and Bhutan.²⁷

By analyzing Chinese government speeches and white papers, the year 2049 as the self-imposed, mythological deadline the Chinese government has given itself to reclaim Taiwan.²⁸ China's ability to develop and leverage a multitude of groups across a vast spectrum of readiness, multiple warfighting domains, and even with a targeted ethnic dynamic should give U.S. planners pause. While mass amphibious warfare is what the Chinese military has been overtly preparing for, it is highly likely that the first strike against Taiwan will not come from an easily observable conventional military force, but from a little-understood secondary force. In both a military and civilian context, China has proven adept and unembarrassed at integrating technology and techniques from foreign powers to gain any advantage it can. Given Russia's success in the hybrid warfare conquest of Ukraine, it is equally likely that a “beached” maritime militia vessel or the “emergency landing” of a Chinese civilian airliner filled with paramilitary police will establish the initial pretext and beachhead for a Chinese invasion force.

Russian Secondary Forces

Russia's reserve force management and structure reflects the Russian government's continuing struggle to balance strategic depth and operational readiness—all against the backdrop of unpredictable budgets,

shifting cultural views on national service, and a dated, Soviet-era conscription system. Despite years of attempted reforms, the Russian military has failed to achieve strategic depth or operational capability within the uniformed, traditional reserve component. Proxy and paramilitary organizations outside the purview of the Ministry of Defense have accordingly represented important manpower pools enabling some surge capability, though these also seem to have limited utility as strategic reserve forces in a great power competition context.

Soviet manpower models were grounded in a compulsory draft, which provided active-duty manpower and trained reservists comprising ex-conscripts who had completed their service.²⁹ Economic and cultural crises put enormous pressure on this model, culminating in major reforms (coinciding with the Russian Great Recession) in 2008–2009. Among other things, brutalization of junior draftees by senior conscripts led Russian youths to take extraordinary measures to avoid service. By 2001, 88 percent of eligible men had a deferment or exemption.³⁰

But attracting and retaining professional service members has proven difficult, expensive, and controversial within a military establishment designed around the conscript model.³¹ The difference in cost between a conscript and a professional volunteer is striking, with the latter costing thirty-one times as much as the former in monthly salary.³² These tensions have yielded a hybrid force mix of conscripts serving twelve-month terms and professional “contract” soldiers filling Russia’s authorized active-duty end strength of about one million service members, with about nine hundred thousand recently discharged veterans available for recall as reservists.³³

Simultaneous with this shift to a more professional active-duty force, Russia has repeatedly over the past decade announced its intention to create a Western-style reserve system capable of fielding operationally deployable units. Those efforts have failed. Despite plans to create a large-scale operational reserve modeled after the U.S. National Guard program, Russia’s operational reserve as of 2020 comprised about six thousand troops organized into two or three units of dubious quality.³⁴ Significantly, these units are designated as “territorial defense battalions” intended to free up active-duty units by assuming limited rear-area security missions.³⁵

On paper, Russia can mobilize and train reservists until they reach the age of fifty for one two-month period of active duty every three years, not to exceed twelve months over their total period of reserve service.³⁶ Official communications describing large-scale exercises emphasize reservist participation, highlighting reservists supporting both combat support and combat-arms units.³⁷ But many reservists simply ignore active-duty orders due to weak job protections for those called to active duty and minimal consequences for skipping exercises.³⁸ Others have noted that official descriptions of reserve unit training events do not mesh with known manning and retention data, likely overstating the number of reservists available to participate in such exercises.³⁹ Even Russian sources have conceded that reserve centers intended to provide regular refresher training have not yet been stood up.⁴⁰ Significantly, Russian sources tend to emphasize reserve support to Army units; the Russian navy was apparently only beginning to contemplate forming an operational reserve in the spring of 2018.⁴¹ With regional press reporting as recently as fall 2021 that Russia was still “forming” combat reserve forces, it appears Russia has made no meaningful progress toward standing up a U.S.-style reserve system.⁴²

In lieu of an effective formal reserve, Russia has cultivated a range of proxy and paramilitary forces: Chechen militias, the Night Wolves motorcycle gang, and private military companies such as the Wagner Group along with a hodgepodge of Soviet-style and even pre-Soviet paramilitary organizations have developed, from the “Young Pioneers”-style “Yunarmii” youth group to semiofficial “Cossack” formations.⁴³ These groups do not appear to offer reliable replacements for military units or internal security forces; their prevalence may reflect limited government security resources more than a conscious effort to foster a reserve capability.⁴⁴

In 2013, Russia created “reserve component commands,” mandated to develop and deploy military units in times of conflict.⁴⁵ In 2014, one of those units—the 12th Reserve Component Command of Russia’s Southern Military District (later reorganized as a “territorial troops center”)—established, organized, recruited, manned, and equipped Ukrainian rebel armed forces.⁴⁶ The 2014 Military Doctrine of the Russian Federation called for the “formation of territorial troops to provide protection and defense

of military, state and special facilities, critical infrastructure, including transport, communications and energy, as well as potentially hazardous sites.”⁴⁷ According to recent Ukrainian analysis and reporting, Russia began an ambitious campaign to recruit reservists in August, in which reportedly “only a month is given for the selection of personnel for two armies.”⁴⁸ While much attention has been paid to active-duty Russian troop deployments and maneuvers along the Ukrainian border, the active Russian military cannot seize and hold a significant portion of Ukraine by itself. In retrospect, the Russian government’s inability to rapidly man, train, and equip a sizeable reserve force in the Southern Military District can be viewed as an unacknowledged predictor of the failure of Russia’s second invasion of Ukraine.

Conclusion

To an extent, China and Russia view U.S. reserve forces as the model to emulate. Their nations’ respective military RC forces lack the robust capacity the U.S. RC offers. However, both nations will likely continue to support a complicated array of proxies, militias, gangs, and private security forces regardless of further indigenous development of a formal reserve component. Russian and Chinese secondary forces pose a complex challenge that presents an asymmetric threat, confounds Western understanding of the law of war, and defies easy integration into strategic, operational, or tactical doctrine. Chinese and Russian secondaries have fought and won Russian and Chinese conflicts,

are engaged in escalatory actions across the globe, and are already partly pre-positioned in key areas that China and Russia want to influence. The new nature of Chinese and Russian warfare poses a broader intellectual challenge beyond a narrow operational one.

The existence of these secondary forces raises a host of questions, some of which have been addressed above but all of which require further study and analysis: Why do China and Russia involve such disparate groups? What are their contrasting goals for these groups? How do they pose a particular problem for Western democracies that adhere to the international rule of law? How can the United States design an operational approach to defeat these forces? What does the employment of these secondary forces say about the nature of Chinese and Russian power, and how they seek to align means, ways, and risk to meet their strategic ends? How might China and Russia employ these forces in future conflicts? How can the United States defeat these forces? What Russian or Chinese operational and organizational models could the United States co-opt?

Instead of focusing solely on active Chinese and Russian forces, the United States must adjust to the pacing threats during great power competition in an environment where China and Russia may have already staged proxies, contractors, or criminal gangs; deploy reservists; or raise militias prepared to act across the entire spectrum of armed conflict. Without taking these steps, we may find ourselves unprepared to conduct phase zero—and beyond—operations in great power competition. ■

Notes

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"We cannot enter into alliance with neighboring princes until we are acquainted with their designs. We are not fit to lead an army on the march unless we are familiar with the face of the country—its mountains and forests, its pitfalls and precipices, its marshes and swamps. We shall be unable to turn natural advantages to account unless we make use of local guides."

—Sun Tzu, Book 11, *The Nine Situations*
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