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China Maritime Report No. 43

Shadow Force

A Look Inside the PLA Navy Reserve

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Main Findings

- The PLA Navy Reserve is an important and understudied element of PRC maritime power that could augment the active-duty force and improve its ability to undertake global operations and wage a protracted war.
- The PLAN Reserve appears to be transitioning from a substandard backup force to an increasingly well-trained complement to the active-duty force.
- In the past, the PLAN Reserve suffered from low morale and lackluster participation. Training scandals occurred in which navy reservists did not muster up when recalled for training. It is unclear to what extent these problems persist today.
- The overhaul of the PLAN's reserve components, specifically the integration of the PLAN Reserve into a centralized command structure and the introduction of new legislative and policy reforms, constitutes a serious effort to enhance operational effectiveness, increase mobilization speeds, and improve readiness.
- The PLAN Reserve is remarkably opaque. While little has been publicly revealed about this shadowy force, future research may offer opportunities to develop early-warning indicators and help reveal plans, intentions, and capabilities.

Introduction

The People's Liberation Army (PLA) maritime "reserve force" (后备力量) is comprised of the PLA Navy Reserve (预备役) and the Maritime Militia. The reserve force functions as a strategic asset enabling the People's Republic of China (PRC) to expand its naval reach, enhance operational flexibility, and sustain long-term maritime activities. While relatively unknown, the PLAN Reserve represents a critical yet understudied component of the PRC's growing maritime reserve force. The PLAN Reserve exists to bolster the PLAN's capabilities and support its strategic objectives.¹

The rapid modernization of the PLAN makes it important to study its Reserve. The number of PLAN reservists is unknown but appears to be significant and growing. Understanding the PLAN Reserve is integral to understanding the evolution of the PRC as a naval power and gauging its broader maritime ambitions. As the PRC seeks to project power globally, the PLAN Reserve provides a reservoir of trained personnel and manifold resources that can be mobilized to support a range of operations from humanitarian missions to protracted naval combat. The PLAN Reserve not only augments active-duty PLAN forces but also facilitates a more adaptable and resilient naval strategy by enhancing the PLAN's operational readiness.

¹ The *PLA Dictionary of Military Terms* defines "reserve forces" (后备力量) as "armed organizations and personnel other than the national standing army that can participate in war and directly support combat through mobilization. Mainly including the Reserve, militia, and other reserve personnel, as well as trained university and middle school students." It defines the "Reserve" (预备役部队) as "a force in the armed forces composed mainly of reserve personnel with active soldiers as the backbone. They can be quickly converted to active forces through mobilization." 中国人民解放军军语 [*PLA Dictionary of Military Terms*] (Beijing: Academy of Military Science Press, 2011), pp. 31, 333. See also 海军副参谋长兼海军国防动员委员会秘书尹悉少将 [Rear Admiral Yin Xi, Deputy Chief of Staff of the Navy and Secretary of the Navy National Defense Mobilization Committee], 贯彻落实科学发展观加强海军舰艇预备役部队建设 ["Implementing the Scientific Outlook on Development and Strengthening the Construction of the Navy's Vessel Reserve Forces"], 国防 [*National Defense*], no. 2 (2007), pp. 4-7.

Significant resources have been dedicated to the examination of PLA reserve forces such as the Maritime Militia.² There has yet to be a comprehensive report on the PLAN Reserve in English, and Chinese scholarship on the topic remains limited. This report attempts to fill that analytic gap by describing the PLAN Reserve and why it matters. This report will first explore the people, organization, training, and mission set of the PLAN Reserve. Then, it will examine the strategic significance of the PLAN Reserve and what ongoing reforms may reveal about the future trajectory of the PLAN Reserve and the PRC's naval power. The report will conclude with a brief analysis of how the PRC may be leveraging the PLAN Reserve to position itself in an increasingly competitive and contested maritime environment.

Who is a PLAN Reservist?

A PLAN reservist is a part-time member of the PLAN, tasked with supporting the active-duty force when needed.³ They provide additional manpower and expertise that can be mobilized to augment or replace active-duty forces, thereby enhancing the PRC's maritime operational capacity and flexibility. The integration of reservists into the PLAN may reflect a broader trend in modern military organizations, where reserve components are increasingly crucial for maintaining operational readiness and addressing a range of current and future mission requirements.

² The PLA Maritime Militia has been covered extensively by CMSI. For more information on the Maritime Militia, please see Kennedy, Conor M. and Erickson, Andrew S., "China Maritime Report No. 1: China's Third Sea Force, The People's Armed Forces Maritime Militia: Tethered to the PLA", *CMSI China Maritime Reports*, 1, 2017, <https://digital-commons.usnwc.edu/cmsi-maritime-reports/1/>; McDevitt, Michael A., *China as a Twenty First Century Naval Power: Theory, Practice, and Implications*, Naval Institute Press, 2020.; Andrew S. Erickson and Conor M. Kennedy, "Directing China's 'Little Blue Men': Uncovering the Maritime Militia Command Structure", *Asia Maritime Transparency Initiative*, Center for Strategic and International Studies, 9 September 2015, <https://amti.csis.org/directing-chinas-little-blue-men-uncovering-the-maritime-militia-command-structure/>; Andrew S. Erickson and Conor M. Kennedy, "Irregular Forces at Sea: 'Not Merely Fishermen—Shedding Light on China's Maritime Militia'," *Center for International Maritime Security*, 2 November 2015, <https://cimsec.org/new-cimsec-series-on-irregular-forces-at-sea-not-merely-fishermen-shedding-light-on-chinas-maritime-militia/>; Erickson, Andrew S. and Kennedy, Conor M., "China's Maritime Militia: What it is and How to Deal with It", *Foreign Affairs*, 23 June 2016, <https://www.foreignaffairs.com/articles/china/2016-06-23/chinas-maritime-militia>; Andrew S. Erickson, ed., *Maritime Gray Zone Operations: Challenges and Countermeasures in the Indo-Pacific*, New York, NY: Routledge Cass Series: Naval Policy & History, 2022, <https://www.routledge.com/Maritime-Gray-Zone-Operations-Challenges-and-Countermeasures-in-the-Indo-Pacific/Erickson/p/book/9781032316598?srsltid=AfmBOoqCihxT5d07RuLqe39MBWSLYf1DvdGOwqtzLXLtskBYFH0uK7sv>; Andrew S. Erickson and Ryan D. Martinson, eds., *China's Maritime Gray Zone Operations*, Annapolis, MD: Naval Institute Press, 2019, <https://www.usni.org/press/books/chinas-maritime-gray-zone-operations>; Conor M. Kennedy, "The Struggle for Blue Territory: Chinese Maritime Militia Grey-Zone Operations," *The RUSI Journal*, 163.5, October/November 2018, 8–19, <https://www.tandfonline.com/doi/full/10.1080/03071847.2018.1552450?journalCode=rusi20>; Andrew S. Erickson and Conor M. Kennedy, "China's Maritime Militia," *CNA Corporation*, 7 March 2016, https://www.cna.org/archive/CNA_Files/pdf/chinas-maritime-militia.pdf; and Andrew S. Erickson and Conor M. Kennedy, "Meet the Chinese Maritime Militia Waging a 'People's War at Sea'", China Real Time Report, *Wall Street Journal*, 31 March 2015, <https://www.wsj.com/articles/BL-CJB-26372>.

³ The *PLA Dictionary of Military Terms* defines reservists (预备役人员) as "personnel who perform military service outside of active service in accordance with the law. This includes those who have been registered and pre-assigned to active forces, assigned to the Reserve, assigned to militia organizations for reserve service, or those who perform reserve service in other forms. They are divided into reserve officers and reserve soldiers." *PLA Dictionary of Military Terms*, p. 35. The 2023 Reservist Law of the PRC defines reservists (预备役人员) as "citizens who fulfill their military service obligations in accordance with the law and are pre-assigned to the active forces of the Chinese People's Liberation Army or are assigned to the reserve forces of the Chinese People's Liberation Army to serve in the reserve." Notably, the law excludes the militia from the definition of reservists. See 中华人民共和国预备役人员法 ["Reservist Law of the PRC"], 中国人大 [National People's Congress], Revised 2023, <http://www.mod.gov.cn/gfbw/fgwxf/fifg/4929602.html>.

PLAN reservists are characterized by their distinct role, appearance, and purpose, differentiating them from active-duty PLAN personnel. As depicted in Figure 1, PLAN reservists wear the PLAN uniform while on duty. Previously, PLAN reservists' uniforms were differentiated by their silver ranks (active-duty ranks were gold).⁴ More recently, PLAN reservist personnel have been observed wearing “Y” insignia, which stands for “Yu Bei Yi” (Reservist) and distinguishes reservists from their active-duty counterparts.⁵



Figure 1: PLAN reservists aboard a vessel. Reservists wear the PLAN uniform with a “Y” insignia indicating they are a member of the PLAN Reserve.⁶

The PLAN Reserve is composed of officers and enlisted sailors.⁷ Historically, reserve personnel have been drawn mainly from prior service, active-duty veterans; their experience operating heavy weaponry and specialized military equipment makes them uniquely positioned to support, augment, and even replace active-duty PLAN forces.⁸ Both active-duty officers and enlisted sailors have the opportunity to transition to the reserve upon completing their active-duty service commitment.⁹

However, while most PLAN reservists are still veterans, efforts are being made to widen the net of eligibility to include non-prior service civilians with special technical or professional skills. Exactly which special technical or professional skills the PLAN Reserve may be targeting for recruitment has not been publicized, although maritime service and skills that align with current unit mission sets will

⁴ 海军男预备役春秋常服 [“Navy Men's Reserve Spring and Autumn Service Uniform”], 新退图片 [Sina Photos], 6 September 2011, http://slide.mil.news.sina.com.cn/slide_8_20083_10648.html?img=68725#p=3.

⁵ 走进中国人民解放军海军预备役部队 [“About the Chinese People's Liberation Army Navy Reserve”], 中国军网综合 [China Military Network], 12 March 2015, http://www.81.cn/jmb1/2015-03/12/content_6390764.htm; and 贺跃民 [He Yuemin] and 王凌硕 [Wang Lingshuo], 海军后备力量人才队伍蓬勃发展 [“The Ranks of the Navy's Reserve Forces are Thriving”], 解放军报 [PLA Daily], 27 December 2012, p. 6.

⁶ “About the Chinese People's Liberation Army Navy Reserve.”

⁷ “Reservist Law of the PRC”.

⁸ “Reservist Law of the PRC”; He and Wang, “The Ranks of the Navy's Reserve Forces Are Thriving,” p. 6; 中华人民共和国兵役法 [“Military Service Law of the PRC”], 中国人大 [National People's Congress], Revised 2021, https://www.gov.cn/xinwen/2021-08/21/content_5632513.htm; 黄川 [Huang Chuan], 加强预备役部队军事训练刍议 [“A Brief Discussion on Strengthening the Military Training of Reserve Forces”], 国防 [National Defense], no. 9 (2017), pp. 69-71.

⁹ Ibid.

likely be highly valued. The widening of recruitment eligibility through law reflects an attempt by the PLAN to capitalize on the benefits of military-civilian fusion, providing the PLAN Reserve the ability to incorporate civilian professionals with technical skills that have utility for military purposes.¹⁰ New recruiting efforts along these lines have the potential to yield advanced professional and technical expertise for the fleet while still maintaining institutional knowledge and skills within the Reserve through the traditional recruitment of veterans. Yet, it is uncertain at this time how and with what methods the PLA intends to recruit civilians.

PLAN reservists can maintain civilian employment in conjunction with their reserve service and are excused from their civilian jobs when called up for military duty.¹¹ The employers of reservists are legally prohibited from terminating, demoting, or otherwise penalizing reservists for taking time off to fulfill their military duties. When reservists participate in military activities, a system of allowances and subsidies ensures their financial stability and proper compensation. Reservists employed by the state continue to receive their full wages and bonuses while on military duty, without any detriment to their benefits. Reservists employed in the private sector are entitled to subsidies for lost working time, with specific remuneration determined by local and regional governments. During times of service, reservists receive food allowances and reimbursement for travel expenses. Adjustments to compensation based on rank, job classification, position, or duty station can be granted upon successful attainment of standards set by relevant military and financial departments. Overall, the system offers numerous incentives and additional compensation, with regulations ensuring that reservists maintain their original wages and benefits while engaged in military service. The Central Military Commission (CMC) is responsible for setting and adjusting the standards for these allowances and subsidies, and the state government is responsible for providing funding.¹²

PLAN Reserve Organization and Development

The organization of the PLAN Reserve is evolving significantly to meet the PRC's strategic needs and global maritime ambitions. Initially established as a backup to the active-duty naval forces, the PLAN Reserve has undergone a series of structural and operational transformations to enhance its operational effectiveness and integrate it within the broader naval force's framework.¹³ The PLAN Reserve is organized into various units that are meant to mirror the structure of the fleet.¹⁴ This

¹⁰ Huang, "A Brief Discussion on Strengthening the Military Training of Reserve Forces," p. 69-71; "Reservist Law of the PRC"; and Rear Admiral Yin, "Implementing the Scientific Outlook on Development and Strengthening the Construction of the Navy's Vessel Reserve Forces," pp. 4-7.

¹¹ "Military Service Law of the PRC"; "Reservist Law of the PRC"; and He and Wang, "The Ranks of the Navy's Reserve Forces Are Thriving," p. 6.

¹² "Reservist Law of the PRC."

¹³ Rear Admiral Yin, "Implementing the Scientific Outlook on Development and Strengthening the Construction of the Navy's Vessel Reserve Forces," pp. 4-7.

¹⁴ 连云港市人民政府关于做好 2018 年度民兵整组顿工作的通知 ["Notice of the Lianyung District People's Government on Doing a Good Job in the Reorganization of the Militia in 2018"], 连云港市人民政府 [Lianyung District People's Government], 8 March 2018, http://www.lianyun.gov.cn/lyq/zfwjj/content/lyzfb_56087.html; and 张容璿 [Zhang Rongrong], 郑延坤 [Zheng Yankun], and 樊罡 [Fan Gang], 载誉凯旋！欢迎受阅官兵回家 ["Return with honor! Welcome the Officers and Soldiers on Parade Home"], 东海舰队发布 [East China Sea Fleet Release], 微信 [WeChat], 7 October 2019, https://mp.weixin.qq.com/s/w9CI8_S9XdttcJm3ipSX6A.

organizational approach is critical to ensure that reserve units can be rapidly mobilized and integrated into existing naval operations, providing PLAN with critical support and operational flexibility.¹⁵

The size of the PLAN Reserve and number of its units remain undisclosed. However, initial research has found that at least five distinct units have recently existed within the PLAN Reserve, and reservists might also function as individual augmentees.¹⁶ Identified PLAN Reserve units have included: three mobile radar and observation battalions located in Qingdao, Xiamen, and Shenzhen, respectively; one reconnaissance ship squadron based in Yantai; and one minesweeper squadron stationed in Ningbo.¹⁷ Sources suggest that additional reservists serve in the PLAN and perform tasking different to that of the five identified units. For example, a 2024 article in PLA Daily highlighted the work and promotion of eight PLAN Reserve non-commissioned officers (NCO) under the Eastern Theater Command (ETC). These NCOs are described as technicians specializing in ordinance support, electronic warfare, aircraft maintenance/air support, and even submarine technical support.¹⁸ The five PLAN Reserve units identified are not known to have most of these technical specialties, so it is possible that other units may exist. Another alternative explanation could be that these PLAN reservist NCOs are functioning as individual augmentees reporting to active-duty units. Unfortunately, there was not enough information available at the time of research to discern how these reservists report (individuals vs. part of a unit), nor identify other PLAN Reserve units they might serve in.

The primary mission set of each PLAN reservist varies depending on the location, situation, and capabilities associated with their unit. The five PLAN Reserve units identified have specific operational roles and other reservists have reportedly served in one or more roles, including: maritime reconnaissance, minesweeping, service support for other vessels, electronic warfare, humanitarian assistance and disaster relief (HADR), search and rescue, and local level security.¹⁹ According to reports, a reservist's mission set is highly adaptable, varying based on the operational context and their unit's specific capabilities. PLAN Reserve units and individual reservists can be tasked independently, or they can augment active-duty PLAN forces, participating in exercises and operations to enhance their integration and responsiveness.²⁰

¹⁵ Rear Admiral Yin, "Implementing the Scientific Outlook on Development and Strengthening the Construction of the Navy's Vessel Reserve Forces," pp. 4-7.

¹⁶ There appears to be a recent multi-year gap in these original five PLAN Reserve units being mentioned by name in reporting. Gaps in reporting are not an unusual phenomenon within this topic; however, recent research suggests that reserve units of the PLAA have begun to disband. This move is in line with statements from the Ministry of Defense which put forth the goal of shrinking the PLAA Reserve. The lack of recent reporting on specific PLAN Reserve units by name could indicate that some of these units have disbanded as well. Research from 2022 to 2024 continues to refer to PLAN reservists and unidentified PLAN Reserve units which suggests that PLAN Reserve units likely still exist, albeit the status of the five identified units is uncertain. For more information on the PLA Reserve and the disappearance of certain PLAA Reserve units, see Joshua Arostegui, "The PLA's Disappearing Reserve Divisions," *China Landpower Studies Center (CLSC) at the U.S. Army War College*, forthcoming.

¹⁷ 海军预备役部队概况 ["Naval Reserve Overview"], 中国军网综合 [*China Military Online*], 12 March 2015, http://www.81.cn/jmbl/2015-03/12/content_63907642.htm.

¹⁸ 汪新颖 [Wang Xinying], 陈泽生 [Chen Zesheng], 许宸 [Xu Chen], and 向黎鸣 [Xiang Liming], 解码后备高级军士进阶之路 ["Decoding the Advancement Path of Senior Reserve Officers"], 解放军报 [*PLA Daily*], 24 June 2024, p. 5.

¹⁹ "About the People's Liberation Army Navy Reserve" and Rear Admiral Yin, "Implementing the Scientific Outlook on Development and Strengthening the Construction of the Navy's Vessel Reserve Forces," pp. 4-7.

²⁰ Ibid. PLAN reservists are reported to have participated in more than ten PLAN exercises between 2005–2015.



Figure 2: PLAN vessels with reservists aboard.²¹

The first maritime PLAN Reserve units were established in 2005, and since that time the PLAN Reserve has been continuously shaped and molded to improve its readiness and mobilization capabilities.²² PLAN reserve units operate on a squadron- and battalion-level basis, with Mobile Radar and Observation Battalions likely falling under the surveillance and communications brigades of the theater command navies.²³ For instance, the Xiamen-based battalion may be subordinate to the 1st Surveillance and Communications Brigade of the Eastern Theater Command Navy.²⁴ In peacetime, reserve units fall under their respective theater commands, while during wartime operations, these reserve units will revert to the command of designated active-duty units.²⁵ This may indicate that reserve units, when not activated, remain as distinct units, but when activated, may be essentially absorbed into their active-duty counterparts. While this wartime transition has not been observed in actual practice, an illustrative example of this change in command structure can be partially observed during peace time, as PLAN reserve units' active training requirements are managed and implemented by their active-duty counterparts and not by theater commands or the CMC.²⁶

The PLAN Reserve is only useful to the PLAN to the extent that units and individuals can be mobilized to support the PRC's strategic needs. In the past, reserve units, despite being part of the PLAN, required management coordination between military and local authorities. Special regulations concerning reserve force construction required a "unified military-civilian command mechanism" (军

²¹ "About the Chinese People's Liberation Army Navy Reserve."

²² 董华森 [Dong Huasen], 邓伟余 [Deng Weiyu], and 赵继承 [Zhao Jicheng], 中国海军预备役部队首次成建制进行海上训练 ["China's Naval Reserve Forces Conduct Maritime Training as a Whole for the First Time"], 中新网 [China News Online], 10 July 2006, <https://www.chinanews.com.cn/others/news/2006/07-10/755646.shtml>; and Rear Admiral Yin, "Implementing the Scientific Outlook on Development and Strengthening the Construction of the Navy's Vessel Reserve Forces," pp. 4-7.

²³ "Notice of the Lianyung District People's Government on Doing a Good Job in the Reorganization of the Militia in 2018" and Zhang, Zheng, and Fan, "Return with honor! Welcome the Officers and Soldiers on Parade Home."

²⁴ Ibid.

²⁵ 有关预备役, 你了解多少? ["How Much Do You Know about the Reserve Force?"], 解放军报 [PLA Daily], 2 January 2023, p. 4; 肖天亮 [Xiao Tianliang], ed., 战略学 [Science of Military Strategy] (Beijing: National Defense University Press, 2020), p. 442.

²⁶ Huang, "A Brief Discussion on Strengthening the Military Training of Reserve Forces," pp. 69-71.

地合一的指挥机制), which complicated the mobilization and management of reservists.²⁷ The PLA reforms of 2015 and 2016 saw the task of defense mobilization assigned to the National Defense Mobilization Department, which reports directly to the CMC. According to the CMC's website, the National Defense Mobilization Department "is responsible for organizing and instructing the national defense mobilization and the construction of reserve forces."²⁸

Organizational Restructuring

Recently, the PLA has undertaken a sweeping organizational restructuring program affecting all of its reserve components. This development could improve alignment with active-duty counterparts and streamline organizational reporting. The integration of the PLA Reserve into the PLA's broader command structure has been facilitated by legislative and organizational reforms, particularly the "Chinese Communist Party (CCP) Central Committee's Decision on Adjusting the Leadership System of the Reserve Forces" ("中共中央关于调整预备役部队领导体制的决定"), which took effect on 1 July 2020 and was later enshrined in law by the 2023 Reservist Law.²⁹ The "Decision" integrated the PLA Reserve into the active-duty military's leadership and command system, shifting reserve units from a dual military-civilian leadership to centralized and unified control under the CMC. Bringing the PLA Reserve under CMC leadership did not change the nature of the Reserve, which remains a constituent element that supplements the active-duty force. The restructuring under the CMC was designed to optimize the organization and reporting of the PLA Reserve to meet future combat needs and improve synergy with active-duty components.³⁰

The reforms of the PLAN Reserve are part of a broader strategy to enhance its effectiveness and integration with active-duty forces. At present, there are three major reforms affecting the evolution of the PLAN Reserve. The first is an effort to decrease PLA Army reservists and increase the size of the PLAN, PLA Air Force (PLAAF), and PLA Rocket Force (PLARF) reserves. This reflects a rebalancing of the force structure for modern warfare.³¹ The second reform is to optimize the PLA Reserve's organizational structure for future combat needs and better integration with the active-duty component.³² The third reform is the implementation of the 2023 Reservist Law which marks a significant milestone in this transformation, insofar as the Law provides comprehensive regulations on various aspects of reserve personnel management, including recruitment, training, and organization. Notably, the 2023 Reservist Law embraces the inclusion of non-prior service

²⁷ Dong, Deng, and Zhao, "China's naval reserve forces conduct maritime training as a whole for the first time."

²⁸ "Central Military Commission Departments", *Ministry of National Defense*, <http://eng.mod.gov.cn/xb/CMCDEPARTMENTS/index.html>.

²⁹ 中共中央印发关于调整预备役部队领导体制的决定 ["The CPC Central Committee Issued a Decision on Adjusting the Leadership System of the Reserve Forces"], 新华网 [*Xinhua Online*], 28 June 2020, http://www.xinhuanet.com/politics/zywj/2020-06/28/c_1126169270.htm; 中国人民解放军军事科学院 [Chinese People's Liberation Army Academy of Military Sciences], 强军十年大事记 ["Major Events in Strengthening the Military over the Past Decade"], 解放军报 [*PLA Daily*], 10 October 2022, p. 3; 国防部新闻发言人吴谦就预备役部队领导体制调整答记者问 ["Ministry of National Defense Spokesperson Wu Qian Answered Reporters' Questions on the Adjustment of the Reserve Force's Leadership System"], 和国国防部 [*Ministry of National Defense*], 1 July 2020, <http://www.mod.gov.cn/gfbw/xwfyf/fyrth/4867464.html>.

³⁰ Ibid.

³¹ Xiao, *Science of Military Strategy*, p. 446; "Ministry of National Defense Spokesperson Wu Qian Answered Reporters' Questions on the Adjustment of the Reserve Force's Leadership System."

³² "Ministry of National Defense Spokesperson Wu Qian Answered Reporters' Questions on the Adjustment of the Reserve Force's Leadership System."

individuals with specialized skills, reflecting a strategic shift to leverage civilian expertise and enhance the reserve's capabilities.³³

The push for reform has impacted the PLAN and trickled all the way down to the unit level. In 2022, following the 20th Party Congress, an unspecified Southern Theatre Command (STC) PLAN Reserve unit implemented a special research effort focused on reservist tasking, unit organization, military-civilian frameworks, and unit training and education. The effort was intended to be an experiment in the organization, segmented training, and duties of reservists. This move comes as part of broader move transitioning the PLA Reserve from a substandard backup force to a regularly activated and highly-trained complement to the active-duty force.

In this specific navy unit, difficulties with mobilization, decentralized management, and unit organization were identified. The special research effort engaged veterans for their perspectives and constructed solutions to each of the identified issues. According to this STC PLAN Reserve unit, it would assess needs and resources and address mobilization issues through increased collaboration with defense mobilization systems and the local government. The unit would begin regularly soliciting unit-level feedback to improve personnel education and training in light of decentralized management and education. Lastly, the special research effort concluded that a commitment to work closer with the PLAN regarding long-term needs was necessary to address issues with organization.³⁴

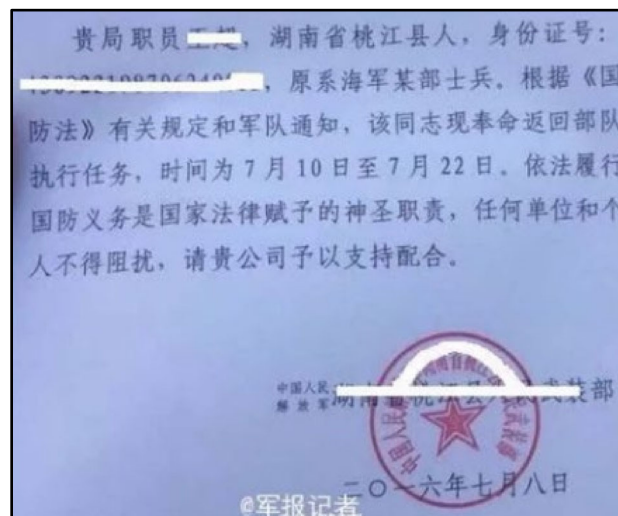


Figure 3: A notice to an employer regarding orders for a 13-day recall from 10–22 July 2016. The notice includes a seal from a local level People's Armed Forces Department.³⁵

³³ Ibid., and “Reservist Law of the PRC.”

³⁴ 洪雪 [Hong Xue], 探索转型发展方法路子！某预备役部队这样做 [“Explore the Path of Transformation and Development! A Certain Reserve Force Does This”], 南海舰队 [South China Sea Fleet], 微信 [WeChat], 1 December 2022, <https://mp.weixin.qq.com/s/aZGEnf5wH0U2h9wJmphQ5g>.

³⁵ The notification reads: “Your employee, Wang Chao, from Taojiang County, Hunan Province, ID number: [redacted], was a former non-commissioned officer in the Navy. According to the relevant provisions of the National Defense Law and notification from the military, this comrade is now ordered to return to the unit to perform his duties from July 10 to July 22. Fulfilling national defense obligations in accordance with the law is a sacred duty bestowed by national laws. No unit or individual may obstruct this obligation. We ask for your company’s support and cooperation in this matter. People’s Armed Forces Department of Taojiang County, Hunan Province, July 8, 2016”; 复员老兵的心声：若有战，召必回(图), [“Voice of Demobilized Veterans: If There is a war, I Will Return if Called (Photo)”], 人民网 [People’s Daily Online], 12 July 2017, <http://military.people.com.cn/n1/2016/0712/c1011-28547713.html>.

The modernization of the PLA Reserve is closely linked to the PRC's evolving military strategy and national defense objectives.³⁶ The integration of the reserve into a centralized command structure, coupled with legislative and policy reforms, aligns the PLA Reserve more closely with leadership expectations of modern warfare and future operational needs of the active-duty component.³⁷ The focus on modernization, combined with a strategic emphasis on joint operations and civilian integration, positions the PLAN Reserve to serve Beijing's national defense strategy, while potentially making it more capable of bolstering maritime deterrence and combat capabilities, addressing complex security challenges, and enhancing overall national defense readiness.

PLAN Reserve Mission Set and Training

Reservists within the PLAN are tasked with a variety of mission sets that reflect the broadening scope of the PRC's maritime interests. These tasks range from conducting reconnaissance and minesweeping operations to providing logistical support for active-duty ships and performing HADR missions. Additionally, reservists contribute to electronic countermeasure operations and the resilience of radar and surveillance systems.³⁸ In response to expanding maritime ambitions, PRC leaders have recognized the need for a strong navy which they believe can be achieved, in part, by building a maritime capable PLAN Reserve. The key to realizing this aim is realistic and comprehensive training with the goal of the reserve component performing at or close to the same level as the active-duty component.³⁹

PLAN reservists undergo periodic training to maintain their readiness and proficiency.⁴⁰ Reservist training is coordinated by active-duty units, and sources indicate yearly training requirements are more than a week long—although training times can vary widely based on unit needs and individual skills.⁴¹ This training can include participation in naval exercises, disaster relief operations, and real-life naval operations at sea. Emphasis is placed on training with active-duty forces and the use of science and technology resources to enhance training, which is seen as essential for improving

³⁶ Xiao, *Science of Military Strategy*, pp. 436, 440-441.

³⁷ “Ministry of National Defense Spokesperson Wu Qian Answered Reporters’ Questions on the Adjustment of the Reserve Force’s Leadership System.”

³⁸ “About the Chinese People's Liberation Army Navy Reserve”; Huang, “A Brief Discussion on Strengthening the Military Training of Reserve Forces,” pp. 69-71; and “The Scientific Outlook on Development and Strengthening of the Construction of Naval Vessel Reserve Forces.”

³⁹ Rear Admiral Yin, “Implementing the Scientific Outlook on Development and Strengthening the Construction of the Navy's Vessel Reserve Forces,” pp. 4-7.

⁴⁰ “Reservist Law of the PRC” and “Military Service Law of the PRC.”

⁴¹ Huang, “A Brief Discussion on Strengthening the Military Training of Reserve Forces,” pp. 69-71.

coordination in combat scenarios.⁴² The quality and realism of these exercises is meant to prepare reservists for the rigors of maritime combat. Reservists are also provided with educational materials, such as the “Reserve Knowledge Question Bank” (预备役知识题库) and “Pre-commissioned Officers' Instructions” (预任军官须知), to familiarize themselves with regulations and their operational responsibilities.⁴³



Figure 4: PLAN reservists undergo firefighting training.⁴⁴

Reservist training is multifaceted, focusing on both foundational military skills and specialized naval operations. Training activities range from battle casualty care and damage control to complex naval maneuvers and operations such as minesweeping.⁴⁵ A notable example occurred in 2016, when a reserve minesweeper squadron of the PLAN's East Sea Fleet organized training for its reserve officers and enlisted sailors. Training and assessments included battle casualty care, damage control, firefighting, and the operation of navigation equipment. The squadron conducted specialized training on how to retrofit fishing vessels to turn them into minelaying craft, how to deploy minesweeping gear, and how to conduct minesweeping operations with surface vessels.⁴⁶

Reports on several key exercises highlight the PLAN Reserve's growing integration into naval operations. Between 2005 and 2015, PLAN reservists had participated in over ten significant naval exercises and contributed to more than 20 critical missions, including combat support and maritime law enforcement.⁴⁷

⁴² Ibid.

⁴³ 烟台海军预备役侦察船大队 [“Yantai Naval Reserve Scout Ship Group”], 扎实抓好基层预建党组织建设 [“Do a Good Job in Building Pre-Established Party Organizations at the Grassroots Level”], 人民海军 [People's Navy], 17 December 2012, p. 8.

⁴⁴ “About the Chinese People's Liberation Army Navy Reserve”.

⁴⁵ 敬小红 [Jing Xiaohong] and 伍尚锐 [Wu Shangrui], 预备役官兵练兵忙 [“Reserve Officers and Soldiers are Busy with Training”], 中国海军网 [China Navy Network], 14 October 2016, https://navy.81.cn/content/2016-10/14/content_7301352.htm.

⁴⁶ Ibid.

⁴⁷ Ibid.

This involvement increases the potential for reserves to act as a force multiplier, providing personnel to augment the standing military in times of conflict. Importantly, the PLAN Reserve is considered critical to the PRC's coastal defense, reinforcing active-duty units and serving as a rapid-response force in times of crisis.⁴⁸

The PLAN emphasizes the importance of integrating reservists into active-duty operations during exercises. For instance, in 2018, reservists integrated into a PLAN air defense brigade trained alongside active-duty sailors and fully participated in military tasks.⁴⁹ This approach to training is intended to ensure that reservists are prepared to operate seamlessly when integrated into or alongside active-duty combat units in wartime. In June 2011, the PLAN carried out a drill in response to a simulated missile attack on an observation and communication station. This exercise saw the South China Sea Fleet's reserve battalion mobilize all three reserve mobile squadrons. The drill was designed to enhance the reserves' emergency mobility and combat readiness, incorporating training on electronic countermeasures and complex electromagnetic environments.⁵⁰ By integrating reservists into active-duty units and conducting large-scale exercises, the PLAN could ensure that the reserve remains ready to mobilize and support active-duty forces when required. The continuous refinement of unit skills and the operational integration of reservists are critical for bolstering the PLAN's ability to respond to diverse challenges, ranging from coastal defense to full-scale maritime conflicts.

The basic training, assessments, and applied training while underway that are provided to reservists appear to be focused on helping sailors maintain both currency and proficiency in their occupational specialties. In mid-November 2019, the ETC Navy's 3rd Destroyer Flotilla held a comprehensive seven-day training program for nearly 40 reservist personnel aboard the destroyer *Ningbo*. The training was designed to test the rapid mobilization capabilities of the national defense system and prepare for wartime mobilization. It included ship-specific drills, practical operations with weapons and equipment, damage control, and first aid. The reservist participants reportedly matched their active-duty counterparts in discipline and standards.⁵¹

⁴⁸ Ibid.

⁴⁹ 若有战，召必回！刚刚，这群退伍老兵“恢复”军人身份 [“If There is a War, We Will Return if Called! Just Now, This Group of Veterans ‘Restored’ Their Military Status”], 微信 [WeChat], 2 November 2018, <https://mp.weixin.qq.com/s/OSKI4KiwTDDvJeRbcNJ53w>.

⁵⁰ 徐兵 [Xu Bing] and 贺跃民 [He Yuemin], 海军首次组织预备役 观通部队机动演练 [“The Navy Organized its First Mobile Drill for the Reserve Observation and Communication Forces”], 人民海军 [People's Navy], 15 July 2011, p. 1.

⁵¹ “If There is a War, We Will Return if Called! Just Now, This Group of Veterans ‘Restored’ Their Military Status.”



Figure 5: A group of PLAN reservists perform maintenance tasks onboard a ship.⁵²

In 2018, the PLAN Naval Aviation University's training base hosted more than 120 Navy reservists to take part in a 10-day return-to-duty refresher training event. The purpose of organizing a refresher training was to quickly restore the military skills and political indoctrination of reservists, to further improve their "quick response and emergency combat capabilities," and to lay the foundation for national defense mobilization preparations.⁵³

In terms of PLAN Reserve training content, an emphasis is reportedly placed on training for leadership, single-ship formations, and mission specialties. Military theoretical knowledge is taught through correspondence courses and self-study, while basic technology (common military and civilian technology) is taught through daily operations. Military skills and tactics are taught to PLAN reservists through incremental and iterative training programs and exercises. For instance, training may begin with basic skills before being implemented in individual ship exercises and progressively expanded to larger, more complex maneuvers that require broader coordination and multiple skillsets.⁵⁴

Attempts at mustering reservists for training have reportedly been challenging.⁵⁵ In March 2015, it was reported that less than half of the expected 150 reservist personnel showed up at an earlier formal training event involving a reserve minesweeping squadron in Ningbo. The news report said that the low rate of participation was due to the fact that reservists did not recognize the importance of their work. Reports have amplified the sentiment that "in peacetime, a considerable number of reserve personnel have a weak sense of national defense and low enthusiasm for training, which

⁵² "About the Chinese People's Liberation Army Navy Reserve."

⁵³ 姜六畜 [Jiang Liuxu] and 赵杰 [Zhao Jie], 某训练基地组织海军预编兵员返岗复训 ["A Training Base Organized Navy Reservists to Return for Refresher Training"], 人民海军 [People's Navy], 3 July 2018, p. 2.

⁵⁴ Huang, "A Brief Discussion on Strengthening the Military Training of Reserve Forces," p. 69-71; Rear Admiral Yin, "Implementing the Scientific Outlook on Development and Strengthening the Construction of the Navy's Vessel Reserve Forces," p. 4-7.

⁵⁵ Xiao, *Science of Military Strategy*, pp. 440-442.

makes it difficult to complete the training plan, and the training quality does not meet the prescribed requirements.”⁵⁶

Recruitment reforms have sought to diversify the reservist pool, a shift that could create new challenges. Changing the composition of the reserve could mean revisiting training approaches to meet new and evolving "man, train, and equip" requirements. For non-prior service civilian recruits, they will have to adapt to the military, an institution with unique concepts such as chain of command and adjust to military environments that can be austere, stressful, and isolated, which may prove challenging for those serving part-time. For reservists in general, the limited time spent training per year could be a hinderance to building a highly trained reserve, as most reservists spend a majority of their time in civilian roles that may not be connected to their military specialty. Despite efforts to improve training, gaps will likely still exist for both new and old reservist recruits. Reporting suggests that issues with motivation and unit culture have plagued the PLAN Reserve and impeded training.⁵⁷ Any training gaps may affect the PLAN's performance and capabilities in a future war in which the PLAN Reserve is mobilized.

The skills and experiences reservists bring to the table from previous civilian and veteran experiences—and those they pick up from training exercises as reservists—may be transferable to combat scenarios. Nonetheless, for both types of reservists, a lack of prior combat experience could represent a significant weakness, making the need for realistic and comprehensive training increasingly important. The PLAN appears to be making strides in integrating reservists into active-duty operations and improving the quality of their training. By focusing on exercises, technological advancements, and enhanced recruitment strategies, the PRC aims to ensure that its naval reserve remains a capable and flexible component of its national defense strategy.⁵⁸

The Reserve as an Indicator of PLA Readiness and Intentions

While most PLA research has focused on active-duty forces, the PRC has been quietly building up a potentially combat ready and technically competent reserve, as an important part of the PLA fighting force. For the PLAN, the Reserve represents a force multiplier hiding in plain sight. Indeed, the PLAN Reserve could be mobilized in a maritime conflict scenario to give the navy a source of strategic depth in terms of manpower capabilities. The PLAN's continued commitment to strengthening and reforming its reserve component has possibly created a growing number of trained, and specialized, reservists that cannot only augment, but also replace active-duty casualties.

Studying the PLAN Reserve offers opportunities for developing early-warning indicators that could help reveal plans and intentions. Analyzing resource allocation decisions within the Reserve could reveal both short- and long-term military priorities and objectives. For instance, investments in certain capabilities, such as naval logistics, may reveal specific areas the PLAN perceives as potential operational gaps. Changes in training frequency, the introduction of new weapons, or restructuring efforts within the PLAN Reserve could serve as early-warning indicators of the PLAN's

⁵⁶ 敬小红 [Jing Xiaohong] and 伍尚锐 [Wu Shangrui], 东海渔船建预备役扫雷部队 曾助海军应对异常 [East China Sea Fishing Boats Set up Reserve Minesweeping Forces to Help the Navy Deal with Abnormal Situations"], 中新网 [China News Online], 11 March 2015, <https://www.chinanews.com.cn/mil/2015/03-11/7119110.shtml>; Rear Admiral Yin, "Implementing the Scientific Outlook on Development and Strengthening the Construction of the Navy's Vessel Reserve Forces," pp. 4-7; Xiao, *Science of Military Strategy*, pp. 440-442.

⁵⁷ Ibid.

⁵⁸ Ibid.; "About the Chinese People's Liberation Army Navy Reserve"; and Huang, "A Brief Discussion on Strengthening the Military Training of Reserve Forces," pp. 69-71.

intentions to enhance combat readiness in particular theaters or prepare for specific conflict scenarios, such as a cross-Strait invasion.

Specialized or consistent investments aimed at bolstering the reserve may also indicate strategic vulnerabilities. A sudden increase in reserve mobilization for specialized training might suggest weaknesses the PLAN aims to address before a potential conflict. Examining the pace of resource allocation and training within the Reserve could provide important insights into timelines for future military campaigns, revealing the readiness milestones the PLAN's leadership seeks to achieve.

The push for reserve reform may suggest the PRC sees its current reserve structure as a problem for military readiness. Chinese military officials indicate the PLA aims to reduce the PLA Army Reserve while expanding the reserve forces of the PLAN, PLARF, and PLAAF, potentially signaling preparation for joint operations across all warfighting domains.⁵⁹ The status of the other services has become increasingly important; the PLAA reserve structure, which has traditionally dominated the PLA Reserve, has reportedly struggled to adapt to the needs of modern integrated joint operations.⁶⁰ This reshuffle aligns the overall PLA Reserve more closely with the changing forms of warfare and the future operational needs of the PRC military, integrating reserve units into a position where they can effectively support and complement active-duty forces.

The PLAN Reserve can be seen as a critical barometer to measure progress the PRC military is making toward broader defense goals. Observing shifts in how the PLAN prepares its reserve can expose areas of military concern and provide a clearer picture of how and when the PRC might intend to employ these forces in a future conflict.

Conclusion

The PLAN Reserve plays an increasingly important role in the PRC's efforts to enhance its maritime security and operational capacity. As an integral part of the PRC's broader naval strategy, the Reserve acts not only as a supplement to active-duty PLAN personnel but also as a strategic asset capable of responding to a wide range of missions. From humanitarian assistance and disaster relief to combat operations and maritime law enforcement, a capable Reserve serves to enhance the PLAN's flexibility and operational readiness. It remains to be seen what effect new recruitment efforts and expanded eligibility requirements will have on the Reserves and the PLAN in the future. Currently, the Reserve is still heavily dominated by veterans with military experience, a fact that could translate to a high degree of operational competence and ensure a pool of capable personnel that could be rapidly mobilized.⁶¹

Potential uses of the PLAN Reserve are numerous; however, uncertainty remains how the force will perform when called. Reservists have not been observed participating in real-world operations. Therefore, it is unknown how reservists may react in situations in which they are under direct fire or tasked with life and death decision making.

⁵⁹ "Ministry of National Defense Spokesperson Wu Qian Answered Reporters' Questions on the Adjustment of the Reserve Force's Leadership System."

⁶⁰ Huang, "A Brief Discussion on Strengthening the Military Training of Reserve Forces," pp. 69-71.

⁶¹ "About the Chinese People's Liberation Army Navy Reserve."

As recently as 2015, reports suggested that the PLAN faces challenges with mustering reservists for training, perhaps due to a lack of understanding of the importance of reservist work.⁶² It is unclear how widespread this problem is today. However, if the PLAN is unable to reliably muster reservists for training, the implications are obvious: training quality and implementation will suffer, and doubts will be raised about how many reservists would show up when recalled for a combat mission.

Recent organizational reforms and legislative changes highlight the PLAN's commitment to modernizing the reserve, aligning it more closely with the active-duty military. The 2020 restructuring placed the PLAN Reserve under the centralized command of the CMC, in part, to streamline mobilization and improve integration with the active component.⁶³ The shift away from a dual civilian-military leadership model to direct military control reflects the increasing importance of the Reserve in supporting the PRC's military ambitions. Additionally, reforms aimed at expanding recruitment to include non-prior service civilians with specialized technical skills may demonstrate another approach to military-civilian fusion where the Reserve stands to benefit from the expertise of a broader number of outside experts.⁶⁴

The modernization of the PLAN Reserve aligns with Beijing's broader military goals, particularly in addressing complex maritime challenges. The Reserve's adaptability and its ability to support joint operations with active-duty forces could enable the PRC to reduce mobilization timelines and more quickly project power across the seas. As the PLAN Reserve continues to evolve, its integration into large-scale naval exercises and real-life operations underscores its growing importance. This modernization effort is a critical part of the PRC's broader goal to enhance its maritime capabilities, ensuring that the PLAN Reserve stands ready to be deployed on both peacetime missions and in potential conflict scenarios.

Ultimately, the PLAN Reserve offers the PRC strategic depth in terms of trained manpower, enhancing its military preparedness and supporting its maritime and territorial ambitions. The Reserve's potential role as a force multiplier, especially in a high-stakes maritime conflict, should not be underestimated. As the PRC's maritime interests and operations expand globally, the PLAN Reserve will serve as an enabler of its national defense strategy, providing trained personnel and technical expertise that can be mobilized swiftly to bolster active-duty forces in times of need.

⁶² "East China Sea Fishing Boats Set up Reserve Minesweeping Forces to Help the Navy Deal with Abnormal Situations" and "Implementing the Scientific Outlook on Development and Strengthening the Construction of the Navy's Vessel Reserve Forces" pp. 4-7; Xiao, *Science of Military Strategy*, pp. 440-442.

⁶³ "The CPC Central Committee Issued a Decision on Adjusting the Leadership System of the Reserve Forces."

⁶⁴ "Reservist Law of the PRC."

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