

APPENDIX II

China's Maritime Militia

An Important Force Multiplier

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The People's Armed Forces Maritime Militia (PAFMM) is a state-organized, -developed, and -controlled force operating under a direct military chain of command to conduct Chinese state-sponsored activities.¹ The PAFMM is locally organized and resourced but answers to the very top of China's military bureaucracy: the commander in chief, Xi Jinping. While the PAFMM has been part of China's militia system for decades, it is receiving greater emphasis today, because of its value in furthering China's near-seas "rights and interests."

Traditionally, the PAFMM has been a military force raised from civilian marine industry workers (e.g., fishermen). Personnel keep their "day jobs" but are organized and trained in exchange for benefits and can be called up as needed. Recently, the People's Liberation Army (PLA—in this context, the military generally) has been adding a more professionalized, militarized vanguard to the PAFMM, recruiting former servicemen (by offering them high salaries) and launching formidable purpose-built vessels. This vanguard has no apparent interest in fishing.

This chapter focuses on the current organization and employment of Chinese maritime-militia organizations. It first puts this force into historical context by surveying the PAFMM's background and its changing role in China's armed forces. Next, it examines the PAFMM's current contributions toward China's goal of becoming a great maritime power,

in both old and new mission areas. The remaining sections will address specific maritime-militia modes of command and control, intelligence gathering, organization and training and will suggest possible scenarios and implications.

Decades-Long History

China's militia system originated before the Chinese Communist Party (CCP) came to power, but the system of recruiting numerous state-supported maritime militias from coastal populations was not fully implemented until the communists began to exercise greater control of the coastline in the 1950s. This segment of China's population had been relatively isolated from the turmoil of the Civil War; these regions had been under either Japanese or Republic of China (ROC) control in the decades before CCP rule was established. The CCP targeted the fishing communities by creating fishing collectives and work units, enacting strict organizational and social controls, and conducting political education. Factors motivating and shaping this transformation included:

- The PLA's early use of civilian vessels after Chiang Kai-shek's Nationalist Party decamped to Taiwan.
- The fact that fishermen constituted the bulk of China's experienced mariners.
- The requirement during the 1950s and 1960s to defend against Nationalist incursions along the coast.
- Increasingly frequent confrontations with other states' fishing and naval vessels as China's fishermen gradually began to fish farther offshore.
- The transformation of many shore-based coastal-defense militias to the at-sea maritime militia.

The PAFMM has played significant roles in manifold military campaigns and coercive incidents over the years:

- In the 1950s, support of the PLA's island seizure campaigns off the mainland coast
- In the 1960s, securing of China's coast against Nationalist infiltrations

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- In 1974, seizure of the western portion of the Paracel Islands in the South China Sea from South Vietnam
- In 1976, harassment of "foreign" naval ships east of the Zhoushan Archipelago (south of Shanghai)
- In 1978, presence mission in the territorial sea of the Senkaku Islands
- In 1995, Mischief Reef encounter with the Philippines stemming from the occupation and development of that reef
- In 2009, harassment of USNS *Impeccable*
- In 2012, Scarborough Shoal stand-off with the Philippines
- In 2014, blockade of Philippine-occupied Second Thomas Shoal
- In 2014, repulse of Vietnamese vessels from disputed waters surrounding the China National Offshore Oil Corporation's (CNOOC's) oil rig *HYSY 981*
- In 2014, harassment of USNS *Howard O. Lorenzen*
- In 2016, large surge of fishing craft near the Senkaku Islands
- In 2017, envelopment of Philippine-claimed Sandy Cay in the northern Spratly Islands.²

The important point to note is that many of these actions were not merely reactive. In some cases PAFMM participation was preplanned and guided by PLA organs: the 1974 seizure of the western Paracels from Vietnam, reconnaissance and sovereignty patrols during the February 2014 blockade of Second Thomas Shoal, and the 2014 defense of the CNOOC oil rig against Vietnamese vessels.³

The 2012 Scarborough Shoal stand-off is an example of how militia forces already at sea can rally to an emerging confrontation. It was the PAFMM that first arrived to aid Chinese fishermen in danger of being arrested by Philippine officials in an incident that sparked the April 2012 Scarborough Shoal episode. Reports by members of the PAFMM unit present at Scarborough Shoal and their actions there suggest that the PLA exercised command and control over PAFMM forces in subsequent operations to seize the feature from the Philippines.⁴

The PAFMM: A Decentralized, Local Institution

The PAFMM is an important component of China's local armed forces. Its part-time units are part of an armed mass organization of

mobilizable personnel who retain their normal economic responsibilities in daily civilian life—a reserve force of immense scale. The militia is organized at the grassroots level: its units are formed by towns, villages, urban subdistricts, and enterprises. It supports China's armed forces in a variety of ways and is seeing the list expand as the PLA continues to modernize. Militia units differ widely from one location to another, as their respective compositions stem from local conditions (*yindi zhiyi*). A good example is the establishment of emergency naval ship-repair units in areas with strong shipbuilding industries.

The PAFMM is found, logically, in port areas with large fishing, shipbuilding, or shipping industries where experienced mariners or craftsmen provide a ready pool of recruits. Citizens can join land-based primary militia organizations between the ages of eighteen and thirty-five. The PAFMM's age requirements are flexible, extending to forty-five for those with special skills, even older in some localities (e.g., Yancheng City of eastern China's Jiangsu Province extended the maximum age for its maritime militiamen to fifty-five).⁵ Veterans of the armed forces are prized. For example, Zhejiang Province has established as a recruiting target a 65 percent ratio of veterans to nonveterans for its maritime-militia units.⁶

Local military and civilian leaders appear to have a degree of autonomy in how they build their militias. Most PLA publications state up front that militia building should be suited to the local missions and localities' resources for mobilization. In other words, forces are not built in cookie-cutter fashion imposed by national-level leadership. Rather, they are organized with two things in mind: the local populace and its industrial or institutional capacity and the specific requirements they are intended to satisfy.

Unlike the active-duty forces of the People's Republic of China (PRC), its reserves, among them the militia, are not recruited from a variety of locations. It is the civilian government's job to incorporate militia building into its maritime economic development and to take the lead in militia construction. Government marine agencies such as the China Coast Guard (CCG) are tasked with assisting in organizing PAFMM units and in their training. Local propaganda, finance, and civil affairs departments each become involved, in their respective areas. The navy, in cooperation with other military agencies, provides special

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technical training and conducts joint exercises with the PAFMM.⁷ Finally, county- and grassroots-level People's Armed Forces Departments (PAFDs), directly involved in the normal management and organization of the units, are central to PAFMM organization.

Unit composition is determined by the capabilities of the vessels involved. In principle, PAFMM personnel numbers are determined based on the vessels (*yichuan dingbing*). Vessels and their crews are recruited into tactical-level units—"detachments" (*fendui*)—typically composed of companies, platoons, and squads. Some provinces have developed battalion-sized units. Most counties establish at least one company-sized unit; however, their size and capabilities vary greatly depending on local conditions. Some units comprise oceangoing fishing vessels capable of reaching distant waters, such as the Spratlys, while support units may not possess vessels at all.⁸ The PLA's political work is not overlooked; the guideline is for two or more party members on each "mission fishing vessel." Essentially, wherever the maritime militia goes, the party is on board.⁹

The geographical distribution of units is largely driven by the operational needs of a given region. For example, in 2015, the Guangdong Military Region (MR) Mobilization Department proposed a PAFMM force organization based on geographically oriented missions:

- Reconnaissance forces are deployed to distant islands, reefs, and areas around important waterways.
- Maritime militia assisting Maritime Law Enforcement (MLE) forces are primarily deployed around disputed islands, reefs, and sea areas.
- Maritime-militia support forces are deployed to naval stations, ports, piers, and predetermined operational sea areas.
- Emergency response forces make mobile deployments to sea areas around "traditional fishing grounds."

That department opined that units could be organized according to their operational destinations: forces assigned to law enforcement and reconnaissance missions would be organized where its vessels normally fish. Conversely, PAFMM forces responsible for security or loading operations would be organized in the coastal areas in which they are needed. Whether followed exactly or not, this approach suggests how

PLA leaders reconcile the need to deploy these forces with the economic realities of individual militia organizations and their personnel. The PLA is continually experimenting with organizational arrangements to serve the needs of the military and state without imposing unrealistic expectations on a given PAFMM unit. This pragmatic policy means there is no universal model for maritime militia organization.¹⁰

On the national scale, however, Beijing is creating a leaner militia force generally (not only maritime), reducing the overall number of militiamen and strengthening the training and capabilities of more elite units. Obsolete infantry units have disbanded in favor of technically sophisticated militia that can support modern PLA operations. For the PAFMM this has resulted in the building of “elite” maritime militia units that would be used year-round.¹¹

Most descriptions of PAFMM vessel requirements focus on the fishing industry. They prioritize large-tonnage, steel-hulled ships that are fast (by fishing-vessel standards) and capable of withstanding collisions. In many ways, since the PAFMM conducts most rights-protection missions without arms, the vessel itself is the weapon.¹² PAFMM forces also incorporate the logistical benefits of the mother ships that routinely support fishing fleets. Hainan’s Sanya Fugang Fisheries Company used a three-thousand-ton supply ship to support its rights-protection operations in the Spratlys from 2012 to 2014, significantly extending the range and endurance of the PAFMM vessels involved.¹³

The PAFMM in the South China Sea

In 2015 Beijing created a special PAFMM unit for the South China Sea, headquartered in Sansha City on Woody Island, the largest of the Paracel Islands. This special-purpose unit appears to be a full-time, militarized organization. It provides the crews for eighty-four purpose-built vessels equipped with high-pressure water cannons and with rugged, reinforced hulls able to withstand physical shouldering of third-party fishing boats and coast guard vessels. Lacking fishing responsibilities, its personnel train for peacetime and wartime contingencies, sometimes with light arms, and deploy regularly to disputed South China Sea features, even during fishing moratoriums.¹⁴ This new full-time Sansha City force has been involved in a recent PAFMM “operation” to keep Philippine and other fishermen away from Sandy Cay, an above-water feature very

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close to Philippine-occupied Thitu Island. It does this by maintaining a blockading force of at least two PAFMM vessels.¹⁵

Sansha City, being the municipality that Beijing charges with “administering” the vast majority of the South China Sea, plays a leading role in PAFMM procedural innovation. Starting in 2013, its higher headquarters called for Sansha’s maritime militiamen to be deployed to “all areas within the nine-dashed line.”¹⁶ In 2015, the municipality was further directed to ensure that maritime militia “achieve[s] regular presence and regular demonstration of rights” in Chinese waters in the South China Sea.¹⁷ To this end, the PLA garrison in Sansha City established the state-owned Sansha City Fisheries Development Company as a PAFMM organization dedicated to maritime rights operations. The Sansha City Fisheries Development Company militia unit was set up first and foremost as a professional paramilitary force, with fishing a secondary mission at best. Military veterans were and continue to be sought for all positions. These militiamen receive hefty salaries atop an array of generous benefits: a crewman can earn over \$13,000 annually, a captain over \$25,000; all members receive insurance, retirement, and medical benefits.¹⁸ These are princely sums and perquisites by Chinese standards and go far in a coastal fishing village. The money apparently does not depend on meeting actual fishing responsibilities; “trawling for territorial claims” would seem to be what these payments are for.

Sansha maritime militia members have been photographed loading crates labeled “light weapons” onto one of their deployed (they are physically homeported on Hainan) large vessels—the ones with water cannons and sturdy hulls.¹⁹ The largest Sansha maritime militia vessels are 60 meters long and 9 meters in beam, and they likely displace 600 to 750 tons. They are a good deal larger than the 320-ton, 44-meter *Parola*-class patrol vessels Japan is constructing for the Philippines.²⁰ Some of these new militia ships reportedly have a “weapons equipment room” and “ammunition stores” on board.²¹

The Sansha militia boats, which are painted blue, and are collectively an integral part of the “blue-hull, white-hull, grey-hull” (PAFMM, CCG, PLA Navy), three-tiered defense of China’s maritime rights and interests in the South China Sea. To coordinate these multiagency efforts, a six-million-dollar command center has been established on Woody Island.²² The Sansha garrison operates on at least two Paracel

Islands “informatized” outposts that monitor proximate seas and has begun construction on three other Paracel features. PLA leaders have indicated that these initial outposts will be replicated in the Spratlys and have commenced construction on three features there. Already, the Sansha garrison has established a People’s Armed Forces Department (PAFD) on Fiery Cross Reef and a PAFMM element on Mischief Reef, the beginnings of a growing and full-time rotational PAFMM presence in the Spratlys.²³

The Sansha fleet maintains a continual rotational presence vis-à-vis disputed features in the South China Sea. Sansha’s vessels are divided into six companies, stationed at three dedicated and closed-off bases in the Hainan Island harbors of Baimajing, Yazhou, and Qinglan. (There is not enough room on Woody Island, and the locally recruited crews have no desire to be stuck on underdeveloped Woody, or the Spratlys at all, for that matter.) The authors’ review of publicly available Automatic Identification System data confirms that a systematic rotation is in effect, apparently a straightforward one-in-three scheme: two of the six companies deployed at any given time, four in port or undergoing maintenance.

Contributions to China’s Maritime Power

PLA reforms introduced by Xi Jinping in 2015 made significant changes across all of China’s armed forces, including modernization of China’s reserve forces, particularly the PAFMM. In the 13th Five Year Plan released in March 2016 the maritime militia was made one of the priorities in optimizing the overall militia system.²⁴ PAFMM units in China’s coastal provinces have since grown visibly and increased in their operational capabilities.

The fishing industry and the maritime militia are valued by Beijing as useful contributors to the consolidation of China’s maritime claims, particularly in the South China Sea. Xi Jinping has personally highlighted the importance of the maritime militia. In 2013, he visited the Tanmen fishing harbor in Hainan Province, meeting its maritime militia company and telling them that “Maritime Militia members should not only lead fishing activities, but also collect oceanic information and support the construction of islands and reefs.” He praised the militiamen for protecting China’s maritime interests in the disputed waters in the South China Sea.²⁵

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The PAFMM is also important politically as an organic arm of the military and state in the fishing industry. The hope is that militiamen will shape public opinion, setting an example for both enterprises and the masses as "model" mariners, inspiring them to get involved in maritime development and to travel to disputed sea areas, islands, and reefs.²⁶ This role was highlighted in October 2016 by the PLA Navy's own news service, which described various ways in which the PAFMM can utilize the "Three Warfares" (psychological, public opinion, and legal) in support of maritime rights protection. It cited the militiamen's numerical and geographical advantages and their ability to act as agents of the military and state without inciting suspicion and how such advantages can be leveraged to influence domestic and foreign public opinion. Furthermore, the news service noted, militiamen are granted significant leeway as to how they fulfill their manifold functions, unlike active-duty troops subject to numerous military and international regulations.²⁷ For example, as numerous sources describe, the PAFMM can use deceptive measures regarding uniforms: "putting on camouflage, they qualify as soldiers; taking off the camouflage, they become law-abiding fishermen."²⁸ This "plausible deniability" makes maritime militia forces ideal instruments for supporting Chinese maritime claims while insulating Beijing from escalation at sea or criticism abroad.

These advantages underpin China's operational use of the PAFMM. Militiamen are called to "serve in peacetime, respond to emergencies, and fight during war" (*pingshi fuwu, jishi yingji, zhanshi yingzhan*). The maritime militia's dual roles are often referred to as an "ability to fish and fight" (*nengyu, nengzhan*). They are assigned a variety of missions, from traditional logistics for ground forces to more advanced missions in support of the navy. As discussed, during peacetime the maritime militia focuses on protecting China's maritime rights and interests. The PAFMM missions and roles discussed in the following sections are based on PLA doctrine and are not exhaustive.²⁹

Support the Front

In "support the front" (*zhiqian*) missions, the PAFMM assists the PLA and PLA Navy. Militiamen augment transport capacity by loading and delivering troops, vehicles, equipment, and materials; they conduct medical rescues and retrieve casualties; provide navigational assistance;

conduct emergency repairs or refits of vessels, docks, and other infrastructure; provide fuel and material replenishment at sea; and conduct various other logistical functions. All along China's coast, militiamen regularly train to support PLA operations.

The PAFMM also trains in minelaying and basic mine clearance. The PLA Navy assists the PAFMM in this area, usually in joint exercises. There appear to be PAFMM mine-warfare detachments that lack the necessary equipment. In some instances, naval reserve craft are integrated with PAFMM vessels to form a "naval reserve minesweeper *dadui*" (battalion).³⁰ Militiamen train on board PLA Navy minesweepers to be ready to execute that mission on their fishing vessels.³¹ The Dalian district clearly outlined its PAFMM's mine-warfare and blockade/sea control missions in a catalogue of military actions to ensure maritime border security during a foreign invasion or major internal unrest in a neighboring (unnamed) coastal state. Given Dalian's location on the Yellow Sea the reference is obviously to collapse of North Korean central authority; in such a scenario maritime militia units assist the PLA Navy and CCG in various ways, processing refugees and disarming former armed forces.³²

Some maritime militia units have a deception mission (often referred to as *weizhuang fendui*), to use corner reflectors to increase their vessels' radar cross sections and thereby seem to be major ships on enemy sensors. Training events feature PAFMM vessels steaming in formation with mounted corner reflectors, attempting to resemble, on "enemy" radar, naval groups. The Jiaojiang Maritime Militia Deception Detachment conducted such a training event in October 2010; it involved multiple efforts to disrupt enemy surveillance and targeting, including corner reflectors and floated chaff canisters.³³ Another instance, in 2012, involved a naval militia resupply detachment that used smoke screens and corner reflectors against an "enemy" unmanned aerial vehicle (UAV) during a training assignment to rendezvous with a PLA Navy formation.³⁴ To be sure, it is unclear exactly what is achieved by these relatively crude passive deception measures, but the fact that they are practiced at all indicates that the PLA plans to use every possible resource in any campaign to defend China. It seems likely that the PAFMM's members have realized that making one's fishing boat look like a warship on radar is a good way to get shot at during a conflict. How enthusiastic these units are about such a wartime mission is unknown.

One maritime militia unit under the Wenzhou Military Subdistrict (MSD) that once trained regularly with corner reflectors now employs instead technology capable of "electromagnetic attenuation and absorption."³⁵ For example, the Ninghai County PAFD in Zhejiang Province has assembled a special-warfare militia detachment of fifty-eight technical experts who conduct electronic warfare using specialized equipment installed on requisitioned civilian vessels. Serving as a "blue force" (i.e., the adversary) for training exercises simulating "blue" electronic signatures, they employ electronic jamming and electronic baiting against Chinese "red forces."³⁶ While this deception unit may not be the most sophisticated "opposition force" to train against, it offers a capability that the PLA Navy almost certainly appreciates.

Maritime Rights Protection

Over the past few years PAFMM responsibilities to conduct "rights protection" (*weiquan*) have become widely known in Western discourse and in many ways appear to have become the maritime militia's most important mission. This is because of the prominence that China's maritime disputes in the East and South China Seas have gained in Western policy interactions with Beijing, as well as in press and scholarly exchanges.

In 2015, Hainan Military District (MD) leaders outlined the PAFMM's specific missions in rights protection, including "Use of civilians against civilians for regular demonstration of rights" and "Special cases of rights protection by using civilians in cooperation with law enforcement."

In the first instance, the maritime militia will execute presence missions by fishing in disputed (but Chinese-claimed) waters. This mission seeks to normalize a Chinese "civilian" presence and justify the activities of the China Coast Guard to assert administrative control over disputed waters. Militia vessels can also be mobilized to harass or expel foreign civilian vessels found encroaching on fishing rights or disrupting Chinese development of islands and reefs or resource extraction. They can also provide regular escorts for Chinese civilian survey ships.

When operating in direct support of the coast guard, militiamen will "receive orders" from its command to conduct special rights-protection missions. For example, the maritime militia conduct perimeter patrols (*waiwei xunluo*), enforce sea-area control (*haiqu fengkong*), alert higher authority to and expel foreign vessels (*jingjie quli*), confront those ships

(*duizhi*), and push them back, with the coast guard (*heli bitui*).³⁷ In short, the PAFMM is increasingly assigned a core role within the “Maritime Rights Protection Force System” (*weiquan lilian tixi*).³⁸

A prime example of the PAFMM’s performance in maritime rights protection occurred when the CNOOC placed the drilling platform *HYSY 981* in disputed waters (within Vietnam’s EEZ) southwest of Triton Island in the Paracels. The resulting confrontation saw a large-scale mobilization of militiamen from Guangdong, Guangxi, and Hainan Provinces to form a defensive perimeter around the drilling platform when Vietnamese maritime forces attempted to force the oil rig to leave.³⁹ Militiamen worked closely with the CCG to repulse numerous attempts by Vietnamese fishing vessels to penetrate the screen.

Emergency Response

Many units have been formed for emergency response (*yingji*)—that is, to handle “*tufa shijian*,” a broad term that includes such fast-erupting contingencies as natural disasters, accidents, public-health incidents, and societal security incidents that develop rapidly, harm the public, and require unconventional responses.⁴⁰ In 2007, the National People’s Congress passed the “Emergency Response Law of the People’s Republic of China,” which requires the militia to participate in relief efforts. Maritime-militia emergency response units are tasked with handling sudden incidents at sea, such as rescue and relief. They make good “first responders,” as they may already be near the scene—as expressed by the phrase *jiudi jiu jin*, referring to responses made by nearby local forces. All this tends to be a peacetime matter but would also certainly be involved in wartime as well.

One example of recent innovation in maritime-militia emergency response is a “partnership” with privately owned civil-aviation (tourist, advertising, training, and so forth) firms. In January 2016, the Qinhuangdao MSD in Hebei Province established a “maritime militia helicopter rescue detachment” with the resources of a private general-aviation company. The militia detachment has earmarked for its use two helicopters for rescue, patrol, and resupply missions.⁴¹

Intelligence, Surveillance, and Reconnaissance

The gathering and reporting of intelligence at sea has been a core mission of the maritime militia in both peace and war. Historically, China

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has used the PAFMM extensively in this role. Hiding in plain sight, maritime militia forces supplement the PLA's surveillance coverage of the near seas, by loitering around targets of interest or reporting sightings during their regular operations at sea. The development and introduction of new navigational and communications technology into China's fishing industry has significantly augmented the PAFMM's ability to provide valuable, timely intelligence to the PLA. PLA commanders are also currently developing maritime militia intelligence, surveillance, and reconnaissance (ISR) capabilities in the "far seas"; this important development will be discussed in detail below.⁴² While the ISR mission is also sometimes termed a "support the front" role, its overall contribution to Chinese maritime domain awareness and its fundamental importance merit a more thorough examination in a separate section of this chapter.

Militia building and mobilization, collectively, is a civil-military venture that helps bind together civilian and military leaders—which is increasingly important as the proportion of party leaders with military experience decreases. As local leaders of coastal provinces look to the ocean for new areas of development and China's military strategy focuses more on maritime power, Beijing's national strategy of civil-military fusion will necessarily be at the forefront. The mobilization of China's mariner population into the PAFMM is one way of extending this civilian-military fusion out to sea.

Command and Control

PAFMM leadership follows the same dual military-civilian structure as that under which most militia organizations in China operate, with responsibilities for militia building falling on both local military organs and their government/party counterparts (*shuangchong lingdao*). In general, the responsibilities of both civilian and military entities are outlined as follows: "The Party Committee provides guidance, the military submits requirements, the National Defense Mobilization Committee (NDMC) coordinates, the government implements, and industries are the backbone."⁴³ This arrangement essentially integrates the civilian and military leadership in a division of labor for the common and required goal.

Many local governments along China's coast are constructing integrated coastal defense systems meant to implement better administrative control over nearby waters. Places such as Weihai City in Shandong

Province and China's newest prefecture, Sansha City, are organizing "military-police-civilian joint/integrated defense systems" (*junjingmin lian-fang tixi*), which include maritime militia units. Sansha City's committee has been a focal point for such projects, with "three lines of defense" (militia, coast guard, and navy, in that order). The city has also established a joint defense coordination center, an integrated monitoring command center, and a "Hainan Province Paracels Islands Dynamic Monitoring System."⁴⁴

As described in many Chinese-language sources on the PAFMM, mobilization orders are received from a variety of entities: the theater, sundry provincial and local authorities, or the China Coast Guard. There is significant overlap, because they all share responsibilities for the militia.⁴⁵ The main point is that while local governments are required to fund, supply, and support the militia, only the military holds the authority to use it.⁴⁶ In practice, this has created problems. Local authorities who have funded the militia have bridled at being told how to use it, especially if the local military commander has decided to employ it on a different task. In short, PAFMM's complex command-and-control structure routinely challenges local active-duty PLA authorities.

What is certainly clear is that militiamen are handed over to the CCG or PLA Navy for temporary use in both rights protection and combat support. The former chief of staff of the Guangdong MD describes the procedure for maritime rights protection as, "Mobilize the maritime militia in accordance with the requirements of the situation and orders given by superiors to go to mission sea areas where they will be transferred over to the command of the rights protection headquarters."⁴⁷

The PLA does pay attention to the quality of the crews of each militia vessel. Promising grassroots-level cadres (*zhuanwu ganbu*) are recruited directly into PAFMM detachments in order to strengthen fishing-vessel command and control. Second, militiamen with "strong character" receive focused training to enhance the PAFMM's political reliability. Third, individuals with backgrounds as specialized "active-duty boat cadres" (*xianyi chuanting ganbu*) and signalmen (*tongxinbing*) are recruited to strengthen fishing-vessel piloting and communication controls.⁴⁸ The ambiguous term "boat cadre" connotes experienced people, including fishing-vessel captains, owners, and exceptional crew members.⁴⁹ Sources refer to the cadres as "boat bosses/skippers" (*chuan laoda*, 船老大) or simply "captains" (*chuanzhang*). Former active-duty personnel are given

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priority for entrance into the maritime militia, and they likely assume unit leadership roles, becoming cadres. Cadres make up an important group that helps maintain unit discipline and ensure that militia building is conducted at the grassroots level.⁵⁰

C4ISR Network

As discussed above, intelligence, surveillance, and reconnaissance missions constitute one of the PAFMM's earliest and most consistent missions. They date back decades, replicating the use by imperial Japan of fishing boats as picket ships in its eastern maritime approaches during World War II.⁵¹ As early as 2007, the PLA Navy recognized the need for a modernized civilian vessel and militia maritime-surveillance network and information-support system that capitalized on the country's vast fishing fleet. It wanted satellite services combining the Beidou positioning, navigation, and timing satellite system and automated shortwave radio transmission, fused so as to create near-real-time data connectivity. With it, China's large fishing fleet could supplement the PLA Navy's maritime domain awareness efforts. That same year, the Yuhuan County maritime militia "battalion" reported completion of a PAFMM surveillance and early-warning network covering the "far seas, near seas, and shoreline." Xiangshan County of Zhejiang Province operates a large PAFMM reconnaissance detachment that follows a pattern laid out by the PLA Navy, with thirty-two "mother ships" acting as nodes for 150 vessels forming a network of surveillance.⁵²

MLE forces already use a number of communications systems—such as Beidou, very-high-frequency radio, the Automatic Identification System (AIS), cellular coverage when available, and satellite phones—to ensure reliable command and control when at sea. The equipment is provided to the PAFMM by MSDs, which purchase and distribute satellite navigation terminals, navigational radar, radios, and other electronic equipment.

The Ministry of Agriculture has constructed fisheries command and dispatch centers and regional command-dispatch platforms. According to the Fisheries Law Enforcement Command Center's director, a blend of capabilities forms an important part of the nation's emergency-response and early-warning system: fourteen shortwave shore stations, seventy-eight ultra-high-frequency shore stations, fifteen provincial fishing-vessel position-monitoring centers, thirty fisheries AIS base stations, and

fifty-nine fishing port video surveillance branches, established nationwide.⁵³ This is a redundant communications and monitoring network built and made available to allow the PLA to maintain reliable communications with militia fishing vessels when they are under way.

In addition to this traditional communication network, Beidou satellite navigation and the vessel-monitoring systems in many provinces have yielded an all-weather, continuous monitoring capability that MLE agencies can use to manage fishing fleets. Beidou terminals have been widely installed on China's fishing vessels, allowing the agencies to track their positions and exchange two-way transmissions of up to 120 Chinese characters—enough to dispatch orders to fishing boats as far away as the Spratlys. The growth of the Beidou constellation into global coverage will also expand the range of communications support to China's maritime militia.

In some areas, Beidou has become an important supplement to AIS, which uses shore-based stations to receive ship positioning and identification information. When fishing boats are beyond the range of shore AIS stations, Beidou's AIS transceiver automatically turns on (it turns itself off when within range of the shore station, to avoid duplicate tracks). The widespread implementation of Beidou's vessel-monitoring system, which includes a marine fisheries integrated information service, facilitates control of PAFMM vessels at sea. The head of Zhejiang MD's Mobilization Division has written that military organs use these systems for monitoring fishing-vessel safety and rescue, as part of building a PAFMM-Fisheries Law Enforcement-MSD-PLA Navy information-sharing channel.⁵⁴

Supporting this surveillance network are various local reporting mechanisms. PAFMM reporting channels are typically between vessels and departments of the MD system on shore. For example, Rizhao City's Lanshan District has established a real-time reporting mechanism for its militiamen to use when monitoring the sea and air; it connects vessels at sea with the militia command center, the fisheries bureau command center, and the PAFD's war readiness office.⁵⁵ PLA writings indicate that maritime militia reports are increasingly integrated into the theater command's larger intelligence infrastructure.⁵⁶

For example, the PLA garrison in Zhoushan City, an archipelagic municipality in the East China Sea, has made significant progress in developing its maritime militia ISR network. The garrison has tapped

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into the city's marine-data collection effort to set up a networked center for maritime national defense mobilization, utilizing big-data collection at sea. Fisheries data and vessel monitoring systems give this PLA garrison mobilization office the information it needs to command and control its PAFMM forces in real time. Militia reports flow in constantly, according to the mobilization office's chief of staff, who oversees the twenty-four-hour operations of the garrison's watch-duty room. PAFMM reconnaissance units send video and audio feeds and photography directly to the garrison, giving the PLA "eyes" on board militia vessels. The Zhoushan garrison reported that during 2014–15, militiamen generated over three hundred reports involving military sea and air intelligence, of which more than 130 were of value to the MD and higher-level units.⁵⁷ PAFMM reporting deemed "effective maritime intelligence" is processed and disseminated up the chain of command, reaching the theater-command level.⁵⁸

Militiamen are often termed "mobile sentries" at sea. PAFMM-provided data reportedly directly supports PLA targeting and tracking. The PLA garrison in Jiangsu's Lianyungang held an exercise in late 2015 wherein PAFMM forces provided targeting support to a PLA Navy coastal artillery unit (*anfang budui danpao*). In the scenario, a PAFMM vessel reported a "suspicious vessel" forty nautical miles offshore by calling the garrison's watch-duty room directly via satellite phone. The commander then ordered a shore-based signals unit to transfer the PAFMM vessel's video feed to a radar station. After the garrison command had determined the that vessel was an enemy and verified its location, sensor and targeting data were sent to the coastal artillery unit.⁵⁹ This account suggests that any foreign warship within China's claimed EEZ and in range of its coastal defenses may be positively identified and targeted, thanks to the maritime militia.

Means to report surveillance information are obviously important, but so is the quality of information reported. Selected militia members are trained as reporting specialists—that is, information personnel (*xinxi-yuan*)—within units. These personnel collect intelligence at sea and use the Beidou and other reporting systems to ensure that the information is sent up the chain. For instance, Fu'an, a city in Fujian Province opposite Taiwan, held a week-long collective training session for its maritime militia information personnel, covering target identification, essentials

of collection methods, and operation of the maritime militia vessel-management platform and the Beidou notification terminal. Also, the PLA is implementing secure communications with the maritime militia. A unit in China's southern Guangdong Province reportedly uses pre-designed "secret code tables," "secure walkie talkies," and "secure radios" to maintain PLA Navy-PAFMM ship-to-ship communications.⁶⁰ In short, the PAFMM has created a cadre of personnel specifically trained to ensure expertise and professionalism in reconnaissance.

In May 2017 the PRC minister of defense, Chang Wanquan, commended the captain of a militia boat assigned to a reconnaissance detachment based in China's eastern Jiangsu Province. The militiaman was praised for spotting the missile instrumentation ship USNS *Howard O. Lorenzen* (T-AGM 25). He had led other vessels of his unit in surrounding, surveilling, and filming the American ship. The minister "pointed out that the maritime militia is very important and has played a key role in filling in maritime reconnaissance blind spots, as 'small boats' transform into a 'maritime defense with eyes that can see for thousands of miles.'"⁶¹ The availability of technology to the militia is increasingly enhancing its ability to provide ISR support to the PLA. In 2018, the PLA garrison in Shanghai conducted a training exercise with a militia UAV reconnaissance detachment. This detachment contains a "maritime unit" for UAV operations at sea.⁶²

The PLA is also developing the PAFMM's ability to support undersea surveillance. A report of the Xiashan PAFD commander in 2014 included "undersea detection radar" (水下探测雷达) among the equipment to be allocated to maritime militia.⁶³ This commander forwarded in March 2016 a photo of a PAFMM vessel deploying an unmanned underwater vehicle. The photo's caption read, "Going to sea on vessels to collect intelligence."⁶⁴ Another report mentions a maritime militia rescue company in Hebei Province with towed side-scan sonars.⁶⁵

One province has outlined specific "doctrine" for PAFMM ISR, laying out the following guidelines for training:

- Dispersal to predetermined sea areas for reconnaissance as "fixed sentries."
- Close-in reconnaissance to verify the identities of suspicious targets as required by the PLA Navy.

- Covert tracking and following of enemy ships and aircraft, to be conducted in concert with other dispersed PAFMM vessels, trading off and coordinating to track target movements.
- Special reconnaissance tasking will involve distributing and installing specialized equipment on militia vessels, such as electronic detection instruments and fish-finding instruments.
- Units listen in on enemy maritime radio signals and detect submarines.⁶⁶

Maritime militia ISR operations fluctuate during the year, since most militia reporting ceases during the PRC-declared annual fishing moratorium that begins in May of each year. In those periods of nominally three months, most fishing vessels are in port, but commanders ensure that militiamen maintain readiness to mobilize.⁶⁷ PLA leaders in Zhejiang Province MD suggest that some additional types of fishing vessels should be recruited to supplement the larger trawler fleet during the moratorium. Fishing vessels not designed for trawling are subject to a shorter moratorium, as established by the Ministry of Agriculture, and could fill ISR gaps left by the stand-down of the large trawler fleets.⁶⁸

China possesses the world's largest distant-water fishing and merchant marine fleets. The PLA sees great potential in ISR contributions from these fleets, as they operate around the globe in numerous countries' exclusive economic zones and in key shipping lanes. PLA writings increasingly describe PAFMM ISR functions in terms of geographic distance from China's shoreline. For example, the Shanghai PLA garrison's "comprehensive training unit" describes PAFMM ISR in "distant waters" (*yuanyang*) and differentiates between "militia near-seas reconnaissance and early-warning detachments" and "militia far-seas reconnaissance and early-warning detachments." Additional PLA writings describe the need for more PAFMM units that can move from the near seas into the far seas. Some state outright that vessels in oceanic shipping, marine exploration, and even overseas trade should have "distant waters information personnel" (*yuanyang xinxiyuan*) assigned.⁶⁹ Presumably, the information from far-seas reconnaissance would be funneled to a centralized command center, not to provincial MD commands.

Two authors from the PLA's Equipment Academy published an article in 2017 about the need to develop a "sea and space common

operational picture" (*haitian yiti zhanchang tongyong taishitu*) to support the PLA Navy's far-seas operations. They listed PAFMM "armed reconnaissance fishing vessels" and merchant ships among the sources of surface ISR that would build this common operational picture.⁷⁰ Such a development, if fully realized, would also involve the command, control, and management of militia organizations on board Chinese ships in distant waters. To date, there has been virtually no Chinese open-source reporting on actual PAFMM operations outside of the near seas. The discussions (see the preceding paragraphs) of extending ISR networks from the near seas to the far seas suggest that the PLA is considering the development of far-seas ISR generated by a global maritime footprint composed of multiple forces. Whether the PAFMM would play any leading role in such a network—covertly or overtly—remains unknown.

In sum, command of the maritime militia depends on the conditions requiring mobilization, in both peace and war. The PLA utilizes the PAFMM in both peacetime and wartime, as and when needed. The coast guard can also call on PAFMM forces for rights-protection or law-enforcement missions but may be required to provide them material support. In all cases, the MD military and civilian leadership would be involved, either directly or in an oversight role. New institutions and technologies are being incorporated into the mobilization system in order to increase the speed with which local commands can transfer war-fighting potential into war-fighting force. From theater command-led joint exercises to MD-level mobilization orders, and from Beidou messages received by captains operating fishing vessels at sea down to individual militiamen receiving local PAFD notifications on their mobile phones, the means of reliably commanding the maritime militia are growing in sophistication and effectiveness. Here is a powerful example of the PLA's concept of "informatization" at the micro level.

Training

Training of militia is not so intense that it harms the militia members' normal work. To compensate, the PAFD active-duty personnel, cadres, battalion/company and militia unit commanders, and the militia information personnel receive focused training. This is essentially a matter of "training the trainers"; these individuals are expected to train individual militia members in turn. Well-trained supervisors are necessary, since

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rarely can a region make its entire PAFMM force available for a single training event. For example, a PRC district near the Taiwanese-controlled Matsu Islands was able to train only one-fourth of its emergency-response militia personnel during any given exercise.⁷¹ Limited availability for training is one reason why demobilized active-duty soldiers and party members are priority recruiting targets: they tend to have substantially more experience with training, which in itself involves substantial effort. For example, Zhejiang Province in 2015 reportedly mobilized over a thousand maritime militia vessels for training exercises.⁷² Given the independence of nature that characterizes fishermen worldwide, keeping a militia force manned by such people sufficiently disciplined and trained to do that requires continuous effort.

Strong political indoctrination is applied to militia organizations generally, but especially to PAFMM units, since they can disproportionately affect events and diplomacy at sea. It is important that militiamen be familiar with national and provincial objectives and policies. They often receive education in the laws of the sea and rules governing what they can and cannot do.

Previously there existed a degree of separation between the PLA services and the militia units built to support them, particularly in management of training. Joint training was conducted, but evaluations and improvements were largely the work of the PLA MDs. The PLA reforms of 2015 stipulated deeper integration between militia units assigned to support the military. Many maritime-militia units assigned to support the navy are now being trained and evaluated directly by naval personnel. In China's northern province of Liaoning, on the Bohai Sea, the Huludao MSD conducted training for five maritime militia detachments at a navy test base in January 2018. Experts from the Naval Aviation Academy, Ministry of Security, and the Maritime Safety Agency were brought in to teach the militia about oceanography, hydrometeorology, shipboard communications equipment, and reconnaissance of land and sea targets. Joint training between maritime militia vessels and actual PLA Navy ships is also increasing.⁷³

Incentives

Vessel owners complain about the opportunity cost of being detained dockside by militia obligations. Local governments and regulations concerning

vessel mobilization and requisition allow for monetary compensation to vessel owners and personnel for lost income in such cases. In other circumstances, to offset PAFMM expenses and make its units willing to venture farther from home port (e.g., to the Spratlys), many local governments subsidize their fuel.⁷⁴ Hainan's Tanmen Village provides fuel subsidies to its PAFMM units for the expense of travel to the Spratlys.⁷⁵

A system of rewards and publicity for militiamen is in place, its events usually held during provincial military affairs meetings. A series of awards recognizes advanced militia units, advanced captains and cadres, and other outstanding individuals; such accolades are meant to instill pride and a sense of national duty. Other efforts are aimed at preventing abuse or neglect of militia obligations; these include requiring each fishing vessel and its crew to have the appropriate National Defense Obligation Certificates for national defense and mobilization. These are reviewed annually to ensure that all are current. If crews violate their obligations, their fuel subsidies are reduced or eliminated, and their fishing permits could be canceled.

Specific missions will require tailored incentives and rewards. For instance, the Shanghai PLA garrison is reportedly trying to implement rewards to PAFMM reconnaissance units for each intelligence report they generate. Dispatches deemed important will generate greater rewards.⁷⁶ Such a system could conceivably motivate militiamen to seek out the "big fish" and provide higher-quality intelligence reports for the PLA.

An Important Element of Chinese Seapower

The PAFMM helps China pursue its near-seas claims and operationalize a decisive shift in strategy: from a three-sea-force focus on regional seas to an evolving division of labor in which the PLA Navy is enabled to increase its overseas missions and focus significantly, in part by the assumption of increasing responsibilities in China's near seas by the coast guard and PAFMM. For this the PAFMM has been able to draw on the world's largest fishing fleet.

Continued tensions in the South and East China Seas bring increased attention to the important role the PAFMM plays. Some Chinese scholars and security experts advocate making militiamen China's first line of defense in confrontations over maritime disputes. In many cases they are already deployed to the front lines, such as around Scarborough Shoal.

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Since Xi's April 2013 visit to Hainan, numerous *PLA Daily* and *National Defense* articles have recommended increasing support for PAFMM development. Increasing financial resources are allocated to train fishermen and subsidize new vessels. This desire likely drove the rapid construction of Sansha City's new purpose-built, professionalized PAFMM fleet, which in turn has introduced a new model in force development, one which could conceivably be replicated elsewhere as reduced stocks undermine China's fishing industry.

The PAFMM supports China's overall maritime surveillance system. Since the key to China's anti-access/area-denial system is the close monitoring of China's seaward approaches, it is hardly surprising that the PLA has elected to capitalize on the capabilities that its fishing fleet offers. In addition to surveillance, other low-intensity peacetime missions include supporting rights protection (presence missions, obstruction, reef/island development, envelopment, etc.) and dealing with fishing-fleet skirmishes over maritime claims. Should conflicts between China and its smaller regional neighbors break out, the maritime militia might be charged with such wartime tasks as mine warfare, ambush, or island landings. Chinese planners envision employing the PAFMM in unexpected, unconventional ways in addition to its surveillance, rights-protection, and support roles. New reforms introduced to China's armed forces are comprehensively strengthening the nation's PAFMM forces to support future maritime operations in peace and war.

Appendix II. China's Maritime Militia

1. The ideas expressed here are those of the authors alone. A compendium of their previous publications on this subject is available at <http://www.andrewerickson.com/2018/11/secdef-mattis-calls-for-prc-maritime-militia-to-operate-in-a-safe-and-professional-manner-in-accordance-with-international-law/>.
2. China has had an active Maritime Militia presence in the Spratlys since 1985. It was involved in the tensions over Mischief Reef in 1995, when China built structures on the disputed feature. The Philippine navy arrested Tanmen Militia personnel at Half Moon Shoal, much closer to the Philippine coast and over eighty miles southeast of Mischief Reef. Conor M. Kennedy and Andrew S. Erickson, *Model Maritime Militia: Tanmen's Leading Role in the April 2012 Scarborough Shoal Incident* (Washington, DC: Center for International Maritime Security, April 21, 2016), <http://cimsec.org/>.
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12. 张践 [Zhang Jian], “围绕‘六化’抓建推动海上民兵转型” [Advance the Transformation of Maritime Militia Centered on “Six Changes”], 国防 [National Defense] 10 (2015), 21–23.
13. Andrew S. Erickson and Conor M. Kennedy, *China's Daring Vanguard: Introducing Sanya City's Maritime Militia* (Washington, DC: Center for International Maritime Security, November 5, 2015), <http://cimsec.org/>.
14. For a detailed examination of the Sansha Maritime Militia and its creation, see Conor M. Kennedy and Andrew S. Erickson, *Riding a New Wave of Professionalization and Militarization: Sansha City's Maritime Militia* (Washington, DC: Center for International Maritime Security, September 1, 2016), <http://cimsec.org/>. Assessments of deployment patterns are based on the authors' observation of the fleet via the Marine Traffic service, <https://www.marinetraffic.com/>.
15. The involvement of the PAFMM was confirmed in the Pentagon's 2018 China Military Report; U.S. Department of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2018* (Washington, DC, August 16, 2018). The presence of at least two PAFMM vessels was determined from

- the authors' observation of commercially available satellite imagery; *Digital Globe*, <https://www.digitalglobe.com/>.
16. He Zhixiang, "Adjusting to the Security Situation in Sea Defense," 48–50. The author uses "militiamen" to cover both male and female PAFMM personnel.
 17. Zhang Jian, "Advance the Transformation of Maritime Militia," 21–23.
 18. Kennedy and Erickson, *Riding a New Wave of Professionalization and Militarization*.
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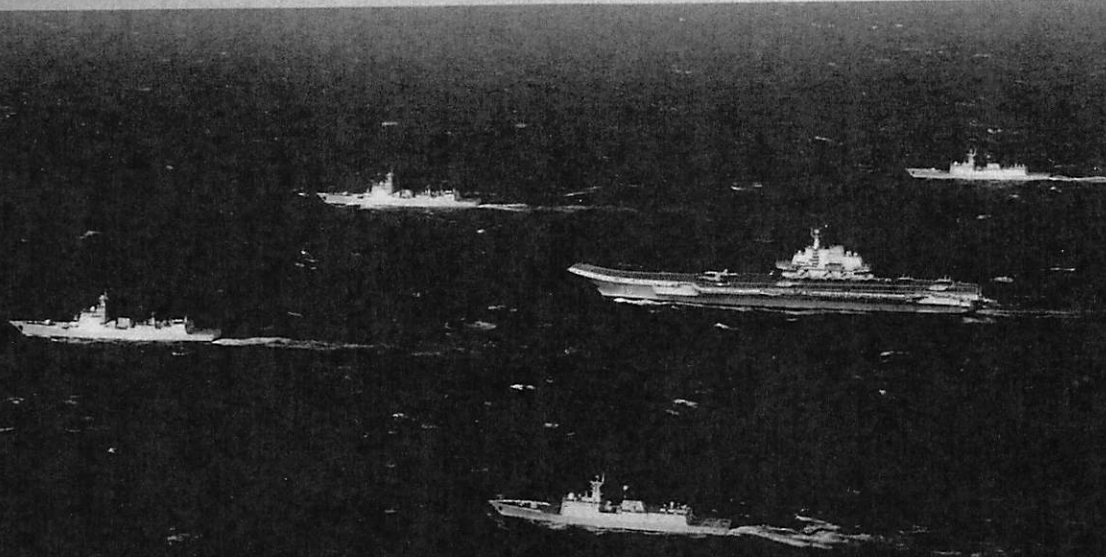
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China as a Twenty First Century Naval Power

Theory, Practice, and Implications



Michael A. McDevitt

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PREFACE

This is a book about today's Chinese navy and how it transitioned from the baby operational steps it was taking in the 1990s to the legitimate "blue-water" force it is today. It argues that ten years of northern Arabian antipiracy patrols, thousands of miles from China, represented the key accelerant in this rise in capability. These operations were a blue-water "laboratory" where the Chinese navy learned how to sustain warships on distant station for many weeks at a time. They overlapped with the takeoff in Chinese naval warship procurement that began just fifteen years ago. Since 2005 the People's Republic of China (PRC) has financed the building of enough warships to create the second-most-capable blue-water navy in the world.

Burdened with the awkward official name of People's Liberation Army Navy, the PLA Navy (in some sources simply PLAN) is the naval arm of the Chinese Communist Party (CCP). Although it flies the national flag, its loyalty is to the CCP, and the leaders of the PRC never let its members forget this. This party navy is a modern, well-equipped force that is numerically larger than the U.S. Navy. Yes, the PLA Navy is the largest navy in the world. This is still a bit of shock; in fact, one respected scholar argued in 2018 that China "will never become a seapower as long as it remains a vast land empire. . . . [T]he sea is so unimportant [to China] that China does not have [a] navy."¹ Technically, I suppose he is right, but if China does not have a navy, the CCP certainly does. In fact, the sea is so important to the PRC that it has its sights set on becoming a "great maritime power" with a navy that is "world-class," in the words of Xi Jinping, the general secretary of the CCP and also president of the People's Republic of China and commander in chief of China's military, the PLA.

This book is not a history of the PLA Navy; that book has already been well written, twice, by Dr. Bernard Cole. What it attempts to do is explain how the PLA Navy arrived, seemingly overnight, in its role of

eminence; where it is headed in terms of growth; and what role it plays in defending China and Chinese national interests. It delves in some detail into the role the PLA Navy plays in the Chinese military's layered-defense concept. That concept the U.S. Department of Defense (DoD) characterizes as "anti-access" and "area denial" (or, as it is better known by defense experts worldwide, A2/AD). It explains how the PLA Navy fits into a joint Chinese military concept of operations aimed at keeping America's navy and air force at arm's length should conflict between the United States and China break out. The role the PLA Navy might play in denying U.S. armed forces access to the western Pacific Ocean—where America's regional allies (Japan, South Korea, the Philippines, and Thailand) all live in the shadow of China—is explored in this book.

Taiwan, also known as the Republic of China (ROC), is also in the PRC's shadow. Taiwan is an important topic in this book, because it is the East Asian friction point that could most credibly involve the United States in a war with China. Should the PRC elect to use force to "reunite" what it deems its wayward province, the PLA Navy will play a leading role. In the unlikely but possible event that Xi Jinping orders the PLA to attack, U.S. forces permanently stationed in East Asia could quickly become involved in conflict with China. That is especially true for the U.S. Seventh Fleet and Fifth Air Force, both of which are stationed on Japanese territory. The book explores the operational roles of the PLA Navy and its sister PLA services in such a conflict.

This work also aims to put the PLA Navy into the broader context of China's national goal to become a great maritime power—or, as some would have it, a "maritime great power." The PRC has developed an impressive blend of all the capabilities one would associate with maritime power. Discovering these facts is the reason I decided to write this book. I was reviewing, in connection with a research project, the text of former PRC leader Hu Jintao's 2012 tediously long "work report" to the party congress at the end of his term in office. Wading through an English version of the document, I came across a statement establishing as a national objective that China should become a "great maritime power." I was immediately struck by the audacity of such an assertion, as well as with its candor and lack of equivocation.

My curiosity was piqued. How did the leadership of the Chinese party-state think about maritime power? How did it interpret maritime

power? Why did it want to become a maritime power? These questions eventually led to an eighteen-month study, which in turn eventually led to this book. It became clear over the course of my research that the Chinese Communist Party leadership has concluded that becoming a maritime power is essential to long-term national goals—goals that the current general secretary has encapsulated as the “China Dream,” a so-called great rejuvenation of the Chinese state that will be accomplished by 2049.

The more my colleagues at the Center for Naval Analyses (or CNA, a research center in Arlington, Virginia, just across the Potomac River from Washington, DC) and I dug into the maritime-power goal, the clearer it became that when Hu announced this objective in 2012, China was not starting with a clean sheet of paper. This was not a “bolt out of the blue” aspiration; rather, in terms of party policy, it was the culminating point of over a decade of careful consideration of, and appreciation for, the importance of the maritime domain to China’s continued development, to its security, and to its vision of its place in the world.

China’s strategic circumstances have changed dramatically over the past thirty years. Since the 1990s, the dramatic growth in China’s economic and security interests abroad have combined with traditional maritime-centered strategic objectives (such as unification with Taiwan and the “reclaiming” of land features in the East and South China Seas) to create a new reality that demands a focus on the maritime domain. Once Xi made maritime power an element of his “dream of the great rejuvenation of the Chinese nation,” it became a forgone conclusion that becoming a great maritime power will remain a national objective.

China defines maritime power the way the world largely defines it, as a broad construct that encompasses more than naval power. What is different, however, is the Chinese emphasis on the power that having a “world-class navy” yields. Such a force is the essential prerequisite of “great” maritime power. That is why the focus of the book is the PLA Navy; it is the keystone of the entire Chinese maritime-power edifice. Beijing clearly understands and appreciates that the maritime-power equation also includes a large and effective coast guard; a world-class merchant marine and fishing fleet; a globally recognized shipbuilding capacity; and an ability to harvest or extract economically important maritime resources.

This book also dwells on another statement made before a party congress, this one by Xi Jinping. During his first work report as general

secretary, to the 19th Party Congress in 2017, Xi stated he wanted the entire PRC military establishment, known as the People's Liberation Army, to be a "world-class" force by 2049 and that ongoing modernization was to be largely completed by 2035, just fifteen years away.² Neither Xi nor other senior officials have defined what "world-class" means, but the phrase connotes "second to none," "top tier," or "best in the world." This work puts flesh on these bones and provides a sense of what "world-class" means for the PLA Navy.

The central role the PLA Navy plays in China's contemporary national strategy is examined. PRC strategists are obsessed with the notion that America is bent on containing China; the PLA Navy's mission includes trying to thwart any attempt at military containment, which would almost certainly capitalize on the PRC's economic dependence on maritime trade in raw materials, especially hydrocarbons. This dependence causes Beijing and the PLA Navy to be anxious that its sea lines of communication (SLOC) could be interrupted. Reading official PLA defense documents could lead one to believe the PLA Navy is suffering from a case of "SLOC anxiety." For the PLA Navy, the problem is real. It is particularly acute in the Indian Ocean where its long SLOC presents the PLA Navy with a very difficult defensive problem. A very different SLOC situation exists in the South China Sea, where since the late 1950s the PLA Navy has played a leading part in China's slow but steady accumulation of land features and their conversion into military bases. Today a network of island bases provides the PLA Navy the means to protect this thousand-nautical-mile SLOC.

In short, this book addresses the surprising growth and maturation of the PLA Navy. It is an exploration of the growth of China's navy from the perspective of the missions assigned by the party-state. It discusses why China seeks to become a maritime power; why President Xi Jinping has determined that China should possess a "world-class" navy by midcentury; and why he is pressing the entire PLA, including the navy, to have this world-class objective "largely completed" in fifteen years. Coincidentally perhaps, 2035 is also when the Trump administration's goal of a 355-ship U.S. Navy is projected to be achieved.

The book concludes by exploring what a "world-class navy" might look like. We know it will be big, but will it begin to operate sizable naval task forces abroad on a routine basis as the U.S. Navy does, or will the

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operational focus remain regional, with only modestly sized formations active overseas? My conclusion is that it will be a force with global expeditionary capability, mimicking the United States in certain aspects in the Indian Ocean region, but that it will also maintain an overwhelming regional force reminiscent of imperial Japan's on the eve of World War II.

Finally, not so very long ago the idea that China would become a maritime power seemed absurd. Today, that preposterous idea has become reality. On June 1, 2019, DoD released an official *Indo-Pacific Strategy Report* that repeats a claim first made in the Trump administration's *National Security Strategy*, that China seeks "Indo-Pacific regional hegemony in the near term and ultimately global preeminence in the long term." This book judges that maritime predominance in the western Pacific is a credible Chinese aspiration. I am, however, dubious that China seeks global preeminence; however, if the DoD is correct, Beijing is going to need a very large navy.

A word about the appendices.

This work has two superb contributed appendices, one on the China Coast Guard and the other on China's maritime militia. They were written by America's leading experts on these subjects, Ryan D. Martinson, Dr. Andrew S. Erickson, and Conor M. Kennedy, at my request. I asked them to do this because to focus simply on the PLA Navy would produce an incomplete and unbalanced picture of the totality of China's coercive maritime power. In the East and South China Seas, the PLA Navy has largely remained over the horizon, leaving the dirty work of asserting China's maritime claims, in an often heavy-handed way, to the coast guard and the PLA-controlled maritime militia.