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## THE HISTORY OF THE TWENTY-FIRST-CENTURY CHINESE NAVY

Bernard D. Cole

hina historically has been a continental rather than a maritime power, despite its more than eleven thousand miles of coastline and more than six thousand islands. It has more often viewed the sea as a potential invasion route for foreign aggressors rather than as a medium for achieving national goals, a tendency that has contributed to the weakness of the Chinese maritime tradition. This attitude had changed by the beginning of the twenty-first century. The remarkable growth of China's economy beginning in the last two decades of the twentieth century, the broadening of Beijing's global political and economic interests, and resolution of almost all border disputes with its many contiguous

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neighbors have contributed to increased attention to threats to the vital sea lines of communication (SLOCs) on which China increasingly depends.

The historical missions of China's navy—called the People's Liberation Army Navy (PLAN)—were described in 1982 as "resist invasions and defend the homeland," attesting to the service's role as a coastal-defense force in support of the ground forces facing a potential Soviet invasion of China. Deng Xiaoping, however, delineated an "offshore defense" strategy in 1985, while in 1993 the PLAN was directed to "safeguard the sovereignty of China's national territorial land, air, and seas" and

to "uphold China's unity and security." This new strategy and direction marked the PLAN's transition to the post-Cold War world.

The four historical missions listed by President Hu Jintao in 2004 were the traditional responsibility of ensuring the military's loyalty to the Chinese Communist Party (CCP); ensuring sovereignty, territorial integrity, and domestic security, to include preventing Taiwanese separatism; and the new responsibilities of safeguarding expanding national interests, including maritime security and "nontraditional security problems," and helping to ensure world peace. The PLAN was being described as "a strategic service" by 2008.

The navy's commander, Admiral Wu Shengli, addressed his service's missions and intentions at its sixtieth-anniversary review, in 2009. He called for strength-ened logistics and support facilities "to improve far-sea repair, delivery, rescue and replenishment capacities" while establishing "a maritime defense system . . . to protect China's maritime security and economic development." These remarks reinforced Wu's 2007 call for creation of a "powerful armed force on the sea" as a "long cherished dream for the Chinese nation."

#### IMPERIAL CHINA

Despite China's historical dependence on ground forces to guard its national security interests, the PLAN can trace its lineage back through the dynasties. The earliest recorded naval battle in China occurred in 549 BC, during the Spring and Autumn Period, when rival rulers used ships to attack each other. Large-scale naval operations continued to play a role in Chinese warfare through the Han dynasty (206 BC-AD 220). Chinese sea-goers were the first to control their ships with sails and rudders, employ compartmentation, paint vessels' bottoms to inhibit wood rot, and build dry docks. They developed the art of navigation to a high degree, including use of the portable compass as early as 1044. China had established regular commercial sea routes to southwestern Asia and western Africa by the end of the Tang dynasty (AD 907).

#### The Song Dynasty

The high point of naval developments in imperial China probably occurred during the Song dynasty (AD 960–1279), as part of a five-hundred-year period when China deployed "the world's most powerful and technologically sophisticated navy." During this time, the military organized in times of emergency fleets composed of several hundred warships and supply vessels. One Song fleet in AD 1274 reportedly totaled 13,500 ships. Chinese maritime technology also matured during this age; shipping was an important part of the national economy.

Perhaps most significantly, the Song regime was the first in China to establish a permanent national navy, functioning as an independent service administered

by a central government agency. The Imperial Commissioner's Office for the Control and Organization of the Coastal Areas was established in 1132 to supervise a navy of fifty-two thousand men.<sup>8</sup>

The Song experience was based on a rapidly expanding national economy, with a particularly strong maritime sector encompassing commerce, fisheries, and transportation. As the navy expanded, so did port facilities, supply centers, and dockyards; soldiers were trained specifically as marines, and coast-guard squadrons were established. Song navies used both sail and paddle-wheel-driven craft, the latter powered by laborers on treadmills. Doctrine was formalized, and it included the development of formation maneuvers, long-range projectile launchers, and complex tactics.<sup>9</sup>

China remained a sea power during the two succeeding dynasties. In fact, the overthrow of the Song regime by the Yuan (Mongol) dynasty resulted in significant part from the latter's conduct of naval warfare. The Yuan later used large fleets to undertake invasions of Vietnam, Java, and Japan. The 1274 expedition against Japan, which proved unsuccessful, involved nine hundred ships and 250,000 soldiers; that of 1281 included 4,400 ships. <sup>10</sup> Maritime commerce continued to expand, and cannon made their appearance on board ship. <sup>11</sup>

#### The Ming Dynasty

During the Ming dynasty (1368–1644) China saw both the pinnacle of its overseas naval deployments and the collapse of its naval power. The crux of the successful Ming struggle to succeed the Yuan was a series of battles on the lakes of the Yangtze River valley. The waterborne forces employed by the Ming and their opponents were not independent navies but rather army units assigned to ships on the local lakes and rivers. Their original mission was to transport men and supplies, but the armies quickly recognized the advantages of using these craft as warships, against both land forces and each other. The Ming ships were manned by about twelve thousand troops and were armed with archers, cannon, and "flame weapons." The "lake campaign" was an effective use of ships and men to take advantage of battlefield topography but did not result in the establishment of a regular Ming navy.

The early-fifteenth-century voyages of Zheng He to the Middle East and Africa also occurred during the Ming dynasty. They demonstrated a standard of Chinese shipbuilding, voyage management, and navigation well beyond European capabilities. Zheng He led large fleets of ships, some displacing over four hundred tons, on seven voyages halfway around the world at a time when Portuguese explorers were still feeling their way down the west coast of Africa in fifty-ton caravels.

After just thirty years, the Ming rulers deliberately ended these voyages for domestic financial, political, and ideological reasons, just at the time when European nations were beginning to use the high seas to achieve economic wealth and to proselytize. Why were these expeditions ended? First, the voyages were expensive, and the Ming pursued a rigid economic policy. Second, the ruling circle was concerned about the growing power of the court eunuchs, who were the voyages' chief sponsors. Third, "Confucian-trained scholar-officials opposed trade and foreign contact on principle." <sup>12</sup>

Perhaps most importantly, however, the threat from Mongols and other Asian aggressors was growing stronger, which both increasingly focused government concerns inland and absorbed a growing portion of the national budget. By 1500, "anti-commercialism and xenophobia [had] won out," and the government thereafter attempted to deal with maritime problems by ignoring them. The navy was allowed to deteriorate; by the end of the sixteenth century the Ming government was unable even to defend its maritime traders against pirates.

During its long period of brilliant maritime scientific progress and dominating power, however, China's national security concerns had focused not at sea but on the north and west—with good reason, since that was where the threat to the regime lay. No dynasty fell as a direct result of maritime invasion or pressure: usurpers emerged from the Asian interior, and the crucial battles were land fights. The navy was at various times capable and even powerful, but never was it vital to a dynasty's survival, even in the face of the centuries-long threat from Japanese "pirates," as the Chinese habitually called their neighbors.

#### The Qing Dynasty

Typical of the process of dynastic progression, the Qing (Manchu) dynasty replaced the Ming in 1644 after a long period of land warfare in which naval power played a very small role. The Qing made no concerted effort to rebuild the navy or expand the maritime sector of China's economy following their assumption of power. The Qing regime faced no significant threat from the sea during its first century and a half in power, and there seemed little justification for investing in a modern navy. This was especially true after the most notable Qing maritime campaign, when after several failed attempts it conquered Taiwan in 1683.

Overseas trade grew despite Qing indifference, owing in part to the extensive settlement of "overseas Chinese" throughout Southeast and South Asia that had begun during earlier dynasties. The Qing navy remained powerful enough to prevent coastal piracy from getting out of hand, to maintain order on the canals and rivers, and to perform other coast-guard functions. China had fallen so far behind the global norm in naval power, however, that it was unable to defeat the late-eighteenth- and early-nineteenth-century imperialists—who came by sea.

#### Failed Modernization

As the Qing reeled from the imperialist onslaught and from the effects of the Taiping Rebellion, which ended in 1864, major "restoration" movements occurred in China. These "self-strengthening" efforts, under the slogan "Chinese learning as the fundamental structure, Western learning for practical use," included building and training a modern navy. This facet of modernization probably resulted from admiration of the technology represented by a modern warship and from the fact that the imperialist powers had used their navies to impose humiliating defeats on China.

An arsenal was established in Shanghai to build steam-powered gunboats, but efforts to modernize China's navy too often fell victim to Confucian traditionalists, who were the rigid ideologues of the day; it was in part a case of ideology defeating professionalism, a problem that has persisted. Nonetheless, by 1884 China had deployed a modern navy, led by the efforts of Li Hongzhang, one of the most prominent of the scholar-bureaucrats who appreciated how far behind the foreign powers China had lagged. Li used three approaches to build the new navy, which he thought should be oriented toward coastal defense: indigenous production, purchases abroad, and the reverse engineering of foreign systems.

Unfortunately, the new navy suffered from high-level governmental corruption and weak administration.<sup>13</sup> It was organized into four fleets that were essentially independent navies. The Beiyang Fleet, organized by Li Hongzhang, was the most modern and powerful; by 1884 it included two 7,500-ton-displacement, German-built battleships. The Fujian Fleet was homeported in Fuzhou; the other two fleets were the Nanyang and Guangdong.

This new navy was well regarded by Western observers but soon became embroiled in battle with two foreign fleets, one of them Western. Disputes with France over its colonization of Vietnam led to the outbreak of hostilities in August 1884; Chinese ground forces did well, but the local French fleet attacked the Chinese Fujian Fleet in Fuzhou Harbor and sank every ship. <sup>14</sup> China's other fleets were not sent to fight the French; Li wanted to conserve and build up remaining naval strength. His efforts were successful on paper, including establishment of a national Navy Office, a better-organized training regimen and shore establishment, and in 1888 standardized naval regulations. <sup>15</sup>

Despite these achievements, China's navy failed to become a coherent national force; its most powerful fleet came to grief attempting to halt Japanese incursions into Korea in the 1890s. The Beiyang Fleet—of two battleships, ten cruisers, and two torpedo boats—lost a sea battle to the Japanese in September 1894 and withdrew to Weihaiwei, a strongly fortified harbor on the northern Shandong coast. In January 1895 the Japanese landed troops who seized the Chinese batteries

guarding the harbor and turned their guns on the Chinese ships. <sup>16</sup> The Beiyang Fleet was eviscerated by its losses in ships, in conjunction with the suicides of the fleet commander and other senior officers. <sup>17</sup> Again, the other Chinese fleets failed to join the fight.

These naval conflicts with the French and the Japanese demonstrated that while Beijing had acquired the ships and weapons of a modern navy, it had failed to institute effective central administration, training, logistical and maintenance support, or command and control. Furthermore, operational doctrine was almost completely lacking; the navy's leaders failed to establish interfleet coordination, exercises, or mutual support. Finally, China had failed to provide its new navy with a coherent strategy tied to national security objectives. China's attempt to deploy a modern navy in the late nineteenth century failed miserably as a result of these factors.

#### THE REPUBLIC OF CHINA (1911–1949)

During the Republican period, Chinese naval forces under Chiang Kai-shek's Nationalists and the Kuomintang Party (KMT) relied almost entirely on ships leftover from the Qing or obtained from foreign nations. No significant efforts were made to rebuild the navy, given China's general political and economic disarray. Individual warlords occasionally made effective use of maritime units, but their ships were employed to augment ground forces, which was how navies had traditionally been employed by Chinese leaders. The low point was probably reached during the height of the warlord period, in the middle to late 1920s, when a Western observer dismissed the Chinese navy as a serious force:

There has been a steady deterioration in the discipline of the Chinese Navy since the establishment of the Republic, and it has now ceased to exist as a national force, the different units being under the control of various militarists, who treat the vessels as their own private property. . . . It is impossible today to obtain a complete list of Chinese warships, showing to which party or militarist faction they belong. Vessels have been changing their allegiance . . . with bewildering frequency. <sup>18</sup>

The government did not develop a maritime strategy, since the primary threats to the new regime were on the ground, from the CCP and warlords. Naval actions that did occur took place chiefly on the rivers, especially the Yangtze and the waterways of the Canton delta. Many of the warlords who struggled to gain control of various provinces and districts during the 1916–28 revolutionary period used China's inland waterways for transportation, as military barriers, or as sources of revenue—taxing the dense river and canal traffic. These efforts led to frequent firefights between provincial forces and the imperialist gunboats that patrolled China's rivers and lakes, but most of these episodes were of no significance insofar as coherent maritime thinking or navy building by China was concerned.

There were two notable exceptions. First was a battle at the upper Yangtze River port city of Wanhsien in September 1926. The local warlord, General Yang Sen, had commandeered British-owned steamers to transport his troops; when a British gunboat, HMS *Cockchafer*, attempted to free the steamers it ran into an ambush, very capably managed by Yang, and suffered severe casualties. <sup>19</sup> There was also an October 1929 naval and land engagement on the Heilong (Amur) River between Chinese and Soviet forces, one that foreshadowed the 1969 incident over disputed boundaries. <sup>20</sup>

Sea power was an effective "force multiplier" for the foreign powers present in China, who used sea and river transport to move troops rapidly from crisis area to crisis area. <sup>21</sup> Great Britain, the United States, and Japan were thus able to influence the course of events in revolutionary China with relatively small military forces. Republican China was unable to contest their maritime strength.

China's record as a naval power during the long period of empire and republic shows an understandable focus on the continental rather than maritime arena. Navies were built and employed almost entirely for defensive purposes. Maritime strength was regarded as a secondary element of national power.

#### THE PEOPLE'S REPUBLIC OF CHINA

The communist victory in 1949 was an army victory; the People's Liberation Army (PLA) was unable to project power across even the narrow Taiwan Strait. The KMT navy continued raiding coastal installations, landing agents, attacking merchant craft and fishing vessels, and threatening to invade the mainland. The government in Beijing of the new People's Republic of China (PRC) sought to defend its coastline and island territories against both the United States and the KMT regime on Taiwan. Coastal defense was emphasized in January 1950 with the creation of a new East China Military Command, headquartered in Shanghai and deploying more than 450,000 personnel. The East China Navy was formed as part of this force.

#### The Early Years: 1949-1954

Beijing ordered these troops to defend China's coast against "imperialist aggression from the sea," continue the fight against Chiang's forces, and help with economic reconstruction. <sup>22</sup> This first PRC navy was constituted largely by the defection of the KMT Second Coastal Defense Fleet. <sup>23</sup> The new navy's commander said it was needed "to safeguard China's independence, territorial integrity and sovereignty against imperialist aggression[,] . . . to destroy the sea blockade of liberated China, to support the land and air forces of the People's Liberation Army in defense of Chinese soil and to wipe out all remnants of the reactionary forces. <sup>24</sup> A navy was also required to establish law and order on coastal and riverine waters, help the army capture offshore islands still occupied by the KMT,

and prepare for the capture of Taiwan. The CCP Politburo further charged the new navy with "defending both [eastern and southeastern] China coasts and the Yangtze River." General Zhang Aiping was the first commander (and political commissar) of the navy. Among his first acts were the establishment of a naval staff college at Nanjing and organization of a rudimentary maintenance and logistical infrastructure.

The PLAN was officially established in May 1950, under the command of General Xiao Jinguang. The Chinese wanted a defensive force that would be inexpensive to build and could be quickly manned and trained. <sup>26</sup> Zhang and Xiao were typical of the early PLAN leadership—revolutionary officers who had spent their entire careers as ground commanders and had been transferred to the navy for reasons of political reliability and proven combat record rather than for any particular naval experience.

*Soviet Assistance.* Mao Zedong, as chairman of the CCP's Central Committee, obtained financial assistance during a 1949–50 visit to Moscow; he planned to use half the initial Soviet loan of \$300 million to purchase naval equipment. The new PLAN also ordered two new cruisers from Great Britain and attempted to obtain surplus foreign warships through Hong Kong, efforts that were nullified by the outbreak of the Korean War.<sup>27</sup>

China acquired mostly small vessels suitable to combat the coastal threat from Taiwan, initially obtaining four old Soviet submarines, two destroyers, and a large number of patrol boats. The new force also included about ten corvettes, forty ex-U.S. landing craft, and several dozen miscellaneous river gunboats, minesweepers, and yard craft, all seized from the KMT. The Soviets also helped establish a large shore-based infrastructure, including shipyards, naval colleges, and extensive coastal fortifications.<sup>28</sup>

Offshore Islands. Beijing's goal was seizure of the offshore islands still occupied by the KMT; the invasion of Taiwan was scheduled initially for the spring of 1950 but was soon postponed to the summer of 1951. Mao Zedong considered the capture of Taiwan "an inseparable part of his great cause of unifying China." He lacked experience in naval warfare but quickly learned that a successful campaign against Taiwan would require adequate amphibious training, naval transportation, "guaranteed air coverage," and the cooperation of a "fifth column" on the island—requirements that still apply.

China achieved a major victory when in April 1950 the PLA occupied Hainan, after Taiwan the largest island held by the Nationalists. The campaign cost Beijing heavily in personnel losses but captured more than ninety thousand Nationalist troops. This victory resulted from the PLA's careful planning, its ability to neutralize superior Nationalist naval and air forces by use of shore-based artillery to gain

effective control of the sea and airspace between Hainan and the mainland, and the characteristically poor performance of Taiwan's senior commanders.

The Korean War began two months later, and China's fear of American aggression was heightened when in June 1950 President Harry Truman ordered the U.S. Seventh Fleet into the Taiwan Strait. This meant America's reentry into the Chinese civil war. Truman claimed that it was intended to prevent either side from attacking the other; however, Beijing understood that the president was committing the United States to the defense of Taiwan—after having refused to do so for many months.<sup>31</sup> Premier Zhou Enlai called Truman's move "violent, predatory action by the U.S. Government [that] constituted armed aggression against the territory of China and total violation of the UN charter."<sup>32</sup> Beijing also understood, as it does today, that the United States possessed complete air and sea superiority in the western Pacific Ocean.

Beijing's concern was reinforced in February 1953, when President Dwight Eisenhower withdrew the U.S. fleet from the Taiwan Strait, thus in theory "unleashing" Nationalist forces on Taiwan to attack China.<sup>33</sup> In December 1953, Mao Zedong assigned the PLAN three priority missions: to eliminate KMT naval interference and ensure safe navigation for China's maritime commerce, prepare to recover Taiwan, and oppose aggression from the sea.<sup>34</sup>

The PRC's young navy faced many problems, including a lack of trained personnel and of amphibious ships, as demonstrated in the very spotty record of assaults on KMT-held coastal islands. Furthermore, in February 1952 Mao diverted the navy's ship-acquisition funds to the purchase of aircraft needed for combat over Korea.<sup>35</sup> Acquisition of equipment from foreign sources also was constrained by Western refusal to sell arms to the PRC and by domestic budgetary limitations.

Furthermore, despite several visits to Moscow by senior PLA leaders, the Soviets continued to insist on immediate payment for their ships, although most of them were obsolete.<sup>36</sup> The PLAN also lacked airpower and was just beginning to establish a capable maintenance and logistical infrastructure.

#### 1955-1959

The Korean War provided China with mixed naval lessons. The amphibious landing at Inchon in September 1950 was a major turning point of the war, while United Nations command of the sea allowed free employment of aircraft carriers and battleships to bombard North Korean and Chinese armies. The UN forces suffered at least one significant maritime defeat, however, when a planned amphibious assault on the east-coast port of Hungnam in October 1950 had to be canceled because the harbor had been mined. Overall, however, Korea was not a maritime conflict, and the PLA ground forces' dominant role there contributed to a continued policy of limiting the navy to coastal defense.

PLAN operations in the mid-1950s continued to focus on KMT attacks against the mainland and on capturing islands still held by Taiwan. The 1954–55 Taiwan Strait crisis included the PLA's capture of the Dachen Islands, an effort that took advantage of superior airpower and a well-coordinated amphibious assault against an outlying island.<sup>37</sup>

The navy's First Aviation School was founded at Qingdao in October 1950, and the navy's air force, referred to as "the People's Liberation Army Navy Air Force," or simply "naval aviation," was formally established in 1952. Its mission was support of antisurface and antisubmarine defensive operations. Its initial inventory was eighty aircraft, including MiG-15 jet fighters, Il-28 jet bombers, and propeller-driven Tu-2 strike aircraft. Naval aviation had grown to about 470 aircraft by 1958.<sup>38</sup>

PLAN operating forces were organized into the North Sea, East Sea, and South Sea Fleets. The decade ended with the PRC in possession of all the disputed islands except Quemoy (Kinmen), Matsu (Mazu), the Pescadores (Penghus), and of course Taiwan. The PLA also had defeated KMT raids on the mainland, as well as attacks on merchant and fishing vessels.<sup>39</sup> The PLAN had been organized, sent to sea, and proven effective as a coastal-defense force within ten years of its founding.

#### A New Situation: 1960-1976

The 1960s were marked by major foreign and domestic events that further constrained development of a seagoing navy. Most important was the split with the Soviet Union, dramatically manifested in mid-1960 when Soviet advisers (and their plans) were withdrawn from China. The navy suffered, with the rest of the PLA, as military development projects were left in turmoil.

Other significant events in the early 1960s included war with India, the reemerging Vietnam conflict, turmoil in the new African states, and revolutionary movements throughout Southeast Asia. None of these major international events directly involved the PLAN; they did not provide justification for naval modernization, which was accordingly extremely limited. By the end of the 1960s, however, relations with the Soviet Union had deteriorated to the point of armed conflict along the Amur River. The former ally was now the enemy; soon the United States would be China's ally. Beijing viewed the Soviet navy as a major amphibious invasion threat. That navy deployed only weak amphibious forces in its Pacific Fleet, but China was worried by a history of military threats from the north, by Soviet proximity, and by the concentration of economic developments in its own northeast.<sup>40</sup>

Significant naval developments were hampered also by the forced industrialization and collectivization program of 1958–61 known as the "Great Leap

Forward," and even more by the Great Proletarian Cultural Revolution, lasting from approximately 1966 to 1976. The PLAN continued to serve as an extension of the army; modernization was limited, since prevailing PLA doctrine, that of "People's War," portrayed technology and weaponry as insignificant compared to the revolutionary fervor of soldiers imbued with Mao's ideology. The Cultural Revolution seriously hampered technological development in general; even the relatively sacrosanct missile, submarine, and nuclear weapons programs were affected. 41 PLAN modernization was retarded by perhaps two decades as a result of program restrictions and personnel losses that occurred during this political maelstrom. Except for the evolution of maritime nuclear power, the PLAN missed or was very late joining developments that were common elsewhere in most warfare areas, including the employment of guided missiles in antiair, antisurface, and antisubmarine warfare; automation and computerization of command and control; expanded use of shipborne helicopters; automation of gunnery and sensor systems; and even the advent of automation and gas turbine technology in ship propulsion.

PLAN modernization was hamstrung in the last years of the Cultural Revolution by the "Gang of Four." Mao's widow, Jiang Qing, led an attack on naval missile development. Another member of the clique, Zhang Chunqiao, expressed its anti-navy, "continentalist" view. 42 By 1970, however, despite this attitude and a lack of resources for major conventional force development, the PLAN had moved into the missile age, deploying a Soviet-designed ballistic-missile submarine and ten Soviet-built patrol boats armed with cruise missiles.

Despite the ideological turmoil of the late 1950s and the 1960s, Beijing was in these years investing heavily in developing nuclear-armed missiles and nuclear-powered submarines to launch them. Beijing had relied on Soviet nuclear forces to counter the American nuclear threat during the 1950s. Among the reasons stresses in the alliance with Moscow had become more divisive as the 1960s progressed was that Mao Zedong was determined that China develop its own nuclear forces, proclaiming that "even if it takes 10,000 years, we must make a nuclear submarine." Mao was adamant that China should join the nuclear club. These were national rather than PLAN projects, however, and did not significantly increase the navy's ability to obtain the military resources necessary for modernization.

The budgetary emphasis on nuclear weapons, the economic disruptions resulting from the disastrous Great Leap Forward and the Cultural Revolution, and the continuing belief in Maoist orthodoxy all contributed to the Chinese navy's lack of resources for modernization during the late 1950s and the 1960s.

#### After the Great Proletarian Cultural Revolution

In May 1975, however, at a meeting of the Central Military Commission (CMC), Mao Zedong reportedly directed the development of a modern navy, probably reacting to both the Soviet threat and the development of a powerful navy by China's ancient adversary Japan. Chinese interests threatened by the Soviet navy in the late 1970s and 1980s included SLOCs vital to Beijing's rapidly increasing merchant marine, as Moscow established a continual naval presence in the Indian Ocean and the northern Arabian Sea. The Soviet Pacific Fleet almost doubled in size during the 1970s and was upgraded by the assignment of Moscow's latest combatants, including nuclear-powered and nuclear-armed surface ships and submarines. Soviet merchant ships and fishing vessels were also omnipresent in Pacific waters historically vital to China's economic interests.

Several factors continued to impede development of a large, modern Chinese navy. The political aftershocks of the Cultural Revolution, as Hua Guofeng and Deng Xiaoping contested for leadership of post-Mao China, limited the resources devoted to military modernization. This struggle was not resolved until 1980, when Deng emerged on top. However, Deng reemphasized the navy's role as a coastal-defense force, a view retained throughout the first half of the succeeding decade. "Our navy," Deng asserted, "should conduct coastal operations. It is a defensive force. Everything in the construction of the navy must accord with this guiding principle."

Naval growth also was limited by the disorder in China's economic and social structures that lasted beyond the end of the Cultural Revolution. This turmoil affected China's military-industrial complex, hindering modernization efforts in the PLA generally. Furthermore, the lesson of the 1979 "punishment" of Vietnam was sobering to the PLA, but this conflict did not involve significant naval efforts. Hence, the PLAN probably benefited only marginally from corrective budgetary measures that resulted.

Finally, the triangular play among China, the Soviet Union, and the United States meant that by 1980 Beijing could rely on the world's largest and most modern navy to counter the Soviet maritime threat. This argued against China's developing a similar force of its own. Furthermore, given the U.S.-Japanese security treaty, Beijing could subsume concern about future Japanese aggression within its strategic relationship with Washington.

Major changes in China's domestic and international situation in the 1980s soon altered Beijing's view of the PLAN, and maritime power became a more important instrument of national security strategy by the end of the decade. Beijing's second maritime priority, after countering the Soviet threat, was securing offshore territorial claims. Taiwan was the most important of these, but the South China Sea was also significant. Although successful action against South

Vietnamese naval forces in 1974 resulted in Chinese possession of the disputed Paracel Islands, the fight itself indicated that other claimants to the islands and reefs of the South China Sea would not accede meekly to Beijing's territorial assertions. Furthermore, the Soviet naval base at Cam Ranh Bay was flourishing as the 1970s ended.

These factors contributed to a significant change in the South Sea Fleet's organization: the marine corps, first formed in 1953 but disbanded in 1957, was reestablished in December 1979 as an amphibious assault force and assigned to the southern fleet. The PLAN's slender amphibious assets were concentrated in the South Sea Fleet, which conducted "island seizing" exercises. In 1980, for instance, a major fleet exercise in the South China Sea focused on the seizure and defense of islands in the Paracel Archipelago.<sup>46</sup>

The South Sea Fleet's organization benefited from PLAN force-structure changes that, for the first time, centered on Chinese-built warships. Although still heavily reliant on Soviet designs, the Luda-class guided-missile destroyers, Jianghu-class frigates, and Houjian fast attack missile boats collectively marked a significant increase in China's maritime capability. The submarine force included the first Chinese-built nuclear-powered attack submarines, as well as about sixty conventionally powered boats. A seaborne nuclear deterrent force continued under development, following Mao's earlier declaration that the navy had to be built up "to make it dreadful to the enemy."

#### Deng Xiaoping's Navy

Naval expansion and modernization were spurred during the 1980s by the coastal concentration of China's burgeoning economy and military facilities. Furthermore, the resources necessary for a modernized PLAN became available as a result of China's dramatic economic development and increasing wealth. Recovery from the Cultural Revolution, well under way by 1985, brought a reinvigorated, if less centralized, military-industrial complex.

Three events contributed prominently to the development of the navy in this decade. The first was Deng's evaluation of the military at an expanded CMC meeting in 1975 as "overstaffed, lazy, arrogant, ill equipped, and ill prepared to conduct modern warfare," an opinion strengthened by the PLA's poor performance during the 1979 conflict with Vietnam. Second was Beijing's 1985 strategic decision that the Soviet Union no longer posed a major threat to China in terms of global nuclear war and that accordingly the PLA would have to be prepared instead for "small wars on the periphery" of the nation. The emphasis on a "peripheral" (to a significant extent maritime) rather than continental strategic view improved the PLAN's leverage in obtaining resources within the PLA as a whole.

Third was the rise to prominence of Admiral Liu Huaqing. Liu had been schooled in the Soviet Union, had served most of his career in the science and technology arms of the PLA, and was close to Deng Xiaoping. Liu exerted a strong force on development of the navy as its commander from 1982 to 1987 and vice chairman of the CMC until 1997. He is best known for promulgating a three-stage maritime strategy that provided justification on which PLAN officers and other navalists could base their plans for a larger, more modern navy. More important were his accomplishments in reorganizing the navy, redeveloping the marine corps, upgrading bases and research-and-development facilities, and restructuring the school and training systems. <sup>51</sup>

China's widening maritime concerns and increased budget resources in the 1980s favored PLAN modernization, which proceeded along three paths—indigenous construction, foreign purchase, and reverse engineering—much as had Li Hongzhang's "self-strengthening" navy initiative of a hundred years earlier. The 1980s program proceeded at a measured pace, but it created a new navy.

Construction included guided-missile destroyers and frigates, replenishment-at-sea ships, conventionally and nuclear-powered attack submarines, and support craft, including missile-tracking ships and officer-training vessels. Foreign purchases were concentrated in the West, with the United States selling China a small number of modern ship engines and torpedoes and Western European nations selling weapons and sensor systems, including Italian torpedoes, French cruise missiles, and British radars. The PLAN acquired its only Xia-class fleet-ballistic-missile submarine. The successful submerged launch in 1988 of the Ju Lang–1 (JL-1) intermediate-range ballistic missile from this submarine meant that China for the first time could deploy strategic nuclear weapons at sea. <sup>52</sup>

The PLAN demonstrated its increasing capability in other maritime missions as well during the 1980s. China invested in four large space-surveillance ships to support its growing military and commercial space program; these ships conducted the first long-range PLAN deployments, in support of space launches, in 1980. Task forces supported scientific expeditions to the Arctic and Antarctic. The PLAN's first foreign port visit was conducted in 1985, when two East Sea Fleet ships visited Bangladesh, Sri Lanka, and Pakistan; the officer-training ship *Zheng He* became the first PLAN vessel to visit the United States when it made a 1989 port call in Hawaii.

During the 1990s Beijing continued to expand and modernize the navy it had begun building in the 1970s, but again, at a measured pace. The PLAN engaged in a series of long-range deployments throughout East and South Asia, as well as deploying a three-ship task group to the Western Hemisphere in 1998, visiting the United States, Mexico, Peru, and Chile. Foreign purchases of improved ships, submarines, and aircraft earned the PLAN headlines as China acquired

Sovremenny-class guided-missile destroyers, Kilo-class submarines, and Su-27 fighters from Russia, but these constituted only incremental improvements to a large if still limited navy.

#### NOTABLE CONSISTENCIES AND CAUTIONARY MESSAGES

The communist regime recognized early on the need to deal with maritime issues, but only after thirty years and a dramatically altered international situation did China apparently acknowledge the necessity of a modernized navy. Beijing currently views "the ocean as its chief strategic defensive direction," since "China's political and economic focus lies on the coastal areas [and] for the present and a fairly long period to come, [its] strategic focus will be in the direction of the sea."53

The Chinese navy being built for the twenty-first century owes a good deal to its history, which has been marked by some notable consistencies. First has been recognition of the maritime element in China's national security. Second, Chinese naval efforts have been closely linked to the nation's economic development. Hence, continued naval modernization should be expected, in view of China's continuing economic boom.

Third, Chinese naval development since the eighteenth century has been marked by significant interaction with foreign navies. Qing-dynasty modernization efforts drew on Japanese, German, British, and American naval professionals as advisers, administrators, and engineers. This trend continued under the People's Republic of China, with a sporadic but pervasive reliance on Soviet/ Russian advisers, strategy, equipment, technology, and engineers.

Fourth, the Chinese government has not hesitated to employ naval force in pursuit of national security goals. These efforts have not always been successful (witness the failed campaigns in 1884 against France and 1894–95 against Japan) but often they have been, as in 1950, 1954-55, and 1958 in the Taiwan Strait, and in 1974, 1988, and 1998 in the South China Sea. Beijing's willingness to resort to naval force even when significantly outgunned bears a cautionary message for foreign strategists.

Imperial China for the most part ignored the sea except for brief periods and specific campaigns. Republican China was simply too preoccupied with civil war and Japanese invasion to focus on naval development. The communist regime installed in 1949 maintained for almost fifty years a traditional Chinese attitude toward the navy as a secondary instrument of national power.

Mao Zedong recognized in 1950 that deploying a navy to conquer Taiwan required development of expertise in amphibious warfare, seaborne logistics, and maritime airpower, but his plan to organize a strong navy was aborted because of the Korean War and thereafter limited by domestic political events, especially the disastrous Great Leap Forward. Later, naval development was severely impacted

during the 1960s by the Sino-Soviet split and the Great Proletarian Cultural Revolution. Only at the end of the 1970s, following the end of the Cultural Revolution and the post-Mao power struggle, was the PLAN in a position to "take off."

That takeoff did not immediately happen, although the PLAN did benefit in the 1980s from a relatively close relationship with the United States, from which China purchased advanced naval systems, including LM2500 gas-turbine engines and Mark 46 antisubmarine torpedoes. The sanctions that followed the June 1989 Tiananmen Square massacre ended U.S. naval assistance, and China has since turned to Europe, Israel, and especially Russia. The following decades have seen a dramatic increase in China's naval capabilities.

Almost all of China's primary sovereignty concerns lie in the maritime arena: Taiwan; territorial and seabed resource disputes with Japan in the East China Sea; similar disputes with Vietnam, the Philippines, Brunei, Indonesia, and Malaysia in the South China Sea; and SLOCs across the Indian Ocean endangered by piracy in the Gulf of Aden. Additionally, the government's authority relies in significant part on continued economic growth, which in turn relies on maritime trade and energy flows.

Finally, Beijing's willingness to resort to force even when significantly outgunned should impart a cautionary message for strategists considering possible Chinese reactions to specific issues, especially Taiwan's efforts to resist reunification. While Beijing will continue to be constrained by American (and perhaps Japanese) naval force, it will not hesitate to employ the PLAN in situations involving sovereignty or other vital national security claims.

#### NOTES

An earlier version of this article was delivered to the U.S. Naval Academy's Seventeenth Naval History Symposium in September 2011 and will appear as chapter 11 of the selected proceedings of that symposium, New Interpretations in Naval History, forthcoming from the Naval War College Press.

- 1. This discussion relies on "CMC's Guo Boxiong Urges Improving PLA Capabilities to 'Fulfill Historic Missions," Xinhua, 27 September 2005, in Open Source Center CPP20050927320021, and Daniel M. Hartnett, The PLA's Domestic and Foreign Activities and Orientation, Testimony before the U.S.-China Economic and Security Review Commission, "China's Military and Security Activities Abroad" hearings, 111th Cong., 1st sess., 4 March 2009, available
- at www.uscc.gov/. The Central Military Commission (CMC) is the supreme military policy-making commission, issuing directives relating to the People's Liberation Army (PLA), including senior appointments, troop deployments, and arms spending. CCP senior leaders hold the CMC's most important posts. See The Central People's Government of the People's Republic of China, english.gov.cn/, for current CMC membership.
- 2. Quoted in Cui Xiaohuo and Peng Kuang, "Navy Chief Lists Key Objective," China Daily, 16 April 2009, www.chinadaily.com.cn/.
- 3. Deng Gang's Chinese Maritime Activities and Socioeconomic Development, c. 2100 BC-900 AD (Westport, Conn.: Greenwood, 1997) is a well-written history of this topic.

- 4. Joseph Needham's massive (six-volume) Science and Civilisation in China (Cambridge, U.K.: Cambridge Univ. Press, 1954-86) discusses these and related developments.
- 5. See "China's Sea Route to West Asia Begins in Xuwen," Xinhua, 21 June 2000, in Foreign Broadcast Information System [hereafter FBIS] CPP20000621000077, for an archaeological theory that trading voyages may have departed from Guangdong Province as early as 200 BC, two hundred years before the Silk Road was established; Deng, Chinese Maritime Activities and Socioeconomic Development, p. 41.
- 6. Paul C. Forage, "The Foundations of Chinese Naval Supremacy in the Twelfth Century," in New Interpretations in Naval History: Selected Papers from the Tenth Naval History Symposium Held at the United States Naval Academy, 11-13 September 1991, ed. Jack Sweetman (Annapolis, Md.: Naval Institute Press, 1992), p. 3.
- 7. Ibid., p. 70.
- 8. Lo Jung-pang, "The Emergence of China as a Sea Power during the Late Song and Early Yuan Periods," Far Eastern Quarterly 14, no. 4 (August 1955), p. 491.
- 9. See Forage, "Foundations of Chinese Naval Supremacy in the Twelfth Century," pp. 6–7, 19-21, for a fascinating account of two battles between Song and Yuan naval forces.
- 10. John K. Fairbank, "Maritime and Continental in China's History," in The Cambridge History of China, vol. 12, Republican China: 1912-1949, pt. I, ed. John K. Fairbank and Dennis Twichett (Cambridge, U.K.: Cambridge Univ. Press, 1983), p. 1:15.
- 11. Forage, "Foundations of Chinese Naval Supremacy in the Twelfth Century," pp. 500-501, provides a brief but interesting description of these early weapons.
- 12. Quote is from Jin Wu, in Richard Gunde, "The Voyages of Zheng He" (Los Angeles: UCLA Center for Chinese Studies, 20 April 2004), available at www.international.ucla .edu/. The Ming decision also reflected Chinese xenophobia, perhaps best expressed in the response of the Qing emperor Ch'ienlung to Britain's 1793 attempt to establish relations with Beijing. The emperor told Lord Macartney, "We possess all things. I set no value on objects strange or ingenious, and

- have no use for your country's manufactures." The best work on Zheng He remains Edward L. Dreyer, Zheng He: China and the Oceans in the Early Ming Dynasty, 1405-1433 (New York: Longman, 2006). See George Raudzens, "Military Revolution or Maritime Evolution: Military Superiorities or Transportation Advantages as Main Causes of European Colonial Conquests to 1788," Journal of Military History 63, no. 3 (July 1999), p. 56, for an interesting but Eurocentric interpretation of the role maritime mobility played in European imperialism.
- 13. John K. Fairbank, China: A New History (Cambridge, Mass.: Belknap Press of Harvard Univ., 1992), p. 220, relates the most famous case of corruption—the diversion of perhaps fifty million dollars in naval construction funds to the building of the empress's Summer Palace in Beijing, complete with a large boat made of marble.
- 14. Mary Clabaugh Wright, The Last Stand of Chinese Conservatism: The T'ung-chih Restoration, 1862-1874 (Stanford, Calif.: Stanford Univ. Press, 1957), pp. 59-66, provides the most detailed description of the Sino-French War. The French had eight warships and two torpedo boats. The Chinese had eleven warships and several other craft, but all were made of wood. The French also destroyed the Chinese shore installations.
- 15. Bruce A. Swanson, The Eighth Voyage of the Dragon: A History of China's Quest for Seapower (Annapolis, Md.: Naval Institute Press, 1982), p. 96ff., discusses these developments.
- 16. Japan's success was simplified by the fact that the forts' guns were designed only to defend against threats from seaward. The British made the same defensive mistake in Singapore in 1941, and Japanese forces took advantage of it.
- 17. Swanson, Eighth Voyage of the Dragon, p. 223. China was only one of several countries building navies at this time: Great Britain, Germany, France, Italy, Russia, Japan, the United States, and even Austria-Hungary were all modernizing their fleets. Those that fell spectacularly short—China, Germany, Austria-Hungary failed to develop meaningful strategic and operational frameworks for their new navies. William Ferdinand Tyler, Pulling Strings in China (London: Constable, 1929), tells some

- colorful stories about another, more successful maritime force developed in China during the late nineteenth century. British naval officers operated most of the ships of the Revenue Service, established as part of the Customs Service, long supervised by Sir Robert Hart. Tyler, who was on board the Chinese flagship at Weihaiwei in 1895, characterized the navy as "a monstrously disordered epicyclic heterogeneity."
- "The Chinese Navy," in Shanghai Defense Force and Volunteers (Shanghai: North China Daily Herald, 1929[?]), p. 1302.
- 19. This battle is described in Bernard D. Cole, *Gunboats and Marines: The U.S. Navy in China, 1925–1928* (Wilmington: Univ. of Delaware Press, 1982), pp. 89–90.
- 20. Swanson, Eighth Voyage of the Dragon, p. 157. The "Chinese" naval forces were actually those of Zhang Xueliang, the Manchurian warlord (the "Young Marshal") who had recently sworn allegiance to Chang Kai-shek's Nationalist government. The Chinese account of this battle quoted by Swanson ends with a Soviet victory due to superior firepower, including air strikes. There was also an October 1929 clash with Soviet forces over disputed boundaries.
- 21. The United States, for instance, used just two Navy transports and a commercial passenger liner to move a regiment of Marines from the United States to the Far East, and then between the Philippines and China and between northern and southern China, as crises waxed and waned.
- PLAN vice commander Zhou Xihan, 1957, quoted in David G. Muller, Jr., *China's Emergence as a Maritime Power* (Boulder, Colo.: Westview, 1983), p. 47.
- 23. Larry M. Wortzel, "The Beiping-Tianjin Campaign of 1948–49: The Strategic and Operational Thinking of the People's Liberation Army" (paper prepared for the U.S. Army War College's Strategic Studies Institute, Carlisle, Pa., n.d.), chart 1, points out that by July 1949 the PLA actually included seventy-seven "naval vessels." Gene Z. Hanrahan, "Report on Red China's New Navy," U.S. Naval Institute *Proceedings* 79, no. 8 (August 1953), p. 847, describes the Nationalist contribution to this force as "twenty-five vessels ranging from LCTs [tank landing craft, about 120 feet long, 260 tons] to destroyers, representing an

- estimated one-fourth of the total Nationalist naval force."
- 24. Gen. Zhang Aiping, quoted in Hanrahan, "Report on Red China's New Navy," p. 848. See Bernard D. Cole, *Taiwan's Security: History and Prospects* (London: Routledge, 2006), chap. 2, for an account of KMT activities during this period.
- Quoted in Shu Guang, Mao's Military Romanticism: China and the Korean War, 1950–1953
  (Lawrence: Univ. Press of Kansas, 1995), p. 51.
- 26. Hanrahan, "Report on Red China's New Navy," pp. 46–54, provides a useful description of the beginnings of the PLAN. Muller, *China's Emergence as a Maritime Power*, p. 13, estimates that approximately two thousand former Republic of China naval personnel defected to the communist regime in 1949 and formed the core of the nascent PLAN.
- 27. The Chinese missions to Moscow are discussed, in some cases with verbatim accounts, in "Inside China's Cold War," Cold War History Project Bulletin, no. 16 (Fall 2007 / Winter 2008) (edited by Christian Ostermann, at the Woodrow Wilson Center, in Washington, D.C.). Probably the most complete account of PLAN Taiwan Strait operations in this period is He Di, "Last Campaign to Unify China: The CCP's Unmaterialized Plan to Liberate Taiwan, 1949-1950," Chinese Historians 5 (Spring 1992), p. 8. Its author worked at the Institute of American Studies of the Chinese Academy of Social Sciences and presumably had good access to PLA archives while researching this article.
- 28. Raymond V. B. Blackman, ed., *Jane's Fighting Ships:* 1955–56 (London: Jane's Fighting Ships, 1956), p. 151ff., provides these numbers, but they should be treated as estimates. Swanson, *Eighth Voyage of the Dragon*, p. 196, describes such massive projects as a fortified "250-mile, 10-foot-wide communication trench paralleling the southern bank of the Yangtze River from Wusong to Jiujiang up river," noting that a "similar trench was constructed along the coast south of Shanghai for about 200 miles."
- 29. He, "Last Campaign to Unify China," p. 2, points out that Mao postponed the date for assaulting Taiwan several times as PLA failures against various offshore islands emphasized the additional time required to prepare for a successful large-scale amphibious assault. Muller, China's Emergence as a

- Maritime Power, p. 16, gives August 1951 as the planned invasion month.
- 30. He, "Last Campaign to Unify China," p. 4. Edward J. Marolda, "U.S. Navy and the Chinese Civil War, 1945-1952" (PhD diss., George Washington University, 1990), p. 139, states that by spring 1950 Beijing "had assembled a motley armada of 5,000 vessels . . . freighters, motorized junks, and sampans" for the invasion of Taiwan; these vessels were to be crewed by "30,000 fishermen and other sailors."
- 31. See Robert J. Donovan, Tumultuous Years: The Presidency of Harry S Truman, 1949–1953 (New York: W. W. Norton, 1983), p. 206, for Truman's decision to reposition the Seventh Fleet, and p. 241ff. for a good account of administration (i.e., Truman, Acheson, Bohlen, et al.) thinking about the implementation of NSC-68, which effectively rearmed the United States for the Cold War and potential global war with Soviet-led communist forces: "On the last day of July 1950, Truman and Acheson had a talk about grand strategy. The eyes of the American people were glued to Korea. . . . The president and the secretary of state fixed their gaze on the Rhine and the Elbe." The Chinese reaction is in Mao Zedong, "Speech Delivered at the Eighth Meeting of the Government Council of the People's Republic of China, 28 June 1950," in Jerome Chen, Mao, ed. Gerald Emanuel Stearn (Englewood Cliffs, N.J.: Prentice Hall, 1969), p. 115. A contrary but very credible view of U.S. intentions is provided by Bruce A. Elleman, High Seas Buffer: The Taiwan Patrol Force, 1950-1979, Newport Paper 38 (Newport, R.I.: Naval War College Press, April 2012), esp. chap. 1, available at www .usnwc.edu/press/.
- 32. Quoted in Marolda, "U.S. Navy and the Chinese Civil War," pp. 119-20.
- 33. Fred L. Israel, ed., "Dwight D. Eisenhower: First Annual Message," in The State of the Union Messages of the Presidents, 1790-1966, vol. 3, 1905-1966 (New York: Chelsea House, 1967), p. 3015. In his 2 February 1953 State of the Union Address to Congress, Eisenhower commented that "since the 'Red Chinese' had intervened in the Korean War, he felt no longer any need to 'protect' them from an invasion by . . . Chiang K'ai-shek."
- 34. Swanson, Eighth Voyage of the Dragon, p. 187.

- 35. Dangdai Zhonggun Haijun (Beijing: China Social Services Publishing House, 1987), translated as China Today: The People's Navy [hereafter People's Navy] in FBIS, JPRS-CAR-90-014 (16 July 1990), p. 7.
- 36. Ibid., p. 10, also notes that the Soviet ships were designed for a northern climate and had some difficulty operating in the warmer waters of the East and South China Seas. difficulty that is still a concern with the Sovremenny-class guided-missile destroyers purchased by China.
- 37. Gordon Chang and He Di, "The Absence of War in the U.S.-China Confrontation over Quemoy and Matsu in 1954-1955: Contingency, Luck, Deterrence?," American Historical Review (December 1993), p. 1514, describes this action, during which "10,000 PLA troops . . . overwhelmed 1,086 Kuomintang soldiers."
- 38. People's Navy, pp. 36-37. Kenneth W. Allen, Glenn Krumel, and Jonathan D. Pollack, China's Air Force (Santa Monica, Calif.: RAND, 1995), p. 205 note 11, also app. E, pp. 221-29, for useful descriptions of PLA aircraft-acquisition programs. Swanson, Eighth Voyage of the Dragon, p. 205, estimates 470 aircraft; a reasonable assumption is that the navy's air arm has flown older variants of PLA Air Force aircraft.
- 39. Other islands remained under Taiwan's control, including the Pratas Islands and Itu Aba in the South China Sea. Taiwan's attacks on the mainland continued into the 1960s. The Taiwan Strait naval campaigns are addressed in Li Xiaobang, "PLA Attacks and Amphibious Operations during the Taiwan Straits Crisis of 1954-58" (paper presented at the Center for Naval Analyses [CNA] Conference on the PLA's Operational History, Alexandria, Virginia, June 1999), and Alexander Huang, "PLA Navy at War, 1949-1999: From Coastal Defense to Distant Operations" (paper presented at the same conference). Thomas Torda, "Struggle for the Taiwan Strait: A 50th Anniversary Perspective on the First Communist-Nationalist Battles for China's Offshore Islands and Their Significance for the Taiwan Strait Crises" (unpublished manuscript, 1999), describes these early battles, which included PLA successes as well as failures. Also see Alexander Huang, "Evolution of the PLA Navy and Its Early

- Combat Experiences" (paper presented at the CNA Conference on the People's Liberation Army Navy, Washington, D.C., April 2000), p. 3, for a tabular summation of the PLAN's war-fighting efforts during this period. Chang and He, "Absence of War in the U.S.-China Confrontation," pp. 1504, 1510 notes 7–8, documents this.
- 40. Raymond V. B. Blackman, ed., Jane's Fighting Ships, 1970-1971 (London: Jane's Yearbooks, 1970), p. 610, credits the Soviet Navy with just four large (four-thousand-ton displacement) and eighty smaller (six hundred to a thousand tons) amphibious ships spread out among all of the Soviet Union's four fleets, from the Pacific to the Baltic.
- 41. People's Navy repeatedly emphasizes the deleterious effects of the Cultural Revolution. John R. O'Donnell, "An Analysis of Major Developmental Influences on the People's Liberation Army-Navy and Their Implication for the Future" (master's thesis, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas, 1995), p. 42, lists the PLAN's political commissar, chief operations officer, the East Sea Fleet commander, two deputy commanders, and two fleet political commissars among the "120 senior naval officers and thousands of lower ranking personnel [who] were purged." Also see John Wilson Lewis and Xue Litai, China's Strategic Seapower: The Politics of Force Modernization in the Nuclear Age (Stanford, Calif.: Stanford Univ. Press, 1994), p. 206ff, who note that not even Zhou Enlai was able to protect these programs completely.
- 42. Quoted in People's Navy, p. 13.
- 43. Cited in Muller, China's Emergence as a Maritime Power, p. 154.
- 44. Lewis and Xue, China's Strategic Seapower, p. 223, discusses Hua's decision; Deng is quoted on p. 224.
- 45. Fred Hiatt, "Marine General: U.S. Troops Must Stay in Japan," Washington Post, 27 March 1990, p. A14, quoted Lt. Gen. Henry Stackpole, U.S. Marine Corps, commander of III Marine Expeditionary Force on Okinawa, as describing the United States as "a cap in the [Japanese] bottle," a statement I confirmed in conversation with Lieutenant General Stackpole.
- 46. Tai Ming Cheung, Fortifying China: The Struggle to Build a Modern Defense Economy

- (Ithaca, N.Y.: Cornell Univ. Press, 2009), p. 28. China's marine corps, disestablished in 1957 as "unnecessary," was reestablished in 1980. The concentration of amphibious forces in the South Sea Fleet continues in 2012, indicating that PLAN amphibious planning is aimed more at the South China Sea than at Taiwan.
- 47. John E. Moore, ed., Jane's Fighting Ships: 1976-77 (New York: Franklin Watts, 1977), p. 100ff. The PLAN also included the first Chinese range-instrumentation ships for tracking guided-missile flights and the first Chinesebuilt amphibious ship. Mao is quoted in Muller, China's Emergence as a Maritime Power, p. 171.
- 48. Deng Xiaoping, "Speech at an Enlarged Meeting of the Military Commission of the Party Central Committee," 14 July 1975, in Joint Publications Research Service China Reports, no. 468 (31 October 1983), pp. 14-22 (website now discontinued).
- 49. Alfred D. Wilhelm, China and Security in the Asian Pacific Region through 2010, CRM 95-226 (Alexandria, Va.: CNA, 1996), p. 42.
- 50. John W. Lewis, China Builds the Bomb (Stanford, Calif.: Stanford Univ. Press, 1988), pp. 50-51; Liu had worked for Deng on at least two previous occasions.
- 51. Liu's accomplishments are summed up in Wilhelm, China and Security in the Asian Pacific Region through 2010, p. 43.
- 52. Lewis and Xue, China's Strategic Seapower, provides the best account of the fleet-ballisticmissile and JL-1 programs. A successful launch was made in 1982 from a submerged platform; a 1988 attempt from the submarine probably succeeded. The single Xia itself has been an operational failure, never operating on a regular basis. The boat apparently received an extensive overhaul—probably involving recoring the propulsion plant—that enabled it at least to participate in the April 2009 naval review conducted by China to celebrate the PLAN's sixtieth anniversary.
- 53. Lt. Gen. Mi Zhenyu, PLA, "A Reflection on Geographic Strategy," Zhongguo Junshi Kexue [China Military Science], no. 1 (February 1998), pp. 6-14, in FBIS-CHI-98-208. A brief popular view of China's maritime history was published as "Special Report: China Marks 60th Anniversary of Navy," Xinhua, 24 April 2009, news.xinhuanet.com/.