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Echelon Defense: The Role of Sea Power in Chinese Maritime Dispute Strategy

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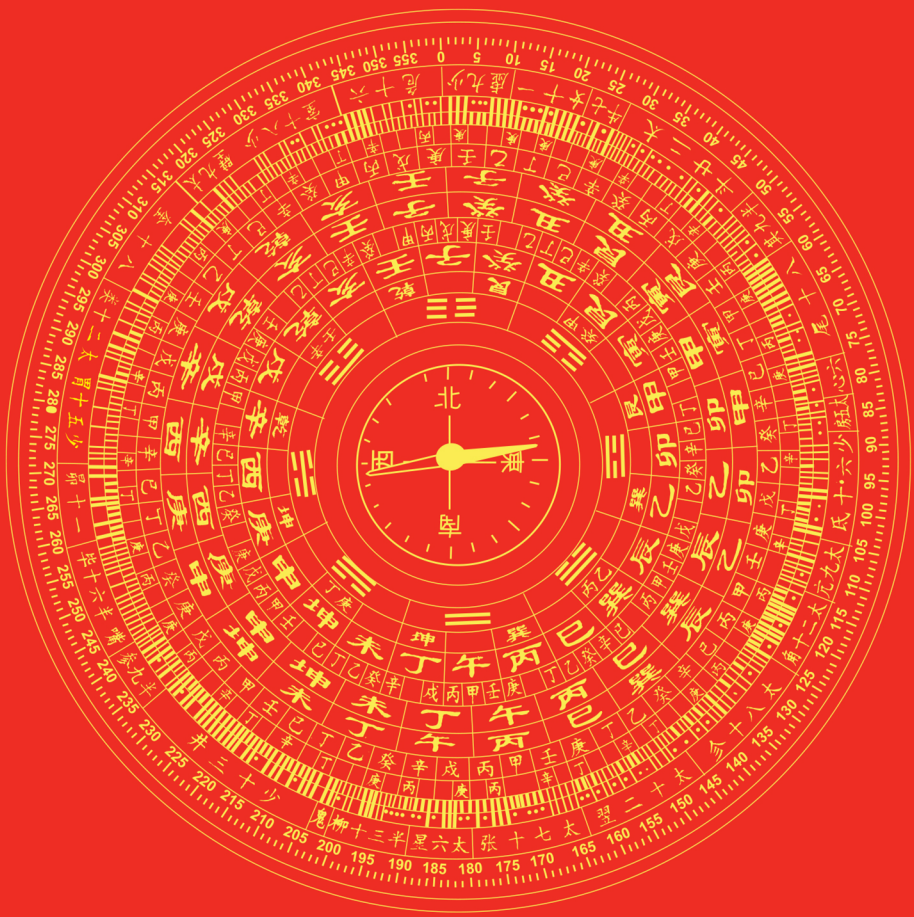
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Echelon Defense

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Ryan D. Martinson

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Echelon Defense

The Role of Sea Power in Chinese Maritime Dispute Strategy

Introduction: Echelon Defense in Action

On April 10, 2012, two Chinese law-enforcement cutters on joint patrol in the South China Sea received orders to proceed immediately to Scarborough Shoal, a disputed cluster of rocks 140 nautical miles west of Subic Bay, the Philippines. Earlier that day, a Chinese fisherman aboard one of several boats moored in the lagoon had transmitted an alarming message to authorities in his home port in Hainan: "Philippine Navy ship number 15 heading this way."[1]

Ship number 15 was BRP *Gregorio del Pilar,* an elderly former U.S. Coast Guard (USCG) cutter now serving as a frigate in the Philippine navy. Not long after the first message arrived in Hainan, sailors operating from the ship entered the lagoon and approached the Chinese boats. At this point, the fisherman sent a final message: "They're boarding."[2]

For Chinese fishermen sailing to Scarborough Shoal, the dangers to life and property were well-known. Despite China's long-standing claim to the feature, the Philippines had administered it for decades. Since the 1990s, a number of incidents had occurred as a result of adventurous (and state-backed) Chinese fishermen risking personal safety for the precious commodities to be found in the lagoon—above all, coral and giant clams.

What had changed was China. In recent years, Chinese law-enforcement authorities—especially an agency called China Marine Surveillance (CMS)—had increased patrols dramatically to disputed waters in the South China Sea, in part to protect Chinese fishermen such as these. They were prepared for just such a crisis.

The two Chinese cutters, *CMS 75* and *CMS 84,* arrived on the scene just as Philippine sailors prepared to arrest the suspected poachers.[3] On the orders of senior officers in Beijing, the two ships maneuvered between *Gregorio del Pilar* and the entrance to the lagoon, physically preventing access to the Chinese fishermen. Despite their superior firepower, the Philippine forces did not escalate the confrontation. Doing so might have precipitated a military conflict, which the Philippines could not possibly win. *Gregorio del Pilar* itself would not last long in any modern clash of arms.[4] And who knew? Chinese naval forces might be in the area already.[5]

The tactical stalemate at Scarborough Shoal did not end tidily. Instead, it turned into a lengthy standoff that attracted worldwide attention. Both China and the Philippines kept vessels at the shoal, but neither side dared to use force to contest the other's presence. *Gregorio del Pilar* was called home quickly, replaced by a less menacing Philippine coast guard cutter, and the Chinese fishing trawlers originally involved in the incident soon were allowed to leave.[6] But these concessions were not enough for Beijing. China needed to win something.

After several weeks of fruitless diplomatic negotiation, China opted to escalate. People's Republic of China (PRC) statesmen condemned the Philippine leaders for "bullying" their country, and issued vague threats through media mouthpieces.[7] China sent more vessels to the scene. On May 22, Philippine authorities counted seventy-six Chinese utility boats bobbing in the lagoon, with twenty trawlers also in the vicinity—this during a period when Chinese fishermen should have been observing an annual fishing moratorium.[8] Moored nearby were their protectors: half a dozen Chinese coast guard cutters.[9] Meanwhile, China used other tools of statecraft, including an informal embargo on Philippine bananas, to punish the much weaker disputant.[10]

The pressure paid off. By early June, Philippine diplomats, clearly desperate for the feud to end, were speaking openly of de-escalation.[11] On June 15, President Benigno Aquino III ordered the country's ships back to port to avoid an approaching typhoon.[12] Apparently believing that some agreement existed with Beijing, Aquino publicly declared that the standoff was over.[13]

If any agreement existed, Beijing did not honor it. Not long after the storm cleared, Chinese fishing and constabulary vessels returned to Scarborough Shoal. And now it was theirs. It remains so to this day.

In an interview several months after the standoff had ended, Cheng Chunfa, the head of CMS operations in the South China Sea, took credit for the victory at Scarborough Shoal on behalf of his service. Chinese forces had maintained a "dominant position" (主导地位) throughout the two-month crisis. In doing so, they had played a pivotal role in restoring Chinese territory. With this triumph, they had pioneered a "new model" (新的模式) for prosecuting the "rights-protection struggle."[14]

This was not exactly true. The use of sea power to impose one's will on another nation in operations short of war is far from novel. In fact, it is a very old model, often called "gunboat diplomacy."[15]

Yet Cheng's claim contains some truth. China indeed has developed a distinct approach for using sea power to assert its maritime claims, and the Scarborough Shoal incident was the supreme validation of that approach.[16] Key components of Chinese sea power are integrated into what PRC strategists call an "echelon defense system" (梯次防卫体

系).[17] On the front line, China deploys coast guard forces—cutters such as *CMS 75* and *84*—operating on the pretext of routine law enforcement. They directly vie for influence over disputed space using verbal threats backed up by nonlethal measures, but never armed force. To their rear, on the second line, looms the People's Liberation Army (PLA) Navy (PLAN) surface fleet. Even if not always physically in the vicinity, its power and mobility exert a deterrent effect on foreign decision makers from the region, forcing them to compete on China's terms.[18] This coercive function also is directed at countries such as the United States that might intervene on behalf of competing claimants.

As the events at Scarborough Shoal suggest, China's echelon defense approach has achieved remarkable successes. Since 2006, when this model began to take form, the geographic frontiers of PRC influence and control have expanded dramatically. Meanwhile, the influence and control of other states have undergone a corresponding contraction. Because of the resulting increase in tensions at sea, some frontline Chinese forces have described this campaign as a "war without gun smoke."[19]

China's success in this campaign is a function of the model's ability to exploit two key asymmetries with other states.[20] First, China is far more powerful than most other disputants, a disparity that has increased dramatically over the last decade. Coastal states in Southeast Asia simply do not have the fiscal and industrial resources to invest in the naval and coast guard tools needed to compete with China. This resource gap is exacerbated by the nature of the maritime arena, where a great advantage accrues to states that have the wherewithal to keep more forces at sea.[21] Second is an asymmetry of resolve between China and the only other states capable of competing with it in these waters, Japan and the United States. Extremely cautious about how it builds and uses sea power, Japan has shown that it is less willing to assume the degree of risk needed to halt Chinese expansion than China is to pursue it. While this self-restraint may be morally commendable, it has failed to elicit a reciprocal response from China.[22] For its part, the United States, which is not a direct claimant, has remained neutral in most of the maritime disputes, insisting only that they be handled on the basis of international law and without coercion or intimidation.[23] Clearly, then, the outcome of this contest means less to the United States than it does to China, which is fighting for much more than abstract principles.[24]

China's echelon defense approach exploits these two asymmetries while remaining within the constraints of Chinese grand strategy, what PRC propagandists call "peaceful development." Beijing desires to leverage its growing power to alter the status quo in its favor. Yet it generally seeks to avoid encounters that might risk armed conflict and tarnish its reputation, outcomes that could undermine the stability so important to its economic goals. Relying on coast guard forces backed up by naval power allows China to pursue both objectives simultaneously. In the words of one PLA analyst, it ensures

"room for action" (有为空间), while at the same time ensuring a certain degree of "room for maneuver" (回旋余地) for Chinese diplomacy.[25]

This monograph examines China's use of naval and coast guard forces to advance its maritime claims in the period since 2006. These include claims to sovereignty over dozens of land features, such as Scarborough Shoal. They also include rights to use and administer vast swaths of ocean that China claims on the basis of its particular interpretation of international law. Chinese leaders believe that the United Nations Convention on the Law of the Sea (UNCLOS) entitles them to jurisdictional rights over three million square kilometers of maritime space, often referred to as China's "blue national territory" (蓝色国土). Nearly half of this space, Chinese leaders frequently lament, is contested by other states. To defend these "maritime rights," Chinese ships are charged with a whole host of missions that often are conducted well out of sight of land.

Part 1 outlines China's maritime claims, the value that Chinese leaders ascribe to them, and the overall objectives driving PRC policy. Part 2 looks at the naval and coast guard forces charged with defending and advancing these claims: their organizations, doctrines, and capabilities. Part 3 sketches the strategic context of China's echelon defense approach. Part 4 zeroes in on the six major types of operations the Chinese coast guard and navy conduct in disputed areas. The monograph concludes with an accounting of PRC expansion over the ten-year period from 2006 to 2016, including key decisions that guided and enabled that expansion.

Part 1: China's Blue National Territory

China uses sea power to defend and advance its position in two major types of maritime disputes. The first involves claims to territory—that is, sovereignty over islands and other land features. China's territorial claims are concentrated in the East and the South China Seas. In the East China Sea, it claims sovereignty over Diaoyu Island (钓鱼岛) and a handful of nearby islets, which Japan, the other claimant, collectively calls the Senkaku Islands. Aside from a period of U.S. occupation following World War II, Japan has exercised administrative control over the islands since the late nineteenth century. In December 2008, China began taking steps to contest that control actively, in large part by operating coast guard forces in waters surrounding the disputed islands.

In the South China Sea, China claims sovereignty over all the land features within the "nine-dash line" (九段线) or "dashed line" (段续线), including the Paracel Islands (Xisha, 西沙), Macclesfield Bank and Scarborough Shoal (collectively called Zhongsha, 中沙), and the Spratly Islands (Nansha, 南沙). Most of these features are tiny spits of sand and coral. Few, if any, of the features, and none in the Spratlys, satisfy UNCLOS standards for full-fledged *islands* entitled to an exclusive economic zone (EEZ).[26] Indeed,

Macclesfield Bank and James Shoal (south of the Spratlys) are fully submerged at low tide and therefore yield no maritime entitlements whatever.

China's territorial claims in the South China Sea bring it into disagreement with Taiwan (all features), the Philippines (Scarborough Shoal and the Spratlys), Brunei and Malaysia (some of the Spratlys), and Vietnam (all the Paracels and Spratlys).[27] China currently occupies all the major Paracel features and seven of the Spratly features.[28] Since mid-2012, it has exercised control over Scarborough Shoal, but has not moved to occupy it.

Figure 1. *China's Maritime Claims in the East and South China Seas*



The second category of maritime dispute involves "maritime rights." This refers to the rights of coastal states to use and administer certain areas of the ocean, as outlined in international law—above all, UNCLOS. These areas, or zones, include the territorial sea, contiguous zone, EEZ, and, in some cases, a continental shelf. Within its twelve-nautical-mile (nm) territorial sea, a coastal state exercises a degree of sovereignty akin to that exercised on land. The extent of a coastal state's rights diminishes the farther away one moves from the coast. In the EEZ, for instance, the rights of a coastal state are strictly circumscribed. They do, however, include the exclusive right to exploit any and all resources that may exist in the water and seabed, which makes this zone extremely valuable.[29]

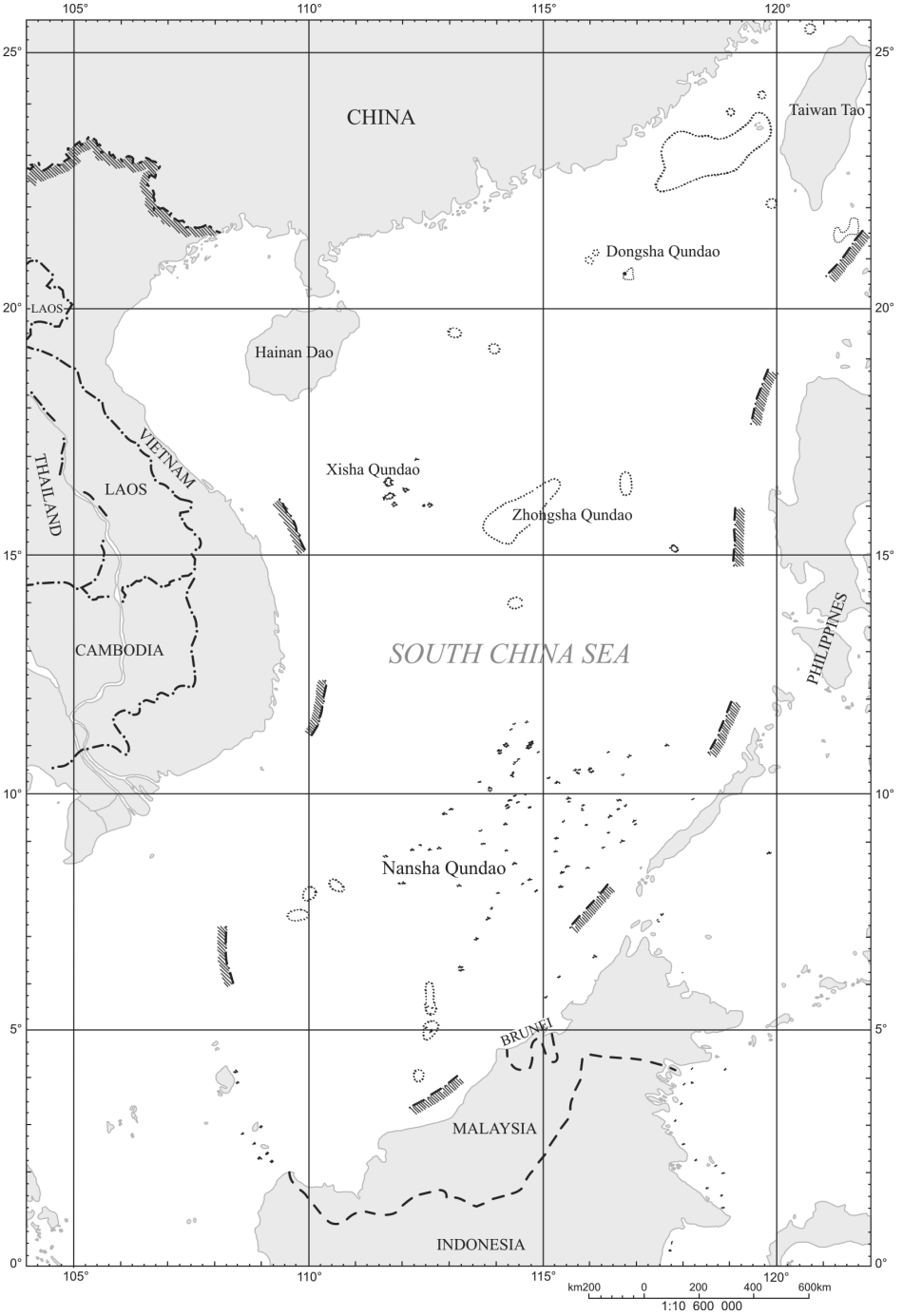
China's many territorial disputes inevitably create disputes over maritime rights, because land determines the shape and extent of any resulting zones of sovereignty and jurisdiction. Further complicating matters, the standards for determining maritime rights are themselves contested. Islands capable of human habitation, for example, generate EEZs. Other land features, called "rocks" and "low-tide elevations" (LTEs), generate few or no maritime rights.[30] Conflicting positions on the legal status of different land features—whether island, rock, or LTE—lead to disputes over maritime rights.

Disputes also can result when states separated by narrow seas (those less than four hundred nautical miles across) disagree on how to divide the space. China and Japan, for instance, still have not settled their jurisdictional boundaries in the East China Sea, a problem with no necessary relationship to the dispute concerning sovereignty over the Senkaku Islands. China claims resource and other maritime rights out to the Okinawa Trough, well east of the median line between it and Japan.[31] In the Yellow Sea, China and both North and South Korea have yet to define their maritime boundaries.[32]

In the South China Sea, disputes over maritime rights are exacerbated by the fact that China has not defined its jurisdictional claims fully. To do so, it would need to draw baselines (i.e., starting points for maritime zones) around its claimed land features, indicating the status of individual features, and explain the significance of the nine-dash line. Perhaps seeing advantage in delay and ambiguity, it has done few of these things. Beijing has drawn baselines around the Paracels (in a 1996 declaration), but it has yet to do so for any of the Spratly features.[33] Moreover, authoritative Chinese sources frequently claim Chinese jurisdiction over two million square kilometers in the South China Sea—roughly the area within the nine-dash line—but China has not defined the nature of that jurisdiction explicitly. China claims some brand of "historic rights" (历史性权益) in the waters bounded by the nine-dash line.[34] Again, the Chinese government never has indicated fully what these rights entail, or specifically where they exist.[35] However, key policies and regulations governing the activities of Chinese oil and gas companies and fishermen suggest that Chinese leaders assume the nine-dash line gives China expansive

"rights" to exploit marine resources within its limits.[36] Figure 2 depicts the nine-dash line.[37]

Figure 2. *China's "Nine-Dash" Line in the South China Sea*



The statements and actions of China's sea services shed light on the practical significance of the nine-dash line.[38] The PLA Navy operates on the assumption that China has "historic rights" to all the resources, both living and nonliving, within the nine-dash line, often referred to as China's "traditional maritime border in the South China Sea" (南海传统海疆线).[39] This view also reflects mainstream assumptions within the Chinese coast guard.[40] As will be discussed below, frontline rights-protection operations take place in all the waters within the nine-dash line.

Why China's Maritime Claims Matter

China's claims to sovereignty over offshore islands and to jurisdiction over water space are important for economic, military, and political reasons. Economically, if China achieved control over the three million square kilometers of waters it claims, Chinese firms and individuals could exploit the fish, petroleum, gas, and other resources that exist in and beneath those waters. Since these waters already are fished intensively, the economic value of biological resources in these waters is very real. The amount of exploitable hydrocarbon resources in the seabed of disputed areas of the East and South China Seas is much more theoretical. In Chinese texts, the South China Sea is depicted as a "second Persian Gulf."[41] It is difficult, however, to know to what extent this claim reflects a facts-based assessment, to what extent it is wishful thinking, and to what extent it is another justification for extending Chinese control over these strategically important waters.[42] China's endowments of terrestrial resources, always poor, are now heavily depleted; this may amplify the value of offshore resources in the eyes of Chinese leaders.[43]

China's maritime claims also have significant military value. China's eastern seaboard is its economic heartland and home to a massively disproportionate share of the Chinese population.[44] Chinese analysts believe that threats to these centers of wealth have increased as a result of improvements in the capacity of foreign navies to project power ashore.[45] Therefore, Chinese policy makers seek to expand "strategic space" (战略空间) or "strategic depth" (战略纵深) between potential adversaries and the Chinese homeland. They hope to achieve this by increasing Chinese presence at remote distances from the Chinese coast and restricting or denying foreign access and maneuver within the so-called first island chain.[46] As PLAN senior captain Xie Shiting wrote in a 2014 article, China seeks "to be able to detect and engage the attacking foreign forces at a distance as far away as possible [from the homeland]."[47] Controlling island frontiers hundreds of miles from the mainland coast and the waters between them offers a means to alleviate this vulnerability.[48]

Moreover, by expanding peacetime presence and control over these claimed waters, China can improve its chances of preventing other states from threatening its vital sea lines of communication (SLOCs)—and, conversely, enable China to disrupt others'

SLOCs—in the event of a military conflict. This is an extremely important consideration, given China's acute dependence on seaborne communications for international trade in raw materials and manufactured goods. Probably reflecting mainstream thinking in the Chinese military, two authors writing for a magazine published by the PLA Academy of Military Science assert that "pushing the depth of maritime defense out to the first island chain and normalizing military presence there is the only way for China to change its passive position with respect to SLOC security and ensure that China's SLOC security is not subject to [the will of] another state."[49]

The matter of maximizing "strategic space" in the seaward direction is of special concern, given that Chinese leaders believe that China's gravest threats are located offshore.[50] In a speech delivered in August 2013, the then director of the State Oceanic Administration (SOA), Liu Cigui, explained, "It can be predicted that for a period of time going forward China will face increasing challenges as it tries to safeguard its maritime rights and interests. The ocean will very likely be the primary direction from which China will face interference in the strategic period of opportunity for development and threats to national security."[51] In the words of two Chinese government analysts, "Today and for some time into the future, China's security situation in the landward direction will be basically stable; security threats mostly come from the seaward direction."[52]

China's maritime claims also have significant, if intangible, political value. That others vie for areas that rightly belong to China is an emblem of disrespect. The need to maintain national dignity creates incentives for the PRC to repudiate and undermine others' claims, even if the objects under dispute have very little intrinsic value.[53] When the other disputant is a weaker state, its obstreperous actions are apt to offend Chinese leaders' image of China as a great power—an image that has been fostered by Xi Jinping's policy to restore national greatness ("the great rejuvenation of the Chinese nation").[54] In the case of disputes involving Japan, these emotional elements are compounded by historical memories of being "bullied" and occupied during the hundred years leading up to the founding of the PRC—the so-called Century of National Humiliation.[55] Since the Chinese party-state holds a monopoly on the only tools that can preserve Chinese dignity in the face of foreign disrespect, leaders no doubt face certain pressures to act, even when doing so may not be in the national interest.[56]

Naturally, there is much debate about the extent to which each of the above factors drives Chinese behavior at sea. This study does not seek to settle this debate. All three are certainly in play. When combined, they create a strong impetus for Chinese leaders to invest in and use the capabilities needed to improve China's position in its disputes.[57]

The Growing Value of Disputed Land and Sea

The value of China's claims has increased over time, creating greater impetus to invest in and use tools to assert them. One can track this change in official documents, such as the biennial iterations of the PRC national defense white paper. The first was published in 1998. However, it was not until the eighth iteration, released in April 2013, that Chinese policy makers first dedicated a section to the military's role in safeguarding "maritime rights and interests."[58] This maritime focus was emphasized further in the most recent national defense white paper, published in 2015.[59]

Tracking language on maritime affairs in party congress reports reveals a similar trend. The *Sixteenth Party Congress Report* (November 2002) called for China to "engage in marine development." The *Seventeenth Party Congress Report* (October 2007) cited the need to "develop the marine economy."[60] Both of these documents reflect the party-state's emphasis on the ocean's importance to economic development. To these economic aims, the *Eighteenth Party Work Report* added that China must "resolutely safeguard national maritime rights and interests," a pointed reference to defending and advancing China's position in its disputes.[61]

The growing importance of China's maritime claims also can be seen in other state documents, such as five-year plans. It was not until the Tenth Five-Year Plan (2001–2005) that Chinese policy makers included content on the need to protect China's "maritime rights and interests." It has done so in every five-year plan since, with increasing "rights-protection" content in each new iteration.[62] The Thirteenth Five-Year Plan (2016–20), issued in March 2016, devotes a whole section to what might be called the civilian component of China's maritime dispute strategy, openly acknowledging that China's maritime rights and interests are not constant, but expanding.

> [China] will effectively safeguard territorial sovereignty and maritime rights and interests. It will strengthen the capabilities of its maritime law-enforcement agencies, deepen research on maritime-related historical and legal issues, conduct overall planning for the use of various types of means to safeguard and *expand* [emphasis added] national maritime rights and interests, properly handle foreign infringements, and safeguard freedom of navigation and sea-lane security in China's jurisdictional waters. It will actively participate in the establishment and protection of international and regional maritime order, improve mechanisms for dialogue and cooperation on maritime issues, and promote pragmatic cooperation on maritime issues. It will improve coordination mechanisms for maritime affairs, strengthen top-down design for maritime strategy, and formulate a maritime basic law.[63]

In recent years Chinese policy makers have come to regard sovereignty over offshore islands—and perhaps even maritime rights—as "core interests" (核心利益). The international press reported the earliest inklings of this policy shift in 2010. However, Chinese

diplomats appear to have backtracked soon afterward.[64] Other authoritative sources continued to use the term.[65]

Xi Jinping erased any ambiguity during remarks delivered at a July 2013 politburo session devoted to discussion of policies for building China into a "maritime power" (海洋强国), at which he declared that China would never sacrifice "core national interests."[66] Now China's maritime claims regularly are described as "core interests." For example, at a July 2016 meeting in Beijing, then–PLAN commander Adm. Wu Shengli purportedly told USN Chief of Naval Operations Adm. John Richardson that China "would not sacrifice its sovereign rights/interests in the South China Sea. These are China's core interests."[67]

China maintains extensive maritime claims in the East and South China Seas, many of which other states contest. These include claims to sovereignty over islands and other land features and the right to use and administer the ocean. China's territorial claims are of long standing. However, the geographic extent and content of China's maritime rights claims are both ambiguous and evolving. This is especially true in the South China Sea, where China has yet to draw baselines around its island claims in the Spratlys or formally define the significance of the nine-dash line. Chinese leaders believe that the country's maritime claims have significant economic, military, and political value. Over time, this value has grown. In consequence, the PRC leadership has felt a strong impetus to invest in new tools to defend and advance China's maritime claims.

Part 2: White Hulls, Gray Hulls

To defend and advance China's maritime claims, Chinese leaders have at their disposal an oceangoing fleet comprising hundreds of vessels drawn from maritime law-enforcement agencies and the PLA Navy.[68] These ships represent a vast range of size, function, and capability. Together, they give Chinese leaders many options with which to pursue national objectives.

This section outlines the organizations and platforms that play the largest role in China's maritime dispute strategy. It also broadly sketches the doctrinal and legal bases for their operations along China's maritime frontier.[69]

The Coast Guard Fleet

Unlike the United States, China does not operate a single maritime law-enforcement agency responsible for the full range of "coast guard" missions. Rather, it funds a number of different agencies, each of which contributes to ensuring order and safety at sea and to securing national borders. In mid-2013, China began the process of integrating several

of these agencies into a new organization called the China Coast Guard (中国海警局) (CCG). The vast majority of the white-hulled ships performing sovereignty—or "rights-protection"—operations now are painted with CCG colors and pennant numbers. However, this superficial sign of unity should not obscure the fact that the China Coast Guard does not yet exist as a single, homogeneous organization. Rather, the China Coast Guard should be seen as an amalgam of the four agencies brought together to create it:

- China Marine Surveillance (中国海监)
- China Fisheries Law Enforcement (中国渔政)
- China Maritime Police (边防海警)
- Antismuggling Police (缉私警察)

Because they feature prominently in the period under study, the first two of these agencies merit closer attention.

China Marine Surveillance. Before being integrated into the China Coast Guard, China Marine Surveillance was a maritime law-enforcement agency within the State Oceanic Administration—itself overseen by the Ministry of Land and Resources. Nobody affiliated with China Marine Surveillance attempted to disguise its paramilitary identity. Indeed, authoritative publications have referred to China Marine Surveillance as China's "second navy."[70]

Tracing its roots to 1983, China Marine Surveillance was charged with performing administrative law-enforcement（行政执法）functions—preventing illegal land reclamation, mining of sea sand, discharge of pollutants, and other environmentally destructive activities—and defending China's maritime claims, called "rights-protection law enforcement" (维权执法).[71] Small craft, motorboats, and light-displacement steel-hulled vessels performed the former, while the service's oceangoing cutters primarily focused on the latter. The service clearly regarded rights protection as its core mission.[72]

China Marine Surveillance comprised both national-level units funded by the central government and local-level units owned and operated by coastal provinces, counties, and cities. National-level units were organized into detachments (支队), ten total, distributed across three regions, north, east, and south, responsible for the Bo Hai (Gulf of Chihli) / Yellow Sea, East China Sea, and South China Sea, respectively. However, ships based in a given region commonly sailed beyond their jurisdictions to contribute to rights-protection activities in other areas, especially the South China Sea.[73]

While nominally part of China Marine Surveillance, local-level units operated largely on the basis of a different set of laws and regulations, often drafted by the local government that funded them. For many years, local-level units seldom had cause to leave the country's territorial sea. But starting in 2009, the State Oceanic Administration began asking

local-level units—provincial-level units, in particular—to contribute to rights-protection operations.[74] For instance, after its commissioning in 2009, the six-hundred-ton *CMS 9012,* owned and operated by Shenzhen City, performed a number of rights-protection patrols in the South China Sea.[75] All rights-protection missions were organized at the national level (国家的统一部署). Local-level units received compensation in the form of fuel and other subsidies.[76]

At the end of 2012, China Marine Surveillance operated twenty-eight cutters displacing at least a thousand tons, by far the most of any coast guard agency. The core of the fleet consisted of thirteen new ships built in the 2005–12 period. These thirteen vessels performed the bulk of the service's rights-protection missions.[77]

Fisheries Law Enforcement. Until 2013, China Fisheries Law Enforcement (FLE), an agency overseen by the Ministry of Agriculture, was the second major coast guard service active along China's maritime frontier.[78] To be sure, FLE forces had pressing fisheries administration functions to fulfill, most of which were inoffensive to other states. Indeed, in some respects the agency fostered international cooperation; for instance, its vessels and personnel worked with the U.S. Coast Guard to deter and defeat high-seas drift-net fishing in the Pacific Ocean.[79]

However, FLE vessels also regularly performed rights-protection missions. Indeed, Fisheries Law Enforcement spearheaded China's quiet annexation of Mischief Reef in late 1994. For years prior to the creation of the China Coast Guard, Fisheries Law Enforcement regularly kept a cutter on station at the disputed Spratly feature.[80] Most fisheries rights-protection patrols involved efforts to protect Chinese fishermen and expel foreign fishermen operating in Chinese-claimed waters. But FLE forces also sometimes performed operations that had no plausible connection to the service's claimed responsibilities. FLE ships were involved in the harassment of USNS *Impeccable* (T-AGOS 23) and USNS *Victorious* (T-AGOS 19) in March 2009.[81]

Like China Marine Surveillance, Fisheries Law Enforcement vessels comprised both national- and local-level units, with the national-level forces initially performing the bulk of rights-protection patrols, but local-level units playing increasingly prominent roles over time. The 570-ton *FLE 45001,* a ship owned by Guangxi Autonomous Region, was the first local-level cutter to patrol the Spratlys, doing so in June 2010.[82]

Fisheries Law Enforcement operated far fewer large cutters than did China Marine Surveillance—just a dozen displacing over a thousand tons—before it was incorporated into the China Coast Guard.[83] All these were national-level cutters. Because of the small size of the national fleet, many administrative functions were performed by smaller-displacement, local-level ships. Again, whereas rights protection was the core responsibility of China

Marine Surveillance, it was only one of several major functions of Fisheries Law Enforcement.

Coast Guard Reform

For over a decade, Chinese commentators had called for unifying the country's many maritime law-enforcement agencies into a single organization. The old model of charging each of several different agencies with a narrow set of responsibilities led to inefficiency, waste, and bureaucratic rivalry, a situation derisively called "five dragons stirring up the sea" (五龙闹海).[84] Chinese leaders, too, were acutely aware of the need for greater administrative unity. However, it ultimately took an ambitious new national leader (Xi Jinping) and a new high-level commitment to transform China into a "maritime power" to prompt the PRC to begin what has been an extremely difficult and still-incomplete reform.[85] A desire to enhance the fleet's ability to conduct rights-protection operations drove the reform.[86]

The China Coast Guard was established officially in July 2013. Information about the new agency remains scarce and sometimes contradictory. Administratively it is overseen by the State Oceanic Administration. When conducting rights-protection operations, the China Coast Guard operates on behalf of—i.e., "in the name of" (名义)—the State Oceanic Administration. However, these operations are subject to the "operational guidance" (业务指导) of the Ministry of Public Security. What that means in practice never has been articulated clearly.[87]

The current commandant (局长) of the China Coast Guard is Meng Hongwei (孟宏伟), who serves concurrently as the vice-minister of the Ministry of Public Security.[88] Meng's administrative status is higher than that of the director of the State Oceanic Administration, a source of friction that likely has hampered reform.[89] The China Coast Guard has two vice-commandants (副局长).[90] The service also has appointed directors of functional departments, analogous to USCG assistant commandants.

The China Coast Guard has three regional branches: North, East, and South. These are roughly equivalent to the two USCG area commands (Pacific and Atlantic). The regional branches oversee "contingents" (总队)—akin to USCG districts—located in each of China's eleven coastal provinces and provincial-level cities. Beneath these contingents are the Chinese analogues of USCG district units, called "detachments" (支队).[91] Of note, local-level CMS and FLE organizations were not included in the reorganization, although the China Coast Guard officially is charged with guiding their work.[92] Thus, ships with CMS and FLE colors and pennants still patrol the maritime frontier.

At the national headquarters level, members of all four original agencies work in some degree of conjunction. The same appears to be true at the regional branches. However, CCG contingents still are not integrated fully. Indeed, CMS detachments continue to

exist. At the time of this writing (early 2017), the China Coast Guard still does not even have a common service uniform.

However, while the CCG reform is still very much a work in progress, it already is impacting rights-protection operations in two key ways. First, coordination among the different agencies has improved. Former CMS and FLE vessels now regularly deploy together to trouble spots, which they seldom did in the past. Moreover, rights-protection deployments now are overseen by a single command center in Beijing, which can and does communicate directly with ships at sea.[93] This enables vessels from different regions to be directed to areas where they are needed. For instance, in 2015 eight ships based in the north of China were ordered to conduct rights-protection operations in the South China Sea, by far the service's largest theater of operations.[94]

Second, former China Maritime Police (CMP) units now regularly operate in disputed waters.[95] Before being incorporated into the China Coast Guard, the China Maritime Police spent most of its time performing its public security and antismuggling missions on or near the shore.[96] A specialized force within the People's Armed Police (PAP), it was considered part of China's armed forces. Like other parts of the PAP, officers and enlisted personnel (官兵) had military ranks. They also had true police powers, which China Marine Surveillance and Fisheries Law Enforcement did not.

Former CMS and FLE vessels (and ships under contract to be built before the reform) continue to perform the majority of rights-protection operations. However, CMP forces now frequently operate with them. Identifiable by their five-digit pennant numbers, CMP ships are equipped with 30 mm and—on the most recent ship classes—76 mm deck guns. They patrol the Paracels; indeed, they played a key role in organizing the 2014 defense of China National Offshore Oil Corporation (CNOOC) Rig 981 (discussed in part 4).[97] Former CMP vessels now conduct missions to the Senkakus, Scarborough Shoal, and the Spratly Islands.[98] Moreover, special operations forces (特勤队员) from the former China Maritime Police now are assigned to at least some former CMS and FLE cutters.[99]

When the China Coast Guard was created in mid-2013, Chinese leaders did not indicate what kind of organization it would become: a civilian agency like China Marine Surveillance, or a component of the armed forces like the China Maritime Police. The Chinese government still has not answered this question publicly. However, officer recruitment efforts begun in late 2014 suggest that Chinese leaders intend for it to become a military organization akin to the China Maritime Police.[100]

Slow progress in the reform probably has hampered efforts to improve tactical capabilities. Since so many aspects of the CCG organizational identity—doctrine, chain of

command, training, etc.—have yet to be defined, ships and crews from different backgrounds still do not work together as they should.[101]

Other Agencies

The China Coast Guard has not supplanted all of China's other maritime agencies. The Ministry of Transport continues to operate two organizations with authorities and responsibilities at sea: the Maritime Safety Administration and the China Rescue and Salvage Service. Both chiefly focus on marine safety, including by performing search and rescue, maintaining navigation aids, and certifying vessels and their crews.[102] These two agencies are not on the front line and rarely engage in adversarial encounters with foreign mariners.

A few exceptions are worth citing. In July 2005, during a period of heightened tension with Japan, a three-thousand-ton Maritime Safety Administration cutter patrolled the East China Sea to show Chinese commitment to continuing operations at the Chunxiao gas field.[103] In 2013, Maritime Safety Administration forces performed three rights-protection patrols in the South China Sea, one of which covered 5,628 nautical miles and involved three cutters and a shipborne helicopter.[104] Both Maritime Safety Administration and China Rescue and Salvage Service cutters helped defend CNOOC 981 during its deployment to disputed waters south of the Paracels in 2014.

Coast Guard Force Structure

With over 120 ships displacing more than a thousand tons, China operates by far the world's largest fleet of blue-water coast guard cutters.[105] Valued for their endurance, seaworthiness, and ability to intimidate, these large vessels perform the bulk of rights-protection operations.[106] The vast majority belong to the China Coast Guard.

As an amalgam of four formerly independent services, the China Coast Guard commands a hodgepodge of vessels, including purpose-built cutters, former research vessels, and auxiliaries and combatants transferred from the PLA Navy. These range from brand-new vessels built in the great force expansion that began in 2012 to ships launched when Mao Zedong still ruled China. The large number of ship classes confounds efforts at generalization.

Until very recently, most constabulary vessels involved in rights-protection operations lacked armament. CMS ships were unarmed, save for a small number of assault rifles kept aboard. Some FLE cutters were equipped with deck-mounted machine guns. Reflecting their civilian nature, CMS and FLE cutters were called *gongwuchuan* (公务船), literally, "ships for carrying out official business." As components of China's armed forces, CMP vessels were considered "warships" (舰). They had traditional deck guns, but did not sail to disputed waters. Many ship classes delivered since the CCG reform began are equipped with cannon.

Chinese coast guard forces use a variety of nonlethal means to coerce foreign mariners. Most constabulary ships have powerful water cannon and sirens. For instance, *CMS 8002,* a ship owned by Fujian Province, possesses water cannon that can hit targets at one hundred meters and sirens that can reach 153 decibels.[107] At least some CMS and FLE ships were equipped with jamming capabilities.[108]

Several newer classes of ships do deserve mentioning, because they reflect an effort to standardize the fleet. Moreover, because of their advanced capabilities, they are likely to play the most prominent roles in future rights-protection operations. Displacing twelve thousand tons, the Zhaotou-class cutters are particularly noteworthy because they are easily the largest coast guard ships in the world.[109] Table 1 enumerates these new classes, citing their USN Office of Naval Intelligence class names, ships commissioned to date, and other pertinent information.

Table 1. *Major New Ship Classes of the China Coast Guard*

Office of Naval Intelligence Class Name	Displacement (tons)	Ships in the Class	Notes
Zhaotou	12,000	2901, 3901	Armed with one 76 mm cannon. Owned by former CMS units.
Shuoshi II	5,800	1501, 2501, 2502, 3501	Unarmed. Owned by former CMS units.
Zhaolai	4,800	1401, 2401, 3401, 3402	Unarmed. Owned by former CMS units.
Shucha II	4,000	1305–1307, 2305–2308, 3306–3308	Unarmed. Owned by former CMS units.
Zhaoyu	3,500	1301–1304, 2302–2304, 3301, 35305, 3303–3305	Armed with one 30 mm cannon. Owned by former FLE and CMP units.
Zhaoduan	4,000	46301, 46302, 31303 (more building)	Called 818 class. Resembles a Type 054A frigate. Armed with one 76 mm cannon and two 30 mm cannon. Owned by former CMP units.
Zhaojun	2,700	46111, 46112, 44111, 33111, 21111 (more building)	Called 718 class. Armed with one 76 mm cannon. Owned by former CMP units.
Zhaotim	1,700	1102–1104, 3104–3106, 21115, 31115, 33115, 35115, 37115, 46115	Armed with one 30 mm cannon. Owned by former FLE and CMP units. Three vessels owned by current provincial-level FLE units.

Notes: CMP = China Maritime Police; CMS = China Marine Surveillance; FLE = Fisheries Law Enforcement.

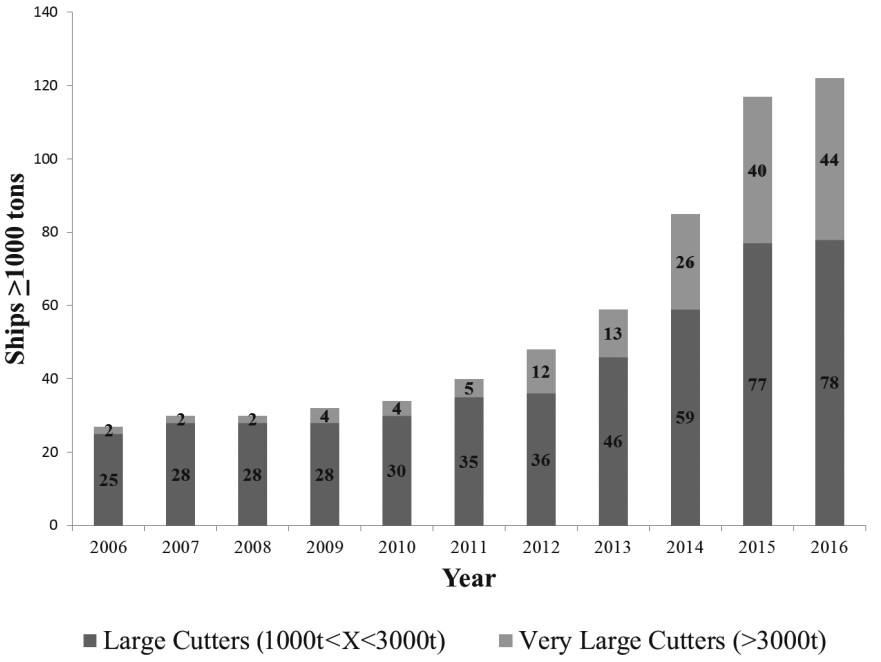
Provincial-level CMS and FLE units also operate several dozen oceangoing cutters, none displacing more than two thousand tons. Some of these have been painted with CCG colors and pennant numbers; many have not. Sansha City—which nominally governs all Chinese-claimed space in the South China Sea—owns and operates a small fleet of maritime law-enforcement cutters. These vessels include the 2,600-ton former *FLE 310*.[110]

The Chinese coast guard has seen tremendous expansion in absolute numbers. During the 2009–12 period, the Chinese government made a series of decisions to invest in new ships. First, it empowered and supported local-level CMS and FLE organizations to procure new ships. In early 2010, the Chinese media revealed that provincial-level CMS agencies would receive national funding to build a total of thirty-six oceangoing rights-protection cutters, all displacing between 600 and 1,500 tons. The first of these was delivered in early 2013. At the time of this writing, nearly all have been commissioned.[111]

Second, national-level CMS, FLE, and CMP units also began procuring large numbers of new ships. Many of these displaced over three thousand tons. The first began reaching the fleet in early 2014, after the CCG reform had begun. They therefore all have CCG colors and pennant numbers. In late 2016, the China Coast Guard began commissioning the first units of two new armed ship classes, the Zhaoduan and Zhaojun (see table 1). This could mean dozens of more ships in the coming years.

Third, at the same time that new cutters were being built from the keel up, the PLA Navy transferred large numbers of ships to Chinese agencies to meet immediate needs. In late 2012, for example, China Marine Surveillance received a number of former PLAN ships, mostly fleet auxiliaries.[112] In 2015, former CMP units under the China Coast Guard received three PLAN Type 053 H2G (Jiangwei I) frigates.[113] Figure 3 shows the growth in numbers of blue-water (i.e., greater than one thousand tons) coast guard cutters.[114]

Figure 3. *Growth in Numbers of Blue-Water CCG Cutters*



Legal Bases for Rights Protection

When operating in disputed waters, the Chinese coast guard does so on the pretext of routine domestic maritime law enforcement. In bridge-to-bridge communications with foreign mariners, Chinese coastguardsmen often invoke domestic and international law to justify their actions. Therefore it is useful to examine what China considers to be the legal bases for these operations, even while acknowledging that the regime uses the law as an instrument of statecraft.[115]

Table 2. *National Laws Guiding Law-Enforcement Activities in Disputed Areas*

English Name	Chinese Name	Issued/Revised
Marine Environmental Protection Law of the PRC	中华人民共和国海洋环境保护法	1982, 1999
PRC Fisheries Law	中华人民共和国渔业法	1986, 2000, 2004
Law of the PRC on the Territorial Sea and Contiguous Zone	中华人民共和国领海及毗连区法	1992
Provisions of the PRC on Administration of Foreign-Related Marine Scientific Research	中华人民共和国涉外海洋科学研究管理规定	1996
Law of the PRC on the Exclusive Economic Zone and the Continental Shelf	中华人民共和国专属经济区和大陆架法	1998
Law of the PRC on the Administration of Sea Areas	中华人民共和国海域使用管理法	2001
Law of the PRC on Island Protection	中华人民共和国海岛保护法	2009

Note: PRC = People's Republic of China.

In August 2016, China's Supreme People's Court issued two judicial interpretations defining the authorities of Chinese maritime law-enforcement agencies to handle foreign and domestic violations taking place in China's claimed jurisdictional waters. The interpretations concluded that the Chinese coast guard has the authority to arrest foreign mariners suspected of poaching in China's claimed jurisdictional waters and charge them with violations of the criminal code. It also authorizes criminal proceedings against foreigners found merely entering China's claimed territorial waters. This gives Chinese maritime law-enforcement officers new weapons with which to conduct rights-protection missions. However, to date this tool has not been used.[116]

Rules and regulations issued at the local level also justify coast guard activities in disputed areas. This is especially true in the case of Hainan, the province that nominally exercises jurisdiction over all two million square kilometers of Chinese-claimed waters in the South China Sea. Hainan's fishing and public security regulations, both recently revised, have a direct bearing on disputed land and seas. The November 2012 revision of the province's Regulations for the Management of Coastal Border Security and Public

Order was aimed pointedly at redressing the issue of foreign vessels operating "illegally" in Hainan's jurisdictional waters.[117]

To date, China's coast guard reform has not been accompanied by any major revisions to Chinese maritime law. This could change soon. China is in the process of drafting a "maritime basic law" (海洋基本法). When issued, this document should outline explicitly the roles, responsibilities, and authorities of China's maritime law-enforcement forces and formally define their functions in China's maritime dispute strategy.[118]

The Navy Surface Fleet

The PLAN surface fleet long has played an important role in defending and advancing China's position in the country's maritime disputes. Indeed, surface combatants were the chief protagonists in two conflicts directly involving disputed offshore islands: the 1974 battle of the Paracels and the March 1988 clash at Johnson Reef.[119] In the peacetime "rights-protection struggle," the PLAN surface force is very active in both the East and South China Seas, even though it now often operates on the "second line."

Operations Other Than War. The peacetime missions of the PLAN surface fleet in disputed waters are considered "military operations other than war" (非战争军事行动).[120] According to the 2013 edition of the *Science of Military Strategy,* an authoritative volume published by the Academy of Military Science, the PLA Navy serves to "effectively safeguard sovereign rights in the maritime domain, stop infringements and illegal activities at sea, and ensure the normal pursuit of China's maritime production, development, and scientific/research activities." It also explicitly states that the "precondition" (前提) for any of these efforts is that the navy must not jeopardize "*the overall stability* [emphasis added] of the maritime situation."[121]

The PLA Navy has an explicit law-enforcement function in disputed waters.[122] This role is outlined in the 2009 *Handbook on the Law of Naval Operations,* written by Sr. Capt. Ren Xiaofeng of the PLA Naval Research Institute (NRI). For instance, the Chinese navy is authorized to "adopt necessary measures to expel [unauthorized foreign naval vessels] operating in China's territorial sea."[123] In the case of foreign civilian vessels operating in Chinese-claimed territorial waters in a manner inconsistent with innocent passage, the Chinese military should "act independently or assist Chinese maritime law-enforcement forces to prevent, halt, or correct and dispose of" the offending vessel. This includes the use of "coercive law-enforcement measures."[124]

The PLA Navy also is expected to conduct law enforcement in the EEZ. In the *Handbook,* Ren points out that the ineffectiveness of China's maritime law-enforcement forces compels the navy to play a constabulary role in jurisdictional waters. Operations include "acting alone or assisting other maritime law-enforcement forces to prevent, halt, punish, and crack down on behavior that illegally violates Chinese sovereign rights over

marine resources."[125] Prescribed measures include boarding, inspections, expulsions, detentions, and legal proceedings.[126] Ren also recommends this approach for handling foreign vessels conducting marine scientific activities in Chinese-claimed jurisdictional waters. In the case of foreign military vessels conducting "illegal" surveys in China's EEZ, the PLA Navy is expected to reference instructions governing handling of foreign fishing vessels operating illegally in Chinese jurisdictional waters. However, the *Handbook* states that commanders must be careful to take into account the "special circumstances" inherent in the fact that this is a foreign naval vessel.[127]

Aside from enforcing China's maritime claims, the PLA Navy serves as an instrument by which to communicate Chinese intentions. It conveys Beijing's resolve and ability to defend and advance China's interests to deter foreign states from acting in ways that harm those interests. This deterrent function is outlined in authoritative PLA writings going back decades. For example, the 1999 edition of the *Science of Military Strategy* (published by China's National Defense University) states that in the context of defending China's maritime claims, the PLA Navy serves a "maritime military deterrent function." By "showing" (显示) naval power, China can "put pressure on the other side, deterring it from daring to resort to the use of force out of fear of the difficult-to-bear and severe consequences that would result."[128] During international crises, China could send surface vessels to the contested area to "make the potential opponent not dare to act rashly [轻举妄动], thereby helping to prevent escalation and deter war."[129]

A nonscholarly volume published by the PLA Navy suggests how Chinese leaders generally see the service's deterrent function:

> [T]he navy uses various types of channels to show its power, thereby exerting an invisible pressure on the counterpart, deterring him from daring to act rashly for fear of the consequences, or force him to retreat for fear of consequences, thereby achieving the aim of "subduing the enemy without fighting," and realizing the navy's strategic objectives. . . . The navy can show its power through naval exercises, escort operations, patrols, and weapons testing on and beneath the sea.[130]

Navy leaders are very conscious of the diplomatic impact of their actions. One PLAN political officer acknowledged that a Chinese surface vessel patrol through disputed waters is "not just a military operation. It is also a political operation. . . . [It] demonstrates the spirit of the Chinese military and its warfighting capabilities, shows our country's will and resolve to safeguard maritime sovereignty, and serves our diplomacy."[131] Another PLAN officer described how during patrols through disputed waters the fleet must "actively work in concert with the overall situation of Chinese diplomacy."[132]

Deterring foreign leaders from using military force is a key mission of the surface fleet. In this context, the fleet is seen as a tool with which to "subdue the enemy without fighting" (不战而屈人之兵).[133] "The enemy," of course, means other disputants. But it also

means deterring any "powerful adversary" (强敌)—e.g., the United States, and perhaps Japan—from "interfering" (干预) or "getting involved" (介入) in China's maritime disputes.[134] This deterrence function is no doubt a key driver in China's evolution from a "near seas" to a "far seas" naval strategy designed (in part) to enable fighting a powerful adversary as far away from the Chinese coast as possible.[135]

Force Structure and Organization. Almost all elements of the PLAN surface fleet patrol disputed waters. These range from tiny missile boats to twenty-thousand-ton amphibious transport docks (LPDs), and include both defenseless minesweepers and some of the most advanced surface combatants in the world. Each is a unique tool in the struggle at sea. During the last five years, the PLA Navy has built modern surface combatants at a rate so fast that it is often described as "dropping dumplings into boiling water" (下饺子).[136] This production rate has changed the makeup of the surface fleet dramatically.

Since 2012, the PLA Navy has built large numbers of new surface combatants, including destroyers (both Type 052C and 052D), frigates (054A), and corvettes (056 and 056A). These new ships have vastly improved combat capabilities (and therefore coercive potential) and, owing to their larger displacement, have greatly improved endurance compared with the classes they replaced. The PLA Navy has evolved rapidly from a coastal force based on submarines and missile craft to a first-rate, blue-water navy centered on large surface combatants.[137] This has tremendous implications for the service's ability to maintain presence in disputed areas and to influence the decisions of foreign leaders.

In 2016 alone, the PLA Navy commissioned twenty-three new surface vessels. By contrast, the U.S. Navy commissioned just six surface ships in 2016.[138]

Excluding the aircraft carrier *Liaoning* (CV 16), which is not yet patrolling disputed waters, destroyers are the most capable units in the Chinese surface fleet. At the most advanced end, the PLA Navy operates Type 052C (Luyang II) and 052D (Luyang III) destroyers. These ship classes have phased-array radars and advanced missiles housed in vertical launching systems, and their capabilities may approach those of the U.S. Navy's *Arleigh Burke*–class destroyers. At the time of this writing, China has commissioned six Type 052C destroyers and five of the follow-on Type 052D destroyers, with eight more of the latter in various stages of construction.[139] The PLA Navy also operates four *Sovremenny*-class destroyers procured from Russia to fill a gap while it developed modern destroyers and advanced antiship cruise missiles (ASCMs) of its own.[140]

The PLA Navy fields some two dozen Type 054A (Jiangkai II) frigates, another modern surface combatant.[141] In 2013, the PLA Navy began receiving a new class of ship: the Type 056 (Jiangdao) "light frigate," or corvette. At only 1,300 tons, the Type 056 corvette appears to be purpose-built to patrol Chinese-claimed waters within the first island

Table 3. *PLAN Surface Ships Commissioned in 2016*

#	Type	Name (hull #)	Fleet	Month
1	Frigate	*Jingzhou* (532)	ESF	January
2	Minesweeper	*Rongcheng* (811)	?	January
3	Icebreaker	*Haibing* (722)	NSF	January
4	LST	*Tianmushan* (916)	ESF	January
5	Fleet-replenishment ship	*Gaoyouhu* (966)	ESF	January
6	Corvette	*Jingmen* (506)	SSF	January
7	LPD	*Yimengshan* (988)	ESF	February
8	Survey ship	*Dengjiaxian* (?)	ESF	February
9	Corvette	*Tongren* (507)	SSF	February
10	Frigate	*Xiangtan* (531)	ESF	February
11	LST	*Wuyishan* (914)	ESF	March
12	LST	*Culaishan* (915)	ESF	March
13	LST	*Wutaishan* (917)	ESF	March
14	Icebreaker	*Haibing* (723)	NSF	March
15	Corvette	*Qujing* (508)	SSF	June
16	Destroyer	*Yinchuan* (175)	SSF	July
17	Fleet-replenishment ship	*Honghu* (963)	SSF	July
18	Fleet-replenishment ship	*Luomahu* (963)	SSF	July
19	Corvette	*Huai'an* (509)	ESF	August
20	Corvette	*Baoding* (511)	ESF	December
21	Corvette	*Heze* (512)	ESF	December
22	Minesweeper	*Donggang* (814)	?	December
23	Frigate	*Binzhou* (515)	ESF	December

Notes: ESF = East Sea Fleet; LPD = amphibious transport dock; LST = tank landing ship; NSF = North Sea Fleet; SSF = South Sea Fleet.

chain. To date, the service has commissioned over thirty Type 056 hulls, with at least half a dozen more in various stages of construction.[142]

The PLA Navy also owns and operates large numbers of earlier-generation frigates, destroyers, corvettes, and minesweepers. Their poor war-fighting capabilities would render them almost valueless in a modern, high-end conflict. However, they remain useful instruments of peacetime coercion, especially when directed against weaker states in Southeast Asia.

Amphibious warfare ships are also active in disputed areas. The most capable class in this category is the Type 071 LPD; four ships of the class have been commissioned to date. At twenty thousand tons, this ship closely resembles the USN *San Antonio* class. It contains a large well deck for landing craft (including the air-cushioned type) and a flight deck for embarked helicopters. But other, smaller amphibious vessels, such as tank landing ships (LSTs), also patrol disputed waters.[143]

PLAN auxiliary vessels are active along China's maritime frontier. These ships, most of which lack combat power, conduct presence missions in conjunction with other purposes. For instance, the auxiliary water tanker *Beishui 572* has performed at least seven rights-protection patrols to the Spratlys, probably as part of a supply mission to Mischief Reef.[144]

The PLAN surface fleet includes large numbers of fast-attack craft, such as the Type 022 (Houbei) missile boat. Despite their impressive ASCM payloads, these ships are small and have poor endurance. Therefore, they are unable to play a direct role in the most remote areas along China's maritime frontier. Indeed, these units have roots in an earlier age when the PLA Navy focused chiefly on coastal defense and a possible conflict in the Taiwan Strait. Still, Type 022 fast-attack craft can be—and have been—deployed to the disputed Paracel Islands to signal Chinese intentions.[145]

PLAN surface vessels are distributed across three regional fleets and their subordinate units. The East Sea Fleet (ESF), headquartered in Ningbo (Zhejiang), is charged with handling disputes with Japan in the East China Sea. The South Sea Fleet (SSF), headquartered in Zhanjiang (Guangdong), performs the bulk of operations intended to uphold China's claims in the South China Sea. Both fleets operate large numbers of amphibious warfare ships, destroyers, frigates, corvettes, minesweepers, auxiliaries, and fast-attack craft.

Prior to early 2016, peacetime surface fleet deployments were organized and commanded by PLAN leaders in Beijing and at regional fleet headquarters. In late 2015, the PLA began a major organizational reform, which has stripped the navy of significant authorities. Peacetime deployment decisions now are made by theater commands (战区), the successors to the military region (军区), with the PLA Navy focusing its attention on building and training the fleet. Each theater command is responsible for security threats in a given "strategic direction."[146] The Eastern Theater Command, headquartered in Nanjing (Jiangsu), commands and coordinates PLAN surface combatant activities in the East China Sea. The Southern Theater Command, Guangzhou (Guangdong), is responsible for the fleet movements of the SSF. Its most important mission is "safeguarding China's rights and interests in the South China Sea."[147]

Support Infrastructure. The capacity to provide presence in disputed waters involves more than ship numbers; it is also a function of the location and capacity of shore-based support facilities. Well-equipped bases located close to disputed areas provide easier access to fuel, food, water, and other necessities. This cuts down on transit times to and from the theater of operations, allowing ships to spend more time deployed. Since 2012, China has invested heavily in shore-based infrastructure for both naval and coast guard forces.

In the East China Sea, China has constructed new naval facilities at Nanji Island, located just 165 nm northwest of Uotsuri-shima in the Senkakus. These facilities include a seventy-to-eighty-meter pier, which already may be hosting surface combatants deploying to disputed areas in the East China Sea.[148] China also has begun construction on a new 120-acre base for the China Coast Guard in the city of Wenzhou—much closer to the front line than other coast guard bases. When completed, the facility, called the Wenzhou Command and Comprehensive Support Base, will have six berths for coast guard cutters and will be able to accommodate the China Coast Guard's new twelve-thousand-ton Zhaotou-class cutters.[149]

The benefits of forward basing are especially pronounced in the South China Sea, given the great distances between the mainland and the areas China claims. Since early 2014, China has invested huge sums to transform its facilities in the Spratlys from tiny outposts into major military complexes. With its enormous lagoon and extensive facilities, the new base at Mischief Reef already is serving as a hub for Chinese surface vessels operating in the Spratlys. Port and berthing facilities to the southwest at Fiery Cross Reef place Chinese surface forces even closer to the more remote sections of the nine-dash line and the key shipping lanes traversing the South China Sea.[150] Subi Reef hosts China's third enormous basing complex in the Spratlys.

Aside from enabling increased presence in disputed waters, these new facilities provide other advantages. They allow for a surge of forces during a crisis. Placing significant combat power so close to the territory of other states also increases the credibility of Chinese efforts to exercise military coercion, especially to deter other states from using force against coast guard cutters or Chinese civilians.

Jointness

The Chinese coast guard and the PLA Navy constitute separate organizations, but they operate as components in an integrated echelon defense system. To maximize the effectiveness of this approach, they must be able to coordinate their activities, share information, and operate jointly in the event of a crisis. They currently do this with some degree of success.

This was not always the case. For many years, China lacked the ability to coordinate national strategy effectively across different agencies and the military. In 2012, China created the Central Maritime Rights and Interests Leading Small Group (中央海洋权益工作领导小组), a decision-making body led by Xi Jinping that was charged with formulating and coordinating maritime dispute strategy. The creation of this leading small group likely improved policy coordination among the groups responsible for implementing the PRC's dispute strategy.[151]

Prior to the coast guard reform, China Marine Surveillance maintained the closest interservice relationship with the PLA Navy. In part, this was a result of an institutional kinship that goes back decades. For years after its founding in 1964, the State Oceanic Administration was managed (代管) by the PLA Navy on behalf of the State Council. Many CMS personnel started their careers in the navy. The PLA Navy has educated CMS officers at military institutions such as the PLAN Command College in Nanjing, the Dalian Naval Academy, and the Bengbu Academy for Noncommissioned Officers.[152] PLAN units have trained CMS personnel on important skills, such as landing helicopters on ships at sea.[153] PLAN strategists also have helped to design and assess approaches for using the maritime law-enforcement fleet in rights-protection operations.[154]

China Marine Surveillance and the PLA Navy established a mechanism for sharing information and coordinating activities as early as 2002. This occurred following a joint effort to monitor Japan's operations to salvage an armed North Korean trawler the Japan Coast Guard (JCG) sank in late 2001 in (undisputed) Chinese jurisdictional waters.[155] By late 2007, China Marine Surveillance and the PLA Navy had set up "coordination mechanisms for maritime operations" (海上行动协调配合机制) at the regional level (i.e., between the three navy fleets and their corresponding CMS contingents).[156] Subsequent years saw repeated calls for these mechanisms to be strengthened.[157]

Now that both the PLA and the China Coast Guard are in the process of major organizational reform, interservice coordination mechanisms no doubt are in flux.[158] If the past is any guide, coordination of peacetime ship deployments will occur largely among the China Coast Guard's regional branches and the PLAN fleets or the new theater commands.

The available materials shed little light on the extent to which the Chinese navy and coast guard share intelligence. As mentioned above, China Marine Surveillance and the PLA Navy had established intelligence-sharing mechanisms as early as 2002.[159] But these systems were probably never very satisfactory.[160] While FLE vessels were not as active in disputed waters, they received information on foreign activities from Chinese fishing vessels, which operate all over the near seas and beyond.[161] It is unclear how and to what extent Fisheries Law Enforcement shared this intelligence with the Chinese military or other coast guard forces.

Naval and coast guard forces ideally would share real-time information about foreign activities in disputed areas. However, the services evidently did not use similar or even compatible command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) systems.[162] This appears to be changing. CCG ships now are being fitted with the HN-900 datalink systems that the PLA Navy currently uses. This should improve greatly the sharing of tactical information between coast guard and

naval forces at sea, allowing both services to contribute to and benefit from a common operating picture.[163]

During most operations, it is probably adequate that naval and coast guard forces be generally aware of their respective locations and missions. Crises, however, demand much higher standards of interoperability. To hone these skills, the PLA Navy and components of the Chinese coast guard periodically conduct joint exercises. In September 2014, for instance, the PLAN's ESF and selected maritime law-enforcement forces held a three-day exercise in the East China Sea called HAISHEN-2014. The aim was to improve the PLA Navy's ability to provide "support and cover" (支援掩护), its key mission in disputed areas. The exercise involved large numbers of vessels, including destroyers, auxiliaries, and submarines.[164]

Similar exercises also take place in the South China Sea. In late August 2016, for instance, a "large-scale maritime rights-protection" exercise was held in the Gulf of Tonkin involving elements of the PLA (navy, ground forces, and air force) and various maritime law-enforcement entities, including the China Coast Guard, local-level FLE and CMS units, and the China Rescue and Salvage Service. One aim of the exercise was to improve the ability of the PLA and coast guard forces to conduct joint rights-protection operations, such as defending Chinese oil rigs from the type of assaults that Vietnam directed against CNOOC 981 in 2014.[165] As will be discussed below, sometimes these exercises serve the political function of signaling Chinese intentions. But they also meet legitimate desires to improve interoperability.

When coast guard and naval forces are operating in the same area, logic suggests that the senior service should assume tactical command. Evidence indicates that this indeed occurs, at least some of the time. While on patrol in the Spratlys in May 2013, for instance, the PLAN frigate *Jiangmen* "successfully organized coast guard vessels to investigate and expel [查证驱赶] several foreign fishing and transport vessels" operating without consent in Chinese-claimed waters.[166]

Part 3: Sea Power and Strategy

Echelon defense is an approach for using sea power to defend and advance China's maritime claims. It employs a division of labor between China's two primary sea services, leveraging the particular advantages of each. This part examines the strategic and operational considerations underlying China's echelon defense approach. It also outlines the chief functions it serves in China's dispute strategy.[167]

"Rights" vs. "Stability"

China has powerful incentives to build and use instruments of coercion—including naval and coast guard forces—to advance its maritime interests. In Chinese parlance, such

actions often are referred to as "rights protection" (维权, *weiquan*). At the same time, however, Chinese leaders must weigh desires for gain against the potential consequences of zealous pursuit of claims. China has a strong interest in maintaining a healthy degree of stability in its relations with neighboring states, which Chinese policy makers believe is vital to maintaining an external environment congenial to its economic development. At the Sixteenth Party Congress (November 2002), the then Party leader Jiang Zemin introduced the concept of a "period of strategic opportunity." He identified the first two decades of the twenty-first century as a time in which China would be able to focus on making itself strong and rich.[168] Thus, while "rights protection" is extremely important to Chinese leaders, options to advance the country's claims must be weighed against this emphasis on "maintaining stability" (维稳, *weiwen*) in China's foreign relations.[169] The decision to rely largely on coast guard forces backed up by the navy should be seen as a compromise between these two contradictory desires.

Bristling with armaments, naval warships are instruments and symbols of violence. The PLAN surface fleet has formidable combat capabilities, especially the modern platforms commissioned in the last five years. These vessels are equipped with missiles that can destroy targets well beyond the horizon, allowing them to influence foreign decisions even when they cannot be seen. Not surprisingly, this menacing aspect can exert a persuasive effect on a potential foe. However, it also can lead to risky escalation with a disputant who will not be cowed, and possibly armed intervention from a foreign great power. Moreover, relying too heavily on warships can undermine China's efforts to craft an image of a state pursuing "peaceful development."[170] The PLA Navy is aware of the difficult balancing act it must perform. As then–ESF deputy commander Rear Adm. Zhang Huachen admitted, the PLA Navy "must both safeguard national interests from foreign violation and safeguard the stability of the overall situation. This is the Party's policy. Fulfilling these requirements presents a great challenge to the navy."[171]

Coast guard vessels, by contrast, are not typically instruments of war but of peacetime order. What armaments they possess have little or no utility on the modern battlefield. Yet in the peacetime struggle at sea they can perform a wide range of missions successfully, and can do so without the negative repercussions that would accompany reliance on the navy. In the words of one PAP analyst, "Unlike naval forces, the coast guard enjoys exceptional advantages. As a representative of the Chinese government, it can use any means aside from use of force to conduct vigorous rights-protection law enforcement."[172] Moreover, constabulary actions do not offer outside powers a pretext to intervene.[173] According to a textbook published by a top Chinese maritime university, "Using maritime law-enforcement forces to safeguard maritime rights and interests provides the state with much more room for maneuver than if it used the navy, and is therefore more beneficial for protecting the national image."[174] As one PLAN analyst

wrote, "[u]sing maritime law-enforcement forces to safeguard sovereignty allows the Party to avoid being criticized for 'gunboat diplomacy' and allows for protracted pressure to be exerted on the adversary."[175]

The "rights-stability" concept also guides when and how Beijing elects to use sea power in disputed waters. It has led to the development of at least two stratagems for pursuing the former without jeopardizing the latter.

First, China tends to seize on the minor provocations of another disputant, using them as a pretext for a response of greater vigor than the original offenses themselves.[176] As a result, the other state both is a net loser in the exchange and is cast as the instigator of increased tension. Macau University researcher You Ji calls this China's "one-plus strategy." Aside from Scarborough Shoal, the classic case is the 2012 Senkaku Islands imbroglio. The Japanese central government purchased three of the disputed islets from private owners to prevent the governor of Tokyo from doing so (and perhaps building on them). Thus, Japan was opting for the lesser of two evils. China's response was far more escalatory. Immediately after the purchase transaction, PRC leaders initiated regular deployments of constabulary vessels to the territorial sea—operations intended to undermine Japan's administration of the features.[177]

The one-plus stratagem is not acknowledged openly in Chinese sources. Rather, it is a theoretical construct that seems to fit the pattern of some PRC behavior. However, Chinese officials do admit openly the punitive nature of their approach. For instance, while speaking at a 2014 event, an SOA official said that it is China's "principled stance" (原则立场) to force states that provoke China to pay a "corresponding price" (相应的代价).[178]

Second, Chinese expansion takes place on the basis of proactive changes to the status quo. To avoid engendering instability, these actions often take place unobtrusively, resulting in a gradual undermining of other states' claims. This preference for incrementalism is a widely recognized characteristic of China's approach.[179] For instance, while appearing on a current affairs program in July 2015, Shi Yinhong, a civilian researcher with close ties to the party-state, and Li Jie, an analyst from a PLAN research institute, agreed that China's maritime dispute strategy in the South China Sea was described best as *bubu weiying* (步步为营)—"building fortifications after each new advance."[180]

Not all decisions about how to handle China's maritime disputes are made on the basis of strategy. Sometimes parochial interests may intrude on the policy-making process. For many years, Chinese maritime law-enforcement agencies vied with each other for influence and acclaim. Surely some decisions were made in the interest of advancing bureaucratic interests. To the extent that this thesis ever offered a plausible explanation for China's seaward expansion since 2006—and the case never has been made

persuasively—the 2013 CCG reform should dampen local activism as a factor driving Chinese behavior at sea.[181]

To some degree, Chinese leaders are driven to act for the sake of domestic legitimacy—that is, the need to show the Chinese people that the Chinese Communist Party is defending the honor and interests of the Chinese nation. This factor is probably most salient when Chinese leaders are faced with a sudden incident with another state, especially a state that historically has "bullied" China (e.g., the United States and Japan).[182] In such cases, Chinese leaders may experience some pressure to respond. However, because the Chinese Communist Party—operating through the Central Propaganda Department—has broad powers to decide which narratives are presented to the Chinese people, Chinese leaders are not nearly as vulnerable to domestic pressure as those in democratic states.[183]

The Functions of Sea Power in Chinese Dispute Strategy

Where expedient, China prefers to place maritime law-enforcement vessels on the front line in rights-protection operations, where they serve two primary functions: they manifest or embody China's maritime claim; and they forcibly assert, or enforce, these claims through coercive actions at sea.[184] With its modern combat capabilities, the PLAN surface fleet primarily operates on the second line, where it serves to discourage escalation. Both services perform the fourth major function of sea power in Chinese dispute strategy: intelligence collection.

Manifest China's Claims. By being present in disputed waters, Chinese vessels embody or manifest China's claims. Depending on the circumstances, presence can exert one or more political effects. First, it shows Chinese administration, thereby bolstering a narrative of Chinese ownership. Second, it demonstrates to other disputants China's commitment to its claims. In this sense, Chinese presence operations are analogous to USN freedom-of-navigation "operational assertions." Third, sending ships to contested areas to manifest China's claims provides a means by which Beijing can exert pressure on other states to comply with its wishes. This pressure differs from a threat because it is an action that already has been taken. Its coercive value lies in another state's desire for it to end. Both coast guard and naval forces perform operations that serve this function, but less-threatening coast guard cutters are often the preferred instrument.

Enforce China's Claims. Chinese constabulary vessels and warships also may be tasked with forcibly asserting—or enforcing—China's claims by directly vying for control in disputed areas. In such cases, Chinese ships serve as instruments of low-intensity conflict. This ability distinguishes surface vessels from other tools of national power. Chinese ships can threaten foreign vessels with a whole range of measures and can follow through on many threats, without using armed force. For instance, they can damage

foreign vessels and endanger foreign crews by targeting them with powerful water cannon, destroying or confiscating equipment, and even bumping and ramming.[185]

Enforcing China's claims is an end in and of itself; that is, it achieves the aim of exercising administrative control over Chinese-claimed waters, ensuring that China can enjoy the economic, security, and other benefits of that control. But doing so also serves political aims. In taking action, China follows through with threats, providing a fund of credibility for future threats. Forcibly asserting China's rights to use and administer disputed waters is also a more coercive means of pressuring other disputants to comply with China's wishes.

Operations to enforce China's maritime claims are performed primarily by coast guard forces. There are, however, limits to the white-hull/gray-hull distinction. The PLAN surface fleet is far more active along China's maritime frontier than commonly is assumed. Navy warships do not simply lurk beyond the horizon while coast guard and militia forces commit the actual acts of aggression. The PLA Navy has an enforcement function, and it sometimes performs it.[186]

Discourage Escalation. PLAN surface ships serve certain key functions that coast guard cutters cannot, because of their lack of modern armaments. When a surface vessel has real combat capabilities, its presence in disputed areas assumes a more menacing aspect. This ability not only to communicate but to follow through with threats makes naval forces superior instruments of deterrence. A warship conveys the will and ability to act if some redline is crossed.[187]

The PLAN surface fleet does not do this alone. Indeed, the full power-projection capabilities of the Chinese military *as a whole* constitute a latent threat to foreign leaders considering certain policy actions. However, the PLAN surface fleet's ability to provide targeted threats by maintaining protracted, visible presence in an area under dispute distinguishes it from other forms of military power.[188]

Prior to 2006, there was little impetus for the PLA Navy to serve this deterrent function. Rather, the need has arisen from concern that the expansion of China's own frontline activities might elicit an armed response. This important strategic dynamic is well recognized in Chinese sources. As one authoritative PLAN source put it, while patrolling disputed waters, the navy "shows the military's resolve and capability to actively support rights-protection law-enforcement operations."[189] In a 2012 interview, senior CMS officer Sun Shuxian acknowledged that having coast guard and naval forces maintain close coordination is vital to ensuring that the former do not "get pushed around" (吃亏). In Sun's words, "We must always maintain military deterrence. If a neighboring state uses force against one of our maritime law-enforcement vessels, it will suffer a devastating assault."[190]

The vehicle for PLAN presence in disputed waters is the "combat readiness patrol" (战备巡逻).[191] When conducted to deter foreign aggression against unarmed or lightly armed vessels, these operations are called "support and cover" (支援掩护).[192] The most common PLAN approach for conducting this mission is to operate twenty to thirty nautical miles away from frontline coast guard forces, depending on the circumstances, prepared to intervene if necessary.[193] This presence forms the second line in China's echelon defense system.

In recent years, as the PLA Navy has expanded the geographic scope of its operations, these patrols have become one segment of longer missions that may take a task force beyond the first island chain into the Pacific Ocean. These missions are called "combat readiness patrols and far seas training" (战备巡逻远海训练). Chinese sources readily acknowledge their political importance. One such mission occurred from January to February 2014 and involved a PLAN surface flotilla comprising a Type 071 LPD *(Changbaishan),* a Type 052C destroyer *(Haikou),* and a Type 052B destroyer *(Wuhan)*. The twenty-three-day voyage covered eight thousand miles, taking the formation through disputed waters in the South China Sea, into the Indian Ocean and the Pacific Ocean, and returning via the East China Sea. On arrival in Zhanjiang, the task force was met by the then PLAN deputy political commissar Vice Adm. Wang Sentai (王森泰) and the then PLAN political commissar, Adm. Liu Xiaojiang (刘晓江). In his speech, Wang stated that the mission had "fully demonstrated China's resolve to safeguard national sovereignty and maritime rights and interests."[194]

Aside from forward-presence operations, the PLAN surface fleet also communicates deterrence signals through military exercises. One noteworthy example took place in October 2012, during a tense period in China-Japan relations over the Senkaku Islands. The PLA Navy, China Marine Surveillance, and Fisheries Law Enforcement conducted a very public joint exercise in the East China Sea. In the exercise scenario, a coast guard ship was rammed by a foreign naval vessel in disputed waters. The PLA Navy was called to the scene to assist the damaged ship and protect Chinese administrative presence.[195] The timing, location, content, and publicity of the exercise clearly suggest that the purpose was to signal Chinese resolve to dispatch the navy if Japan responded forcibly to China's recent dramatic increase in coast guard patrols to the Senkakus. As one PLAN officer pointed out, "With this exercise, we amply showed China's ability and determination to safeguard territorial sovereignty and maritime rights and interests."[196]

More recently, the Chinese fleet played an important signaling role in the days leading up to and following a legal decision that an UNCLOS tribunal issued on the validity of Chinese claims and the legitimacy of the country's actions in disputed parts of the South China Sea. In late June and early July 2016, the Chinese military conducted a number of very public exercises in the South China Sea.[197] The most important of these was a

massive live-fire exercise that took place near the Paracels on July 9. Over one hundred ships and dozens of aircraft from all three fleets participated in a simulated great-power war at sea. The PLA Navy officially insisted this was a "routine exercise," but Li Jie, a naval analyst at the PLA NRI, admitted that it was intended to "show China's power and capabilities, send a warning to extraregional powers, and convey a serious statement to regional powers." With the exercise, China "showed its resolve to defend maritime rights and interests and maritime territory."[198]

If deterrence fails, the presence of PLAN surface vessels gives the PRC an option to respond immediately with force and ensure that China is not on the losing side of any armed clash. As one researcher at China's National Defense University put it, placing the PLA Navy on the second line means that "any opponent with the audacity to escalate from contention between coast guards to a combat operation will suffer a catastrophic armed response from China."[199] In this context, the navy serves as a "backstop" (后盾) and provides "security guarantees" (安全保障) for the constabulary fleet as it operates on the front line.[200]

Not being the side to fire first is a much-emphasized part of the PLA identity. If force is used against Chinese state vessels, the PLA Navy would be expected to respond in kind. This principle often is captured in the phrase (first uttered by Mao Zedong) "If nobody attacks me, then I won't attack. But if somebody does attack me, I must counterattack" (人不犯我, 我不犯人, 人若犯我, 我必犯人).[201] Speaking in similar terms, Vice Adm. Huang Jiaxiang stated, "We'll never fire the first shot, but if the other side fires the first shot, we will resolutely counterattack."[202] PLAN scholar Sr. Capt. Zhang Wei claims that China's doctrine is to "never fire the first shot, but not to let the other side fire the second shot."[203]

Even if one accepts that the "doctrine of the second shot" reflects PLA orthodoxy—and there is reason to believe that it may not—it may be applied cynically.[204] For example, video footage of the March 1988 Johnson Reef conflict suggests that the PLA Navy goaded the Vietnamese to fire first, providing it with a pretext for what ultimately turned into a massacre of dozens of Vietnamese troops.[205]

Collect Intelligence. Intelligence operations indirectly contribute to China's maritime dispute strategy by providing Chinese civilian and military leaders with a timely, accurate "picture" of foreign activities in disputed areas.[206] Intelligence collection is a core mission of China's constabulary forces. In a 2013 interview, a CMS officer acknowledged that when patrolling disputed waters, one of the service's key functions is to monitor foreign infringements, a mission he euphemistically called "understanding what's going on" (了解情况). If other states violate Chinese rights, Chinese law-enforcement entities "must be the first to know."[207] This mission often is framed in legal terms: tracking and

documenting the activities of foreign vessels and aircraft are described as "collecting evidence" (取证).

China Marine Surveillance had and the China Coast Guard now has special units called "rights-protection law-enforcement detachments" (one for each regional branch) to perform intelligence-collection functions. These detachments, set up in 2008, embark a handful of personnel on ships sailing to disputed waters. These personnel handle verbal communications with foreign mariners, document these encounters with photographs and video footage, file reports, and transmit information to commanders ashore.[208]

Intelligence collection, of course, is a very important function of PLAN surface vessels. When ships are at sea, they actively monitor and document all ships and aircraft they encounter, using data links to keep shore-based commanders fully apprised in real time.[209] For instance, during a two-month-plus patrol to the Spratlys that began in August 2014, the PLAN frigate *Huai'nan* identified more than four hundred "suspicious targets." This provided shore-based commanders with "accurate information" with which to make timely decisions.[210]

PLAN ships deploy analogues to USN "snoopy teams," called "evidence-collection personnel" (取证员).[211] In October 2013, the Chinese LST *Jiuhuashan* was on patrol when it discovered an unknown fishing vessel operating in "sensitive waters" in the East China Sea. The LST's crew proceeded to track the foreign trawler, taking photos and video footage until it departed the area. The onboard "security officer" (保卫干事) then processed these materials and cataloged them as "evidence" of a foreign violation.[212]

This collection effort is an important component of the surface-fleet mission in disputed waters. However, the fleet is less effective than aviation assets such as unmanned aerial vehicles and fixed-wing aircraft—which can cover a much larger swath of ocean—and Chinese fishing vessels, which are far more numerous.[213]

China relies on coast guard and naval forces to defend and advance its position in its maritime disputes. Chinese leaders assign many frontline rights-protection missions to the unarmed or lightly armed constabulary fleet. These missions involve sailing to disputed waters to manifest and enforce China's maritime claims. However, there are some functions that only warships can perform. Where activities in disputed areas risk a foreign response, China may deploy gray-hulled naval vessels to discourage escalation, influencing foreign decisions from afar. When forward deployed, units of both sea services actively collect intelligence on foreign activities in the air, on the water, and beneath the sea.

Decisions about how Chinese leaders use the country's two sea services—which missions are performed, when, and by which service—reflect strategic considerations

openly acknowledged in Chinese sources and suggested through patterns of behavior. Chinese policy makers seek to use the country's growing power to diminish foreign influence over Chinese-claimed land and sea areas, but their decisions are constrained by another strong desire to maintain stability in China's foreign relations. Chinese leaders have adopted at least two stratagems to enable the country to pursue rights better without jeopardizing stability. China's most assertive behavior often comes in the wake of minor provocations from other states. Moreover, Beijing has opted for a gradualist approach, which some Chinese analysts describe as "building fortifications after each new advance."

Table 4 outlines the four primary functions served by naval and coast guard forces in China's dispute strategy.

Table 4. *The Functions of Sea Power in Chinese Dispute Strategy*

Function	Performed By	Description
Manifest China's maritime claims	Mostly CCG	Maintain presence in disputed waters. Serves to 1. Uphold the narrative of Chinese ownership 2. Communicate China's commitment to its claims 3. Pressure other disputants to comply with Chinese wishes
Enforce China's maritime claims	Mostly CCG	Forcibly assert PRC claims by using threats and nonlethal measures against foreign mariners operating "illegally" in Chinese-claimed waters. Serves to 1. Follow through with threats made by Chinese diplomats/statesmen (to ensure the credibility of future threats) 2. Pressure other disputants to comply with Chinese wishes 3. Control Chinese-claimed waters
Discourage foreign escalation	PLAN only	Maintain presence in disputed areas to convey a threat of consequences if another state escalates or intervenes
Collect intelligence	Both services	Track and report on foreign activities in Chinese-claimed areas

Notes: CCG = China Coast Guard; PLAN = People's Liberation Army Navy; PRC = People's Republic of China.

Part 4: Echelon Defense

China's naval and coast guard forces generally are arrayed in what Chinese strategists call an "echelon defense" posture. Maritime law-enforcement vessels perform most, but not all, frontline operations to manifest and enforce China's maritime claims. The PLA Navy operates on the second line, where its presence serves to warn foreign leaders against responding forcefully to the assertive behavior of China's frontline forces, and to intervene if deterrence fails. What follows is a close examination of the five primary frontline operations that Chinese forces perform: sovereignty patrol, blockade, tracking and monitoring, obstruction and eviction, and escort. Where possible, this analysis also includes data about the disposition of naval forces on the second line in China's echelon defense approach, performing a sixth type of operation: support and cover.

Sovereignty Patrol

Chinese coast guard and naval forces can influence island disputes through the conduct of two types of frontline operations. First, by sailing to waters adjacent to a disputed feature, Chinese forces can manifest Beijing's claim to that feature. Such missions, herein called "sovereignty patrols," serve a whole range of political functions, from bolstering a narrative of Chinese ownership to exerting pressure on foreign leaders. (As discussed in the next section, the PRC also uses sea power to blockade access to certain disputed features as a means to assert control over the features themselves.)

Whenever an element of the Chinese surface fleet approaches within twelve nautical miles of a disputed feature, this is a political act. The political objectives may differ, depending on the particular circumstances. Indeed, in any given case Chinese leaders no doubt seek to achieve more than one objective. Sometimes these sovereignty patrols take place during crises; more often they occur on the pretext of routine administration of "Chinese" sovereign territory.

China's policy for managing its dispute with Japan over the Senkaku Islands relies very heavily on the sovereignty patrol. For decades, China's claim to the features was almost entirely theoretical. Chinese diplomats told their Japanese counterparts that the islands were China's. Chinese newspapers and textbooks stated this was the case. However, with very few exceptions, PRC authority never actually extended there.[214]

This changed in 2008, when Chinese leaders decided to establish an administrative presence near the features. In December of that year, two CMS cutters entered the territorial sea of the Senkaku Islands and lingered for some nine hours.[215] In service lore, this operation is known as the "12-8 Patrol," for the month and day on which it took place. The mission commander was instructed to "show presence, manifest jurisdiction, and declare sovereignty."[216]

Unlike later sovereignty patrols to the Senkakus, the 12-8 Patrol was not framed as a reaction to some Japanese "provocation." It occurred during a period of rapid expansion in Chinese coast guard presence in disputed waters. Like other such operations, the 12-8 Patrol was conceived at least in part to communicate China's commitment to its claim. More importantly, perhaps, the mission was seen as necessary to bolster the legitimacy of China's position. Chinese decision makers likely had come to believe that China's claim to the features was weakened by its total acquiescence to Japanese administration. Not long before the 12-8 Patrol took place, vice-commandant of China Marine Surveillance Sun Shuxian publicly explained, "Internationally, there are two customs [惯例] with respect to disputed waters. One is whether or not you have exercised effective management [over the disputed area] and the second is that effective control is superior to historical evidence. In our case, this area is ours, and it was so beginning

with our ancestors. But this alone is of no use. One must show effective control. China Marine Surveillance must show presence and manifest jurisdiction in our jurisdictional waters."[217]

During the two years following the 12-8 Patrol, no Chinese vessels sailed to the features.[218] This changed in the wake of two crises, one in 2010, the other in 2012. On September 7, 2010, while piloting the 166-ton trawler *Minjinyu 5179* near the Senkaku Islands, a Chinese fishing captain named Zhan Qixiong intentionally rammed his vessel into two JCG ships.[219] Japan detained Zhan and his crew and impounded the vessel.

When it became clear that the Chinese fishermen would not be released immediately, the PRC responded by issuing formal protests through diplomatic channels and delaying bilateral meetings set to take place later that month.[220] Japanese authorities released fourteen of the crewmembers and the trawler on September 13 and 14, respectively. However, the captain remained in custody and faced the possibility of prosecution, and perhaps jail time.

When Zhan's detention was extended on September 19, China began taking more-forceful actions to pressure Japan to release him. PRC diplomats and statesmen publicly threatened serious consequences and suspended governmental exchanges. China also arrested four Japanese citizens working in China to dispose of World War II–era chemicals, charging them with espionage—a blatant act of hostage taking.[221] It also may have enacted informal economic sanctions by halting the export of rare earths—inputs vital to the Japanese economy.[222] Japanese officials released Zhan on September 24, openly acknowledging that PRC pressure tactics ultimately forced this decision.[223]

Chinese coast guard forces played a key role in China's handling of the crisis. Immediately after Fisheries Law Enforcement learned of the disappearance of *Minjinyu 5179,* it sent two cutters *(FLE 201* and *FLE 202)* to the area to guard Chinese fishing vessels still operating there.[224] On *Minjinyu 5179*'s release, the ship sailed back to China under the escort of *FLE 202* and two Chinese trawlers. Later in the month, when China sought to increase pressure on Japan to release Zhan Qixiong, it sent back *FLE 201* and a second cutter, *FLE 203,* to waters just outside the territorial sea, this time with a Chinese reporter aboard to increase pressure on Japan and show Chinese citizens that the leadership was doing something.[225]

The biggest significance of the 2010 incident was not that Chinese actions at sea had effected the release of Zhan Qixiong. They did not; their use was just one tool of many that Chinese leaders employed to exert pressure on Japan. Rather, this event provided a pretext for establishing a larger administrative footprint near the Senkakus. An FLE official portended this outcome in a statement made in the days following Zhan's release: "Going forward, Fisheries Law Enforcement will begin normalizing patrols to waters

near Diaoyu [Uotsuri] Island."[226] In the months following the incident, Chinese constabulary vessels indeed operated occasionally near the disputed features. For example, three FLE cutters sailed to waters near the Senkakus on October 24. In three instances—occurring in August 2011, March 2012, and July 2012—Chinese ships actually entered the territorial sea.[227]

An article that appeared in the SOA-owned *China Ocean News* in the days following the second of these intrusions sheds further light on the rationale for normalizing patrols to the Senkakus. Published under the byline of "maritime current affairs commentator Dong Mu" (a pseudonym), the article states that, given their status as representatives of the state, constabulary vessels allow China to "use positive action to reiterate China's consistent position with respect to its sovereignty over Diaoyu Island and its associated islets."[228] The purpose of these operations, then, was to reinforce China's claims through physical presence.

Real "normalization" of Senkaku patrols did not begin until September 2012, following a second crisis. As mentioned earlier, the Japanese central government purchased three of the disputed islets from private owners to preempt others from doing so—an action meant to preserve, not alter, the status quo. China responded with a dramatic expansion in the frequency of sovereignty patrols to adjacent waters, including the territorial sea.

To some extent, authoritative Chinese claims that these actions were aimed at sending a message to Japanese leaders—a declaration of "China's firm determination to defend sovereignty and maritime rights and interests"—may be taken at face value.[229] Japan's "nationalization" of the Senkakus may have been perceived as an affront to Chinese leader Hu Jintao, who personally requested that Japan not take this measure.[230] Moreover, Japan's public denial of the existence of a territorial dispute no doubt gave impetus to the dispatch of Chinese vessels to prove the absurdity of this claim.[231]

However, Beijing's asymmetrical response suggests that Chinese leaders were looking for a pretext to establish a firmer foothold in these waters. That is, this was a clear-cut example of the "one-plus strategy," which the outcome of the Scarborough Shoal incident (just three months earlier) had shown to be a winning approach to dispute management. China's biweekly coast guard patrols, which continue to this day, directly undermine Japan's administration of the Senkakus, to the point that Japan now no longer exercises effective control.[232]

To date, only coast guard vessels have conducted sovereignty patrols to the Senkakus. Presumably, Chinese leaders have judged that naval presence in sovereign Japanese waters would cross a redline and risk conflict. However, Chinese naval vessels gradually are pushing the limit. In June 2016, for the first time, a PLAN surface combatant sailed

through the contiguous zone (i.e., the 12 nm belt just outside the territorial sea) of one of the islands.[233]

More importantly, the surge of coast guard presence near the Senkakus that began in September 2012 appears to have been accompanied by PLAN surface fleet deployments to signal a commitment to protect China's new foothold. Chinese warships patrolled waters near the Senkakus through the worst of the crisis, and perhaps longer.[234] Responding to a question about the PLA Navy's role in the Senkaku dispute with Japan, Xing Guangmei, an analyst from a PLAN research institute, claimed, "The navy has adopted the common international approach, whereby maritime law enforcement is on the front line and naval forces are nearby patrolling and providing support and cover. Thus, whenever anybody sees China Marine Surveillance vessels patrolling on the front line, the navy is definitely nearby awaiting orders. Once our law-enforcement forces encounter danger, the navy will immediately be on its way to help."[235]

China's policies for using sea power as an instrument for handling the Senkaku dispute are influenced strongly by Japan's status as a great power, allied to a superpower. China must be very careful that it does not cross a redline that results in an armed clash and perhaps even a regional conflict.

In the South China Sea, China faces no such adversary. Chinese surface vessels routinely conduct sovereignty patrols to many, if not most, of the disputed features in the South China Sea. Moreover, they do so without the need for the pretext of a foreign provocation. Chinese constabulary forces, lightly armed and operating on the basis of providing routine law enforcement, are particularly well suited for this type of operation. The vehicle for the CCG presence near disputed features is the "regular rights-protection patrol" (定期维权巡航).[236]

Sovereignty patrols to James Shoal merit special attention. This feature appears on Chinese maps and is depicted no differently from any other land feature. However, the shoal is submerged under roughly twenty meters of water. No artful distortion of international law can justify Chinese ownership of this section of seabed deep within Malaysia's EEZ.[237]

And yet Chinese coast guard and naval vessels on occasion sail to these waters deep in the southern part of the South China Sea, hover above the shoal, hold oath-taking ceremonies, and sometimes drop stone sovereignty markers into the ocean.[238] For instance, on the morning of March 26, 2013, sailors aboard the Type 071 LPD *Jinggangshan* held a ceremony on the ship's flight deck in which they declared the following: "We are the sailors of the glorious South Sea Fleet. Here, facing the national flag at the motherland's James Shoal, we solemnly swear to follow the command of the Party; be able to fight and win wars; be upright in behavior; plant roots in the South China Sea, do great deeds

in the South China Sea, and guard the South China Sea; resolutely safeguard national sovereignty; and work hard to achieve the dream of building China into a powerful country."[239]

Chinese vessels conduct sovereignty patrols to James Shoal to assert China's claim to these waters, which fall within the nine-dash line. Indeed, in the words of one authoritative source, the act of dropping a sovereignty marker allows China to "quietly express its strong will" to defend its sovereignty.[240] However, there is at least one domestic factor driving these patrols. From childhood, Chinese citizens learn that James Shoal is "the southernmost extent of Chinese territory" (中国领土的最南端, or 中国领土的最南点).[241] If this narrative is to have any credibility, representatives of the Chinese state actually must go there from time to time. In this respect, then, Chinese ships serve to perpetuate a national myth.

Blockade

Scarborough Shoal proved that Chinese naval and coast guard forces have the ability to seize disputed land features without resorting to armed force. After the standoff ended in June 2012, Chinese coast guard forces physically began preventing Philippine fishing and constabulary vessels from accessing the shoal, daring Philippine leaders to escalate and American leaders to intervene.[242] Neither did.

In the context of China's peacetime dispute strategy, a *blockade* is a maritime operation designed to exercise control over a land feature by interdicting seaborne communications to that feature. Chinese ships rely on threats to discourage foreign vessels from approaching and, if necessary, resort to nonlethal measures to force them to depart. These may include bumping and firing water cannon.[243]

Even if armed force is not used, blockading foreign access to a disputed land feature is an extremely provocative act that easily could lead to the negative outcomes that Chinese leaders seek to avoid: an armed clash, a damaged reputation, and foreign intervention. The case of Scarborough Shoal suggests certain preconditions for success. These include a suitable pretext for action (in this case, the arrest of Chinese fishermen) and signs of passivity from other disputants and their allies.

These conditions were not present in early 2014, when China attempted to blockade Philippine access to another disputed feature, this time in the Spratlys. Second Thomas Shoal (also known as Ayungin Shoal and Ren'ai Shoal) is a teardrop-shaped feature located about one hundred nautical miles west of Palawan—well within the Philippine EEZ. It is fully submerged at high tide; therefore it is not entitled to a territorial sea. It sits in the shadow of China's massive new installation at Mischief Reef, just twenty nautical miles to its west.

In 1999, a few years following China's occupation of Mischief Reef, the Philippines grounded a World War II–era troop transport vessel (BRP *Sierra Madre*) at Second Thomas Shoal. Since then, it has stationed a tiny garrison of marines on the dilapidated hulk. The garrison is entirely reliant on regular resupply from Palawan by ship, making it very vulnerable to blockade.[244]

For years, the PRC approach consisted of verbal complaints. This changed in 2013, when Chinese maritime law-enforcement vessels first established a regular presence near Second Thomas Shoal in May of that year.[245] However, as late as August, CCG vessels did little more than patrol and monitor the feature.[246] Then, in March 2014, CCG ships attempted to prevent Philippine supply vessels from reaching *Sierra Madre* to replenish the garrison, escalating what had been a presence mission to the level of an enforcement operation.[247]

China's attempted blockade failed. Philippine leaders clearly were committed to maintaining their foothold at the shoal. They had learned their own lessons from Scarborough Shoal, and since the Philippines actually occupied Second Thomas Shoal, more was at stake. Acting under the spotlight of the international press, Beijing proved unwilling to take the steps needed to halt Philippine access to the feature forcibly—i.e., bumping, ramming, and other types of soft force. The Philippines did not offer China the needed pretext for action. Moreover, it appears that in this case the United States took a more proactive approach to supporting its ally. For instance, the U.S. Navy deployed patrol aircraft to the area during supply runs to signal American opposition to the attempted blockade and to intimidate the coast guard forces implementing it.[248]

Since a contested blockade rests on continuous, vigilant presence and the willingness to use coercive measures if necessary, it is both expensive and risky. A political agreement that recognizes the new status quo is naturally far more preferable. Recent developments at Scarborough Shoal show how the pressure of successful enforcement coupled with economic and other inducements can lead to the political outcome Chinese leaders seek. The new Philippine administration of President Rodrigo Duterte has accepted PRC control over Scarborough Shoal and has sought accommodation on that basis. As part of a political détente between the two countries—which promises economic and other benefits for the Philippines—China began allowing some Philippine fishermen to access the feature in the second half of 2016. This was not a return to the status quo ante—China retains administrative control over the feature. But by making a small concession and offering modest inducements in the form of economic investment, it has gained tacit acceptance of this control, reduced tensions, and a total reorientation of the Philippines' foreign policy toward closer ties with China and a corresponding downgrading in U.S.-Philippine relations.[249]

Tracking and Monitoring

China's sea services help Chinese leaders defend and advance the country's "maritime rights"—that is, the PRC's claimed rights to use and administer certain sections of the ocean that it bases on China's particular interpretation of international law. On the lower end of the escalation spectrum, they may track and monitor foreign "infringements," an operation aimed at manifesting China's claims and collecting intelligence. The primary targets are foreign fishing vessels and survey ships.

The East China Sea has been the setting for a number of such operations. For example, in July 2004 Japan began hydrocarbon exploration in the East China Sea, hiring the Norwegian surveying vessel *Ramform Victory* for the purpose. Since China claims resource and other maritime rights out to the Okinawa Trough (well east of the median line between its coast and Japan's), it regarded these surveying operations as an infringement.[250]

PRC leaders called on China Marine Surveillance to deploy cutters to track and monitor developments and to engage in verbal harassment. These operations, which continued through 2005, apparently did not involve behavior that seriously threatened the safety of the ship and crew of *Ramform Victory*. According to Chinese sources, China Marine Surveillance conducted a total of 146 aircraft patrols (架次) and eighteen ship patrols (艘次), during which servicemembers recorded 807 minutes of video footage and 7,232 photographs of Japanese "infringements" and communicated bridge to bridge more than five hundred minutes of verbal protest (喊话—literally, "yelling words").[251] These were the metrics that mattered. Such operations served to signal Chinese displeasure and to manifest physically China's claim to jurisdiction over these waters.[252] In the words of CMS officer Yu Zhirong, their purpose was to "show the attitude and position of the Chinese government."[253]

Obstruction and Eviction

Chinese naval and coast guard forces sometimes are authorized to impede the operations of foreign vessels in Chinese-claimed waters actively. In many cases, verbal threats—accompanied by the use of floodlights and loud sirens—are enough, especially when a threat is transmitted from the bridge of China's larger and more menacing ships.[254] When verbal threats fail to bring compliance, Chinese forces may take forcible measures to compel foreign ships to cease their activities. Chinese coast guard vessels are equipped with advanced water cannon that can reach targets up to one hundred meters away and damage sensitive ship hardware such as radar and communications equipment.[255] Chinese ships also may threaten collision, and even may bump foreign vessels intentionally.[256]

Foreign fishing trawlers are the most common victims of these enforcement operations. Most such activities are conducted in the South China Sea, about which few fisheries

agreements exist. China regularly "expels" (驱离 or 驱赶) Vietnamese fishing vessels operating near the Paracel Islands. In the Spratlys, China prevents foreign fishermen from using waters near Chinese-controlled features, but seldom in other areas.

Indeed, there remain large sections of the South China Sea in which foreign fishermen continue to operate unmolested. The great distance from the Chinese mainland, coupled with the vast area of ocean to be patrolled, has created practical challenges for Chinese law-enforcement forces operating there.[257] Moreover, when Chinese forces compel a foreign fishing vessel to leave a given area, there is nothing to prevent it from returning or sailing to another area. China has not asserted exclusive fishing rights in all sections within the nine-dash line—at least, not yet. Lastly, China has yet to draw baselines around Scarborough Shoal or the Spratlys. Thus, it has no declared EEZ to enforce in these waters.

Both naval and coast guard forces impose Chinese prerogatives on foreign fishermen. Because managing fisheries is a classic constabulary role and because China seeks to avoid conjuring images of Chinese warships bullying tiny foreign fishing trawlers, coast guard cutters perform the bulk of the work. Prior to 2013, this chiefly had been the responsibility of Fisheries Law Enforcement; now it falls within the purview of the China Coast Guard as a whole.[258]

The PLA Navy also conducts these types of operations, presumably when coast guard vessels are absent. For instance, in February 2011 the Chinese frigate *Dongguan* fired three warning shots to evict a Philippine fishing vessel anchored at Jackson Atoll in the Spratlys.[259] In September 2012, the PLAN frigate *Shaoguan* conducted a thirty-four-day patrol of the Paracels, during which it "investigated and expelled" (查证驱离) seventeen foreign vessels, probably all Vietnamese trawlers.[260] On March 20, 2013, the Type 037 subchaser *Wanning* pursued and fired on a Vietnamese fishing vessel operating near the Paracels.[261]

Foreign surveying vessels operating in Chinese-claimed waters are the second major target of Chinese surface-force operations. In 2011, CMS and FLE ships tracked and interfered with the operations of several surveying vessels hired by the Philippines and Vietnam. In March of that year, *CMS 71* and *CMS 75* drove away *Veritas Voyager,* which had been operating near Reed Bank, north of the Spratlys.[262] In May 2011, *CMS 84* cut the towed cable of *Binh Minh 2,* a surveying vessel owned by PetroVietnam, as it conducted surveys east of Nha Trang, in waters within the nine-dash line.[263] *Binh Minh 2* suffered a similar fate in November 2012, in waters south of the Paracels. In June 2011, at least two FLE cutters conducted a joint operation with Chinese fishing vessels (probably piloted by militiamen) to destroy streamers that *Viking II* was towing as it surveyed waters off the southern coast of Vietnam (within the nine-dash line).[264]

The PLA Navy also has targeted foreign surveying vessels. In 2012, the minesweeper *Luxi* encountered a Vietnamese surveying vessel under escort by three armed trawlers near Triton Island in the Paracels. *Luxi* outmaneuvered the trawlers and aggressively approached the surveying ship, forcing it to depart the area.[265]

Chinese forces also obstruct foreign surveying vessels operating in disputed waters in the East China Sea. Again, Chinese coast guard forces are the main protagonists in these missions. In February 2012, *CMS 66* interfered with the operations of the unarmed JCG surveying ship *Shoyo* (HL 01) operating twenty nautical miles east of the Chunxiao gas fields. On the evening of February 19, the Chinese vessel threatened *Shoyo* by approaching within 0.3 nm, forcing it to halt its operations. The Japanese ship, accompanied by a second JCG vessel, *Takuyo* (HL 02), reportedly departed the area the next morning. This was one of at least three such incidents in the East China Sea between 2010 and 2012.[266]

Escort

Chinese coast guard and naval forces safeguard the economic activities of Chinese civilians—witting and unwitting actors in the country's dispute strategy. Together, they assert China's maritime rights, above all the right to exploit resources in the water and seabed. The fleet underwrites their activities by ensuring their safety and preventing foreign intimidation. Often, protection is provided by means of physically "escorting" (护航) Chinese vessels as they operate in disputed waters.

Chinese efforts to exploit disputed waters are driven to some extent by a desire to reap the material benefits that may accrue from these activities. That is, there is a profit motive for Chinese civilians who are bold enough to go to disputed areas and an economic incentive for the government to encourage them to do so.[267] But clearly, Chinese leaders also support these initiatives because they are a means to manifest and enforce China's claims. At an October 2012 maritime affairs conference in Hainan, then–SOA director Liu Cigui outlined this line of reasoning as follows:

> Hainan Province's strategic position is extremely important. Earnestly safeguarding China's rights and interests in the South China Sea involves China's core interests. This is not just the responsibility of the State Oceanic Administration. It is also the sacred mission of Hainan's leaders in the Party and government. We must . . . scientifically develop fisheries resources in the South China Sea, rationally develop the oil/gas resources in the South China Sea, and energetically develop marine tourism. We must pursue development and exploitation of marine resources in order to manifest China's concrete presence in the South China Sea and manifest China's sovereignty over the islands of the South China Sea and their adjacent waters.[268]

Empowering Chinese firms to explore and develop oil and gas resources is a key prong in China's dispute strategy. In May 2012, on the occasion of a drilling operation conducted by the newly built, deepwater, semisubmersible drilling rig CNOOC 981, an

SOA-run newspaper quoted CNOOC chairman Wang Yilin as saying that the rig, which he called "movable national territory," would "make new contributions to the advancement of China's maritime power strategy and [efforts to] safeguard China's maritime sovereignty."[269]

This rationale no doubt motivated the rig's first mission to disputed waters, in 2014. In May of that year, it was deployed south of Triton Island in the Paracels. Vietnam responded with vigor, sending coast guard and militia forces to harry its operations. Because of the expense of the rig and the scale and energy of Vietnam's response, China was forced to employ dozens of cutters from several coast guard agencies to enforce an exclusion zone (警戒区) around it.[270] The Chinese ships formed a protective perimeter, interposing themselves between the rig and the Vietnamese militia and coast guard ships seeking to approach it. They also engaged in aggressive maneuvering, including ramming Vietnamese vessels, sinking at least one.[271] Chinese forces purposely targeted their powerful water cannon at the smokestacks and radar and other electronic equipment of the Vietnamese vessels. The fleet succeeded in preventing the Vietnamese vessels from reaching the rig—but it was a very expensive, complex, and risky undertaking.[272]

Smaller in scale but equally intense confrontations had occurred in these waters as early as 2006. In June 2007, for instance, several CMS cutters accompanied a Sinopec vessel as it conducted seismic surveys south of the Paracels. According to Chinese accounts and video footage, Vietnamese paramilitary vessels sailed in front and obstructed the movements of the Sinopec ship and its escorts. Ultimately, the CMS forces chose to ram the smaller Vietnamese vessels, a desperate act meant to reverse their own passive position.[273]

Chinese naval and coast guard ships also ensure the security of Chinese fishermen operating in disputed waters.[274] The presence of Chinese fishermen helps manifest China's maritime claims.[275] As a commander at a PAP Border Defense Force unit based in a Hainan fishing village observed, "We should thank these fishermen, for if they weren't fishing at Scarborough Shoal or the Spratlys, who could prove that these places are ours?"[276] The Chinese government encourages their presence through subsidies (direct and in-kind) and direct payments, as well as salaries for seafarers serving in the maritime militia.[277]

Fishermen have been the cornerstone of Chinese dispute strategy in the South China Sea since at least 1985, when the PRC inaugurated a new policy known by the eight-character slogan "in developing the Spratlys, fishing should be first" (开发南沙, 渔业先行).[278] In the 1980s and '90s, as Chinese fishermen began operating in the Spratlys and other remote sections of the South China Sea, some faced harassment and arrest by foreign military and law-enforcement forces.[279] FLE and later CCG vessels patrolled these

waters to protect them.[280] These patrols permit Chinese fishermen to operate anywhere within the nine-dash line, pledging to protect all who follow this rule.[281] For instance, in April 2012, cutter *FLE 310* was ordered to come to the aid of Chinese fishermen facing harassment from Vietnamese "gunboats" while operating just off Vietnam's coast but still within the nine-dash line.[282]

To improve the effectiveness of coast guard protection of Chinese civilian mariners, in 2006 China began funding a program to install Beidou satellite navigation/communication devices on fishing vessels, beginning with those boats operating in the eastern sections of the South China Sea. With this equipment, Chinese fishermen could keep Chinese authorities apprised of developments at sea and call for help when they came under threat. Since Fisheries Law Enforcement had far too few oceangoing cutters for them to be present in sufficient numbers, in late 2009 these ships began convoying fishing fleets to the more perilous sections of the South China Sea.[283] Both of these efforts improved security for Chinese fishermen—but they also resulted in greater tensions with neighboring states.

Waters within the southernmost areas of the nine-dash line have been particularly prone to conflict over fishing rights. A large section of what Chinese fishermen call the "southwest fishing grounds" falls within Indonesia's EEZ.[284] When Indonesia attempts to enforce its coastal-state rights within these waters, incidents occur. For example, on May 12, 2010, *FLE 301* and *302* were ordered to rescue nine Chinese fishermen aboard a Chinese trawler on which an Indonesian naval vessel had fired. After steaming two hours to the scene, the Chinese commander thwarted the attack by placing his cutters between the trawler and the Indonesian ship, which elected not to respond with armed force.[285] On June 23, 2010, a similar incident took place in these same waters in which *FLE 303* and *311* interposed themselves between three Chinese fishing vessels and the Indonesian naval forces attempting to board them.[286] In March 2013, *FLE 310* was involved in another serious incident in the southwest fishing grounds: an Indonesian coast guard vessel detained a number of Chinese fishermen. *FLE 310* subsequently tracked down and confronted the Indonesian ship and, through a combination of threats and possibly communication jamming, compelled the Indonesian forces to release their Chinese captives.[287]

In the first half of 2016, the Indonesian government began a campaign to crack down on Chinese fishing in these same waters. Three separate incidents took place in four months. In each case, the China Coast Guard failed to prevent the detention of the Chinese crews. When Indonesia used force against Chinese fishermen, China did not respond in kind.[288]

Table 5. *China-Indonesia Fishing Incidents in 2016*

Date	Description
March 20	A Chinese trawler was boarded by an Indonesian fisheries law-enforcement vessel, its crew taken into custody, and the ship towed back to port in the Natuna Islands. On the way, a CCG cutter freed the trawler by ramming.[a]
May 27	An Indonesian frigate boarded a Chinese trawler, detained the crew, and towed the vessel back to port in the Natuna Islands. A CCG ship arrived on the scene but did not intervene. The frigate initially fired shots that damaged the trawler.[b]
June 17	An Indonesian warship fired shots at several Chinese trawlers, injuring one crewman. One fishing vessel was impounded; another was damaged. A CCG cutter arrived on the scene but did not intervene.[c]

Notes:
CCG = China Coast Guard.

a. Ankit Panda, "Indonesia Summons Chinese Ambassador after South China Sea Stand-Off near Natuna Islands," *The Diplomat,* March 21, 2016, thediplomat.com/2016/03/indonesia-summons-chinese-ambassador-after-south-china-sea-stand-off-near-natuna-islands/; Jane Perlez and Yufan Huang, "Harrowing Trip for Chinese Trawler before Bump in Territorial Tensions," *New York Times,* April 9, 2016, www.nytimes.com/2016/04/10/world/asia/harrowing-trip-for-chinese-trawler-before-bump-in-territorial-tensions.html?_r=0.

b. Chandni Vatvani, "Indonesia Seizes Yet Another Chinese Vessel," *Channel News Asia,* May 30, 2016, www.channelnewsasia.com/news/asiapacific/indonesia-detains-yet/2827122.html?cid=cna_flip_070214. See also Niniek Karmini, "South China Sea: Indonesian Navy Fires Shots, Seizes Chinese Fishing Boat," *Sydney Morning Herald,* May 31, 2016, www.smh.com.au/world/south-china-sea-indonesian-navy-fires-shots-seizes-chinese-fishing-boat-20160531-gp7s45.html#ixzz4ADUjENdb.

c. Jake Spring, Ben Blanchard, and Kanupriya Kapoor, "Indonesian Navy Fires on Chinese Boat, Beijing Says One Injured," *Reuters*, June 19, 2016, www.reuters.com/article/us-china-indonesia-ship-idUSKCN0Z50FG.

Chinese forces also escort Chinese fishermen operating in the East China Sea. Indeed, the September 2010 trawler collision near the Senkakus stemmed from a dispute over fishing rights, even if the original incident quickly evolved into a crisis over the land that generated those rights (i.e., the Senkaku Islands). The same is true of a more recent incident. In August 2016, twenty Chinese constabulary vessels—including a number of armed cutters from the former China Maritime Police—escorted a fleet of several hundred Chinese fishing trawlers to fishing grounds near the Senkaku Islands. Some fishing vessels and coast guard ships entered the Senkaku territorial sea. Japan did not attempt to remove the Chinese trawlers forcibly, opting instead to track and monitor their activities.[289]

This incident is noteworthy because it suggests how provocative actions in disputed areas may be driven by factors unrelated to the dispute itself. Chinese leaders may see maritime disputes as offering a means—or, in the words of a senior SOA analyst, "capital" (资产)—with which to pressure foreign leaders to amend or cease certain unrelated policies.[290] One very well connected PLAN academic concluded that the August 2016 Senkaku operation was designed to warn Japan of the possible consequences of insinuating itself further into the disputes in the South China Sea.[291]

If the use of force is out of the question, defending Chinese use of disputed waters is far more difficult than denying foreign use of the sea.[292] When protecting an oil rig or surveying vessel, Chinese ships must position themselves between the assailants and their defenseless quarry, physically blocking foreign ships from approaching. The initiative clearly lies with the attacker. Chinese leaders learned this bitter lesson during the

2014 defense of CNOOC 981, when a few Vietnamese ships commanded by bold leaders pinned down large numbers of Chinese forces.

Given the great distances involved, protecting Chinese fishermen from foreign harassment remains a very difficult mission, even given recent increases in Chinese coast guard presence and the widespread use of Beidou hardware. Despite Chinese efforts, in May 2014 the Philippines succeeded in arresting eleven Chinese fishermen for poaching in disputed waters off Half Moon Shoal in the Spratlys.[293]

Chinese coast guard forces serve on the front line in operations intended to ensure the security of Chinese civilians in disputed areas. However, where the risk exists of provoking an armed response, PLAN surface combatants likely linger nearby, on the second line. China deployed surface combatants to the scene during the 2014 defense of CNOOC 981.[294] Gray hulls were no doubt present during earlier clashes in these same waters. Because the presence of gray hulls communicates a quiet signal, these operations seldom are publicized, and therefore little is known about how frequently they occur.[295] PLAN surface combatants probably seldom conduct frontline escort operations in disputed areas.[296]

Table 6. *Major Operation Types in China's Echelon Defense Strategy*

Dispute Type	Operation Type	Primary Function(s)	Surface Fleet Action
Island sovereignty	Sovereignty patrol	Manifest China's claims; collect intelligence	Sail to waters surrounding a disputed feature
	Blockade	Enforce China's claims	Prevent foreign access to a disputed feature
Maritime rights	Tracking and monitoring	Manifest China's claims; collect intelligence	Follow foreign vessels operating "illegally" in Chinese-claimed waters; urge them to leave
	Obstruction and eviction	Enforce China's claims	Use nonlethal measures to force foreign vessels to cease "illegal" activities and depart Chinese-claimed waters
	Escort	Enforce China's claims	Use nonlethal measures to prevent foreign vessels from obstructing the "legal" operations of Chinese civilians in Chinese-claimed waters
Both	Support and cover	Discourage escalation; collect intelligence	Sail to and linger in disputed waters; signal a threat to use force to protect Chinese vessels; be prepared to act on that threat

In China's echelon defense approach, elements of Chinese sea power operate on two lines. Frontline operations involve efforts to manifest and enforce China's maritime claims. They include operations that often, although not exclusively, are conducted by China's maritime law-enforcement forces. There are five major types: sovereignty patrol, blockade, tracking and monitoring, obstruction and eviction, and escort. Second-line operations—the exclusive province of PLAN surface combatants—serve to discourage escalation by providing "support and cover" for frontline forces, whose assertive actions sometimes risk an armed response from other disputants. Together, these six operations constitute the "grammar" of the saltwater component of China's dispute strategy.

Part 5: New Frontiers

When examined over time, China's use of the echelon defense approach in its maritime disputes suggests a vigorous but politically sensitive campaign to turn the country's claims into reality. By many measures, this campaign has been extremely successful: Chinese ships are sailing to places they seldom, if ever, went before; the density of Chinese presence in disputed waters has increased dramatically; and China has converted this presence into increased influence and control. Most importantly, China has achieved these gains while avoiding the instability that would accompany a campaign that relied on more-overt forms of military aggression. Part 5 assesses China's seaward expansion during the period 2006–16 and examines the key decisions that guided that expansion. It concludes with a discussion of the political and strategic costs China incurs by its use of the echelon defense approach as a tool in its dispute strategy.

Increased Presence

Over the last decade, the presence of Chinese coast guard and naval forces in disputed waters has grown at an astonishing rate. This is immediately evident when deployment patterns in 2006 are compared with those of 2016. In 2006, among China's many maritime law-enforcement agencies, only the national-level units of China Marine Surveillance and Fisheries Law Enforcement operated in disputed areas. Both, however, did so only rarely.

In the East China Sea, early 2006 saw China begin production at the Chunxiao gas fields.[297] Although Chinese production facilities were located in undisputed waters west of the median line, Japan opposed them because they exploited reserves that may straddle the Japanese-claimed maritime boundary. Thus, CMS vessels patrolled these waters to ensure security.[298] In the middle of 2006, as the result of a State Council decision (discussed below), the service began maintaining a more regular presence in the East China Sea; but this presence probably seldom extended east of the median line, and certainly never into waters adjacent to the Senkaku Islands. For its part, Fisheries Law

Enforcement was in the sixth year of systematic EEZ fisheries patrols (专属经济区渔政巡航), which included missions within the large joint-fisheries zone in the East China Sea.[299] However, there is no evidence that its cutters deployed to other disputed areas in the East China Sea, such as those in the vicinity of the Senkakus.[300]

In 2006, PLAN surface combatants probably rarely, if ever, patrolled contested parts of the East China Sea. In January 2005, two *Sovremenny*-class destroyers had sailed to the Chunxiao gas fields, purportedly the first time the Japan Maritime Self-Defense Force had observed these advanced (by contemporary PLAN standards) vessels.[301] In September 2005, five Chinese surface combatants patrolled another controversial gas field near the median line. However, there is no evidence that PLAN warships systematically ventured into disputed waters.[302] Indeed, in 2006 the PLA Navy had not yet begun to conduct "far seas" training regularly, which meant the fleet had no opportunity to transit contested areas on the way into the western Pacific via the Miyako Strait. Surface combatant training beyond the first island chain would not occur until 2007.[303]

Aside from those to the Paracels—islands that are close to the mainland and entirely under PRC control—Chinese patrols to disputed waters in the South China Sea were extremely rare in 2006. CMS cutters maintained no regular presence near Scarborough Shoal or in the Spratlys—that would not happen until 2007 or 2008. For its part, Fisheries Law Enforcement kept a single lonely cutter at Mischief Reef. Chinese fishing vessels operating elsewhere in the Spratlys were largely on their own, and sometimes paid a price for this absence of Chinese power.

The PLA Navy maintained tiny outposts at the handful of PRC-occupied features in the Spratlys. The available information does not indicate the extent of PLAN surface-combatant presence in these areas, but it was probably quite low.[304] In this period, PLAN warships were not yet sailing through the Strait of Malacca into the Indian Ocean—it would be another two years before China sent its first escort task force to the Gulf of Aden. Nor did the service send ship formations through the Bashi Channel for "far seas" training; again, that would not happen until 2007. To summarize: in 2006, the PLAN surface fleet rarely was seen in the South China Sea, aside from waters adjacent to the Paracels.

The next decade would witness an utter transformation in PLAN and coast guard operations in the East and South China Seas. In 2016, at two-week intervals Chinese constabulary vessels sailed in formations of three to five ships to the Senkaku Islands, where they routinely entered the territorial sea. Most of these ships displaced at least three thousand tons; beginning in December 2015, many formations included at least one armed cutter. The vast majority of Chinese coast guard vessels operating in disputed waters in the East China Sea now answered to a single chain of command under a unified

maritime law-enforcement agency (the China Coast Guard), with all the improvements to coordination this implies. However, some ships operating east of the median line were owned by China's provincial maritime law-enforcement agencies, which in 2006 were not authorized or equipped to participate in the "rights-protection" struggle.

Ten years later, PLAN surface combatants regularly were conducting "combat readiness patrols" to sensitive areas of the East China Sea.[305] Many of their operations probably took them east of the median line, within striking distance of the Senkakus, so they could provide "support and cover" for the Chinese coast guard's frequent patrols there. In 2016, PLAN ship formations regularly steamed through the Miyako Strait for "far seas" training, including, in December of that year, China's first aircraft carrier, *Liaoning*.[306]

In the South China Sea, changes in the geographic scope and density of the Chinese surface-vessel presence were equally pronounced. CCG vessels—including some armed elements of the former China Maritime Police—now conducted regular patrols to all areas within the nine-dash line. Painted in CMS and FLE colors and pennant numbers, large cutters from provincial and even municipal coast guard agencies now contributed to the guarding of China's maritime frontier.

In 2016, China kept a permanent constabulary presence at Scarborough Shoal and the Luconia Shoals. When operating in the eastern and southern sections of the South China Sea, Chinese coast guard forces could seek shelter and support at enormous new facilities at Subi Reef, Fiery Cross Reef, and, above all, Mischief Reef, from which they easily could monitor the tiny contingent of Philippine marines at Second Thomas Shoal.[307]

The PLA Navy, too, by then was crisscrossing the South China Sea regularly. By the end of 2012, the PLA Navy had "normalized" (常态化) its presence in the Spratlys, and perhaps in the vicinity of Scarborough Shoal.[308] In 2016, Chinese warships were so numerous that they could afford to shadow USN ships during their patrols in the South China Sea.[309] Massive new facilities at Chinese-occupied features in the Spratlys ensured excellent support for increased presence in these waters. Unlike in 2006, PLAN ships now regularly sailed through disputed waters in the South China Sea on their way to other places, either the Indian Ocean via the Malacca Strait to fight piracy in the Gulf of Aden, or the western Pacific via the Bashi Channel for "far seas" training.

Increased Enforcement

In large parts of the East and South China Seas, China's maritime claims were almost purely theoretical in 2006. Since then, Chinese vessels have established a regular presence in all three million square kilometers of Chinese-claimed waters. China's sea services also have led new efforts to use threats to enforce China's maritime claims, sometimes in the face of foreign resistance. Whereas expanded Chinese presence can be

traced to 2006, the majority of known enforcement operations have occurred since 2010. What has China gained?

In the East China Sea, the Chinese coast guard, backed up by the PLA Navy, effectively underwrites Chinese civilian use of disputed areas. Chinese fishermen now operate with impunity in all Chinese-claimed waters in the East China Sea, including in the territorial sea of the Senkakus. Chinese gas production operations along the median line continue unabated, and even have expanded in recent years, although not yet into disputed areas.[310] With its regular patrols to the Senkakus, the Chinese coast guard has turned the disputed islets into a no-man's-land for either side.[311] Japanese fishing rights in the disputed sections of the East China Sea still are respected, the joint fisheries agreement remaining in effect. However, were Japanese ships to resume surveying in Chinese-claimed waters east of the median line, they likely would face harassment and obstruction from the Chinese coast guard. No such operations have been attempted since 2012.

China likewise has achieved major gains in the South China Sea over the last decade. Since mid-2012, Chinese sea power has enforced Chinese sovereignty claims to Scarborough Shoal. A similar attempt at Second Thomas Shoal in 2014 failed, but a more tractable administration under President Duterte, combined with the fragility of the current Philippine occupation, obviates the need for further action—the crumbling *Sierra Madre* soon could be the victim of time and tide.

Chinese fishermen now sail securely in large swaths of the South China Sea. With one exception in May 2014, Chinese fishermen operating in the Spratlys have not been harmed or arrested in years.[312] Speaking in August 2014, the head of a Hainan-based fishermen's association could report as follows:

> Over the past year, our biggest sentiment is that we feel much safer. Not only have maritime law-enforcement patrol vessels strengthened their patrols, the government has installed Beidou navigation systems on every fishing vessel at no cost. No matter where we go, the command center knows where we are. No matter what kind of problem arises at sea, as long as we inform the relevant department, a maritime law-enforcement ship will quickly arrive on the scene. As long as we request it, they send help.[313]

China's fisheries-escort operations have been less successful in the more remote sections of the South China Sea. Since late 2009, Chinese coast guard vessels have escorted Chinese trawlers to waters within Indonesia's EEZ.[314] These missions succeeded in keeping Chinese fishermen safe, even though they resulted in incidents in 2010 and 2013. In the first half of 2016, Indonesia forcefully contested Chinese fishing activities in its EEZ, arresting Chinese fishermen in clear view of Chinese coast guard forces. However, since then the China Coast Guard may have tightened its escort operations: no such incidents occurred in the first half of 2017, despite Indonesia's continued commitment to enforce its EEZ rights near Natuna.[315]

Since at least 2006, Vietnam has contested vigorously the deployment of oil/gas exploration vessels to waters near the Paracels. China has the technical means to exploit seabed resources in disputed waters, but the CNOOC 981 incident shows the limits of China's echelon defense approach when exercised against a committed foe. At the time of this writing, China has yet to begin oil/gas production in any contested areas of the South China Sea.

In recent years, China has cracked down on Vietnamese fishing activities in the Paracels, although the degree of enforcement tends to track the peaks and troughs of Sino-Vietnamese relations.[316] As long as they do not venture too close to Chinese-controlled features, foreign fishermen appear to be able to operate freely in most other disputed areas in the South China Sea. Still, the fear of encountering a Chinese coast guard cutter on the open ocean no doubt has had a dampening effect on some foreign fishing activities. China's presence near the Luconia Shoals, for example, purportedly has scared away Malaysian fishermen, even though it appears that Chinese cutters are not enforcing fully Chinese sovereignty claims in these waters.[317]

Decision Points

Over the last decade, China has pursued its claims in the East and South China Seas with ever-increasing vigor. Relying on sea power coupled with other instruments of statecraft, China has expanded the frontiers of its control and influence within the first island chain. This expansion is understood best as an outcome of four major decisions, all made or endorsed by leaders at the most senior levels of government.

The first was to establish a constabulary presence in all Chinese-claimed waters. This can be traced to July 2006, when then-premier Wen Jiabao approved a new policy requiring CMS ships to conduct "regular" (定期) rights-protection patrols in Chinese-claimed waters in the East China Sea.[318] Chinese leaders subsequently decided to expand patrols to other areas. By the end of 2007, the service could claim a "comparatively high degree" of rights protection in all waters over which China claimed jurisdiction.[319] By the end of 2008, China Marine Surveillance stated that it had regularized rights-protection patrols to all jurisdictional waters, "from the Yalu River to James Shoal."[320] This expansion included the inaugural Senkaku patrol in December of that year.[321]

The regular rights-protection patrol system led to a geographic expansion in coast guard presence in Chinese-claimed waters. Over time, it also meant an increase in the concentration of Chinese cutters in disputed waters. By 2012, China Marine Surveillance was maintaining at least nine ships constantly at sea, with at least six patrolling the waters of the South China Sea.[322] Aggregate numbers of patrols increased tremendously over the 2008–12 period. In 2008, CMS ships performed 113 regular rights-protection ship patrols, sailing a total of 212,242 nm.[323] But by 2012, China Marine Surveillance conducted

172 ship patrols covering 172,000 nm just in the South China Sea alone.[324] In 2013, the last year such numbers were released, China Marine Surveillance as a whole conducted a total of 347 rights-protection patrols (543,652 nm).[325]

Chinese leaders placed special emphasis on patrolling "waters in which rights infringements take place most frequently."[326] According to one pseudonymous article published in an SOA-run newspaper, "the more controversial the waters and the more sensitive the place, the greater the focus of China Marine Surveillance patrols. This is the responsibility of China Marine Surveillance regular rights-protection patrols. In the future, we will continue to strengthen this [approach]."[327]

The newly created China Coast Guard has assumed the rights-protection duties of China Marine Surveillance and Fisheries Law Enforcement.[328] It has carried on the regular patrols to the Senkakus that began in September 2012, generally maintaining the same tempo, albeit with more and larger vessels performing each mission.[329] The China Coast Guard also has expanded maritime law-enforcement presence to new areas, especially in the South China Sea. In August 2013, for instance, CCG ships began "patrolling and monitoring" (巡航监控) the waters adjacent to the North and South Luconia Shoals, tiny features roughly ninety nautical miles from the coast of Malaysia and well within its EEZ.[330] By early 2015, the character of these patrols had become something much more permanent: "keeping watch" (值守), the same term used to describe Chinese operations near Second Thomas Shoal.[331] Indeed, automatic identification system (AIS) data indicate that CCG vessels are now stationed at the Luconia Shoals on a near-permanent basis.[332]

The second key decision, discussed in detail in part 2, was to increase vastly the size and capabilities of the Chinese fleet. This was actually a series of decisions made between 2009 and 2012, with each new decision more ambitious in scope and scale. Chinese leaders made these decisions as the rights-protection campaign unfolded and they discovered what could be gained from adroit use of sea power.

The third key decision was to convert China's new presence in disputed waters into a commitment actually to enforce some of China's claims, where possible. This decision to begin vying with other states for control can be documented in the available sources. For example, the "Outline Plan for National Maritime Development (2006–2010)," a foundational policy document that the State Council approved in February 2008, contains numerous mentions of China's need to safeguard maritime rights and interests. To do so, it recommended that China "strengthen its monitoring and management [监管] of jurisdictional waters."[333] Sometime in the subsequent three years, however, this call for "monitoring and management" was replaced or supplemented by the language of control.

In publicly available discourse, this new focus can be traced to 2011.[334] Soon after he became SOA director in February 2011, Liu Cigui announced that his organization's aims for 2011 included "strengthening control over jurisdictional waters" (强化管辖海域的控制力).[335] CMS leaders actively spread this new message.[336] National planning documents also recognized the new goal. In March 2012, the State Council approved a document called "National Maritime Functional Zoning (2011–2020)," which outlined preferred zones of economic activity in China's claimed jurisdictional waters. Among other things, this document charged local and national government entities with responsibility for "creating, according to the law, a system of comprehensive administrative control over all of China's jurisdictional waters."[337]

The language of control now dots official discourse. It appears in the text of the Twelfth Five-Year Plan for Maritime Development, released in April 2013. Like the "Outline Plan for National Maritime Development (2006–2010)" that it supersedes, this document repeatedly cites the need to safeguard maritime rights and interests. However, unlike the earlier document, it calls for China to "strengthen effective control over jurisdictional waters" and "raise the capacity to achieve administrative control" over disputed areas.[338]

The language of control now is invoked often in discussions about China's strategy to become a "maritime power" (海洋强国).[339] At the January 2013 National Maritime Work Conference in Beijing, Xu Shaoshi, head of the Ministry of Land and Resources, stated that if it is to become a maritime power, "China's struggle for maritime rights and interests must be strong and effective and it must do more to strengthen its ability to exert administrative control over the ocean."[340] Indeed, during an interview at the time of the Eighteenth Party Congress, then–SOA director Liu Cigui defined a "maritime power" as a state that "has formidable comprehensive power with respect to developing the ocean, exploiting the ocean, protecting the ocean, and controlling the ocean."[341]

Such discourse finds parallels in the writings of officers in the PLA Navy, suggesting that this policy decision was endorsed by senior leaders within the party-state. In an August 2014 speech commemorating the 120th anniversary of the First Sino-Japanese War, then–PLAN commander Wu Shengli wrote that in the face of growing discord in the near seas, China must "continuously strengthen administrative control over claimed waters."[342] In a very important March 19, 2014, article in the navy's official newspaper, Rear Adm. Zhang Zhaoyin, then deputy commander of the South Sea Fleet, described China's approach to handling its maritime disputes in his area of responsibility. Admiral Zhang cited "administrative control" as the goal and outlined how his service would help take the initiative to achieve it. Zhang called for closer cooperation with maritime law enforcement. China would have to build up its maritime law-enforcement forces, which in his view were still too weak. As it did so, China must "continually augment the strength of its administrative control and rights protection within the South China Sea,

gradually achieving effective administrative control over Chinese jurisdictional waters in the South China Sea."[343]

The fourth decision was to be less compromising. This new attitude is implied by the three decisions discussed above. However, in 2012 there seems to have been a more fundamental shift, one that Xi Jinping endorsed personally. This new reluctance to compromise is captured in an oft-repeated Xi Jinping quote, which succinctly expresses the Xi Jinping doctrine for handling China's maritime disputes: "We love peace, and will continue to take the path of peaceful development, but we absolutely cannot give up our legitimate rights and interests, much less sacrifice core national interests."[344]

This shift may have been prompted by a sincere (albeit delusional) belief that China's earlier efforts at conciliation had gone unreciprocated. As one Chinese analyst wrote about this sense of disappointment, "It was regrettable that our good-hearted hopes were frequently ignored, that our friendly attitude was seen as a loophole to be exploited."[345] Perhaps reflecting the mainstream view, one researcher at the PAP Academy claimed that Deng Xiaoping's policy of "keeping a low profile" (韬光养晦) actually "caused China's maritime territory and maritime rights and interests to be repeatedly gobbled up by neighboring states."[346] America's growing involvement in East Asian affairs as part of the "rebalance to Asia"—inevitably interpreted to be an enhanced form of American "containment" of China—reinforced the PRC's belief that more action was called for.

Chinese leaders and analysts see this decision to be less compromising as a fundamental shift in how the regime balances the two contradictory objectives of rights and stability. As the director of the SOA's Department of International Cooperation, Zhang Haiwen, put it in a September 2014 speech, China's current maritime dispute policy "is not like in the past when China simply said that the big aim was a stable periphery, and that everything else must yield to stability. In my view, for 10–20 years stability maintenance held the dominant position. But in recent years, China has balanced this out, meaning that stability maintenance and rights protection are now in a dynamic equilibrium [动态平衡]."[347]

The Costs of Coercion

If seen as a military campaign to control space, China's echelon defense strategy has achieved much in the last ten years. The PRC has undermined foreign control over disputed land features and strengthened its influence over human activity in disputed waters. However, these gains have not come without costs.

While China has avoided armed conflict with other disputants, the success of its strategy nevertheless has antagonized and alienated its neighbors.[348] In response, they have sought better relations with China's rivals. Since 2010, Japan has bolstered its relationship with the United States, in large part as a response to assertive Chinese behavior in the East China Sea. In April 2014, the United States and the Philippines signed the

Enhanced Defense Cooperation Agreement, allowing the U.S. military wider access to Philippine military installations.[349] Both the Philippines and Vietnam have turned to Japan to provide material support in the form of coast guard cutters.[350] In the end, the very success of China's echelon defense approach has spurred a foreign response that ultimately could lead to a diminution of China's sense of security.

Moreover, Chinese actions have spawned fear and suspicion in the United States, the only state powerful enough to tip the scales against China. While America is not a disputant, Chinese actions raise grave concerns about the future of American access to the waters of East Asia. Chinese naval and coast guard forces currently represent a modest but very real threat to American freedom of navigation. To date, Chinese efforts to impede U.S. naval operations in these waters largely have centered on defenseless special-mission ships such as USNS *Impeccable, Effective, Victorious, Loyal,* and *Bowditch,* which routinely operate within the first island chain.[351] Harassment directed against these ships largely has taken place in undisputed waters, and has been fairly rare.[352] However, China never has renounced its opposition to the presence of U.S. naval vessels in Chinese-claimed jurisdictional waters, and it continues to differentiate between commercial freedom of navigation (legitimate, welcome) and the freedoms of foreign naval vessels (illegitimate, unwanted). American strategists therefore cannot discount the threat of future incidents.

As China consolidates control over disputed areas, the waters within which American ships might face obstruction and other threats will continue to expand. Moreover, now that China has built major military bases in the Spratlys, special-mission ships—and the forces that would come to their rescue in any incident—must worry about the presence of significant Chinese combat power at their rear.[353] In sum, although largely directed against other states, PRC actions have primed the United States to play a more active role balancing against China's seaward expansion and to strengthen its ability to threaten and destroy Chinese forces at sea—outcomes that bring into question the ultimate worth of China's echelon defense approach.

Since 2006, China has enlarged dramatically the geographic frontiers of its influence and control in the near seas of East Asia. It has done this in large part through adroit use of unarmed or lightly armed constabulary vessels backed up by Chinese navy surface combatants, in what Chinese strategists call an echelon defense approach. Application of this approach has expanded and intensified over time, the result of at least four major decisions by senior Chinese leaders. These include decisions to establish a regular constabulary presence in all Chinese-claimed waters, to invest heavily in new surface vessels for both the coast guard and the navy, to convert passive presence in disputed areas into

a national effort to vie for control over space, and to be less compromising toward other disputants. When viewed as a campaign to assert Chinese claims, the echelon defense approach has been quite effective. However, its successes have come at the cost of damaged relations with its neighbors and the United States. Already the fears and suspicions that PRC actions at sea have spawned are driving policies certain to erode the foundations of PRC prosperity and security that have stood for close to forty years.

Notes

1. A Border Defense Force duty officer who received the message from the threatened Chinese fishermen passed this information up the chain of command. His superiors contacted the South China Sea China Marine Surveillance Command Department in Guangzhou, which ordered the two nearby CMS vessels to the scene. As events unfolded, the CMS Command Center in Beijing took direct command of the two CMS cutters involved in the incident. See 龙泉 [Long Quan], 理性看待中菲黄岩岛对峙 ["Rationally Examining the Scarborough Shoal Confrontation"], 中国海洋报 [*China Ocean News*], April 20, 2012, p. 4. See also 张杰, 闫昆仑 [Zhang Jie et al.], 黄岩岛事件中的 "第一哨站" ["The 'First Outpost' of the Scarborough Shoal Incident"], 海南日报 [*Hainan Daily*], July 22, 2012, p. 3, available at epaper.southcn.com/.nfdaily/html/2012-07/22/content_7106588.htm; and 许春媚 [Xu Chunmei], 海南潭门边防派出所: 曾上报黄岩岛事件首份信息 ["Tanmen Hainan Border Defense Duty Station: It Passed on the First Messages during the Scarborough Shoal Incident"], 海南日报 [*Hainan Daily*], July 5, 2012, available at www.chinanews.com/gn/2012/07-05/4009968.shtml. These two sources were first cited in Conor M. Kennedy and Andrew S. Erickson, "Model Maritime Militia: Tanmen's Leading Role in the April 2012 Scarborough Shoal Incident," *Center for International Maritime Security,* April 21, 2016, cimsec.org/model-maritime-militia-tanmens-leading-role-april-2012-scarborough-shoal-incident/24573.
2. Xu Chunmei, "Tanmen Hainan Border Defense Duty Station."
3. Floyd Whaley, "Philippines and China in a Standoff at Sea," *New York Times,* April 12, 2012, query.nytimes.com/gst/fullpage.html?res=9C05E1D91431F931A25757C0A9649D8B63. An FLE vessel stationed 340 nm south at Mischief Reef also was ordered to the scene, but it did not arrive until the next day. See 韩永 [Han Yong], and 关向东 [Guan Xiangdon], 对峙黄岩岛 ["Confrontation at Scarborough Shoal"], 中国新闻周刊 [*China Newsweek*], May 14, 2012, p. 28.
4. For an earlier authoritative report on this encounter, see 孙安然 [Sun Anran], 中国海监在黄岩岛保护我被困渔船 ["CMS Protects Chinese Fishing Vessels Trapped at Scarborough Shoal"], 中国海洋报 [*China Ocean News*], April 13, 2012, p. 1.
5. Some evidence suggests that the confrontation took place "within the missile envelope" (在海军导弹的射程之内) of at least one PLAN surface combatant. Han Yong and Guan Xiangdon, "Confrontation at Scarborough Shoal," p. 28.
6. Indeed, several of the original vessels involved in the incident were operated by components of China's maritime militia. They later returned to the shoal to take part in the standoff. See Kennedy and Erickson, "Model Maritime Militia."
7. See Brian Spegele, "Rhetoric Rises on South China Sea Standoff," *Wall Street Journal,* May 8, 2012, www.wsj.com/articles/SB10001424052702304363104577391700507048644. A *People's Daily* editorial published on May 8 sarcastically warned the Philippines that China would be happy to work with the Philippines to "jointly create a 'Scarborough Shoal model' [黄岩岛模式]" if it continued its provocations. 秦宏 [Qin Hong], 面对菲律宾, 我们有足够手段 ["We Have Ample Means with Which to Face the Philippines"], 人民日报海外版 [*People's Daily Overseas Edition*], May 8, 2012, p. 1, paper.people.com.cn/rmrbhwb/html/2012-05/08/content_1047405.htm. On May 15, Chinese state councillor Dai Bingguo warned that China would not accept bullying from smaller states, "such as the Philippines." See Craig Hill, "We Won't Be Bullied, Top Chinese Diplomat Warns Philippines," *China Daily,* May 16, 2012, chinadailymail.com/2012/05/16/we-wont-be-bullied-top-chinese-diplomat-warns-philippines/.
8. The moratorium began at noon on May 16, 2012. It encompassed all waters north of 12 degrees latitude. 崔莹 [Cui Ying], 我国南海大部分海域将进入伏季休渔期 ["Most Waters in China's South China Sea Will Begin a Fishing Moratorium"], 新华网 [*Xinhua Online*], May 13,

2012, news.xinhuanet.com/fortune/2012-05/13/c_111940832.htm.

9. Brian Spegele, "Philippines Accuses China of Fanning Sea Tensions," *Wall Street Journal,* May 23, 2012, www.wsj.com/articles/SB10001424052702304065704577421952278868514.

10. Andrew Higgins, "In Philippines, Banana Growers Feel Effect of South China Sea Dispute," *Washington Post,* June 10, 2012, www.washingtonpost.com/world/asia_pacific/in-philippines-banana-growers-feel-effect-of-south-china-sea-dispute/2012/06/10/gJQA47WVTV_story.html?utm_term=.0c4fff998cc7.

11. "Philippines: DND Hopeful Panatag Shoal Impasse Will End Peacefully," *Asia News Monitor,* June 5, 2012; Robert Ourlian, "More Philippine Disputes with China Loom, Says Aquino," *Wall Street Journal,* June 7, 2012, www.wsj.com/articles/SB10001424052702303296604577452512040287258.

12. Brian Spegele, "Beijing to Withdraw Fishing Boats from Disputed Shoal," *Wall Street Journal,* June 18, 2012, www.wsj.com/articles/SB10001424052702303379204577474162595763298.

13. "Philippines Says Chinese Ships Pull-Out from Disputed Reef as per Agreement," *BBC Monitoring Asia Pacific,* June 19, 2012. The U.S. government also apparently believed that an agreement existed for a mutual withdrawal from the shoal. Chinese diplomats deny that any agreement was reached. See Geoff Dyer and Demetri Sevastopulo, "US Strategists Face Dilemma over Beijing Claim in South China Sea," *Financial Times,* July 9, 2014, www.ft.com/content/b2176dea-0732-11e4-81c6-00144feab7de.

14. 潘虹 [Pan Hong], 维护南海海洋权益时不我待—访中国海监南海总队总队长成纯发 ["We Cannot Wait Any Longer to Safeguard Maritime Rights and Interests in the South China Sea—an Interview with the Head of the CMS South China Sea Contingent"], 中国海洋报 [*China Ocean News*], November 30, 2012, p. 5.

15. The term *gunboat diplomacy* refers to a specific function of sea power in peacetime and is not used as a term of derogation. Chinese sources naturally do not regard the behavior described in this study as gunboat diplomacy (炮艇外交). James Cable, *Gunboat Diplomacy, 1919–1991: Political Applications of Limited Naval Force,* 3rd ed. (New York: St. Martin's, 1994).

16. This study defines *sea power* as those instruments the state wields directly to achieve objectives on or from the sea. Chinese sea power comprises Chinese naval and maritime law-enforcement forces. It excludes discussion of the maritime militia, which serves a supporting function in Chinese dispute strategy. Chinese sources regard coast guard forces as elements of Chinese sea power. Writing in the journal *China Military Science,* PLAN vice admiral Duan Zhaoxian defined maritime law enforcement as one component of Chinese "sea power" (海洋力量), the function of which is to "effectively control the sea and achieve maritime security." See 段昭显 [Duan Zhaoxian], 论建设海洋强国的战略目标 ["On Strategic Objectives for Building China into a Maritime Power"], 中国军事科学 [*China Military Science*], no. 3 (2013), p. 24. Sr. Capt. Zhang Wei regards coast guard forces as part of China's "sea power" (although she uses a slightly different phrasing—海上力量—as does her colleague, now-retired PLAN senior captain Li Jie). See 张炜 [Zhang Wei], 中国特色海权理论发展历程综述 ["A General Review of the History of China's Sea Power Theory Development"], 学术前沿 [*Frontiers*], no. 7 (2012), p. 34, and 李杰 [Li Jie], 建设海洋强国要发展海上力量 ["To Build China into a Maritime Power It Must Develop Maritime Power"], 中国海洋报 [*China Ocean News*], November 18, 2013, p. 1. In a paper examining the sources of China's maritime insecurity, Du Bo, Feng Liang, and Gao Xinghua from the PLAN Command College classify China's coast guard as part of the country's "maritime security forces" (海上安全力量). See 杜博 [Du Bo], 冯梁 [Feng Liang], and 篙兴华 [Gao Xinghua], 我国海洋安全: 问题, 原因与政策 ["China's Maritime Security: Issues, Reasons, and Policies"], 唯实 [*Weishi*], no. 8 (2013), p. 93.

17. This approach is described in 吴寒月 [Wu Hanyue], 中国共产党海防思想研究 [*The History of CCP Maritime Defense Thought*] (Beijing: National Defense Univ. Press, 2013), p. 106. See also 史春林 [Shi Chunlin], 中国海洋管理和执法力量整合后面临的新问题及对策 ["Issues Faced in the Wake of Integration of Chinese Maritime Management and Law-Enforcement Forces and Policy Options"], 中国软科学 [*China Soft Science*], no. 11 (2014), p. 6. Shi is a professor at Dalian Maritime University. See also 孙利 [Sun Li] and 徐佳慧 [Xu Jiahui], 军事专家: 中国海警局将与海军形成梯次防卫体系 ["Military Expert: China Coast Guard Will Form an Echelon Defense System with the Navy"], 中广网 [*China National Radio Online*], March 11, 2013, mil.cnr.cn/ztl/2013lh/zxxx/201303/t20130311_512126943.html. Some Chinese refer to an "echelon defense system" with fishing vessels on the front line. Fishing vessels crewed by maritime militia forces are indeed important instruments in China's maritime dispute strategy. However, this "third sea force" will not be discussed in great detail in

this monograph. 梁芳 [Liang Fang], 建设海洋强国迫在眉睫 ["Now's the Time to Build China into a Maritime Power"], 国防参考 [*National Defense Reference*], March 10, 2015, www.81.cn/jwgz/2015-03/10/content_6389144.htm.

18. Edward Luttwak examines this coercive function of navies in his excellent volume *The Political Uses of Sea Power.* See Edward N. Luttwak, *The Political Uses of Sea Power* (Baltimore, MD: Johns Hopkins Univ. Press, 1974), p. 31.

19. The Chinese term is 一场没有硝烟的战争. It commonly is used in the context of frontline CMS rights-protection operations. See, for instance, 纪念中国海监南海总队成立10周年 ["Commemorating the 10th Anniversary of the Founding of the South China Sea Contingent of China Marine Surveillance"], 国家海洋局南海分局 [*Website of the South China Sea Branch of the State Oceanic Administration*], September 21, 2009, www.scsb.gov.cn/scsb/fjdt/200909/0f4cc3256ebf4b8cbd157b8e264dfd3e.shtml. See also 张延敏 [Zhang Yanmin], 坚定信心维护海洋权益 ["Confidently Safeguard Maritime Rights and Interests"], 中国海洋报 [*China Ocean News*], January 18, 2013, p. 3; 赵叶苹 [Zhao Yeping], 亲历中越舰船南海对峙 ["Personal Witness to a Confrontation between Chinese and Vietnamese Ships in the South China Sea"], 国际先驱导报 [*International Herald Leader*], July 24, 2009, news.xinhuanet.com/herald/2009-07/24/content_11764017.htm; and 芦垚 [Lu Yao] and 钱亚平 [Chen Yaping], 东海海监维权十年: 如同一场没有硝烟战争 ["10 Years of CMS Rights Protection in the East China Sea: Just like a War without Gun Smoke"], 瞭望东方周刊 [*Oriental Outlook*], September 24, 2012, news.sina.com.cn/c/sd/2012-09-24/114225240228.shtml.

20. My analysis of "asymmetries" was inspired by remarks made by Peter Dutton. Dutton sees slightly different asymmetries: (1) China's strength advantage vis-à-vis other disputants and (2) America's lack of "gray zone" forces with which to compete with China.

21. If contested, peacetime control of the sea relies on the constant presence of surface vessels. However, even the largest ship cannot remain at sea for more than a few months; all ships must return to port to avoid typhoons, receive repairs, perform preventive maintenance, rest crews, and take on supplies. Thus, huge advantages accrue to states with the financial and industrial wherewithal to keep surface vessels at sea. For more on the physical attributes of the ocean and their impact on maritime strategy, see Ian Speller, *Understanding Naval Warfare* (New York: Routledge, 2014), pp. 16–18.

22. Adam Liff, "'Self-restraint' with Japanese Characteristics," *Asia Maritime Transparency Initiative,* March 10, 2016, amti.csis.org/self-restraint-with-japanese-characteristics/.

23. U.S. Defense Dept., *The Asia-Pacific Maritime Security Strategy: Achieving U.S. National Security Objectives in a Changing Environment* ([2015]), available at www.defense.gov/Portals/1/Documents/pubs/NDAA%20A-P_Maritime_SecuritY_Strategy-08142015-1300-FINALFORMAT.PDF.

24. America's lack of resolve is largely an outcome of an "asymmetry of interests" with China. This concept is borrowed from Alexander L. George, *Forceful Persuasion: Coercive Diplomacy as an Alternative to War* (Washington, DC: United States Institute of Peace Press, 1991), p. 13.

25. See Sun Li and Xu Jiahui, "Military Expert: China Coast Guard Will Form an Echelon Defense System with the Navy."

26. An UNCLOS tribunal formally decided this issue in the case of *Republic of the Philippines v. People's Republic of China* (PCA case no. 2013-19). See South China Sea Arbitration (Phil. v. China), Case No. 2013-19, Award (Perm. Ct. Arb. 2016), pca-cpa.org/wp-content/uploads/sites/175/2016/07/PH-CN-20160712-Award.pdf. For a brief summary of the decision, see Permanent Court of Arbitration, "The South China Sea Arbitration (The Republic of the Philippines v. the People's Republic of China)," press release, July 12, 2016, pca-cpa.org/wp-content/uploads/sites/175/2016/07/PH-CN-20160712-Press-Release-No-11-English.pdf.

27. For a still-useful reference on China's territorial claims, see Greg Austin, *China's Ocean Frontier: International Law, Military Force, and National Development* (Canberra: Allen & Unwin, 1998).

28. China occupies the following seven Spratly features: (1) Mischief Reef (美济礁), (2) Fiery Cross Reef (永暑礁), (3) Subi Reef (渚碧礁), (4) Cuarteron Reef, (5) Johnson Reef (赤瓜礁), (6) Gaven Reef (南薰礁), and (7) Hughes Reef (东门礁).

29. United Nations Convention on the Law of the Sea pt. V, *opened for signature* December 10, 1982 [hereafter UNCLOS], available at treaties.un.org/ (entered into force November 16, 1984).

30. Ibid., arts. 13, 121.

31. James Manicom, "China's Claims to an Extended Continental Shelf in the East China Sea: Meaning and Implications," Jamestown Foundation *China Brief* 9, no. 14, July 9, 2009, jamestown.org/program/chinas-claims-to-an-extended-continental-shelf-in-the-east-china-sea-meaning-and-implications/.

32. The Yellow Sea maritime boundary disputes have remained comparatively quiet. This study examines only disputes in the East and South China Seas.

33. The PRC declared its baselines in the Paracels on May 15, 1996. See Declaration of the Government of the People's Republic of China on the Baselines of the Territorial Sea (May 15, 1996), www.un.org/depts/los/LEGISLATION ANDTREATIES/PDFFILES/CHN_1996 _Declaration.pdf. The Ministry of Foreign Affairs has indicated that China's claims to maritime rights in these waters are based on the Spratlys "as a whole," and that the archipelago can generate zones of jurisdiction beyond the territorial sea. This would contradict a July 2016 UNCLOS tribunal ruling, which stated that none of the Spratly features, individually or collectively, meets the standards of an "island" (entitled to an EEZ). On March 24, 2016, Ministry of Foreign Affairs spokesperson Hua Chunying stated that "China claims maritime rights and interests based on the Spratly Archipelago as a whole." On July 8, 2016, a second Ministry of Foreign Affairs spokesperson, Hong Lei, stated, "As a whole, China's Spratly Archipelago has maritime rights and interests such as a territorial sea, EEZ, and continental shelf." See 2016年3月24日外交部发言人华春莹主持例行记者会 ["The 24 March 2016 Regular Press Conference Held by Ministry of Foreign Affairs Spokesperson Hua Chunying"], 外交部网站 [*Website of the Ministry of Foreign Affairs*], March 24, 2016, www.fmprc.gov.cn/web/fyrbt_673021/t1350452 .shtml. See also 2016年7月8日外交部发言人洪磊主持例行记者会 ["The 8 July 2016 Regular Press Conference Held by Ministry of Foreign Affairs Spokesperson Hong Lei"], 外交部网站 [*Website of the Ministry of Foreign Affairs*], July 8, 2016, www.mfa.gov.cn/nanhai/chn/fyrbt/t1378698.htm. On July 12, 2016, China issued a statement describing its claims in the South China Sea. These include (1) sovereignty over the Dongsha Islands (i.e., Pratas Islands), Xisha Islands (i.e., Paracel Islands), Zhongsha (i.e., Macclesfield Bank and Scarborough Shoal), and Nansha Islands (i.e., Spratly Islands); (2) the internal waters, territorial sea, and contiguous zone that these islands generate; (3) the EEZs and continental shelves these islands generate; and (4) (unspecified) historic rights（历史性权利）. See "Full Text of Chinese Gov't Statement on China's Territorial Sovereignty and Maritime Rights and Interests in South China Sea," *Xinhua News,* July 12, 2016, news.xinhuanet .com/english/2016-07/12/c_135507754.htm. Government-affiliated scholars have sought to justify this approach. See 张颖 [Zhang Ying], 南沙群岛法律地位辨析 ["Examining the Legal Status of the Spratly Archipelago"], 中国海洋报 [*China Ocean News*], October 15, 2015, p. 3, and 密晨曦 [Mi Chenxi], 中菲南海争议: 唯有双边谈判是解决正道 ["The China-Philippines South China Sea Dispute: Bilateral Negotiation Is the Only Way Forward"], 中国海洋报 [*China Ocean News*], August 24, 2016, p. 2. Both articles were written by researchers at the China Institute for Marine Affairs (CIMA).

34. M. Taylor Fravel, "Traditional Fishing Grounds and China's Historic Rights Claims in the South China Sea," *Maritime Awareness Project,* July 11, 2016, maritimeawarenessproject .org/2016/07/11/traditional-fishing-grounds -and-chinas-claims-in-the-south-china-sea/. Article 14 of the Law of the PRC on the Exclusive Economic Zone and Continental Shelf (1998) states that, while China accepts these UNCLOS-based zones of jurisdiction extending from its land territory, this does not impact its claims to certain unidentified "historic rights" to other parts of the ocean. See 中华人民共和国专属经济区和大陆架法 ["Law of the PRC on the Exclusive Economic Zone and Continental Shelf"], 中国人大网 [*NPC*], June 26, 1998, www.npc.gov .cn/wxzl/gongbao/2000-12/05/content_5004707 .htm. The PRC document on file at the UN wrongly translates 历史性权利 *(lishixing quanli)* as "historical rights." See Exclusive Economic Zone and Continental Shelf Act (promulgated by the Standing Comm. Nat'l People's Cong., June 26, 1998), www.un.org/depts/los/ LEGISLATIONANDTREATIES/PDFFILES/ chn_1998_eez_act.pdf. Notably, for many years the SOA's *China's Ocean Development Report* did not mention "historic rights." This changed starting with the 2013 iteration of the report. 海洋发展战略研究所课题组 [China Institute for Marine Affairs Special Topic Group], 中国海洋发展报告 (2013) [*China's Ocean Development Report (2013)*] (Beijing: Ocean, 2013) [hereafter *ODR 2013*], pp. 46, 48; 海洋发展战略研究所课题组 [China Institute for Marine Affairs Special Topic Group], 中国海洋发展报告 (2014) [*China's Ocean Development Report (2014)*] (Beijing: Ocean, 2014), p. 280.

35. The Chinese Ministry of Foreign Affairs has justified publicly Chinese fishing activities in the southernmost sections of the South China Sea (within Indonesia's EEZ) on the basis of a claim to "traditional fishing grounds." See 外交部发言人华春莹就印尼海军舰船袭扰枪击中国渔船渔民事答记者问 ["Ministry of Foreign Affairs Spokesperson Hua Chunying Responds to a Reporter Question on the Indonesian Naval Vessels Armed Attack on a Chinese Fishing Trawler"], 外交部网站 [*Website of the Ministry of Foreign Affairs*], June 19, 2016, www.fmprc .gov.cn/web/fyrbt_673021/t1373394.shtml.

36. The "rights" of Chinese fishermen to operate within the nine-dash line are officially outlined in 南沙渔业生产管理规定 [Regulations for Managing Spratly Fisheries Production], available at hd.hinews.cn/2/hyr_page.php?xuh=79530. This document defines the Spratlys as "the waters and islands within the dashed line, south of 12 degrees latitude." See also Hainan Province's 海南省南沙渔业生产安全管理规定 [Regulations on Management of Safety of Fisheries Production in the Nansha (Spratly) Islands]. This document regulates fishing in the Spratlys, which are defined as "the waters and islands within China's traditional border [传统疆界线] south of 12 degrees latitude." Chinese coast guard forces enforce these regulations. In July 2012, the Chinese government opened drilling blocks that tracked the western boundary of the nine-dash line. It also objects to foreign surveying and drilling operations on that basis. At present, China does not attempt to regulate fishing in all areas within the nine-dash line. China's annual fishing moratorium does not include Spratly waters (i.e., areas south of 12 degrees latitude). For an excellent discussion of China's opposition to foreign oil and gas activities taking place within the nine-dash line, see Bill Hayton, *The South China Sea: The Struggle for Power in Asia* (New Haven, CT: Yale Univ. Press, 2014), chap. 5. For information on China's own drilling blocks, see Lu Na, "CNOOC: US Firms May Join Oil Exploration Bids," China.org.cn, July 18, 2012, www.china.org.cn/business/2012-07/18/content_25942312.htm.

37. This map was included in China's May 7, 2009, response to a joint Vietnam-Malaysia submission to the Commission on the Limits of the Continental Shelf, submitted on May 6, 2009. The Chinese note does not mention the nine-dash line. See "Submissions to the Commission: Joint Submission by Malaysia and the Socialist Republic of Viet Nam," *UN Division for Ocean Affairs and Law of the Sea,* May 7, 2009, www.un.org/depts/los/clcs_new/submissions_files/mysvnm33_09/chn_2009re_mys_vnm_e.pdf.

38. Gao Zhiguo and Jia Bingbing, *The Nine-Dash Line in the South China Sea: History, Status and Implications* (Beijing: Haiyang, 2014), p. 82. See also U.S. State Dept., *China: Maritime Claims in the South China Sea,* Limits in the Seas 143 (Washington, DC: Office of Ocean and Polar Affairs, Bureau of Oceans and International Environmental and Scientific Affairs, December 5, 2014), available at www.state.gov/documents/organization/234936.pdf.

39. This claim is made by Zhang Wei and Feng Liang in their very important volume *Maritime Security of the State*. 张炜 [Zhang Wei] and 冯梁 [Feng Liang], eds., 国家海上安全 [*Maritime Security of the State*] (Beijing: Haichao, 2008), p. 484. Their language is almost identical to that used by Sr. Capt. Ren Xiaofeng in his *Handbook on the Law of Naval Operations*. Both claim that China issued a statement to this effect when it ratified UNCLOS in May 1996. In fact, China submitted its declaration to the UN on June 7, 1996, and it contains no mention of the nine-dash line. See 任筱锋 [Ren Xiaofeng], 海上军事行动法手册 [*Handbook on the Law of Naval Operations*] (Beijing: Haichao, 2009), p. 111. For China's actual declaration, see "Declarations and Statements [upon Ratification of UNCLOS]," *UN Division for Ocean Affairs and Law of the Sea,* www.un.org/depts/los/convention_agreements/convention_declarations.htm#China Upon ratification.

40. See, for instance, 张辉 [Zhang Hui], 从国家安全看东海及南海问题 ["Examining Problems in the East China Sea and South China Sea from the Perspective of National Security"], 国防 [*National Defense*], no. 2 (2017), p. 79. The author, who directs the Maritime Law Enforcement Research Institute at the China Maritime Police Academy, writes, "China enjoys historic rights to fishing, navigation, and oil/gas development in waters . . . within its traditional maritime border in the South China Sea."

41. In a 2016 article, Hainan governor and former SOA director Liu Cigui claimed that more than forty billion tons of oil, more than sixteen trillion square meters of natural gas, and seventy billion tons of combustible ice have been "verified" (探明) in the South China Sea. See 刘赐贵 [Liu Cigui], 坚决扛起建设海洋强国的历史使命 ["Resolutely Shoulder the Historical Mission of Building China into a Maritime Power"], 求是 [*Seek Truth*], August 2, 2016, theory.people.com.cn/n1/2016/0802/c40531-28604161.html. For more on methane hydrate, or "combustible ice," see Mimi Lau, "Beijing Finds Fresh 'Fire Ice' Reserves in South China Sea," *South China Morning Post,* June 27, 2016, www.scmp.com/news/china/policies-politics/article/1981922/beijing-finds-fresh-fire-ice-reserves-south-china-sea.

42. For a U.S. Energy Information Administration (EIA) estimate of oil and gas reserves in the South China Sea, see "South China Sea," *EIA,* February 7, 2013, www.eia.gov/beta/international/regions-topics.cfm?RegionTopicID=SCS.

43. For a recent Chinese assessment of the location and amount of resources in the South China Sea, see 李金蓉 [Li Jinrong], 朱瑛 [Zhu Ying], and 方银霞 [Fang Yinxia], 南海南部油气资源勘探开发状况及对策建议 ["The State of Exploration and Development of Oil Resources in the Southern Part of the South China Sea and

Policy Suggestions"], 海洋开发与管理 [*Ocean Development and Management*] 31, no. 4 (April 2014), pp. 12–15.

44. These points are made in 唐复全 [Tang Fuquan] and 伍铁 [Wu Yi], 中国海防战略探要 ["A Study of China's Coastal Defense Strategy"], 中国军事科学 [*China Military Science*], no. 5 (2007), p. 93. About 94 percent of China's population lives in the eastern one-third of the country. "China Facts," *National Geographic Online,* travel.nationalgeographic.com/travel/countries/china-facts/. See also Henry Gass, "More Chinese on the Coast, Less Fish in the Sea," *Scientific American,* August 8, 2014, www.scientificamerican.com/article/more-chinese-on-the-coast-less-fish-in-the-sea/.

45. 刘中民 [Liu Zhongming], "海权"与"海洋权益"辨识 ["Understanding the Differences between 'Sea Power' and 'Maritime Rights and Interest'"], 中国海洋报 [*China Ocean News*], April 18, 2006, p. 3. This fear of being vulnerable to American assaults from seaward has deep roots, going back to the First Gulf War and the Kosovo war. 尚金锁 [Shang Jinsuo], 吴子欣 [Wu Zixin], and 陈立旭 [Chen Lixu], 毛泽东军事思想与高技术条件下局部战争 [*The Military Thought of Mao Zedong and Local War under High-Tech Conditions*] (Beijing: PLA Press, 2002), pp. 248–49. This point is also mentioned in 师小芹 [Shi Xiaoqin], 论海权与中美关系 [*On Sea Power and Sino-U.S. Relations*] (Beijing: Military Science, 2012), p. 207. This point also is made in Tang Fuquan and Wu Yi, "A Study of China's Coastal Defense Strategy," pp. 95–96.

46. The authors of *China's Ocean Development Report (2011)* describe the value of certain disputed islands as follows: "Some islands have special status; maybe they are places of strategic importance, or important for resources; their value is reflected in control over sea-lanes, and resources that belong to them, and expanding maritime defense depth; their significance is extremely important for national security, social stability, and economic development." See 海洋发展战略研究所课题组 [China Institute for Marine Affairs Special Topic Group], 中国海洋发展报告 (2011) [*China's Ocean Development Report (2011)*] (Beijing: Ocean, 2011) [hereafter *ODR 2011*], p. 118. Also, in an interview with a *China Ocean News* reporter, Jia Yu, Deputy Director, CIMA, stated that, aside from resources and other economic reasons, China's commitment to safeguarding its maritime rights and interests comes down to the need to expand strategic space for the sake of security and development. 江涛 [Jiang Tao], 维护海洋权益开拓发展空间—访国家海洋局海洋发展战略研究所副所长贾宇 ["Safeguard Maritime Rights and Interests and Expand Development Space—an Interview with CIMA Deputy Director Jia Yu"], 中国海洋报 [*China Ocean News*], June 4, 2012, p. 1. These ideas are shared by another SOA expert interviewed for a November 2012 issue of *People's Navy,* the official newspaper of the PLAN. 邢广梅 [Xing Guangmei], 让海洋权益根植人心 ["Let Maritime Rights and Interests Take Root in the People's Hearts"], 人民海军 [*People's Navy*], November 8, 2012, p. 4. The SOA expert states, "Only by effectively safeguarding national maritime rights and interests can China obtain rich marine resources, and expand national strategic security and development space." Chinese strategists see the ocean as a "security barrier" (战略屏障), the function of which is to shield China from foreign threats. This view no doubt amplifies the importance of controlling Chinese-claimed waters. See 陈浩 [Chen Hao] and 杨朝钊 [Yang Chaozhao], 海洋是国家战略的坚实支点 ["The Ocean Is a Solid Stronghold of National Strategy"], 解放军报 [*PLA Daily*], October 10, 2016, p. 6.

47. 谢适汀 [Xie Shiting], 新形势下经略海洋维护海权的科学指南 ["A Scientific Compass for Strategically Managing the Sea and Safeguarding Maritime Rights and Interests in the Context of the New Situation"], 中国军事科学 [*China Military Science*], no. 4 (2014), p. 84.

48. An important discussion of the strategic and economic value of China's maritime claims, especially those in the South China Sea, took place at an academic conference held at the Shanghai University of Politics and Law in November 2011. At the conference, Sr. Capt. Hua Xiaoping from the South Sea Fleet cited the following factors that made the South China Sea important to China: (1) Its resources could help sustain China's economic development. (2) The South China Sea is a vital, strategic sea-lane impacting China's national security. (3) It is important for expanding China's defensive depth (防御纵深). (4) It is the direction through which China can "break through" (突破) in a geostrategic sense (i.e., break through the confines of the first island chain). (5) What happens in the South China Sea impacts other areas important to China. See 南琳 [Nan Lin], 第一届中国海权战略与国家安全学术研讨会综述 ["A Summary of the First Academic Conference on Chinese Sea Power Strategy and National Security"], 国际观察 [*International Review*], no. 2 (2013), p. 30.

49. Expanding strategic depth, the authors believe, also will help achieve the peacetime goal of "checking the long-term, close-in surveillance conducted by America and Japan." 李远星 [Li Yuanxing] and 刘兴 [Liu Xing], 海上战略通道安全面临的威胁及对策 ["Threats to Security of Strategic Sea-Lanes and Policy

Recommendations"], 国防 [*National Defense*], no. 3 (2014), pp. 16–17. The meaning of the term *maritime defense,* or *haifang* (海防), has evolved over time. Originally, it meant the development of coastal installations to protect Chinese territory from foreign invasion. As such, the term was translated best as "coastal defense"; indeed, some Chinese sources still translate it thus. In this conception, the Chinese surface fleet played a minor role. The term's evolution has accommodated the growth of China's maritime interests going forward. Since the early 1980s, the frontiers of Chinese ocean defense have moved out from the Chinese coast to the edge of these new zones of jurisdiction and remote islands. According to the deputy commander of the Shantou Garrison District in Guangdong Province, now "the ultimate aim of maritime defense is to ensure that the state's maritime interests are not infringed." See 谢毫生 [Xie Haosheng], 我国海防面临的安全威胁与加强海防建设的战略性思考 ["Strategic Considerations of the Security Threats Faced by China's Maritime Defense and Strengthening Maritime Defense Construction"], 国防 [*National Defense*], no. 6 (2009), p. 23. In a 1996 article, PLA Naval Research Institute researcher Liu Zhenhuan stated that "according to UNCLOS, the scope of China's maritime defense should and must expand to include all of China's jurisdictional waters, including out to the edge of the EEZ and continental shelf, and in the South China Sea out to the edge of China's traditional maritime frontier [i.e., the nine-dash line]. China's 'maritime defense line' will extend all the way down to James Shoal." As a result of this evolution, Chinese surface vessels, not infantrymen in bunkers, are now the primary guardians of China's "maritime defense line" (海防线). See 刘振环 [Liu Zhenhuan], 联合国海洋法公约评述 (下) ["Comments on UNCLOS (Part 2)"], 国防 [*National Defense*], no. 11 (1996), p. 15. For a detailed discussion of the impact of UNCLOS on China's maritime defense, see 王士强 [Wang Shiqiang] and 高新生 [Gao Xinsheng], eds., 中外海防发展比较研究 [*Comparative Research on Ocean Defense Development in China and Abroad*] (Beijing: Military Science, 2011), pp. 295–309. The role of UNCLOS in the evolution of the concept of "maritime defense" is also emphasized in 李兆春 [Li Zhaochun] and 高新生 [Gao Xinsheng], 海防概念的释读 ["An Explanation of the Concept of *Haifang*"], 中国海洋报 [*China Ocean News*], August 24, 2016, p. 2. In a 2014 article, two researchers from the PLA Academy of Military Science examined the evolution in missions and tasks of China's maritime defense. The authors point to changes in strategic factors, not UNCLOS, as the key drivers in China pushing out its maritime defense to the edge of the so-called near seas. See 张忠良 [Zhang Zhongliang] and 贺宏礼 [He Hongli], 新中国成立以来海防使命任务的演变 ["Evolution in the Mission and Tasks of Maritime Defense since the Founding of the People's Republic of China"], 军事历史 [*Military History*], no. 1 (2014), pp. 27–30.

50. For example, in an August 2016 statement, Central Military Commission member Chang Wanquan, citing Xi Jinping, made special mention of the "security threats from the seaward direction" (来自海上方向的安全威胁). See 常万全: 更加深入扎实做好海上方向动员准备 ["Chang Wanquan: More Deeply and Solidly Make Preparations for Mobilization in the Seaward Direction"], 新华社 [*Xinhua*], August 2, 2016, news.xinhuanet.com/politics/2016-08/02/c_1119324936.htm. In a September 2016 synopsis of Xi Jinping's thinking on military strategy and its relationship to grand strategy, three researchers from the Academy of Military Science wrote, "Chairman Xi has clarified the requirements with respect to preparing for the military struggle. History proves that states that embrace the sea thrive and those that abandon the sea decline; when the state is powerful, its sea power is formidable; and when the state is weak, its sea power is weak. As China becomes increasingly integrated with the rest of the world, the seaward direction is becoming an important direction in which our strategic interests are expanding and the direction in which there exists strategic space to ensure the country's long-term stability. Over the long term, China will face many types of contradictions and struggles in the seaward direction, including containment and countercontainment, separatism and counterseparatism, and infringement and counterinfringement. The maritime security environment will become more complex. Taking into account China's national security situation and changes in the patterns of war, Chairman Xi has emphasized that the starting point for preparations for the military struggle should be on winning informatized wars. He has stressed the maritime military struggle and preparation for military struggle, effectively controlled major crises, appropriately handled chain reactions, and resolutely defended territorial sovereignty, unity, and security. Implementing these requirements has benefited Chinese efforts to seize the strategic initiative in the preparation for military struggle." See 姜铁军 [Zhang Tiejun], 释清仁 [Shi Qingren], and 车兴飞 [Che Xingfei], 强国强军战略先行——深入学习贯彻习主席新形势下军事战略方针重要论述 ["Advancing the Powerful Country and Powerful Military Strategy—Deeply Studying and Implementing Xi Jinping's Important Discourse on Military

Strategic Guidelines in the New Situation"], 解放军报 [*PLA Daily*], September 2, 2016, theory.people.com.cn/n1/2016/0902/c40531-28686808.html.

51. 刘赐贵 [Liu Cigui], 深入学习贯彻习近平总书记重要讲话精神为建设海洋强国做出新贡献 ["Deeply Study the Spirit of Xi Jinping's Important Speech and Contribute to China's Efforts to Become a Maritime Power"], 中国海洋报 [*China Ocean News*], August 19, 2013, p. 1. Liu reiterated this message in an important article published in *China Ocean News* in June 2014. 刘赐贵 [Liu Cigui], 努力实现从海洋大国向海洋强国的历史跨越 ["Work Hard to Realize the Historic Leap from a Big Maritime State to a Powerful Maritime State"], 中国海洋报 [*China Ocean News*], June 7, 2014, p. 1.

52. 张海文 [Zhang Haiwen] and 王芳 [Wang Fang], 海洋强国战略是国家大战略的有机组成部分 ["Maritime Power Strategy Is an Organic Part of Grand Strategy"], 国际安全研究 [*Journal of International Security Studies*], no. 6 (2013), p. 63. At the time, these two authors worked at CIMA, a think tank within the State Oceanic Administration.

53. For an example of this reasoning, see 一言 [Yi Yan], 坚定不移地维护国家海洋权益 ["Resolutely and Unswervingly Safeguard Maritime Rights and Interests"], 中国海洋报 [*China Ocean News*], May 4, 2012, p. 5.

54. See 中共中央文献研究室 [CCP Document Research Laboratory], ed., 习近平关于实现中华民族伟大复兴的中国梦论述摘编 [*Excerpts from Xi Jinping's Discourse on Realizing the China Dream of the Great Rejuvenation of the Chinese Nation*] (Beijing: CCP Document Press, 2013).

55. For an excellent study of the means by which Chinese nationalism affects Chinese views of the world, see Peter Hays Gries, *China's New Nationalism: Pride, Politics, and Diplomacy* (Berkeley: Univ. of California Press, 2005). Chinese maritime law-enforcement officers may be at least in part animated by similar emotions. In the words of one frontline CMS officer, "Early modern China had no maritime defense. This caused China to suffer one hundred years of national humiliation. Today, frontline law-enforcement personnel are the first barrier to guard the motherland's maritime borders. The history of humiliation can never be repeated!" 赵建东 [Zhao Jiandong], 维权执法信心百倍 ["Supreme Confidence in Rights-Protection Law Enforcement"], 中国海洋报 [*China Ocean News*], March 14, 2014, p. 2.

56. Speaking about the disputes in the South China Sea, PLAN political commissar Adm. Miao Hua stated that they "touch upon territorial sovereignty, energy resources, geopolitics, and development space, and they involve the overall situation with respect to stable national development and impact the feelings of the Chinese people." See 吴昊 [Wu Hao], 海军政委苗华谈南海问题: 寸土必争, 寸海必保 ["PLA Navy Political Commissar Miao Hua Talks about the South China Sea: China Will Fight for Every Inch of Territory and Protect Every Inch of Ocean"], 中国军网 [*China Military Online*], April 5, 2016, www.81.cn/rd/2016-04/05/content_6994240.htm.

57. For a great discussion of the value of China's maritime claims, see M. Taylor Fravel, "Why Does China Care So Much about the South China Sea? Here Are 5 Reasons," *Monkey Cage* (blog), *Washington Post,* July 13, 2016, www.washingtonpost.com/news/monkey-cage/wp/2016/07/13/why-does-china-care-so-much-about-the-south-china-sea-here-are-5-reasons/.

58. 白皮书首列专节阐述维护国家海洋权益 ["For the First Time the White Paper Includes a Dedicated Section on Maritime Rights and Interests"], 中国海洋报 [*China Ocean News*], April 17, 2013, p. 1. For the actual document, see Information Office of the State Council, *The Diversified Employment of China's Armed Forces* (April 16, 2013), available at news.xinhuanet.com/english/china/2013-04/16/c_132312681.htm. The concept of "maritime rights and interests" first appeared in Chinese law in the 1992 PRC Law of the Territorial Sea and Contiguous Zone. See 海洋发展战略研究所课题组 [China Institute for Marine Affairs Special Topic Group], 中国海洋发展报告 (2009) [*China's Ocean Development Report (2009)*] (Beijing: Ocean, 2009) [hereafter *ODR 2009*], p. 99. The report is produced annually by researchers at CIMA. Authoritative Chinese sources define *maritime rights* as the "rights and freedoms enjoyed by a state on the basis of relevant international law and domestic law" and *maritime interests* as "the various benefits that a state can gain through exercising its maritime rights." See *ODR 2011,* p. 108. SOA leaders generally use this definition in their speeches. For example, 高悦 [Gao Rui], 坚决维护我国的海洋权益 ["Resolutely Safeguard China's Maritime Rights and Interests"], 中国海洋报 [*China Ocean News*], July 1, 2013, p. 1. This definition also appears in a very important 2011 volume entitled *Maritime Rights and Interests and China*. Production of this volume was overseen by a committee that included a former director of the State Oceanic Administration, the former president of China Ocean University, and six other senior members of China's maritime affairs community. See 干焱平 [Gan Yanping] and 刘晓玮 [Lu Xiaowei], eds.,

海洋权益与中国 [*Maritime Rights and Interests and China*] (Beijing: Ocean, 2011), p. 48. The PLA's definition of *maritime rights and interests* generally accords with the SOA's: "the rights and interests enjoyed by a state at sea. They include sovereignty in the territorial sea; sovereign rights and jurisdictional rights in the contiguous zone, EEZ, and continental shelf; rights enjoyed on the high seas and in the international seabed; and the right of innocent passage through the territorial sea of other states." See 中国人民解放军军语 [*Dictionary of Military Terms*] (Beijing: Academy of Military Science Press, September 2011), p. 26. Strictly speaking, the term *maritime rights and interests* pertains to the space on, above, and below the sea. Claims to offshore islands are considered to involve issues of "territorial sovereignty" (领土主权). See 海洋发展战略研究所课题组 [China Institute for Marine Affairs Special Topic Group], 中国海洋发展报告 (2015) [*China's Ocean Development Report (2015)*] (Beijing: Ocean, 2015) [hereafter *ODR 2015*], p. 285. In wider Chinese discourse, the term *maritime rights and interests* frequently encompasses claims to sovereignty over offshore islands and other land features. This conflation of terms is not incidental, given that sovereignty over land determines the extent of maritime space within which a state may legitimately lay claim to maritime rights. For more on this point, see 刘楠来 [Liu Nanlai], 维护海洋权益要有全球视野 ["To Safeguard Maritime Rights and Interests One Needs a Global Perspective"], 中国海洋报 [*China Ocean News*], November 14, 2013, p. 1, and 吴继陆 [Wu Jilu], 正确认识海洋维权形势坚决维护国家海洋权益 ["Correctly Recognize the Maritime Rights-Protection Situation and Resolutely Safeguard Maritime Rights and Interests"], 中国海洋报 [*China Ocean News*], November 19, 2012, p. 2. In the context of surface fleet missions, "rights protection" encompasses efforts to defend Chinese claims to both land and sea against other claimants and interested parties in their many maritime disputes.

59. As Dennis Blasko writes, defense of China's maritime rights and interests was the "main theme" of the 2015 white paper. See Dennis J. Blasko, "The 2015 Chinese Defense White Paper on Strategy in Perspective: Maritime Missions Require a Change in the PLA Mindset," Jamestown Foundation *China Brief* 15, no. 12 (June 19, 2015), jamestown.org/program/the-2015-chinese-defense-white-paper-on-strategy-in-perspective-maritime-missions-require-a-change-in-the-pla-mindset/.

60. CIMA researcher Gao Zhiguo made this point during his remarks at a January 2013 conference organized by the SOA. See 香山论坛: 建设中国特色海洋强国 ["Xianshan Forum: Building a Maritime Power with Chinese Characteristics"], 中国海洋报 [*China Ocean News*], January 1, 2013, p. 3.

61. The full sentence calls for China to "increase its ability to develop marine resources, develop the marine economy, protect the marine environment, resolutely safeguard national maritime rights and interests, and build China into a maritime power." 胡锦涛在中国共产党第十八次全国代表大会上的报告 ["Hu Jintao's Report at the 18th Congress of the Chinese Communist Party"], November 17, 2012, news.xinhuanet.com/18cpcnc/2012-11/17/c_113711665.htm. Earlier party congress reports did mention "maritime rights and interests," but only in the context of the missions of the Chinese military. See, for instance, Jiang Zemin's report at the Fourteenth Party Congress, 江泽民在中国共产党第十四次全国代表大会上的报告 ["Report Delivered by Jiang Zemin at the Fourteenth Party Congress"], 中国共产党新闻网 [*News of the Communist Party of China*], cpc.people.com.cn/GB/64162/64168/64567/65446/4526313.html.

62. See Ryan D. Martinson, "The 13th Five-Year Plan: A New Chapter in China's Maritime Transformation," Jamestown Foundation *China Brief* 16, no. 1 (January 12, 2016), jamestown.org/program/the-13th-five-year-plan-a-new-chapter-in-chinas-maritime-transformation/.

63. See chap. 41, sec. 3, of 中国国民经济和社会发展第十三个五年规划纲要 ["Outline of 13th Five-Year Plan for China's Economic and Social Development"], 中国网 [*China Online*], March 17, 2016, www.china.com.cn/lianghui/news/2016-03/17/content_38053101.htm. This assumption also is expressed frequently in the statements of officers in the Chinese military. For example, in an important speech given on the 120th anniversary of the First Sino-Japanese War, then–PLAN commander Adm. Wu Shengli stated that the specific meaning of the term *maritime rights and interests* is "continuously evolving with the times." See 吴胜利 [Wu Shengli], 深刻吸取甲午战争历史教训坚定不移走经略海洋维护海权发展海军之路 ["Profoundly Absorb the Historical Lessons of the First Sino-Japanese War and Unswervingly Take the Path of Strategic Management of the Sea, Safeguarding Maritime Rights, and Developing the Navy"], 中国军事科学 [*China Military Science*], no. 4 (2014), p. 2.

64. Toshi Yoshihara and James R. Holmes, "Can China Defend a 'Core Interest' in the South China Sea?," *Washington Quarterly* 34, no. 2 (Spring 2011), pp. 45–59.

65. In 2010, for instance, CMS ships protected a Chinese surveying vessel operating in disputed waters near the Paracels. The SOA officially described this operation as protecting China's "core interests" in the South China Sea. 2010年中国海监十件大事 ["Ten Major Events for CMS in 2010"], 中国海洋报 [*China Ocean News*], May 10, 2011, p. 5. A *People's Daily* editorial published during the Scarborough Shoal standoff warned the Philippines that Scarborough Shoal constitutes a "core interest" for China. See Qin Hong, "We Have Ample Means with Which to Face the Philippines."

66. In the last paragraph of an official summary of Xi's remarks, he is cited as saying, "We must safeguard national maritime rights and interests. . . . We love peace, and will continue to take the path of peaceful development, but we absolutely cannot give up our legitimate rights and interests, much less sacrifice core national interests." For the official summary of Xi's remarks, see Xi Jinping, 进一步关心海洋认识海洋经略海洋推动海洋强国建设不断取得新成就 ["We Need to Do More to Take Interest in the Sea, Understand the Sea, and Strategically Manage the Sea, and Continually Do More to Promote China's Efforts to Become a Maritime Power"], 人民日报 [*People's Daily*], August 1, 2013, paper.people.com.cn/rmrb/html/2013-08/01/nw.D110000renmrb_20130801_2-01.htm. In the weeks following Xi's remarks, *China Ocean News* ran a series of front-page articles, written by internal and external experts, interpreting the significance of the politburo meeting, in many instances highlighting the "core interests" language. The 2015 Ocean Development Report states that Xi's mention of "core interests" refers to sovereignty over islands. See *ODR 2015,* p. 299. The 2011 *White Paper on Peaceful Development* cites territorial integrity as a core interest. This makes clear that offshore islands fall under that rubric. See Information Office of the State Council, "China's Peaceful Development," *Xinhua,* September 6, 2011, news.xinhuanet.com/english2010/china/2011-09/06/c_131102329.htm. CIMA researcher Zhang Xiaoyi made this point in an April 2016 article. 张小奕 [Zhang Xiaoyi], 实现中美在南海航行自由的共同利益 ["Realizing the Common Interests of China and the U.S. with Respect to Freedom of Navigation in the South China Sea"], 中国海洋报 [*China Ocean News*], April 12, 2016, p. 2. For another representative use of this term, see Yi Yan, "Resolutely and Unswervingly Safeguard Maritime Rights and Interests."

67. 吴登峰 [Wu Dengfeng] and 莫小亮 [Mo Xiaoliang], 吴胜利会见美国海军作战部长 就南海问题深入交换意见 ["Wu Shengli Met with the U.S. Navy's Chief of Naval Operations and Exchanged Views on the South China Sea"], 新华社 [*Xinhua*], July 18, 2016, news.xinhuanet.com/mil/2016-07/18/c_1119238489.htm. The PLA Navy also uses this language in internal discourse. For example, in an August 2014 article, the deputy director of the PLAN political department, Rear Adm. Zheng Hengbin, stated, "How China effectively controls the sea and safeguards its maritime rights is the great challenge it faces as it builds itself into a maritime power. This involves great questions associated with China's core interests." The author thanks Conor Kennedy for sharing this article. 郑亨斌 [Zheng Hengbin], 强化海洋意识 建设海洋强国 ["Strengthen Maritime Consciousness and Build China into a Maritime Power"], 中国双拥 [*China Double Support*], August 5, 2014, syzz.mca.gov.cn/article/lltt/201408/20140800679898.shtml. In a January 2017 article describing Xi Jinping's approach to diplomacy, Yang Jiechi mentions the need to safeguard "maritime rights and interests" in the section on China's "core interests." See 杨洁篪 [Yang Jiechi], 在习近平总书记外交思想指引下不断开创对外工作新局面 ["Continuously Creating New Situations for Foreign Affairs Work While Being Guided by Xi Jinping's Thinking on Diplomacy"], 人民日报 [*People's Daily*], January 14, 2017, p. 7, available at paper.people.com.cn/rmrb/html/2017-01/14/nw.D110000renmrb_20170114_1-07.htm.

68. This study defines an *oceangoing* vessel as a ship displacing at least five hundred tons.

69. Since both the Chinese coast guard and the Chinese navy are undergoing major institutional reform and growing rapidly, discussion of organization and force structure should be assumed to be current only as of January 2017.

70. 于赢 [Yu Ying], 赵颖翡 [Zhao Yingfei], and 郭益科 [Guo Yike], 中国海监: 碧海亮剑 ["China Marine Surveillance: Bright Sword in the Blue Ocean"], 人民海军 [*People's Navy*], February 22, 2010, p. 4. See also 王新艺 [Wang Xinyi], 巡航执法: 改变了的中国海洋维权格局 ["Patrol Law Enforcement: It Changed China's Maritime Rights-Protection Situation"], 当代海军 [*Modern Navy*], no. 8 (2011), p. 60.

71. According to one authoritative source, *maritime rights-protection law enforcement* (海洋维权执法) is defined as "law-enforcement behavior directed at infringements of national maritime rights and interests. Its aim is to safeguard state sovereignty, sovereign rights, jurisdictional rights, and rights of control [管制权]. Maritime rights protection uses the law as a basis, is guided by policy, relies on patrols, and uses law enforcement as a means." 胡连 [Hu Lian], 维权执法方式值得深入研究 ["Rights-Protection Law Enforcement Is Worth Researching in

Depth"], 中国海洋报 [*China Ocean News*], March 3, 2009, p. 2. Two SOA researchers have defined *rights-protection law enforcement* as "an administrative law-enforcement function performed for the purpose of safeguarding state sovereignty and maritime rights and interests. It is a fundamental measure and means used by a state to safeguard maritime rights and interests on the basis of maritime law." 范晓婷 [Fan Xiaoting] and 罗婷婷 [Luo Tingting], 海洋维权执法的法律依据之辨 ["Discourse on the Legal Basis of Maritime Rights-Protection Law Enforcement"], 行政与法 [*Administration and Law*], no. 12 (2009), p. 77.

72. Rights protection has been described as the service's "primary" (首要) responsibility. See, for instance, 忠诚使命护海疆 砥砺奋进铸华章—中国海监继往开来踏上新征程 ["Faithful to Its Mission to Protect the Maritime Border It Has Written a Remarkable Chapter: CMS Begins a New Journey"], *PRC Ministry of Land and Resources,* July 23, 2013, www.mlr.gov.cn/xwdt/hyxw/201307/t20130723_1244589.htm. It also has been called the "top priority" (重中之重). See, for instance, 王秋蓉 [Wang Qiurong], 海监工作正在实现跨越式发展 ["CMS Work Is in the Process of Leapfrog Development"], 中国海洋报 [*China Ocean News*], January 25, 2013, p. 4. See also 今年要扎实抓好的六大主要任务 ["The Six Key Tasks We Must Perform This Year"], 中国海洋报 [*China Ocean News*], February 27, 2011, p. 3. In a February 2013 speech, the then director of intelligence and information operations for the U.S. Pacific Fleet, Capt. James Fanell, famously called China Marine Surveillance "a full-time maritime sovereignty harassment organization." Few knew more about what this service actually was doing in disputed areas than Captain Fanell. Bill Gertz, "Inside the Ring: Blunt Warning on China," *Washington Times,* February 6, 2013, www.washingtontimes.com/news/2013/feb/6/inside-the-ring-blunt-warning-on-china/.

73. For instance, in early 2011 *CMS 17,* a national-level cutter belonging to the 1st Detachment (based in Qingdao, Shandong), conducted a patrol to James Shoal, during which it obstructed the operations of a foreign surveying vessel operating in Chinese-claimed waters. 我的船长我的船—"中国海监17"船年度出航301天纪事 ["My Captain and My Boat—'A Record of the 301 Days *CMS 17* Spent at Sea Last Year'"], 人民网 [*People Online*], February 6, 2012, politics.people.com.cn/GB/70731/17034156.html.

74. This decision, implemented in 2009, was outlined in an SOA document called 关于省级海监机构开展海洋维权巡航执法工作的通知 [Notification on Provincial-Level CMS Organizations Initiating Maritime Rights-Protection Law-Enforcement Patrols]. See 王世岗 [Wang Shigang], 北部湾海洋维权执法亟待加强 ["Maritime Rights-Protection Law Enforcement in the Gulf of Tonkin Needs to Be Urgently Improved"], 中国海洋报 [*China Ocean News*], February 6, 2015, p. 3, and 海上执法能力建设四地谈 ["A Discussion of Construction of Maritime Law-Enforcement Capabilities in Four Places"], 中国海洋报 [*China Ocean News*], March 18, 2016, p. 4. Notably, the whole March 18, 2016, issue subsequently was removed from the *China Ocean News* website, presumably because it contained content that later was judged too sensitive to release.

75. 苏涛 [Su Tao], 海洋维权的中坚力量 ["The Backbone of Maritime Rights Protection"], 中国海洋报 [*China Ocean News*], June 13, 2014, p. 3. *CMS 9012* also has the distinction of being one of the few CMS cutters, if not the only one, with deck guns.

76. See, for instance, 江苏省海洋渔业指挥部 [Command Department of the Jiangsu Ocean and Fisheries Department], 中国海警局维权处领导考察中国海警2113舰 ["A Leader from the Rights Protection Department of the China Coast Guard Bureau Visits *CCG 2113*"], 江苏省海洋渔业厅 [*Jiangsu Ocean and Fisheries Department*], March 27, 2015, www.jsmfm.gov.cn/Show.aspx?id=74581. See also "A Discussion of Construction of Maritime Law-Enforcement Capabilities in Four Places."

77. In November 1999, Chinese policy makers approved a major CMS shipbuilding program, to be completed in two phases. The phase I plan, to produce five new one-thousand-ton cutters and one new three-thousand-ton cutter, was completed in 2005. These were *CMS 17* (one thousand tons), *CMS 27* (one thousand tons), *CMS 46* (1,100 tons), *CMS 51* (1,900 tons), *CMS 71* (one thousand tons), and *CMS 83* (three thousand tons). Phase II ships joined their respective national-level units in 2010 and 2011. They included one three-thousand-metric-ton ship and six new one-thousand-metric-ton ships: *CMS 15* (1,500 tons), *CMS 23* (one thousand tons), *CMS 26* (one thousand tons), *CMS 50* (three thousand tons), *CMS 66* (one thousand tons), *CMS 75* (1,300 tons), and *CMS 84* (1,740 tons). 王孟霞 [Wang Mengxia], 中国海洋: 40年风雨兼程 ["China's Oceans: 40 Years of Trials and Hardships"], 中国船检 [*China Ship Survey*], no. 8 (2004), p. 7.

78. *ODR 2013,* pp. 261–62, explicitly identifies China Marine Surveillance and Fisheries Law Enforcement as the two services that perform the bulk of rights-protection missions and that operate most in China's claimed EEZs.

79. Ibid., p. 277; Lyle Goldstein, "China: A New Maritime Partner?," U.S. Naval Institute *Proceedings* 133/8/1,254 (August 2007), pp. 26–31.

80. 肖乐 [Xiao Yue] and 李明爽 [Li Mingshuang], 中国渔政指挥中心主任陈毅德谈"十二五"渔政事业发展 ["Director of the Fisheries Law Enforcement Command Chen Yide Talks about Fisheries Law Enforcement Developments during the 'Twelfth Five-Year Plan'"], 中国水产 [*China Fisheries*], no. 8 (2011), p. 6. For an account of the first FLE mission to Mischief Reef, see 刘添荣 [Liu Tianrong], 一次历史性的巡航: 中国渔政31号船首航南沙纪实 ["A Historic Patrol: An Account of *FLE 31*'s First Trip to the Spratlys"], 中国水产 [*China Fisheries*], no. 12 (1994), pp. 12–13.

81. Jonathan G. Odom, "The True 'Lies' of the Impeccable Incident: What Really Happened, Who Disregarded International Law, and Why Every Nation (Outside of China) Should Be Concerned," *Michigan State Journal of International Law* 18, no. 3 (2010), pp. 1–42. See also Raul Pedrozo [Capt., USN], "Close Encounters at Sea: The USNS *Impeccable* Incident," *Naval War College Review* 62, no. 3 (Summer 2009), pp. 101–11. On the evening of March 4, 2009, *Victorious* was operating in the Yellow Sea (roughly 125 nm from China's coast) when an FLE cutter illuminated it with a high-intensity spotlight and then crossed its bow at just 1,400 yards. While operating seventy-five miles south of Hainan on March 8, 2009, *Impeccable* was threatened with collision by a number of PRC vessels, including at least one FLE cutter. See "Raw Data: Pentagon Statement on Chinese Incident with U.S. Navy," *Fox News,* March 9, 2009, www.foxnews.com/politics/2009/03/09/raw-data-pentagon-statement-chinese-incident-navy.html.

82. 王春楠 [Wang Chunnan] and 卢冬琳 [Lu Donglin], 广西渔政巡南沙保礁护渔扬国威—看广西勇士的风采 ["Guangxi Fisheries Law Enforcement Patrols the Spratlys and Performs Reef Protection Duties—See Brave Guangxi People in Action"], 广西新闻网 [*Guangxi News Online*], May 5, 2013, www.gxnews.com.cn/staticpages/20130505/newgx5185941f-7504741-7.shtml.

83. From 2006 to 2013, Fisheries Law Enforcement received just five new cutters displacing more than a thousand tons, as follows: *FLE 311* (2006), *FLE 88* (2009), *FLE 310* (2010), *FLE 206* (2012), and *FLE 312* (2013). *FLE 88* later was returned to the PLA Navy. Ridzwan Rahmat, "PLAN Re-inducts Fuchi-Class Vessel from Fisheries Agency," *IHS Jane's Navy International,* August 4, 2014, www.janes.com/article/41590/plan-re-inducts-fuchi-class-vessel-from-fisheries-agency.

84. For a still-useful description of this era, see Lyle J. Goldstein, *Five Dragons Stirring Up the Sea: Challenge and Opportunity in China's Improving Maritime Enforcement Capabilities,* China Maritime Studies 5 (Newport, RI: Naval War College Press, 2010), available at usnwc.edu/Research-and-Wargaming/Research-Centers/China-Maritime-Studies-Institute.

85. This was a top-down reform imposed on the sea services. As of early 2016, organizational, personnel, and budgetary integration was "not where it should be" (没有到位). See 李培志 [Li Peizhi], 建设海洋强国战略背景下中国海警体制改革的思考 ["Ideas on Reform of the China Coast Guard in the Context of China's Strategy of Becoming a Maritime Power"], 武警学院学报 [*Journal of the Chinese People's Armed Police Force Academy*] 32, no. 3 (March 2016), pp. 49–50. This echoes a comment a senior CCG officer made in May 2015. See 索有为 [Suo Youwei], 陈启任 [Chen Qiren], and 周冬华 [Zhou Donghua], 我海警坚守南海维权执法36年 守美济礁40多航次 ["A China Coast Guard Officer Has Done Maritime Rights-Protection Law Enforcement in the South China Sea for 36 Years and Participated in More Than 40 Missions to Guard Mischief Reef"], 中国新闻网 [*China News*], May 7, 2015, www.china.com.cn/military/2015-05/07/content_35509917.htm. As one senior CCG officer admitted in January 2017, "Since the creation of the China Coast Guard, the ranks of maritime law-enforcement personnel are much more enthusiastic about their work, but there still exist many practical difficulties. I hope that related reform work can achieve a breakthrough and resolve the current problems as quickly as possible." 高悦 [Gao Liu] et al., 集聚智慧力量 续写海洋新篇——全国海洋工作会议分组讨论侧记 ["Gather Together Wisdom and Power to Write a New Chapter: A Record of Breakout Discussions at the National Maritime Work Meeting"], 中国海洋报 [*China Ocean News*], January 9, 2017, p. 4.

86. 崔凤 [Cui Feng] and 宋宁而 [Song Ning'er], eds., 中国海洋社会发展报告(2015) [*Report on the Development of Ocean Society of China (2015)*] (Beijing: Social Sciences Academic Press, 2015), p. 141.

87. For a useful discussion of CCG reform, see 何杰 [He Jie], 中美日海洋执法机构的组织架构对比 ["A Comparison of the Organizational Structures of Chinese, American, and Japanese Maritime Law-Enforcement Organizations"], 舰船科学技术 [*Ship Science and Technology*] 38, no. 8 (August 2016), pp. 149–53. The author works in the General Logistics Department of the China Coast Guard.

88. In November 2016, Meng was elected to serve as president of the international police organization Interpol, a post he will hold until 2020. Meng's biography is available at the Interpol website: www.interpol.int/About-INTERPOL/Structure-and-governance/Meng-Hongwei. The SOA website still identifies Meng as the commandant of the China Coast Guard.

89. For a discussion of the challenges this has created, see Linda Jakobson, "China's Unpredictable Maritime Security Actors," Lowy Institute Report, *Lowy Institute,* December 2014, p. 18, www.lowyinstitute.org/files/chinas-unpredictable-maritime-security-actors_3.pdf.

90. The two vice-commandants are Maj. Gen. Wang Hongguang (王洪光), an active-duty PAP officer, and Chen Yide (陈毅德), former director of the Fisheries Law Enforcement Command. The CCG political commissar is the SOA director, currently Wang Hong (王宏). For information on Wang Hongguang, see 邢桂杰 [Xing Guijie], 海警队伍党委书记培训班举行开班仪式 ["Opening Ceremony Held for Training Class for China Coast Guard Party Secretaries"], 中国人民武装警察部队学院网站 [*PAP Academy*], June 14, 2016, www.wjxy.edu.cn/xyyw/316722.jhtml. For confirmation of Chen Yide's position, see 陈菲 [Chen Fei], 中国海警圆满完成首次出访 ["China Coast Guard Satisfactorily Completes First Visit Abroad"], 中华人民共和国国防部网站 [*Ministry of Defense*], June 18, 2016, www.mod.gov.cn/diplomacy/2016-06/18/content_4677152.htm. The SOA website provides only the names of the commandant and the political commissar. 国家海洋局网站 [*Website of the State Oceanic Administration*], www.soa.gov.cn/zwgk/bjgk/ldjs/ldjslb/.

91. For a more thorough comparison of the China Coast Guard with the coast guards of other states, see 祁斌 [Qi Bin], 美日韩海警执法体系与装备新动态 ["New Developments in U.S., Japan, and Korea Coast Guard Systems and Equipment"], 中国船检 [*China Ship Survey*], no. 2 (2016), pp. 91–96.

92. The organization and responsibilities of the China Coast Guard were outlined in a document that the State Council issued in June 2013. See 国家海洋局主要职责内设机构和人员编制规定 ["Provisions for the Primary Responsibilities, Organization, and Staffing of the State Oceanic Administration"], 中华人民共和国中央人民政府 [*Website of the Central People's Government of the People's Republic of China*], June 9, 2013, www.gov.cn/zwgk/2013-07/09/content_2443023.htm. The State Council document says that the State Oceanic Administration (working through the China Coast Guard) is responsible for "guiding and coordinating the maritime law-enforcement work of local agencies." One indication of the relationship between local-level maritime law-enforcement agencies and the China Coast Guard can be seen in the fact that a thank-you letter was sent to the crews of two Fujian-owned cutters for participating in an escort mission to the Senkakus in August 2016. 中国海警局来信感谢中国海监8003船、8027船 ["China Coast Guard Bureau Sends a Letter to Thank *CMS 8003* and *CMS 8027*"], 福建省海洋与渔业厅 [*Website of the Fujian Province Oceans and Fisheries Department*], August 24, 2016, www.fjof.gov.cn/xxgk/hydt/stdt/201608/t20160824_70778.htm.

93. Ryan D. Martinson, "From Words to Actions: The Creation of the China Coast Guard" (paper presented at the "China as a 'Maritime Power' Conference," hosted by the Center for Naval Analyses, July 28–29, 2015), pp. 41–43, available at www.cna.org/cna_files/pdf/Creation-China-Coast-Guard.pdf; 范凌志 [Fan Lingzhi], 中国海警讲述抢救菲渔民始末: 顶十四级台风救人获菲律宾同行感谢 ["China Coast Guard Recounts the Rescue of Filipino Fishermen: Conducting a Rescue in a Class 14 Typhoon and Receiving Thanks from Colleagues in the Philippine Coast Guard"], 环球时报 [*Global Times*], December 3, 2016, world.huanqiu.com/exclusive/2016-12/9766227.html; 吕宁 [Lv Ning], 把船当作家——记"中国海警2306"船船长林庆雄 ["Make the Ship a Home—a Profile of the Skipper of *CCG 2306* Lin Chuanxiong"], 中国海洋报 [*China Ocean News*], December 16, 2016, p. 3.

94. 王晶 [Wang Jing], 全面推进北海区海洋事业创新发展 ["Fully Promoting Innovative Development of Maritime Endeavors in the Northern Bureau"], 中国海洋报 [*China Ocean News*], February 4, 2016, p. 3.

95. Their ships have been painted with CCG colors and five-digit pennant numbers. Former CMS and FLE ships have four-digit pennant numbers.

96. In rare cases, China Maritime Police did operate in disputed areas to advance the broader rights-protection mission. In 2006, its ships were involved in a confrontation with Vietnamese paramilitary vessels near the Paracel Islands. See 邓新建 [Deng Xinjian], 海警战士何崇俊为民献真情 ["Coast Guard Warrior He Chongjun Shows True Sentiment to the People"], 法制日报 [*Legal Daily*], February 27, 2008, www.legaldaily.com.cn/misc/2008-02/27/content_806642.htm. Sometimes the service's antismuggling mission brought it into remote waters. For instance, in December 2009 a China Maritime Police cutter sailed to waters just west of the Bashi Channel to interdict a Hong Kong–registered fishing vessel purportedly intending to smuggle two tons of

cocaine into China. The vessel ultimately was boarded near the Pratas Islands. 惠珍珍 [Hui Zhenzhen] and 游春亮 [You Chunliang], "西沙常客"海警44101舰 ["*CCG 44101* Is 'Frequent Guest of the Paracels'"], 法制日报 [*Legal Daily*], June 20, 2016, www.legaldaily.com.cn/army/content/2016-06/20/content_6679781.htm?node=80561.

97. One authoritative source says that elements of the former China Maritime Police worked together with the PLA Navy to organize the defense of the rig. See 刘征鲁 [Liu Zhenglv], 这些年, 人民海军在前进! ["In Recent Years, the PLA Navy Has Been Advancing!"], 中国海洋报 [*China Ocean News*], July 29, 2016, p. 4, epaper.oceanol.com/shtml/zghyb/20160729/62001.shtml.

98. Ryan D. Martinson, "Deciphering China's Armed Intrusion near the Senkaku Islands," *The Diplomat,* January 11, 2016, thediplomat.com/2016/01/deciphering-chinas-armed-intrusion-near-the-senkaku/. For vessels owned by former China Maritime Police units sailing to Scarborough Shoal, see 董芳 [Dong Fang], 新快报记者揭开海警44101舰神秘面纱 ["Xinkuai News Reporter Lifts the Mysterious Veil of *CCG 44101*"], 新快报 [*Xinkuai News*], June 7, 2016, news.xkb.com.cn/guangdong/2016/0607/433552.html. See also Hui Zhenzhen and You Chunliang, "*CCG 44101* Is 'Frequent Guest of the Paracels.'" For former China Maritime Police units sailing to the Spratlys, see 南海研究论坛 [*South China Sea Research Forum*], June 5, 2016, www.nhjd.net/article-2949-1.html. This research forum shows a photo of *CCG 46305* on patrol in the Spratlys. The 2nd Detachment of the Hainan contingent of the China Coast Guard began conducting patrols to the Spratlys in 2015. See 宋体 [Song Ti], 海南海警二支队举办建队20周年庆祝活动 ["The Second Detachment of the Hainan Coast Guard Holds an Activity to Celebrate the 20th Anniversary of Its Founding"], 中新网海南 [*China Net Hainan*], November 22, 2016, www.hi.chinanews.com/hnnew/2016-11-22/428359.html. At least one ship from the 2nd Detachment of the Hainan contingent was operating in the Spratlys in January 2017. See 为伟大祖国守岁, 边防官兵倍儿自豪! ["For Staying Up All Nights for the Motherland, Border Defense Soldiers Feel Extremely Proud!"], 中国军网 [*China Military Online*], January 28, 2017, www.81.cn/jmywyl/2017-01/28/content_7470178.htm. According to a Xinhua article, "[I]n recent years, ships from the Second Detachment of the Hainan contingent of the China Coast Guard have sailed to the Spratlys on several occasions to conduct rights-protection law-enforcement operations." 郑玮娜 [Zheng Weina] and 朱卫军 [Zhu Weijun], 海南海警二支队春节期间巡航南海保平安 ["Second Detachment of Hainan Coast Guard Patrols the South China Sea and Keeps the Peace during the Spring Festival"], 新华社 [*Xinhua*], February 2, 2017, news.xinhuanet.com/politics/2017-02/02/c_1120400685.htm.

99. These forces also might be called "SWAT personnel." 冯志 [Feng Zhi], 当前海警巡航急需解决的问题及对策 ["Problem and Countermeasures for Problems Associated with Coast Guard Patrols"], 公安海警学院学报 [*Journal of China Maritime Police Academy*] 14, no. 4 (2015), p. 72.

100. Ryan D. Martinson, "The Militarization of China's Coast Guard," *The Diplomat,* November 21, 2014, thediplomat.com/2014/11/the-militarization-of-chinas-coast-guard/. On November 29, 2016, three hundred men and women selected from among recent graduates of Chinese universities completed four months of basic training in Guangzhou and received direct commissions as officers in the China Coast Guard. That their uniforms indicated they belonged to the PAP suggests that the China Coast Guard may in fact be evolving into a component of the PAP. This was the second class since this recruitment program began in 2014. See 廖键 [Liao Jian] and 姜宗平 [Jiang Zongping], 航拍军营"成人礼" 300多名海警战士转正啦 ["An Aerial Photograph of a 'Coming of Age Ceremony' in Which More Than 300 Coast Guard Warriors Receive Their Commissions"], 中国军网 [*China Military Online*], December 1, 2016, hi.people.com.cn/n2/2016/1201/c231187-29396236.html.

101. This created particular difficulties during the defense of the CNOOC 981 oil rig in 2014. 丁超平 [Ding Chaoping], 试论当前如何强化海警实战化训练 ["On How to Improve the China Coast Guard's Realistic Combat Training"], 公安海警学院学报 [*Journal of China Maritime Police Academy*] 13, no. 4 (December 2014), p. 12.

102. For more on these two agencies, see Martinson, "From Words to Actions," pp. 27–29.

103. 杨中旭 [Yang Zhongyu], 东海争议: 中日贴身出招 ["Dispute in the East China Sea: China and Japan Lock Up and Throw Down"], 中国新闻周刊 [*China Newsweek*], July 25, 2005, p. 14.

104. 李文华 [Li Wenhua], 俞磊 [Yu Lei], and 庞博 [Pang Bo], 海权在握, 海洋兴国—21世纪中国的交通海权建设 ["Grasping Sea Power and Using the Sea to Rejuvenate the Nation—Building 21st Century Chinese Transportation Sea Power"], 中国海事 [*China Maritime Safety*], no. 8 (2014), p. 14.

105. There is a broad consensus that ships displacing at least a thousand tons are best suited for "rights-protection" work. 李朗 [Li Lang] et al., 论建设我国统一的海上专属经济区执法船队

["On Building a Unified EEZ Law-Enforcement Fleet"], 海洋开发与管理 [*Ocean Development and Management*], no. 8 (August 2013), pp. 28–30.

106. The missions and equipment of the oceangoing elements of the China Coast Guard often are described in terms usually reserved for naval forces. For example, when a three-thousand-ton cutter was delivered to the China Coast Guard in October 2014, an authoritative news article reported that the new ship had "strong combat capabilities." 王晶 [Wang Jing], "中国海警1306"船入列北海总队并首航 ["*CCG 1306* Enters Service and Conducts First Patrol with North Sea Contingent"], 中国海洋报 [*China Ocean News*], October 17, 2014, p. 2.

107. 赵宁 [Zhao Ning], 解密"中国海监 8002"船—探访中国海监福建省总队 ["Demystifying *CMS 8002*—Visiting the Fujian Province CMS Contingent"], 中国海洋报 [*China Ocean News*], March 15, 2013, p. 3.

108. Scott Bentley suggests that *FLE 310* is equipped with jamming capabilities. See Scott Bentley, "Mapping the Nine-Dash Line: Recent Incidents Involving Indonesia in the South China Sea," *The Strategist,* October 29, 2013, www.aspistrategist.org.au/mapping-the-nine-dash-line-recent-incidents-involving-indonesia-in-the-south-china-sea/. According to an authoritative 2011 article, at least some CMS vessels are installed with "listening and jamming equipment" (侦听和干扰设备), used for rights-protection purposes. See 长足发展 亮点纷呈 成绩斐然 ——"十一五"期间中国海监事业发展回眸 ["Outstanding Development with Many Achievements—a Review of CMS Development during the 11th Five-Year Plan"], 中国海洋在线 [*China Ocean Online*], March 1, 2011, www.oceanol.com/zfjc/dwjianshe/11024.html. This article was published originally in the March 1, 2011, issue of *China Ocean News,* but in 2016 that whole issue was removed from the paper's website.

109. The first of the class *(CCG 2901)* joined the 4th Detachment of China Marine Surveillance in July 2016. At the time of this writing, it had not yet patrolled disputed waters. The other ship of the class *(CCG 3901)* patrolled the Paracels in May 2017. Franz-Stefan Gady, "China Coast Guard's New 'Monster' Ship Completes Maiden Patrol in South China Sea," *The Diplomat,* May 18, 2017, thediplomat.com/2017/05/china-coast-guards-new-monster-ship-completes-maiden-patrol-in-south-china-sea/; Ryan D. Martinson, "East Asian Security in the Age of the Chinese Mega-cutter," *Center for International Maritime Security,* July 3, 2015, cimsec.org/east-asian-security-age-chinese-mega-cutter/16974.

110. Ryan D. Martinson, "The Lives of a Chinese Gunboat," U.S. Naval Institute *Proceedings* 142/6/1,360 (June 2016), pp. 34–39.

111. The formal decision to build these ships likely was made before 2010. 王秋蓉 [Wang Qiurong], 全面启动省级海监巡航船舶建造计划 ["Comprehensively Launch the Shipbuilding Plan for Provincial-Level CMS Patrol Cutters"], 中国海洋报 [*China Ocean News*], May 25, 2010, p. 4.

112. Notably, eighty-three PLAN sailors were transferred with these ships. 孙鼎 [Sun Ding], 海监队员是怎样炼成的 ["How CMS Personnel Are Trained"], 中国海洋报 [*China Ocean News*], December 27, 2013, p. 3.

113. Andrew Tate, "China Converting Old Frigates into Coastguard Cutters," *Jane's Navy International,* July 28, 2015. These three ships have the hull numbers 31239, 31240, and 31241, indicating that they belong to the Shanghai contingent of the China Coast Guard, a former China Maritime Police unit.

114. The tremendous rate at which the Chinese constabulary fleet has grown since 2012 has created a problem: China lacks enough trained coastguardsmen to crew the new ships. As a stopgap measure, the service has allowed hiring of contractors to fill out the crews. Notwithstanding these efforts, the China Coast Guard may not be operating at full capacity. 汪晓依 [Wang Xiaoyi], 房建孟到中国海监第四支队调研 ["Fang Jianmeng Arrives at the 4th Detachment of the China Marine Surveillance to Conduct a Survey"], 国家海洋局 [*State Oceanic Administration*], January 14, 2016, www.soa.gov.cn/xw/hyyw_90/201601/t20160114_49719.html.

115. For more on the role of the law in China's maritime disputes, see Isaac Kardon, "China's Maritime Interests and the Law of the Sea: Domesticating Public International Law," in *China's Socialist Rule of Law Reforms under Xi Jinping,* ed. John Garrick and Yan Chang Bennett (New York: Routledge, 2016), pp. 179–96.

116. 罗书臻 [Luo Shuzhen], 最高法院发布审理我国管辖海域相关案件司法解释 ["The Supreme People's Court Issues a Judicial Interpretation of Cases Taking Place in China's Jurisdictional Waters"], 新华网 [*Xinhua Online*], news.xinhuanet.com/legal/2016-08/02/c_129197642.htm. This was a two-part interpretation. For the actual documents, see 最高人民法院关于审理发生在我国管辖海域相关案件若干问题的规定(一) [Provisions of the Supreme People's Court with Respect to Certain Questions on Trying Related Cases That Occur in China's Jurisdictional Waters (Part 1)], 最高人民法院 [*Supreme People's Court*], August 2, 2016, www.court.gov.cn/zixun-xiangqing-24261.html. See also 最高

人民法院关于审理发生在我国管辖海域相关案件若干问题的规定（二）[Provisions of the Supreme People's Court with Respect to Certain Questions on Trying Related Cases That Occur in China's Jurisdictional Waters (Part 2)], 最高人民法院 [*Supreme People's Court*], August 2, 2016, www.court.gov.cn/zixun-xiangqing-24271.html. The Supreme People's Court elaborated on the interpretation in a Q&A session published on the same day the documents were made public. The Chinese official who was interviewed explicitly stated that one goal was to push back against foreign fishing and surveying vessels operating "illegally" in Chinese jurisdictional waters. See 罗书臻 [Luo Shuzhen], 依法积极行使海上司法管辖权 统一涉海案件裁判尺度 ["Positively Enforce Maritime Judicial Jurisdictional Rights According to the Law and Unify the Judgment Standards for Maritime Cases"], 中国法院网 [*China Court*], August 2, 2016, www.chinacourt.org/article/detail/2016/08/id/2047234.shtml.

117. In November 2012, the Hainan People's Congress revised the 海南省沿海边防治安管理条例 [Hainan Province Regulations for the Management of Coastal Border Security and Public Order]. It went into effect on January 1, 2013. The full text is available at www.hq.xinhuanet.com/hngov/2013-01/04/c_114233756.htm. The revision purportedly was aimed at addressing increased smuggling, theft, and other illegal activities in Hainan's jurisdictional waters. A Hainan People's Congress spokesperson stated that it also was aimed at addressing problems with "foreign vessels and personnel illegally entering Hainan's jurisdictional waters . . . and even internal waters and harbors" to engage in illegal activity. 海南省人大发言人就修订《海南省沿海边防治安管理条例》答记者问 ["Hainan People's Congress Spokesperson Answers Questions about the Revised Version of the 'Hainan Province Regulations for the Management of Coastal Border Security and Public Order'"], 海南网 [*Hainan News*], December 30, 2012, www.hinews.cn/news/system/2012/12/31/015302773.shtml. A one-year retrospective on the revised law claimed that it had succeeded in "increasing the force of the province's crackdown on foreign vessels and personnel illegally entering Hainan's jurisdictional waters." See 朱晨鹏 [Zhu Chenpeng] and 王文涛 [Wang Wentao], 《海南省沿海边防治安管理条例》实施一年效果佳 ["Good Results in the Year since Implementation Began for the 'Hainan Province Regulations for the Management of Coastal Border Security and Public Order'"], 新华网 [*Xinhua Online*], January 2, 2014, www.hq.xinhuanet.com/legal/2014-01/02/c_118800743.htm. In November 2013, the Hainan People's Congress passed "measures" (办法) for the province to implement the PRC Fisheries Law in Hainan's jurisdictional waters (海南省实施《中华人民共和国渔业法》办法). This document is available at www.hainan.gov.cn/data/law/2013/12/1900/. These measures, which took effect on January 1, 2014, require that "foreigners or foreign fishing ships entering sea areas administered by Hainan and engaged in fishery production or fishery resource surveys should receive approval from relevant departments of the State Council." The translation comes from Taylor Fravel, "Hainan's New Fishing Rules: A Preliminary Analysis," *The Diplomat,* January 10, 2014, thediplomat.com/2014/01/hainans-new-fishing-rules-a-preliminaryanalysis/. See also Isaac Kardon, "Hainan Revises Fishing Regulations in South China Sea: New Language, Old Ambiguities," Jamestown Foundation *China Brief* 14, no. 2 (January 17, 2014), jamestown.org/program/hainan-revises-fishing-regulations-in-south-china-sea-new-language-old-ambiguities/.

118. Ryan D. Martinson, "Maritime Strategy with Chinese Characteristics?," *The Diplomat,* March 25, 2016, thediplomat.com/2016/03/maritime-strategy-with-chinese-characteristics/.

119. For more on these conflicts, see M. Taylor Fravel, *Strong Borders, Secure Nation: Cooperation and Conflict in China's Territorial Disputes* (Princeton, NJ: Princeton Univ. Press, 2008), pp. 272–96. For a recent treatment of the battle of the Paracels, see Toshi Yoshihara, "The 1974 Paracels Sea Battle: A Campaign Appraisal," *Naval War College Review* 69, no. 2 (Spring 2016), pp. 41–65.

120. The 2015 *Science of Military Strategy* published by China's National Defense University *(2015 SMS)* states the PLA Navy performs the following types of military operations other than war: (1) 海上反恐 (counterterrorism at sea), (2) 海上救援 (maritime rescue operations), (3) 维护国家海洋权益 (safeguarding maritime rights/interests), (4) 海上军事安全合作 (maritime military security cooperation), and (5) 维护海上战略通道安全等 (safeguarding security of strategic sea-lanes). 肖天亮 [Xiao Tianliang], ed., 战略学 [*Science of Military Strategy*] (Beijing: National Defense Univ. Press, 2015) [hereafter *2015 SMS*], pp. 343–44.

121. While sharing the same title, this volume is unrelated to the *2015 SMS*. 寿晓松 [Shou Xiaosong], ed., 战略学 [*Science of Military Strategy*] (Beijing: Military Science, 2013) [hereafter *2013 SMS*], p. 210.

122. *2013 SMS,* p. 163.

123. Ren Xiaofeng, *Handbook on the Law of Naval Operations,* p. 178. According to the *Handbook*

(p. 178), the PLA Navy should "warn" unauthorized foreign naval vessels operating in Chinese-claimed territorial sea. If the foreign vessel does not leave, the military "has the right to issue another warning, issue a severe warning, fire a warning shot, expel, and expel by use of force, among other measures."

124. Ibid., p. 185.

125. Ibid., p. 188.

126. Ibid., p. 189.

127. Ibid., p. 192.

128. 王文荣 [Wang Wenrong], ed., 战略学 [*Science of Military Strategy*] (Beijing: National Defense Univ. Press, 1999) [hereafter *1999 SMS*], pp. 146, 283. For a later discussion of the PLA Navy's deterrent role in maritime disputes, see *2013 SMS,* p. 146. For a full treatment of the coercive uses of the PLA Navy, see 张启良 [Zhang Qiliang], 海军外交论 [*On Naval Diplomacy*] (Beijing: Military Science, 2013). Zhang is not a naval officer. However, his PhD dissertation (which later became *On Naval Diplomacy*) won an award in 2008 and ultimately was published by the Academy of Military Science.

129. *1999 SMS,* pp. 284–85.

130. 曲令泉 [Qu Lingquan], 蓝色呼唤 [*The Call of the Blue*] (Beijing: Haichao, 2013), p. 191.

131. 项建勋 [Xiang Jianxun], 海上政治工作要做实 ["Political Work at Sea Must Be Real"], 人民海军 [*People's Navy*], April 28, 2014, p. 3.

132. 李景伟 [Li Jingwei], 在远海大洋砥砺战斗精神 ["Tempering Combat Spirit in the Far Seas"], 人民海军 [*People's Navy*], May 4, 2015, p. 3.

133. *2015 SMS,* p. 125. This aphorism commonly appears in discussions about the role of the navy in China's maritime dispute strategy. It appears in chapter 3 of *The Art of War.*

134. *2015 SMS,* p. 127. The *2015 SMS* contains innumerable references to Chinese concerns about the need to counter possible foreign intervention. The *2013 SMS* also makes frequent reference to the need to deter outside intervention in a regional conflict. Fravel and Twomey cite the *2013 SMS* in their controversial 2015 *Washington Quarterly* article in which they attempt to debunk the notion that China has a "counter-intervention" strategy, but only mention one of several instances in which discussion of countering foreign intervention occurs in the *2013 SMS*. They therefore dismiss it as insignificant. The concept of countering foreign intervention is discussed in the *2013 SMS* as follows: p. 99 (involving Taiwan); pp. 101, 113 (in a section on fighting against the "hegemon," China should achieve "initiative" [主动权], and "increase the risk and cost of an opponent implementing strategic deterrence and in particular armed intervention" [武力干预]); p. 209 (countering the "involvement" [介入] of a "powerful enemy" [强敌] is regarded as a "combat operation" [作战行动]); and p. 216 (in a regional war under informatized conditions, the PLA Navy needs to emphasize "fighting out" in a war in which "external forces" [外部势力] are trying to conduct "military intervention" [军事干预]). M. Taylor Fravel and Christopher P. Twomey, "Projecting Strategy: The Myth of Chinese Counter-intervention," *Washington Quarterly* 37, no. 4 (Winter 2015), pp. 171–87.

135. This point was made at the press conference for the release of China's 2015 national defense white paper. Sr. Col. Wang Jin was asked for the reasoning behind China's decision to shift its naval strategy to give greater focus on the so-called far seas (i.e., waters beyond the first island chain). In his response, Wang states that the advent of precision-guided weapons has expanded the battle space, implying that China now needs to be able to fight as far away from the Chinese heartland as possible. The only possible adversary in this scenario is the United States. See 国新办《中国的军事战略》白皮书新闻发布会(实录) ["A Transcript of the Press Conference for the Release of China's National Defense White Paper 'China's Military Strategy'"], 凤凰网资讯 [*Phoenix News*], May 26, 2015, news.ifeng.com/a/20150526/43839648_0.shtml.

136. For a useful discussion of developments with the PLAN surface fleet, see *NIDS China Security Report 2016: The Expanding Scope of PLA Activities and PLA Strategy* (Tokyo: National Institute for Defense Studies, 2016), pp. 12–15, available at www.nids.go.jp/publication/chinareport/pdf/china_report_EN_web_2016_A01.pdf.

137. For more on recent developments in China's surface fleet, see Peter A. Dutton and Ryan D. Martinson, eds., *China's Evolving Surface Fleet,* China Maritime Studies 14 (Newport, RI: Naval War College Press, 2017).

138. For information on new Chinese ships, see 中国海军近3年入列军舰29艘含3艘052D驱逐舰 ["In the Last Three Years the Navy Has Commissioned 29 Ships Including Three Type 052D Destroyers"], 中国广播网 [*China National Radio Online*], March 8, 2016, military.cnr.cn/wqzb/fwgc/20160308/t20160308_521558691.html. See also 陈国全 [Chen Guoquan] and 闫培 [Yan Pei], 2016海军入列舰艇大盘点, 总吨位15万吨! ["An Overview of PLA Navy Ships Commissioned in 2016, over 150,000 Tons Total!"], 中国军网 [*China Military Online*], January 9, 2017, www.81.cn/hj/2017-01/09/content_7439774.htm. The six ships that the

U.S. Navy commissioned in 2016 are as follows: USS *Detroit* (LCS 7), USS *Montgomery* (LCS 8), USNS *Brunswick* (T-EPF 6), USNS *Carson City* (T-EPF 7), USS *Zumwalt* (DDG 1000), and USS *John P. Murtha* (LPD 26). See the U.S. *Naval Vessel Register* at www.nvr.navy.mil/.

139. Among their improvements over the Type 052C, the Type 052D destroyers have longer-range surface-to-air missiles. Office of Naval Intelligence, *The PLA Navy: New Capabilities and Missions for the 21st Century* (Suitland, MD: 2015), p. 15, available at www.oni.navy.mil/Intelligence_Community/china.html. These figures come from the *Jane's Fighting Ships* equipment database.

140. In late 2016, the PLAN *Sovremenny*-class destroyers began receiving major refits. See 蓝盾 [Lan Dun], 重获新生的东海重剑——人民海军"现代"级驱逐舰改装猜想 ["Receiving a New Lease on Life—a Look at the Refitting of the 'Sovremenny'-Class Destroyers"], 中国海洋报 [*China Ocean News*], December 2, 2016, p. 4.

141. These figures come from the *Jane's Fighting Ships* equipment database.

142. 刘征鲁 [Liu Zhenglv], 继承荣光重铸辉煌—湘潭舰的前世今生 ["Inheriting Honor and Recasting Glory—the Past and Present Incarnations of the Vessel *Xiangtan*"], 中国海洋报 [*China Ocean News*], March 25, 2016, p. 4. These figures come from the *Jane's Fighting Ships* equipment database.

143. For a very useful discussion of China's amphibious force, see the Dennis Blasko chapter in Dutton and Martinson, *China's Evolving Surface Fleet,* pp. 1–16.

144. 计如林 [Ji Rulin], 何巍 [He Wei], and 杨欣儒 [Yang Xinru], 12名海娃叫美济 ["12 Children of Sailors Are Named 'Meiji'"], 人民海军 [*People's Navy*], May 31, 2013, p. 3.

145. In mid-2016, during a period of heightened tensions in the South China Sea, at least one Type 022 missile boat deployed to the Paracels. 震慑不安分的邻居 海军022导弹快艇镇守永兴岛 ["Intimidating Recalcitrant Neighbors: A Navy Type 022 Fast Attack Craft Guards Woody Island"], 凤凰网资讯 [*Phoenix News*], May 18, 2016, news.ifeng.com/a/20160518/48791046_0.shtml#p=1.

146. 攻坚, 从"脖子以上"开始——怎么看改革总部体制、大军区体制、大陆军体制 ["When Tackling the Problem, We Must Start from the Neck and Above—How to Look at Reform of the General Departments, Military Regions, and the Ground Forces"], 解放军报 [*PLA Daily*], October 4, 2016, p. 4.

147. Phillip C. Saunders and Joel Wuthnow, "China's Goldwater-Nichols? Assessing PLA Organizational Reforms," *Strategic Forum* (April 2016), inss.ndu.edu/Portals/68/Documents/stratforum/SF-294.pdf; Dennis J. Blasko, "The New PLA Joint Headquarters and Internal Assessments of PLA Capabilities," Jamestown Foundation *China Brief* 16, no. 10 (June 21, 2016), jamestown.org/single/?tx_ttnews%5Btt_news%5D=45511&no_cache=1. See also 冯春梅 [Feng Chunmei] and 倪光辉 [Ni Guanghui], 南部战区司令员: 维护南海权益是最重要使命 ["Commander of the Southern Theater Command: Safeguarding Rights and Interests in the South China Sea Is Our Most Important Mission"], 人民日报 [*People's Daily*], February 28, 2016, military.china.com.cn/2016-02/28/content_37890965.htm, and 高毅 [Gao Yi], 南部战区: 全力跑好"第一棒" ["Southern Theater Command: Vigorously Running the 'First Let'"], 解放军画报 [*PLA Pictorial*], no. 3a (2016), pp. 38–41. The latter article mentions the challenges that PLAN officers face, given the broadened scope of their work in the new joint headquarters in the Southern Theater Command.

148. "Pier for Warships Built on Chinese Isle West of Senkakus," *Japan Times,* August 19, 2016, www.japantimes.co.jp/news/2016/08/19/national/politics-diplomacy/pier-built-warships-chinese-military-site-close-senkakus/.

149. This information comes from an announcement posted on the website of the Wenzhou City Port and Shipping Authority (温州市港航管理局) in June 2015. It since has been removed. For English-language coverage of this plan, see "China Coastguard Plans Wenzhou Surveillance Base as Beijing Looks to Bolster Claims to Disputed Diaoyu Islands," *South China Morning Post,* June 14, 2015, www.scmp.com/news/china/diplomacy-defence/article/1821265/china-coastguard-plans-wenzhou-surveillance-base.

150. The Asia Maritime Transparency Initiative has tracked reclamation and construction at features in the Spratlys. For a description (with photos) of construction at the seven features that China occupies, see "Country: China," *Asia Maritime Transparency Initiative,* amti.csis.org/island-tracker/chinese-occupied-features/. China also has invested heavily in land reclamation and new facilities in the Paracels. Also see Victor Robert Lee, "Satellite Images: China Manufactures Land at New Sites in the Paracel Islands," *The Diplomat,* February 13, 2016, thediplomat.com/2016/02/satellite-images-china-manufactures-land-at-new-sites-in-the-paracel-islands/.

151. The Rights Protection Leading Small Group works through its office (办公室). The office contains representatives from the Ministry of

Land and Resources, Ministry of Foreign Affairs, Ministry of Public Security, Ministry of Agriculture, and the PLA. The Rights Protection Leading Small Group also solicits guidance from an experts group (专家组) comprising leading scholars and analysts of maritime affairs. Unfortunately, very little open-source information is available about this organization. 彭美 [Peng Mei], 师小涵 [Shi Xiaohan], and 邢丹 [Xing Dan], 中国海警局亮剑--中国海警局诞生终结"五龙治海" ["The China Coast Guard Flashes Its Sword—the Creation of the China Coast Guard Ends the Era of 'Five Dragons Managing the Sea'"], 人民文摘 [*People's Weekly*], no. 9 (2013), paper.people.com.cn/rmwz/html/2013-09/01/content_1307445.htm. See also Bonnie Glaser, "China's Maritime Rights Protection Leading Small Group—Shrouded in Secrecy," *Asia Maritime Transparency Initiative,* September 11, 2015, amti.csis.org/.

152. 孙安然 [Sun Anran], 中国海监训练基地落户海军蚌埠士官学校 ["CMS Training Base Set Up at the Navy's Bengbu NCO School"], 中国海洋报 [*China Ocean News*], November 22, 2011, p. 1.

153. 周和建 [Zhou Hejian] and 李国军 [Li Guojun], 东海总队组织船载直升机地勤操作培训 ["The East Sea Fleet Organizes Training on Landing on Ships"], 中国海洋报 [*China Ocean News*], April 26, 2011, p. 6.

154. For instance, Sr. Capt. Feng Liang of the PLAN Command College has done work on these issues. See Ryan D. Martinson, "Panning for Gold: Assessing Chinese Maritime Strategy from Primary Sources," *Naval War College Review* 69, no. 3 (Summer 2016), p. 33.

155. 张惠荣 [Zhang Huirong], 十年海监精气神 继往开来新篇章 ["Ten Years of CMS Spirit: Looking Back While Embarking on a New Chapter"], 中国海洋报 [*China Ocean News*], October 28, 2008, p. 2. At the time he wrote this article, Zhang was the director of the SOA's East Sea Branch. Zhang writes that the 2002 crisis led to the "creation of a coordination mechanism [协调机制] for Chinese diplomats, CMS, and the military." For a primary-source Chinese account of the CMS role in monitoring the Japanese salvage operation, see 刘振东 [Liu Zhendong], 一次难忘的东海海上较量: 东海不明国籍沉船事件专项维权执法侧记 ["An Unforgettable Maritime Contest in the East China Sea: A Partial Account of the Rights-Protection/Law-Enforcement Operation following an Incident Involving the Sinking of an Unidentified Foreign Vessel in the East China Sea"], 海洋开发与管理 [*Ocean Development and Management*], no. 10 (2008), pp. 47–49.

156. 张惠荣 [Zhang Huirong], 以十七大精神统领东海区海洋行政管理工作 ["Using the Spirit of the 17th Party Congress to Lead Maritime Administration of the East Sea Area"], 中国海洋报 [*China Ocean News*], December 11, 2007, p. 2. This article refers to the need to strengthen the mechanism as it existed between the CMS East Sea Contingent and the PLAN East Sea Fleet. See also 王林强 [Wang Linqiang], 守护好北海, 为子孙后代造福——专访国家海洋局北海分局局长洪福忠 ["Protecting the North Sea, Creating Happiness for Future Generations—an Interview with the Director of the North Sea Branch of SOA Hong Fuzhong"], 中国网 [*China Online*], June 12, 2012, fangtan.china.com.cn/zhuanti/sdxf/2012-06/12/content_25626475.htm.

157. See, for instance, 王秋蓉 [Wang Qiurong], 理顺体制机制 提升执法层次——中国海监总队印发《中国海监2010年工作要点》 ["Improve the System and Improve the Quality of Law Enforcement—China Marine Surveillance Issues Its 'CMS Highlights of 2010'"], 中国海洋报 [*China Ocean News*], March 23, 2010, p. 4. See also 维护国家海洋权益服务海洋经济发展——国家海洋局南海分局海洋事业发展巡礼 ["Safeguard Maritime Rights and Interests and Serve Marine Economic Development—a Summary of the Development of the Southern Branch of SOA"], 中国海洋报 [*China Ocean News*], March 9, 2012, p. 8.

158. In a January 2014 report, the then SOA director (and CCG political commissar), Liu Cigui, called for the "deepening of the maritime coordination mechanism used by the military and the China Coast Guard." Taken at face value, this would suggest that such a mechanism had been put into place already. However, given that the China Coast Guard had been set up just half a year earlier, Liu may have been referring to the longstanding CMS-PLAN mechanism. 推动海洋强国建设不断取得新成就——刘赐贵在全国海洋工作会议上所作工作报告摘编 ["Achieve Results in the Construction of China into a Maritime Power—Excerpts from the Report Given by Liu Cigui at the National Maritime Work Meeting"], 中国海洋报 [*China Ocean News*], January 17, 2014, p. 3. Prior to 2014, China Maritime Police forces seldom operated in disputed waters and therefore lacked mechanisms for coordinating with the PLA Navy. Now that former China Maritime Police forces are operating along the maritime frontier, such mechanisms must be established, but as of mid-2014 they had not been. See 梁卫华 [Liang Weihua] and 严春梅 [Yan Chunmei], 论海军海警联合行动的装备保障 ["On Equipment Support for Navy and Coast Guard Joint Operations"], 公安海警学院学报 [*Journal of China*

Maritime Police Academy] 13, no. 3 (September 2014), pp. 47–48. The authors, both affiliated with the PLA Navy, acknowledge the existence of such a mechanism between China Marine Surveillance and the PLA Navy, but point out that the China Maritime Police and the PLA Navy lack such a mechanism.

159. As of 2004, two CMS officers reported that "the two services have formed preliminary work mechanisms for intelligence sharing and coordination, and these are effective to a certain degree." 吴强 [Wu Qiang] and 赵胜汝 [Zhao Shengru], 海洋权益维护执法对策分析 ["An Analysis of Measures for Law Enforcement to Safeguard Maritime Rights and Interests"], 海洋开发与管理 [*Ocean Development and Management*], no. 6 (2004), p. 41.

160. In a late 2015 article, a professor from the PLAN University of Engineering lamented that China had "not even come close to a situation where information was adequately shared" among the coast guard, navy, and other government entities involved in the handling of maritime crises. 陈仕平 [Chen Shiping] and 孙君 [Sun Jun], 简论新形势下优化多元主体应对海上危机机制 ["A Brief Discussion of Ways to Enhance the Mechanisms for Multiple Entities Handling Maritime Crisis in the New Situation"], 海军工程大学学报 [*Journal of the Naval University of Engineering*] 12, no. 4 (December 2015), p. 34.

161. 刘斌 [Liu Bin], 张璐 [Zhang Lu], and 房硕 [Fang Shuo], 中国在南海的真实存在 ["China's Real Presence in the South China Sea"], 南方周末 [*Southern Weekend*], July 22, 2011, www.infzm.com/content/61522.

162. A 2015 Office of Naval Intelligence report indicates that most coast guard vessels use commercial-grade hardware. Office of Naval Intelligence, *The PLA Navy,* p. 46. Authoritative Chinese sources call for the two services to integrate their C4ISR systems, suggesting that such integration does not yet exist. Writing in late 2014, a professor at the China Maritime Police Academy states that command, control, communications, and intelligence (C3I) systems installed on CCG vessels must be "interconnected" (互联) with PLAN C3I systems. 赵伟东 [Zhao Weidong], 中国海警力量体系建设——基于新海防安全观的思考 ["Constructing a System for China Coast Guard Forces—Thinking Based on the New Concept of Maritime Defense Security"], 公安海警学院学报 [*Journal of China Maritime Police Academy*] 13, no. 4 (December 2014), p. 54. Li Peizhi, a professor at the PAP Academy, writes that the China Coast Guard should "attach importance to establishing C4ISR automated command systems that are compatible with those of the navy." Li Peizhi, "Ideas on Reform of the China Coast Guard," p. 53. Technical incompatibility between command systems is also lamented by Sr. Col. Wang Deli in an early 2016 article in *National Defense*. Wang writes, "The civilian and military forces taking part in joint control operations have different methods of command and each method has a different level of technological sophistication. Standards of construction are different, compatibility [兼容性] and interoperability [互通性] are fairly poor, and it is difficult to achieve timely sharing and rapid processing of command information." 王德礼 [Wang Deli], 海防管控联合行动指挥体制构建问题探悉 ["An Examination of Questions Associated with Constructing a Command System for Joint Maritime Defense Control Operations"], 国防 [*National Defense*], no. 1 (2016), p. 72. Fisheries Law Enforcement, for instance, used the "FLE Management Command System" (中国渔政管理指挥系统), which was launched in November 2007. As of early 2017, this web-based system had not been supplanted by a CCG system. For background on the creation of this system, see 运用现代信息技术全面提升渔政管理能力——就中国渔政管理指挥系统功能及应用前景访农业部渔业局局长、中国渔政指挥中心主任李健华 ["Use Modern Information Technology to Fully Raise Fisheries Law Enforcement Management Capabilities—an Interview with the Director of the Ministry of Agriculture Fisheries Department / Director of the Fisheries Law Enforcement Command Li Jianhua about the Function and Prospects for Use of the Fisheries Law Enforcement Management Command System"], 中国水产 [*China Fisheries*], no. 12 (2007), pp. 6–7. The Thirteenth Five-Year Plan for Development of Informatization of Agriculture and Rural Areas records the establishment of this system as an achievement of the period of the Twelfth Five-Year Plan (2011–15), which indicates it took several years before the system was fully operational. 《"十三五"全国农业农村信息化发展规划》 ["Thirteenth Five-Year Plan for Development of Informatization of Agriculture and Rural Areas"], 中华人民共和国农业部 [*PRC Ministry of Agriculture*], August 29, 2016, www.moa.gov.cn/govpublic/SCYJJXXS/201609/t20160901_5260726.htm.

163. Joshua Hickey, interviews by author, various times.

164. 虞起正 [Yu Qizheng] and 姜峰 [Jiang Feng], 中国海军东海舰队举行"海神一2014" 海上作战支援实兵演练 ["The PLA Navy East Sea Fleet Holds 'Haishen-2014,' a Maritime Operational Support Exercise"], 新华网 [*Xinhua Online*], September 14, 2014, news.xinhuanet.com/mil/2014-09/14/c_1112473605.htm.

165. 中国在南海举行大型维权演习: 三军出动轰6临空支援 ["China Holds a Large-Scale Rights-Protection Exercise in the South China Sea: H-6 Bombers Provide Support"], 新浪 [*Sina*], August 31, 2016, mil.news.sina.com.cn/china/2016-08-31/doc-ifxvixeq0804933.shtml. This article was released originally by a PLAN social media account.

166. 赵长宏 [Zhao Changhong], 巡海护礁写忠诚 ["Being Loyal While Patrolling the Ocean and Safeguarding Reefs"], 人民海军 [*People's Navy*], June 13, 2014, p. 3.

167. In this monograph, *dispute strategy* refers to China's overall national approach to handling its maritime disputes. Echelon defense is one component of dispute strategy.

168. 全面建设小康社会, 开创中国特色社会主义事业新局面——在中国共产党第十六次全国代表大会上的报告 ["Comprehensively Build a Moderately Well-Off Society, Inaugurate a New Situation in Which to Pursue Socialism with Chinese Characteristics—Report from the 16th Congress of the Chinese Communist Party"], November 17, 2002, *Xinhua,* news.xinhuanet.com/newscenter/2002-11/17/content_632239.htm.

169. *Stability maintenance* (i.e., *weiwen*) *diplomacy* is defined as "a foreign policy that emphasizes the big picture, seeks common ground while maintaining differences, prioritizing stability, minimizing disputes, using economic relations to advance political relations, giving more than taking, and exercising a high degree of restraint." The purpose of *weiwen* diplomacy is to "seize and fully exploit the 20-year period of strategic opportunity, to create a comparatively advantageous peripheral environment for China's peaceful rise." 王生 [Wang Sheng] and 罗肖 [Luo Xiao], 国际体系转型与中国周边外交之变: 从维稳到维权 ["The Transition in the International System and the Change in China's Diplomacy toward Its Neighbors: From Maintaining Stability to Safeguarding Rights"], 现代国际关系 [*Contemporary International Relations*], no. 1 (2013), p. 9. Chinese concern for stability has roots in the 1980s, when Chinese leaders adopted the policy of "shelving disputes and engaging in joint development" (搁置争议, 共同开发). For a recent discussion of this policy, including its lack of tangible outcomes, see 温勇 [Wen Yong], 新形势下维护海洋权益解决海洋争议的思考—对邓小平 "主权属我, 搁置争议, 共同开发" 思想的再探讨 ["Considerations on Safeguarding Maritime Rights and Interests and Resolving Maritime Disputes in the New Situation—a Reconsideration of Deng Xiaoping's Ideas on 'Sovereignty Belongs to China, Shelve the Disputes, and Engage in Joint Development'"], 中国军事科学 [*China Military Science*], no. 2 (2015), pp. 67–74.

170. In the words of a professor at the China Maritime Police Academy, to rely too heavily on the PLA Navy to regulate peacetime activities in disputed waters would "easily give rise to the vigilance [警觉] of other states." 张辉 [Zhang Hui], 海上安全形势与中国海上安全 ["The Maritime Security Situation and China's Maritime Security"], 国防 [*National Defense*], no. 1 (2011), p. 16.

171. 必须加强维护海洋权益提高保护海上运输的能力 ["We Must Strengthen Efforts to Safeguard Maritime Rights and Interests and Improve Our Ability to Protect Marine Shipping"], 中国海洋报 [*China Ocean News*], March 9, 2010, p. 3.

172. Li Peizhi, "Ideas on Reform of the China Coast Guard," p. 53.

173. 徐焰 [Xu Yan], 中菲南海争执几十年 ["On the Past Several Decades of China-Philippine Contention in the South China Sea"], 学习时报 [*Study Times*], May 24, 2012, theory.people.com.cn/GB/49157/17979636.html. The author, Xu Yan, is a professor in the Strategic Studies Department of China's National Defense University. He writes of China's preference for placing coast guard vessels on the front line: "In character, it is not a military operation. It is maritime law enforcement. In the context of doing one's utmost not to allow the situation to escalate into a conflict, this approach can compel the opponent to stop an action. From the perspective of international law, it will make it hard for outside states thinking about intervening to find a pretext to do so."

174. 王琦 [Wang Qi] et al., 海洋行政管理学 [*Maritime Administrative Management*] (Beijing: People's, 2013), p. 32. Preference for maritime law enforcement fits with China's general approach for handling international disputes. Doing so, writes PLAN senior captain Zhang Junshe, allows China to "show its indisputable jurisdictional rights in claimed waters, while at the same time handling any conflicts with justification [有理], in a manner to China's advantage [有利], and with restraint [有节]." This expression "with justification, in a manner to China's advantage, and with restraint" (有理, 有利, 有节) frequently appears in discussions pertaining to China's dispute policy. It comes from a March 1940 Mao Zedong memo entitled "On the Question of Strategy with Respect to a United Front in the War against Japan" (《目前抗日统一战线中的策略问题》). For more on this term, see Alastair Iain Johnston, "The Evolution of Interstate Security Crisis-Management Theory and Practice in China," *Naval War College Review* 69, no. 1 (Winter

2016), p. 35. The PLA Navy is also guided by the "justification, advantage, restraint" principle. This commonly is used to describe the approach of PLAN surface vessels when conducting combat-readiness patrols in disputed waters. 侯瑞 [Hou Rui] and 王志鹏 [Wang Zhipeng], 闻令动若风发--感受东海舰队某驱逐舰支队战斗作风 ["In Fine Fettle—Experiencing the Combat Spirit of an East Sea Fleet Destroyer Unit"], 人民海军 [*People's Navy*], December 1, 2014, p. 1; Li Jingwei, "Tempering Combat Spirit in the Far Seas," p. 3.

175. Wu Hanyue, *The History of CCP Maritime Defense Thought,* p. 142.

176. There is evidence that China has intentionally provoked foreign leaders into making decisions that invite Chinese aggression. See Ryan Martinson and Katsuya Yamamoto, "Three PLAN Officers May Have Just Revealed What China Wants in the South China Sea," *National Interest,* July 9, 2017, nationalinterest.org/feature/three-plan-officers-may-have-just-revealed-what-china-wants-21458.

177. You Ji, *Deciphering Beijing's Maritime Security Policy and Strategy in Managing Sovereignty Disputes in the China Seas,* Policy Brief (Singapore: S. Rajaratnam School of International Studies, October 1, 2013), available at www.rsis.edu.sg/. For an account of Japan's decision to purchase the islands, see Sheila A. Smith, *Intimate Rivals: Japanese Domestic Politics and a Rising China* (New York: Columbia Univ. Press, 2015), pp. 224–28.

178. 张海文: 当前海洋局势及我国海洋战略的思考 ["Zhang Haiwen: The Current Maritime Situation and Thoughts on China's Maritime Strategy"], 中国出版网 [*China Publishing*], www.chuban.cc/tpxw/201409/t20140930_159639.html.

179. China's incrementalist approach is recognized widely by American scholars and analysts. See, for example, Elbridge Colby et al., "Tailored Coercion: Competition and Risk in Maritime Asia," *Center for a New American Security,* March 21, 2014, www.cnas.org/publications/reports/tailored-coercion-competition-and-risk-in-maritime-asia. See also Robert Haddick, "Salami Slicing in the South China Sea," *Foreign Policy,* August 3, 2012, foreignpolicy.com/2012/08/03/salami-slicing-in-the-south-china-sea/.

180. For more on the Shi and Li comments, see Ryan D. Martinson, "China's Great Balancing Act Unfolds: Enforcing Maritime Rights vs. Stability," *National Interest,* September 11, 2015, nationalinterest.org/feature/chinas-great-balancing-act-unfolds-enforcing-maritime-rights-13821. A 2014 report published by the National Institute for South China Sea Studies declared that in 2014 "China built fortifications after each new advance, searching for a balance point between rights protection and safeguarding regional peace, stability, and development." 王子谦 [Wang Ziqian], 《2014年南海地区形势评估报告》出版发行 ["*2014 Report on the Situation in the South China Sea* Is Published"], 中国新闻网 [*China News*], August 27, 2015, www.chinanews.com/gn/2015/08-27/7493341.shtml. For an authoritative Chinese source outlining the principle of gradual or "step-by-step resolution" (逐步解决) of China's maritime disputes instead of "achieving objectives in one big move" (一蹴而就), see Wu Hanyue, *The History of CCP Maritime Defense Thought,* pp. 143–44.

181. Linda Jakobson made the most empirically satisfying effort to bear out this thesis in "China's Unpredictable Maritime Security Actors." M. Taylor Fravel also has suggested that Chinese behavior at sea may be "a product of either bureaucratic autonomy or a competition among different departments for greater resources and authority." M. Taylor Fravel, "Prepared Statement for Hearing on 'Investigating the China Threat, Part One: Military and Economic Aggression," *House Committee on Foreign Affairs,* March 28, 2012, archives.republicans.foreignaffairs.house.gov/112/HHRG-112-FA00-WState-FravelT-20120328.pdf.

182. Zheng Wang, *Never Forget National Humiliation: Historical Memory in Chinese Politics and Foreign Relations* (New York: Columbia Univ. Press, 2012), pp. 199–201.

183. Andrew Chubb closely examined five major cases of Chinese maritime assertiveness and found little evidence of popular nationalism as a driver of policy decisions. Andrew Chubb, "Nationalism as a Driver of Chinese Maritime Behavior" (paper delivered at the China Maritime Studies Institute annual conference, Newport, RI, May 2–3, 2017).

184. The coast guard is often identified as the most important instrument for safeguarding Chinese maritime rights and interests in peacetime. See, for instance, Duan Zhaoxian, "On Strategic Objectives for Building China into a Maritime Power," p. 24. In a July 2011 speech commemorating the five-year anniversary of "regular rights-protection patrols" and the commissioning of *CMS 50,* SOA director Liu Cigui referred to China Marine Surveillance as "the primary force for safeguarding maritime rights and interests in peacetime." 中国海监定期维权巡航执法五周年总结表彰大会暨"中国海监50"船入列仪式举行 ["An Awards Ceremony for the Fifth Anniversary of CMS Regular Rights-Protection Patrols Was Held Together with a Ceremony for

the Commissioning of *CMS 50*"], 海洋开发与管理 [*Ocean Development and Management*], no. 8 (2011), p. 3. For further discussion of the advantages of using maritime law-enforcement forces as instruments in dispute policy, see 张辉 [Zhang Hui], 论加强中国海洋执法力度的途径 ["On Approaches to Strengthening China's Maritime Law Enforcement"], 社会纵横 [*Social Sciences Review*], no. 1 (2014), p. 77. As one CMS officer noted, "To avoid escalation, frontline law enforcement is usually carried out by maritime law-enforcement ships and aircraft." Wu Qiang and Zhao Shengru, "An Analysis of Measures for Law Enforcement to Safeguard Maritime Rights and Interests," p. 41. In the words of one professor at the People's Armed Police Academy, "Due to the sensitivity of its status, it is inconvenient for the navy to handle incidents involving maritime disputes in peacetime. By not using the navy, China can avoid an inadvertent armed clash [擦枪走火] or escalation." Li Peizhi, "Ideas on Reform of the China Coast Guard," p. 53.

185. The Chinese surface fleet is not the only tool on which China relies to advance strategic objectives in its maritime disputes. Indeed, China can leverage (and has leveraged) many different instruments of state power to persuade other states to accept—or acquiesce to—China's claims. These include economic and diplomatic levers. For example, China has pressured other disputants by halting the export of Chinese commodities (such as rare earths to Japan) and impeding the import of foreign products, such as bananas from the Philippines. Moreover, the PRC has other military tools that might be used to dissuade foreign states from acting in ways that harm Chinese interests. These include other components of the PLA Navy, such as submarines and aircraft; the PLA Air Force; and the PLA Rocket Force (formerly called the Second Artillery). But despite their important roles on the modern battlefield, none of these other tools can match the political and military value of the surface vessel in the type of peacetime strategy China is pursuing. Aircraft can fly to trouble spots, but must soon return to base. To signal intentions, shore-based missiles can be moved to the scene of a controversy, or they can be fired as part of a test or exercise. However, short of using force, most of these instruments have limited ability to impact human activity at sea. The stealth of submarines makes them an excellent instrument of warfare, but this same attribute limits their utility as tools of diplomacy. Surface vessels, by contrast, combine mobility, visibility, and endurance. As a result of these qualities, they provide leaders a range of options to communicate intentions. They also present diverse options for following through with threats without using armed force, including nonlethal means such as bumping and use of water cannon. This makes them the most effective tool to communicate threats to foreign mariners, and thereby directly influence events at sea. Chinese expansion in maritime East Asia rests largely on the movements of its fleets. Other components of maritime power can play and have played a role in Chinese strategy. These include the energy and fishing industries. By empowering Chinese firms to operate in disputed areas, Chinese leaders can put pressure on other disputants and help justify the presence of Chinese cutters and warships to protect them. As will be discussed in part 4, encouraging Chinese economic activities in disputed waters is a key prong of China's dispute strategy, and one that relies heavily on the support of China's naval and coast guard forces. China's "maritime militia" (海上民兵) is another instrument used to assert Chinese claims, but it does not fall neatly into the categories above. It is a component of China's "armed forces," yet those elements active in disputed waters often are disguised as civilian mariners, especially fishermen. Indeed, any given voyage may involve both militia and private (i.e., economic) activities. The militia sometimes works closely with Chinese naval and coast guard forces operating on the front line. In sum, surface vessels are excellent platforms with which to signal Chinese intentions to other states. If signaling fails, they are capable of actually imposing China's will on foreign mariners without using armed force. Both of these advantages are well recognized by Chinese strategists and the sailors who actually exploit them. For more on China's geoeconomic tools, see Karen Lema, Manuel Mogato, and Chris Buckley, "Philippines Seeks New Markets amid Sea Dispute with China," *Reuters,* May 17, 2012, www.reuters.com/article/uk-philippines-china-idUSLNE84G02520120517. See also Smith, *Intimate Rivals,* pp. 192–93. For an alternative view on China's rare-earth embargo, see Alastair Iain Johnston, "How New and Assertive Is China's New Assertiveness?," *International Security* 37, no. 4 (Spring 2013), pp. 23–28. On China's use of "geoeconomic" tools, see Robert D. Blackwill and Jennifer M. Harris, *War by Other Means: Geoeconomics and Statecraft* (Cambridge, MA: Belknap of Harvard Univ. Press, 2016), pp. 93–128. The PLA Air Force has played a growing role in China's maritime disputes. For instance, in July 2016 the PLA Air Force sent bombers, fighters, and other aircraft to the vicinity of Scarborough Shoal. For more on this, see Nathan Beauchamp-Mustafaga et al., "China Signals Resolve with Bomber Flights over the South China Sea," *War on the Rocks,*

August 2, 2016, warontherocks.com/2016/08/china-signals-resolve-with-bomber-flights-over-the-south-china-sea/. For more on the maritime militia's supporting role in disputed areas, see 陈典宏 [Chen Dianhong], 联训联演建强海上民兵 ["Joint Training and Joint Exercises to Build the Maritime Militia"], 中国国防报 [*China National Defense Newspaper*], July 16, 2015, www.81.cn/zjsymfc/2015-07/15/content_6587070.htm. For a discussion of the relationships among the militia, navy, and coast guard in the South China Sea, see 赵叶苹 [Zhao Yeping] and 陈爱娣 [Chen Aidi], 南海执法遭遇嚣张外籍船 ["South China Sea Law Enforcement Encounters Arrogant Foreign Fishing Vessels"], 国际先驱导报 [*International Herald Leader*], May 28, 2015, news.xinhuanet.com/herald/2015-05/28/c_134278421.htm. For more on the maritime militia, see the excellent work of Conor Kennedy and Andrew Erickson, especially their multipart series on militia units based in Hainan published by the Center for International Maritime Security. For more on the comparative advantages of surface vessels, see Wang Shiqiang and Gao Xinsheng, *Comparative Research on Ocean Defense Development in China and Abroad,* p. 429. See also Colin Gray and Roger Barnett, *Seapower and Strategy* (Annapolis, MD: Naval Institute Press, 1989), pp. 9–13. Understanding of the particular strategic value of surface vessels is also evident at the fleet level. While patrolling the East China Sea in December 2012, the crew of the Type 054a frigate *Wenzhou* convened a meeting to discuss the merits of the surface vessel in sovereignty operations. One conclusion was that "the surface vessel has the characteristics of visibility [可视性] and range [远洋性], making it an important platform for defending maritime rights and interests in peacetime." 王志鹏 [Wang Zhipeng], 海上维权血性水兵镇海疆 ["Brave Sailors on Maritime Rights-Protection Patrol Guard the Maritime Frontier"], 人民海军 [*People's Navy*], January 11, 2013, p. 2.

186. There may be a view among some strategists in the PLA Navy that the service should play a more active role on the front line. For instance, writing in mid-2016, the former director of the PLAN Research Institute and a current member of the PLA Strategic Planning Consultative Committee, Wang Xiaoxuan, recommended that China "raise the law-enforcement status of Chinese naval forces and transition from the present role of being a support and cover force to a frontline law-enforcement force." 王校轩 [Wang Xiaoxuan], 关于中国南海安全的几点思考 ["A Few Thoughts on Security in the South China Sea"], 国际观察 [*International Review*], no. 4 (2016), p. 28.

187. As PLA scholar Zhang Qiliang writes, the mere presence of PLAN forces in Chinese-claimed waters "is itself a powerful carrier of deterrence information." Having surface vessels conduct sovereignty patrols serves several functions. In the East China Sea, such operations remind other states not to "underestimate" China's ability and will to protect its interests and deters external powers from "getting involved" (介入) in the disputes. Naval patrols in the South China Sea remind other states that China is the most important party (主体) in the resolution of maritime disputes and that they should not feel "at ease" (心安理得) about violating Chinese claims, and warns them that they should not "strive for further gains" (得寸进尺) or "stir up trouble" (挑起事端). Zhang Qiliang, *On Naval Diplomacy,* pp. 267–68.

188. Edward Luttwak makes this important distinction between latent and active threats (or, in his words, "suasion"). Luttwak, *The Political Uses of Sea Power,* pp. 11–38.

189. 李唐 [Li Tang], 海军常态化巡逻覆盖万里海疆 ["The Navy's Normalized Patrols Cover the Ten-Thousand-Mile Maritime Border"], 人民海军 [*People's Navy*], June 23, 2014, p. 1.

190. 席志刚 [Xi Zhigang], 大陆海监打造准海岸警卫队 ["Mainland China's CMS Is Becoming a 'Quasi–Coast Guard'"], 凤凰周刊 [*Phoenix Weekly*], no. 20 (July 13, 2012), blog.sina.com.cn/s/blog_5db34b3b0102w1sl.html.

191. For an authoritative description of the "combat readiness patrol," see 海军政治部 [PLA Navy Political Department], 中国海军——维护国家安全和发展利益的重要战略支撑 ["The PLA Navy—an Important Strategic Support for Safeguarding National Security and Development Interests"], 中国军网 [*China Military Online*], April 23, 2015, www.81.cn/jmywyl/2015-04/23/content_6455536_4.htm. This routine presence in disputed waters is sometimes punctuated by military exercises. For instance, in May 2013 the PLAN frigate *Jiangmen* conducted a live-fire exercise in waters adjacent to the Spratlys. "Jiangmen Missile Frigate in Live-Ammunition Fire Training," *People's Daily Online,* May 16, 2013, en.people.cn/90786/8245659.html.

192. For an authoritative example of this term's use in Chinese sources, see 熊争艳 [Xiong Zhengyan], 孙建国副总参谋长答《瞭望东方周刊》记者问 ["Deputy Chief of the General Staff Sun Jianguo Responds to Questions from *Oriental Outlook*"], 瞭望东方周刊 [*Oriental Outlook*], March 3, 2015, www.81.cn/jwgz/2015-03/03/content_6376746_5.htm.

193. 刘章仁 [Liu Zhangren], 论海警海军协同配合提高海洋管控能力 ["On Coordination and

Cooperation between the Coast Guard and Navy in Order to Increase China's Ability to Control the Ocean"], 公安海警学院学报 [*Journal of China Maritime Police Academy*] 13, no. 3 (September 2014), p. 53. This description appears in a section describing common approaches for coordinating coast guard and naval activities in peacetime operations. The author's description matches observations made by the U.S. Navy. As the Office of Naval Intelligence noted in a 2015 report, the Chinese navy "sometimes deploys surface combatants to waters adjacent to rights protection cutters, in apparent coordination with its unarmed sister service." Office of Naval Intelligence, *The PLA Navy,* p. 45.

194. 甘俊 [Gan Jun], 南海舰队远海训练编队返港, 海军副政委王森泰到码头迎接并讲话 ["A Far Seas Training Formation from the South Sea Fleet Returns to Port, Deputy Political Commissar of the Navy Wang Sentai Meets Them Pier Side and Gives a Speech"], 人民海军 [*People's Navy*], February 12, 2014, p. 1. The ship formation sailed to James Shoal, where leaders held a sovereignty ceremony. 蒋涛 [Jiang Tao] and 高毅 [Gao Yi], 中国海军南海舰队远海训练编队巡航曾母暗沙 ["South Sea Fleet Far Seas Training Formation Patrols James Shoal"], 中国新闻网 [*China News*], January 26, 2014, www.chinanews.com/mil/2014/01-26/5784019.shtml. A similar mission took place in March–April 2013. It involved four surface combatants: the LPD *Jinggangshan,* the destroyer *Lanzhou,* and the frigates *Yulin* and *Hengshui*. *Jinggangshan* embarked an air-cushion landing craft and a company of PLAN marines. The formation, which was commanded by South Sea Fleet commander Vice Adm. Jiang Weilie, sailed through the South China Sea and then through the first island chain into the western Pacific, completing a large loop. The mission lasted sixteen days. 杨琼 [Yang Qiong], 中国海军展开战备巡逻远海训练, 维护海权能力将提升 ["The Chinese Navy Conducts Combat Readiness Patrols and Far Seas Training, Ability to Safeguard Maritime Rights Will Improve"], 国际在 [*China Radio International*], March 21, 2013, gb.cri.cn/27824/2013/03/21/6611s4060404.htm; 高毅 [Gao Yi] and 甘俊 [Gan Jun], 远海训练成为战斗力生成助推器 ["Far Seas Training Has Become a Boost for Combat Power Generation"], 人民海军 [*People's Navy*], April 2013, p. 1. A similar mission took place in May 2016. It involved six vessels in total, all from the South Sea Fleet: three destroyers *(Hefei, Lanzhou,* and *Guangzhou),* two frigates *(Sanya* and *Yulin),* and a comprehensive supply ship *(Honghu)*. The formation sailed through the South China Sea, Indian Ocean, and western Pacific before returning home. These missions serve political functions, but another key focus is to improve the PLA Navy's ability to fight in distant waters. 黎友陶 [Li Youtao] and 吴登峰 [Wu Dengfeng], 南海舰队战备巡逻远海实兵对抗训练编队起航 ["South Sea Fleet Combat Readiness Patrol and Far Seas Confrontation Training Begins"], 新华社 [*Xinhua*], May 4, 2016, news.xinhuanet.com/politics/2016-05/04/c_1118803250.htm.

195. 方立华 [Fang Lihua] and 琚振华 [Ju Zhenhua], 海上维权联合出击 ["A Joint Attack for the Purpose of Maritime Rights Protection"], 人民海军 [*People's Navy*], October 22, 2012, p. 1. See also *ODR 2013,* p. 270.

196. 方立华 [Fang Lihua] et al., 铸就海上维权盾牌—东海协作2012 军地海上联合维权演习掠影 ["Forging a Maritime Rights-Protection Shield—a Glimpse at 'East China Sea Cooperation 2012,' a Joint Civil-Military Rights-Protection Exercise"], 人民海军 [*People's Navy*], October 23, 2012, p. 1. The deputy commander of the exercise was the head of the East China Sea contingent of China Marine Surveillance, Liu Zhendong. In an interview, Liu stated that "PLA Navy support is vital to [离不开] China Marine Surveillance rights protection patrols." The exercise commander was the deputy chief of staff of the PLAN East Sea Fleet, Chen Hao. The second deputy commander of the exercise was an FLE officer named Zhou Tong. 孙利 [Sun Li] and 方立华 [Fang Lihua], 我国成功举行"东海协作—2012"军地海上联合维权演习 ["China Successfully Holds East China Sea Cooperation–2012 Civil-Military Joint Rights-Protection Exercise"], 中广网 [*China National Radio Online*], October 19, 2012, mil.cnr.cn/jstp/yczp/201210/t20121019_511168583.html.

197. For example, on June 22 an amphibious assault unit conducted a live fire exercise while under simulated attack. 黎友陶 [Li Youtao], 顾亚根 [Gu Yagen], and 李伟 [Li Wei], 南海舰队某登陆舰支队组织实战条件下实弹射击演练 ["A South Sea Fleet Amphibious Unit Organizes a Live-Fire Exercise under Realistic Conditions"], 中国新闻网 [*China News*], June 23, 2016, www.chinanews.com/mil/2016/06-23/7915174.shtml.

198. 黎友陶 [Li Youtao] and 陈国全 [Chen Guoquan], 海军三大舰队在南海举行实兵对抗演习 ["The Navy's Three Fleets Conduct a Confrontation Exercise Involving Real Forces in the South China Sea"], 解放军报 [*PLA Daily*], July 9, 2016, p. 1. See also 陈国全 [Chen Guoquan] and 肖永 [Xiao Yong], 南海点兵, 三大舰队背靠背立体攻防 ["Forces in the South China Sea, Three Fleets Back to Back Three-Dimensional Attack and Defense"], 解放军报 [*PLA Daily*], July 13, 2016, p. 1, and 郭媛丹 [Guo Yuandan], 专家解析我南海军演:4上将坐镇3大舰队出动战役级规模! ["Experts Analyze Exercises in

the South China Sea: 4 Flag Officers Involved, 3 Fleets Combine for an Exercise of Campaign Scale!"], 环球时报 [*Global Times*], July 9, 2016, w.huanqiu.com/r/MV8wXzkxNDgzMzFfMTM4XzE0NjgwNDQyNDA=. Another article published in an authoritative newspaper run by the State Oceanic Administration claimed that the purpose of the exercise was to send a signal to the United States, specifically, "to convey the powerful will of the Chinese people and the Chinese navy to resolutely safeguard state sovereignty." Liu Zhenglv, "In Recent Years, the PLA Navy Has Been Advancing!" At the time, the United States had augmented its naval presence in the region, presumably to signal America's resolve not to tolerate PRC aggression in the period prior to and following the tribunal decision. See, for instance, "Two Carrier Strike Groups Double Down in Western Pacific," *U.S. Navy,* June 18, 2016, www.navy.mil/submit/display.asp?story_id=95284.

199. Xu Yan, "On the Past Several Decades of China-Philippine Contention in the South China Sea."

200. For a civilian discussion of this "backstop" function, see 陈明义 [Chen Mingyi], 切实加强维护海洋权益工作 ["Earnestly Strengthen Work on Maritime Rights and Interests"], 中国海洋报 [*China Ocean News*], May 8, 2013, p. 1. China's 2013 national defense white paper describes this function as providing "security guarantees" (安全保障) for maritime law-enforcement rights-protection operations. Information Office of the State Council, *The Diversified Employment of China's Armed Forces.* SOA analysts have called the PLA Navy an "important defensive military force" working in conjunction with Chinese maritime law enforcement to safeguard maritime rights and interests. *ODR 2011,* p. 124. As early as 2004, CMS officers acknowledged that when their service conducted frontline rights-protection operations, "in special situations, PLA Navy ships and aircraft hang back and provide security guarantees." Wu Qiang and Zhao Shengru, "An Analysis of Measures for Law Enforcement to Safeguard Maritime Rights and Interests."

201. Wu Hanyue, *The History of CCP Maritime Defense Thought,* p. 90.

202. Vice Admiral Huang emphasized this point when he was asked about the intensifying "rights-protection" situation in early 2013. 刘川 [Liu Chuan] et al., "两会"代表委员高度评价盛赞中国海监 ["Representatives to the Two Meetings Praise China Marine Surveillance"], 中国海洋报 [*China Ocean News*], March 4, 2013, p. 1.

203. 崔鲸涛 [Cui Jingtao], 建设海洋强国要以强大的海军作支撑——海军军事学术研究所研究员张炜谈十八大报告 ["Building China into a Maritime Power with Support from a Powerful Navy Serves—Naval Research Institute Researcher Zhang Wei Talks about the *18th Party Congress Work Report*"], 中国海洋报 [*China Ocean News*], November 14, 2012, p. 2.

204. There is another school of thought in the PLA Navy that recognizes that "in modern wars at sea if you don't fire the first shot, then you won't have a chance to fire the second shot" (现代化海战打不出第一枪, 就没有机会打1出第二枪). 王万峰 [Wang Wanfeng], 兵撒大洋, 如何做到攥指成拳? ["With Forces Spread All over the Ocean, How Do We Form a Fist?"], 人民海军 [*People's Navy*], November 25, 2013, p. 3.

205. Hayton, *The South China Sea,* pp. 82–83.

206. For a useful general discussion of the roles of navies and other maritime forces in "picture building," see Geoffrey Till, *Seapower: A Guide for the Twenty-First Century* (New York: Routledge, 2009), pp. 264–65.

207. 蓝疆卫士 ["Blue Border Guards"], 走遍中国 [*Traveling around China*], 南海纪行 [*South China Sea Travel Notes* series], episode 8, aired December 31, 2013, by China Central Television (CCTV), available at news.cntv.cn/2013/12/31/VIDE1388496485764597.shtml/.

208. 孙运道 [Sun Yundao], 能打胜仗的"铁军"——中国海监北海维权支队强队之梦 ["The 'Iron Army' That Can Win Wars—the Dreams of the CMS North Sea Rights-Protection Detachment"], 中国海洋报 [*China Ocean News*], May 10, 2013, p. 4; 吕宁 [Lv Ning], 特别能吃苦特别能战斗——记"人民满意的公务员集体"中国海监东海维权执法支队 ["Extremely Able to Eat Bitterness and Engage in Combat—a Record of the CMS East Sea Rights-Protection Law-Enforcement Detachment], 中国海洋报 [*China Ocean News*], December 20, 2013, p. 4. Also see 秦昕 [Qin Xi] and 罗茜 [Luo Qian], 海上忠实的瞭瞭望与记录--记中国海监南海维权执法支队执法队 ["Loyalty at Sea: A Profile of the China Marine Surveillance South China Sea Rights-Protection Law-Enforcement Detachment"], 中国海洋报 [*China Ocean News*], October 21, 2016, p. 3. Members of rights-protection law-enforcement detachments work closely with the Tianjin-based National Maritime Information Center (国家海洋信息中心), an organization overseen by the State Oceanic Administration. For information on its role in supporting rights-protection operations, see 徐胜 [Xu Sheng], 改革创新 开创海洋信息工作新局面 ["Reform and Innovation to Create a New Situation for Maritime Information Work"], 中国海洋报 [*China Ocean News*], March 5, 2014, p. 1. See also 中国海洋年鉴编纂委员会 [China Ocean Yearbook Compilation Committee], 2014

中国海洋年鉴 [*2014 China Ocean Yearbook*] (Beijing: Ocean, 2014), pp. 277–78.

209. 王庆 [Wang Qing], 紧扣实战, 一路巡航一路练——东海舰队某驱逐舰支队锤炼官兵打赢本领 ["Focus on Warfighting, Training While on Patrol—an East Sea Fleet Destroyer Unit Trains Sailors on the Skills Needed to Win a War"], 人民海军 [*People's Navy*], October 25, 2014, p. 2.

210. 赵向虎 [Zhao Xianghu] and 陈显龄 [Chen Xianling], "千里眼", 难见父亲最后一面 ["Known as the 'Man Who Saw Everything,' He Could Not See His Father One Last Time"], 人民海军 [*People's Navy*], November 18, 2014, p. 2.

211. 陆凯 [Lu Kai], 用法理依据捍卫海洋权益, 培养取证人才队伍摸索取证部署模式 ["Use Legal Evidence to Defend Maritime Rights and Interests, Cultivate Evidence-Collection Personnel and Explore Models for Evidence Collection"], 人民海军 [*People's Navy*], April 29, 2014, p. 1. See also 王志鹏 [Wang Zhipeng], 军舰出海文书新任"取证员" ["When the Ship Puts to Sea the Secretary Becomes the 'Evidence Collector'"], 人民海军 [*People's Navy*], March 11, 2013, p. 3.

212. 李静杰 [Li Jingjie], 取证人员有了固定战位 ["Evidence-Collection Personnel Have Been Given Fixed Roles"], 人民海军 [*People's Navy*], November 4, 2013, p. 2.

213. One mid-2011 account claims that "more than 90 percent of foreign special mission vessels are first discovered by Chinese fishing trawlers, which then report the information to the relevant departments." Liu Bin, Zhang Lu, and Fang Shuo, "China's Real Presence in the South China Sea."

214. In April 1978, China did send dozens of fishing vessels to waters adjacent to the islands to put pressure on Japan during the negotiations of the Sino-Japanese Treaty of Peace and Friendship. Daniel Tretiak, "The Sino-Japanese Treaty of 1978: The Senkaku Incident Prelude," *Asian Survey* 18, no. 12 (December 1978), pp. 1235–49. Others argue that this decision stemmed from Chinese domestic politics. Reinhard Drifte, "The Japan-China Confrontation over the Senkaku/Diaoyu Islands—between 'Shelving' and 'Dispute Escalation,'" *Asia-Pacific Journal* 12, iss. 30, no. 3 (July 27, 2014), p. 16, apjjf.org/-Reinhard-Drifte/4154/article.pdf.

215. "Trends in Chinese Government and Other Vessels in the Waters Surrounding the Senkaku Islands, and Japan's Response: Records of Intrusions of Chinese Government and Other Vessels into Japan's Territorial Sea," *Ministry of Foreign Affairs of Japan,* www.mofa.go.jp/region/page23e_000021.html.

216. 郁志荣 [Yu Zhirong], 钓鱼岛海域常态化巡航执法须高度重视 ["We Must Place Heavy Emphasis on Normalized Law-Enforcement Patrols in the Waters of the Diaoyu Islands"], 军事文摘 [*Military Digest*], no. 3 (2014), p. 13.

217. 徐春柳 [Xu Chunliu], 中国海监总队: 中国海监将加强对争议海域管辖 ["China Marine Surveillance: CMS Will Strengthen Its Jurisdiction over Disputed Waters"], 中国网 [*China Online*], December 10, 2008, www.china.com.cn/policy/txt/2008-12/10/content_16924510.htm. CMS officer Liu Zhendong explained a similar rationale for the 12-8 mission: "It is not in China's interest to let the Diaoyu Island issue cool down. We must stir it up. If we do not take action, according to international custom it might become Japan's after 50 years" (p. 12). Aside from entering the territorial sea (which was the most important objective of this mission), the second most important objective was to "collect information on waters surrounding the feature," which China lacked because its vessels had never been there before (p. 11). 中国海监巡航钓鱼岛三周年记 ["A Look at the Three-Year Anniversary of the First CMS Patrol to Diaoyu Island"], 东西南北 [*East West South North*], no. 24 (2012), pp. 10–12.

218. From January 2009 to August 2010, no Chinese vessel entered the contiguous zone or territorial sea surrounding the Senkaku Islands. "Trends in Chinese Government and Other Vessels in the Waters Surrounding the Senkaku Islands."

219. China blamed Japan for the collision. The subsequent release of a video by a member of the Japan Coast Guard shows the Chinese trawler to be at fault. The video is available on YouTube: www.youtube.com/watch?v=LhtPsskJe5k.

220. For a very good recounting of the sequence of events following the ramming incident, see Jessica Chen Weiss, *Powerful Patriots: Nationalist Protest in China's Foreign Relations* (New York: Oxford Univ. Press, 2014), pp. 168–75.

221. The Japanese citizens were released a few days after the release of Zhan Qixiong. Smith, *Intimate Rivals,* pp. 191, 193.

222. Ibid., p. 192.

223. The local prosecutor cited the "effect on the people of our nation and China-Japan relations" as the key reason for releasing Zhan Qixiong. Weiss, *Powerful Patriots,* p. 176.

224. One authoritative account states that the purpose was to "engage in fisheries management activities according to the relevant laws, safeguard order with respect to fisheries production, and protect the security of Chinese fishermen and their property." *ODR 2011,* p. 491.

225. *FLE 201* departed Shanghai on September 23 and arrived near the Senkakus at 1600 the next day. Outmatched in size and numbers (and perhaps seamanship), *FLE 201* and *FLE 203* were blocked physically from entering the territorial sea by the Japan Coast Guard. The Chinese reporter was Cheng Gang, from the *Global Times.* 程刚 [Cheng Gang], 钓鱼岛巡航日记一: 我船员智斗日本巡逻舰 ["Diary Entry 1 of Diaoyu Island Patrol: My Shipmates Vie with Japanese Patrol Ships"], 环球网 [*Huanqiu Online*], September 23, 2010, world.huanqiu.com/roll/2010-09/1130288.html. See also 程刚 [Cheng Gang], 钓鱼岛巡航日记二: 中国渔政船驶近钓鱼岛 日本海空联手纠缠堵截 ["Diary Entry 2 of Diaoyu Island Patrol: China Fisheries Law Enforcement Vessel Approaches Diaoyu Island While Japan Tries to Block It from the Air and Sea"], 环球网 [*Huanqiu Online*], world.huanqiu.com/roll/2010-09/1130269.html, and 余向东 [Yu Xiangdong] and 康存栋 [Kang Cundong], 中国渔政将在钓鱼岛附近海域开展常态化巡航 ["China Fisheries Law Enforcement Will Begin Normalizing Patrols to Waters near Diaoyu Island"], 中国渔业报 [*China Fisheries News*], September 27, 2010, news.ifeng.com/mainland/special/zrczdydxz/content-2/detail_2010_09/27/2639897_0.shtml. China used coast guard deployments to the island as a means to put pressure on Japan to release the Chinese citizens taken into custody. However, Chinese leaders no doubt felt pressure to do something to assuage the desires of Chinese patriots for retribution. By sending vessels to these waters, China could show the Chinese people that it was doing something to punish Japan for having the temerity to arrest Chinese fishermen operating in "Chinese" waters.

226. Yu Xiangdong and Kang Cundong, "China Fisheries Law Enforcement Will Begin Normalizing." In a pseudonymous commentary article published by a Xinhua-owned publication, this operation was described as "the first step toward normalizing patrols of Fisheries Law Enforcement cutters to Diaoyu Island." See 海韬 [Hai Tao], 中国渔政钓鱼岛突击日本防线 ["China Fisheries Law Enforcement Breaks through Japan's Defense Lines at Diaoyu Island"], 国际先驱导报 [*International Herald Leader*], October 28, 2010, news.xinhuanet.com/herald/2010-10/28/c_13579530.htm.

227. "Trends in Chinese Government and Other Vessels in the Waters Surrounding the Senkaku Islands."

228. 冬木 [Dong Mu], 中国海监巡航钓鱼岛海域的启示 ["Revelations from CMS Patrols to Waters Adjacent to Diaoyu Island"], 中国海洋报 [*China Ocean News*], March 30, 2012, p. 4.

229. 唐少曼 [Tang Shaoman], 请祖国和人民放心—中国海监北海总队钓鱼岛巡航记 ["The Motherland and the People Should Be at Ease—a Record of CMS North Sea Contingent's Patrols to Diaoyu Island"], 中国海洋报 [*China Ocean News*], October 19, 2012, p. 5.

230. Shi Jiangtao, "Hu Warns Japan over Planned Purchase of Diaoyu Islands," *South China Morning Post,* September 10, 2012, www.scmp.com/news/china/article/1033054/hu-warns-japan-over-planned-purchase-diaoyu-islands.

231. Yu Zhirong, "We Must Place Heavy Emphasis," p. 14.

232. This point was made in an authoritative article published in *China Ocean News*. The author writes that normalizing patrols to the Senkakus "strengthened to an enormous degree the extent of Chinese control over Diaoyu Island and effectively smashed Japan's so-called 'effective control' [over the features]." Wang Qiurong, "CMS Work Is in the Process of Leapfrog Development."

233. Ayako Mie, "First Chinese Warship to Skirt Senkakus Triggers Protest from Tokyo," *Japan Times,* June 9, 2016, www.japantimes.co.jp/news/2016/06/09/national/chinese-frigate-sails-near-senkakus-russian-military-vessels/.

234. For instance, in mid-December 2012, a four-ship formation from the PLAN East Sea Fleet sailed through waters adjacent to the Senkaku Islands. The formation comprised two destroyers *(Ningbo* and *Hanzhou)* and two frigates *(Zhoushan* and *Ma'anshan)*. The formation was commanded by Rear Adm. Qiu Yanpeng, Deputy Commander, East Sea Fleet. A seven-ship formation from the North Sea Fleet had patrolled these same waters two months earlier. 梁庆松 [Liang Qingsong], 我海军舰艇编队在钩鱼岛附近海域巡航 ["A PLA Navy Ship Formation Patrols Waters near Diaoyu Island"], 人民海军 [*People's Navy*], December 12, 2012, p. 1. Two separate incidents occurring near the Senkakus in January 2013 suggest that PLAN warships were conducting combat-readiness patrols in the vicinity of the disputed features. On January 19, 2013, a PLAN frigate directed fire-control radar at a Japan Maritime Self-Defense Force (JMSDF) helicopter. On January 30, 2013, a second PLAN frigate directed its fire-control radar at a JMSDF destroyer. Mizuho Aoki and Reiji Yoshida, "Chinese Target-Locked JMSDF Ship, Chopper," *Japan Times,* February 6, 2013, www.japantimes.co.jp/news/2013/02/06/national/politics-diplomacy/japan-says-chinese-warships-locked-weapons-radar-on-msdf/. See also "China Military Officials Admit Radar Lock on Japanese Ship, Says Report," *South China*

Morning Post, March 18, 2013, www.scmp.com/news/china/article/1193600/china-military-officials-admit-radar-lock-japanese-ship-says-report.

235. 黄子娟 [Huang Zijuan], 专家称中国海监若在钓鱼岛遇险海军将即刻赶到 ["Expert Says That If China Marine Surveillance Encounters Dangers near Diaoyu Island the Navy Will Come Right Away"], 人民网 [*People Online*], July 11, 2013, mil.huanqiu.com/observation/2013-07/4117322.html.

236. In a December 2013 CCTV 4 documentary, a CMS officer admitted that his service patrolled "all the waters within the nine-dash line." "Blue Border Guards." Other maritime law officers also talk about the nine-dash line as indicating the scope of their responsibilities. For example, in 2013 an FLE officer claimed he had "been everywhere within the nine-dashed line." 姜浩峰 [Jiang Haofeng], 中国海上安保升级 ["China's Maritime Security Is Kicked Up a Notch"], 山西青年 [*Shanxi Youth*], no. 7 (2013), p. 31.

237. For more on the status of James Shoal, see Hayton, *The South China Sea,* pp. 116–17.

238. The PLA Navy's first visit to James Shoal apparently took place in May 1983. A training squadron comprising two PLAN auxiliaries sailed to the feature as part of a six-thousand-nautical-mile training mission that took them into the western Pacific. 1983年5月18日 我国海军远航航海实习船队启航 ["The Chinese Navy's Long-Distance Training Fleet Set Sail on 18 May 1983"], 人民网 [*People Online*], August 1, 2003, www.people.com.cn/GB/historic/0518/1638.html. See also John W. Garver, "China's Push through the South China Sea: The Interaction of Bureaucratic and National Interests," *China Quarterly* 132 (December 1992), p. 1008. The destroyer *Nanchang* was supposedly the first Chinese warship to anchor at James Shoal, doing so on May 12, 1984. 张海龙 [Zhang Hailong], 梁立虎 [Liang Lihu], and 孙尧 [Sun Yao], 回顾中国海军的051时代: 创出"曾母暗沙第一锚" ["A Retrospective on the Age of the 051 Destroyer: Noted for Being 'the First Ship to Anchor at James Shoal'"], 当代海军杂志社 [*Navy Today Press*], September 9, 2016, military.china.com/history4/62/20160909/23514624_all.html.

239. 白瑞雪 [Bai Ruixue] and 甘俊 [Gan Jun], 海军编队在曾母暗沙举行宣誓仪式 ["A Navy Formation Holds an Oath-Taking Ceremony at James Shoal"], 新华网 [*Xinhua Online*], March 26, 2013, news.xinhuanet.com/mil/2013-03/26/c_124506274.htm. For a similar instance that took place a year later, see 中国南海舰队巡航曾母暗沙宣示主权 ["China South Sea Fleet Patrols James Shoal to Declare Sovereignty"], 南华早报中文网站 [*South China Morning Post*], January 27, 2014, www.nanzao.com/sc/national/14c315512b9f9f1/zhong-guo-nan-hai-jian-dui-xun-hang-zeng-mu-an-sha-xuan-shi-zhu-quan. Constabulary vessels also conduct these types of ceremonies. For an example involving an FLE ship, see Martinson, "The Lives of a Chinese Gunboat," p. 37. For an example involving China Marine Surveillance, see 何仲仁 [He Zhongren], 吴恒昊 [Wu Henghao], and 皮履渊 [Pi Luyuan], 南海维权的排头兵 ["The Vanguard of Rights Protection in the South China Sea"], 中国海洋报 [*China Ocean News*], May 4, 2012, p. 5. See also Liu Bin, Zhang Lu, and Fang Shuo, "China's Real Presence in the South China Sea."

240. 罗茜 [Luo Xi], 南沙主权碑的故事 ["Stories of Spratly Sovereignty Tablets"], 中国海洋报 [*China Ocean News*], February 25, 2015, p. 4.

241. It is also called "China's southernmost point" (我国最南端), in recognition of the fact that James Shoal is not a land feature.

242. China's blockade was not as absolute as often suggested. In August 2013, for instance, a Chinese reporter witnessed the failed efforts of *CCG 3368* to scare away a Philippine fishing vessel approaching Scarborough Shoal. The Philippine skipper just managed to pilot his boat into the lagoon, where the three-thousand-ton Chinese ship could not operate. The Chinese ship soon was ordered to Mischief Reef to seek shelter from an approaching storm. Four days later, when *CCG 3368* returned to Scarborough Shoal, the Philippine fishing vessel already had departed. 周超 [Zhou Chao], 值守南海的忠诚卫士 ["The Loyal Warrior on Guard Duty in the South China Sea"], 中国海洋报 [*China Ocean News*], March 28, 2014, p. 3.

243. Motorboats embarked on Chinese cutters have proved a useful tool for handling encounters with small Philippine fishing vessels at Scarborough Shoal. For example, in a January 2015 encounter, a small boat launched from a China Coast Guard ship evicted three noncompliant Philippine vessels operating near the reef. Manuel Mogato, "Philippines Says Chinese Ship Rammed Fishing Boats in Scarborough Shoal," *Reuters,* February 4, 2015, www.reuters.com/article/2015/02/04/us-philippines-china-idUSKBN0L81IM20150204. China's Ministry of Foreign Affairs claimed that on January 29, 2015, a CCG ship encountered three Philippine fishing vessels that were "illegally lingering" (非法逗留) near the feature. The CCG ship dispatched a boat to "evict" (驱离) them. In that process, there was "light bumping" (轻微擦碰). 2015年2月5日外交部发言人洪磊主持例行记者会 ["5 February 2015 Press Conference of Ministry of Foreign Affairs Spokesperson Hong

Lei"], 中华人民共和国驻美利坚合众国大使馆 [*Embassy of the PRC in the United States*], February 5, 2015, www.china-embassy.org/chn/fyrth/t1234731.htm.

244. See Michael Green et al., *Countering Coercion in Maritime Asia: The Theory and Practice of Gray Zone Deterrence* (Washington, DC: Center for Strategic & International Studies, 2017), pp. 170–71. This excellent study offers detailed accounts of some of the key incidents discussed in this monograph.

245. This presence also included intrusions into the lagoon. For example, the Fujian-owned *CMS 8002* patrolled waters around Second Thomas Shoal in May and June 2013. On one occasion, it sent a motorboat into the lagoon for over an hour, during which it photographed the Philippine outpost. See 蔡正文 [Cai Zhengwen], 福建省总队上半年工作回顾 ["A Look Back at the Work of the Fujian Province Contingent in the First Half of 2013"], 中国海洋报 [*China Ocean News*], July 19, 2013, p. 3.

246. Jeff Himmelman, "A Game of Shark and Minnow," *New York Times Magazine,* October 27, 2013, www.nytimes.com/newsgraphics/2013/10/27/south-china-sea/.

247. For a detailed account of China's harassment and interdiction operations, see Green et al., *Countering Coercion in Maritime Asia,* pp. 183–200.

248. Carmela Fonbuena, "US Helped PH Navy in Ayungin Mission," *Rappler,* April 11, 2014, www.rappler.com/nation/55262-ph-ayungin-mission-us-assistance. See also Nikko Dizon, "AFP Uses Couriers to Foil China Spies," *Philippine Daily Inquirer,* April 29, 2014, globalnation.inquirer.net/103076/afp-uses-couriers-to-foil-china-spies, and "US Plane over Ayungin Shoal Proves All-Out Support to PH," *Manila Times,* April 5, 2014, www.manilatimes.net/us-plane-over-ayungin-shoal-proves-all-out-support-to-ph/87652/.

249. Ben Blanchard, "Duterte Aligns Philippines with China, Says U.S. Has Lost," *Reuters,* October 20, 2016, www.reuters.com/article/us-china-philippines-idUSKCN12K0AS; CNN Philippines Staff, "Duterte on Filipinos' Fishing Rights in Scarborough Shoal: 'I Leave It to the Chinese Authorities,'" *CNN Philippines,* October 22, 2016, cnnphilippines.com/news/2016/10/22/Duterte-Filipino-fishing-rights-Scarborough-Shoal-leave-it-to-the-Chinese-authorities.html.

250. 2004年中国海洋行政执法公报 [*2004 Report on Chinese Administrative Law Enforcement*], 国家海洋局网站 [*Website of the State Oceanic Administration*], January 10, 2005, www.soa.gov.cn/zwgk/hygb/zghyxzzfgb/2004nzghyxzzfgb/201212/t20121217_22991.html.

251. 李慕瑾 [Li Mujin], 中国东海监视日本调查船 海监依法监管东海 ["CMS Tracks Japanese Surveying Vessel and Monitors the East China Sea According to the Law"], 新华网 [*Xinhua Online*], February 27, 2006, news.xinhuanet.com/world/2006-02/27/content_4233133.htm.

252. Eventually, in June 2008, China and Japan came to an agreement to mitigate tensions stemming from the Chunxiao gas field. *ODR 2011,* p. 121.

253. 郁志荣 [Yu Zhirong], 东海维权: 中日东海钓鱼岛之争 [*Rights Protection in the East China Sea: Sino-Japanese Contention in the East China Sea and the Diaoyu Islands*] (Shanghai: Wenhui, 2012), p. 217.

254. For an authoritative account of Chinese protocols when expelling foreign vessels, see Feng Zhi, "Problem and Countermeasures for Problems Associated with Coast Guard Patrols," p. 72.

255. Two researchers at the China Maritime Police Academy describe water cannon as a "coercive means of expelling" (强制性的驱离手段) foreign vessels. They write, "At present, in many situations (especially in confrontations with foreign ships in waters where sovereignty is disputed), the use of water cannon has become common." 李世雄 [Li Shixiong] and 藏建忠 [Zang Jianzhong], 舰艇维权执法视角下的水泡改进与使用技术研究—以型舰为例 ["Improving Water Cannon Tactics in the Context of Rights-Protection Law Enforcement—Using the Type 618B Cutter as an Example"], 公安海警学院学报 [*Journal of China Maritime Police Academy*] 14, no. 1 (March 2015), p. 1.

256. These tactics are described by a CMS officer in "Blue Border Guards."

257. For a useful discussion of these factors, see Liu Bin, Zhang Lu, and Fang Shuo, "China's Real Presence in the South China Sea."

258. 曹彩容 [Cao Cairong], "我们的岗位在船上"——走进"中国海警1307"船 ["'My Place Is on the Ship'—a Close Look at *CCG 1307*"], 中国海洋报 [*China Ocean News*], March 4, 2016, p. 3.

259. Greg Amurao, "A Shoal Too Far in South China Sea," *Asia Times,* July 21, 2012, www.atimes.com/atimes/Southeast_Asia/NG21Ae01.html 4.

260. 石安辉 [Shi Anhui] and 吴亮 [Wu Liang], 韶关舰转隶后赴三沙战备巡逻 ["After Being Transferred *Shaoguan* Heads to Sansha for a Combat Readiness Patrol"], 人民海军 [*People's Navy*], September 22, 2012, p. 2.

261. Mac Lam and Richard Finney, "Vietnamese Fishing Boat Fired On, Set Ablaze," *Radio Free*

Asia, March 25, 2013, www.rfa.org/english/news/vietnam/boat-03252013152934.html. See also "Vietnamese Fishing Boat Fired On, Set Ablaze," *VietNamNet Bridge,* March 26, 2013, english.vietnamnet.vn/fms/society/69725/a-quang-ngai-s-fishing-boat-shot-by-chinese-vessels.html.

262. Carl Thayer, "China's New Wave of Aggressive Assertiveness in the South China Sea," *International Journal of China Studies* 2, no. 3 (December 2011), p. 561.

263. Taylor Fravel, "China's Strategy in the South China Sea," *Contemporary Southeast Asia* 33, no. 3 (2011), p. 306. Footage of this incident is available on YouTube at www.youtube.com/watch?v=xTws82pQIEs.

264. Ramses Amer, "China, Vietnam, and the South China Sea: Disputes and Dispute Management," *Ocean Development & International Law* 45, no. 1 (2014), p. 23. This section relies heavily on the thorough account of these incidents found in Hayton, *The South China Sea,* pp. 144–46.

265. 刘文平 [Liu Wenping], 剑啸雷海一先锋—南海舰队扫雷舰大队长吴光怀献身强军实践纪事 ["Whistling Sword and Thunder from the Sea—a Chronicle of the Exploits of the Commander of a South Sea Fleet Minesweeper Unit Wu Guanghuai"], 人民海军 [*People's Navy*], June 26, 2013, p. 3.

266. In May 2010, *CMS 51* tracked and verbally harassed a Japanese surveying ship operating east of the median line. "Japan Protests to Beijing over East China Sea Chase," *Washington Times,* May 5, 2010, www.washingtontimes.com/news/2010/may/5/world-scene-49614984/. A similar incident occurred in September 2010. James Manicom, *Bridging Troubled Waters: China, Japan, and Maritime Order in the East China Sea* (Washington, DC: Georgetown Univ. Press, 2014), p. 183. For information on the February 2012 event, see 蔡岩红 [Cai Yanhong], 中国海监在我东海管辖海域展开维权执 ["China Marine Surveillance Conducts Rights-Protection Law Enforcement in Chinese Jurisdictional Waters in the East China Sea"], 法制日报 [*Legal Daily*], February 23, 2012, www.legaldaily.com.cn/index_article/content/2012-02/23/content_3372579.htm?node=5955. See also 吕宁 [Lv Ning], 中国海监66船好样的! ["*CMS 66* Is a Grand Vessel!"], 中国海洋报 [*China Ocean News*], September 21, 2012, p. 5, and 吕宁 [Lv Ning], 有效体现对东海的主权和管辖权 ["Effectively Manifesting Sovereignty and Jurisdictional Rights in the East China Sea"], 中国海洋报 [*China Ocean News*], September 14, 2012, p. 5.

267. For a discussion of economic drivers, see Hongzhou Zhang, "Chinese Fishermen in Disputed Waters: Not Quite a 'People's War,'" *Marine Policy* 68 (June 2016), pp. 65–73.

268. 陶燕燕 [Tao Yanyan] and 邓韶勇 [Deng Shaoyong], 刘赐贵应邀出席海南省海洋工作会议 ["Liu Cigui Attends Hainan Province Maritime Work Meeting"], 中国海洋报 [*China Ocean News*], October 25, 2012, p. 1. Liu made this point on other occasions. For instance, in a May 2013 meeting with a senior official from Hainan Province, he stated that "from the big picture perspective, developing the marine economy is an important manner and means of safeguarding maritime rights and interests." 康明乐 [Kang Mingle], 要把维权和发展结合起来统筹考虑 ["China Must Integrate Rights Protection and Development and Give Comprehensive Consideration"], 中国海洋报 [*China Ocean News*], May 28, 2013, p. 1. In August 2013, the vice-governor of Hainan Province, Ji Wenlin, made a similar statement, suggesting this consensus pervades all levels of government. Ji said, "Developing the maritime economy is the core task for accelerating the construction of Hainan into a maritime power; it is also at present an effective means to safeguard national maritime rights and interests." 依托海南优势发展海洋经济 维护南海主权 ["Rely on Hainan's Strengths to Develop the Maritime Economy and Safeguard Sovereignty in the South China Sea"], 中国海洋报 [*China Ocean News*], August 1, 2013, p. 1.

269. 一业 [Yi Ye], 中国能源开发挺进深海—我国首座深水钻井平台"海洋石油981"在南海开钻 ["Chinese Resource Development Steps into the Deep Water—China's First Deepwater Drilling Rig *Haiyang Shiyou 981* Performs Drilling Operations in the South China Sea"], 中国海洋报 [*China Ocean News*], May 11, 2012, p. 1. This point also is made in a December 2012 *China Ocean News* recapitulation of major maritime-related events in 2012. 盘点2012 ["Looking Back at 2012"], 中国海洋报 [*China Ocean News*], December 31, 2012, p. 3.

270. These included national-level CCG units (including many from the former China Maritime Police), provincial-level CMS and FLE units, and forces from the Ministry of Transport (Maritime Safety Administration and China Rescue and Salvage Service). This operation also included support from a large maritime militia contingent.

271. "Vietnam Boat Sinks after Collision with Chinese Vessel," *BBC News,* May 27, 2014, www.bbc.com/news/world-asia-27583564.

272. Dong Fang, "Xinkuai News Reporter Lifts the Mysterious Veil of *CCG 44101*."

273. This confrontation is described in "Blue Border Guards." In July 2011, a CMS flotilla guarded the surveying vessel *Tanbao,* owned by Guangzhou Marine Geologic Survey, as it operated near the Paracel Islands. *Tanbao* faced "interference" (干扰) from four "armed vessels" operated by an unnamed state, almost certainly Vietnam. After a "protracted confrontation" involving aggressive maneuvering and near collisions, the foreign vessels, at least according to the Chinese account, were compelled to depart the area. Lv Ning, "*CMS 66* Is a Grand Vessel!" CMS conducted a similar escort operation in May–August 2010. Ryan D. Martinson, "Shepherds of the South Seas," *Survival* 58, no. 3 (2016), pp. 199–200. See also 蔡岩红 [Cai Yanhong], 中国海监对我管辖海域定期维权执法三年对外国军事调查测量船实施监管100余艘次 ["During Three Years of Regular Rights-Protection Patrols CMS Has Monitored Foreign Naval Surveying Vessels over 100 Times"], 法制日报 [*Legal Daily*], February 28, 2011, www.legaldaily.com.cn/government/content/2011-02/28/content_2488744.htm?node=21502.

274. Chinese surface ships also have provided security for other types of vessels. For instance, when the SOA's deep-sea submersible *Jiaolong* conducted its first deep-sea dive in the South China Sea in 2010, several CMS cutters were asked to escort *Jiaolong*'s mother ship in case foreign obstruction occurred. 罗茜 [Luo Xi], 护送"蛟龙"入海 ["Escorting *Jiaolong* as It Enters the Sea"], 中国海洋报 [*China Ocean News*], December 17, 2010, p. 5.

275. In the words of two Chinese academics publishing in an SOA journal, "Just the presence of Chinese fishermen in the South China Sea is the most direct embodiment [体现] of the rights China claims in the South China Sea." 郑泽民 [Zheng Zemin] and 王国红 [Wang Guohong], 南海权益维护中的渔民作用探析 ["An Analysis on the Role of Fishermen in Protection of Rights and Interests in the South China Sea"], 海洋开发与管理 [*Ocean Development and Management*], no. 10 (2014), p. 41.

276. 曾鸣 [Zeng Ming], 军舰边的渔船: 黄岩岛争端中的中国渔民 ["Fishing Vessels near Naval Ships: The Chinese Fishermen in the Scarborough Shoal Dispute"], 南方周末 [*Southern Weekend*], May 3, 2012, www.infzm.com/content/74860.

277. Martinson, "Shepherds of the South Seas," p. 191. For evidence of direct payments of large sums of money to linger in disputed waters for political purposes, see Teo Cheng Wee, "South China Sea—Part Three: China's Front-Line Fishermen," *Strait Times,* April 5, 2016, www.straitstimes.com/asia/east-asia/south-china-sea-part-three-chinas-front-line-fishermen.

278. From 1956 to 1985, the PRC prohibited Chinese fishing vessels from operating in the Spratlys. Martinson, "Shepherds of the South Seas," p. 190.

279. *ODR 2011,* p. 494. For an account of some of these incidents involving just fishermen from Tanmen village in Hainan, see Kennedy and Erickson, "Model Maritime Militia."

280. 陈毅德 [Chen Yide], 马为军 [Ma Weijun], and 杨昌健 [Yang Changjian], 新形式下作好护渔维权维稳工作的思考与建议 ["Thoughts and Suggestions for Doing Fisheries Rights Protection and Stability Maintenance Work under the New Circumstances"], 中国水产 [*China Fisheries*], no. 3 (2012), pp. 12–16.

281. Liu Bin, Zhang Lu, and Fang Shuo, "China's Real Presence in the South China Sea." This article quotes Huang Zuoping, a senior officer in the South China Sea branch of Fisheries Law Enforcement, as saying, "When Chinese fishing vessels approach the nine-dashed line, we'll tell the fishermen that they should not cross the boundary. If the fishing vessels send us a distress signal, we'll hurry over to save them."

282. The harassment of the Chinese trawlers ceased before *FLE 310* arrived. Martinson, "The Lives of a Chinese Gunboat," p. 36.

283. Martinson, "Shepherds of the South Seas," p. 196.

284. The southwest fishing grounds are located at 4–6 degrees latitude, 109–12 degrees longitude. Ibid.

285. 深情守护 ["Protecting from the Bottom of Our Hearts"], 走遍中国 [*Traveling around China*], 南海纪行 [*South China Sea Travel Notes* series], episode 4, aired December 27, 2013, by CCTV, available at news.cntv.cn/2013/12/27/VIDE1388149863832999.shtml.

286. 梁文悦 [Liang Wenyue], 孤独守礁人演绎南沙精神 ["Those Who Guard Chinese Reefs Show the Spratly Spirit"], 南方日报 [*Southern Daily*], August 9, 2012, epaper.southcn.com/nfdaily/html/2012-08/09/content_7112367.htm.

287. Bentley, "Mapping the Nine-Dash Line."

288. Aaron L. Connelly, "Indonesia in the South China Sea: Going It Alone," *Lowy Institute for International Policy,* December 2016, www.lowyinstitute.org/publications/indonesia-south-china-sea-going-it-alone#_edn14.

289. Japan Ministry of Foreign Affairs, "Status of Activities by Chinese Government Vessels and Chinese Fishing Vessels in Waters Surrounding the Senkaku Islands," *Japan Ministry of Foreign*

Affairs, August 26, 2016, www.mofa.go.jp/files/000180283.pdf.

290. 香山论坛: 建设中国特色海洋强国 ["Xiangshan Forum: Building the Country into a Maritime Power with Chinese Characteristics"], 中国海洋报 [*China Ocean News*], January 1, 2013, p. 3. This comment was made by then–CIMA director Gao Zhiguo. Gao was one of two maritime experts invited to brief the politburo during its July 2013 meeting, at which Xi Jinping outlined China's "maritime power" strategy. Xi Jinping, "We Need to Do More."

291. Commenting through her social-media account on August 7, 2016, PLAN senior captain Liang Fang (梁芳) wrote, "If Japan wants to resolve East China Sea issues in the South China Sea, then we will respond in kind by resolving South China Sea issues in the East China Sea and augment our presence near Diaoyu Island." Liang published this comment on her Weibo account under the name of 国防大学梁芳. Liang is a member of the experts group that advises the Maritime Rights Protection Leading Small Group. She has met with and received instructions from Xi Jinping himself. 褚振江 [Chu Zhenjiang] and 罗金沐 [Luo Jinmu], 梁芳: 勇闯战略研究"高地"的女大校 ["Liang Fang: The Woman Who Boldly Entered the 'Heights' of Strategic Studies Research"], 中华儿女 [*China Profiles*], no. 8 (2015), p. 73.

292. This point is made by a CMS officer in "Blue Border Guards." It is also a conventional wisdom of naval combat. Gray and Barnett, *Seapower and Strategy,* p. xi.

293. Two of the fishermen were minors and therefore ultimately did not face trial. "Philippine Trial of Chinese Fishermen Stalls without Interpreter," *Reuters,* June 17, 2014, www.reuters.com/article/2014/06/17/us-philippines-china-fishermen-idUSKBN0ES0S020140617.

294. Office of Naval Intelligence, *The PLA Navy,* p. 30. A Reuters photographer captured an image of a PLAN surface combatant near the rig in mid-July. Ben Blanchard, "Amid Sea Dispute, China Calls for Deeper Defence Ties with Vietnam," *Reuters,* March 29, 2016, in.reuters.com/article/southchinasea-china-vietnam-idINKCN0WV04L.

295. For more on the challenges of relying on open-source materials to understand the disposition of the Chinese fleet, see James E. Fanell and Ryan D. Martinson, "Countering Chinese Expansion through Mass Enlightenment," *Center for International Maritime Security,* October 18, 2016, cimsec.org/countering-chinese-expansion-mass-enlightenment/28781.

296. "Fisheries protection and escort" (护渔护航) is frequently cited in Chinese texts as one key mission of the PLAN Type 056 corvette. However, the author knows of no cases in which the corvette has performed this mission on the front line. 新型导弹护卫舰鄂州舰入列东海舰队 ["The New Type Guided-Missile Frigate *Ezhou* Is Commissioned into the East Sea Fleet"], 人民网 [*People Online*], January 19, 2017, military.people.com.cn/n1/2017/0119/c1011-29035832.html.

297. "Production Begin [*sic*] at Chunxiao Gas Field," *China Daily,* August 6, 2006, www.chinadaily.com.cn/china/2006-08/06/content_657939.htm.

298. By Chinese accounts, JCG vessels were prowling these waters. Li Mujin, "CMS Tracks Japanese Surveying Vessel and Monitors the East China Sea According to the Law."

299. For a useful map of the "Provisional Measures Zones," see Manicom, *Bridging Troubled Waters,* p. 79.

300. FLE EEZ patrols encompassed rights-protection missions, but they also included uncontroversial fisheries management operations in areas not in dispute. For an example of an EEZ patrol circular, see 农业部办公厅 [Office of the Ministry of Agriculture], 关于开展2010年专属经济区渔政巡航管理工作的通知 ["Circular on Initiating Management Work for 2010 EEZ Fisheries Law Enforcement Patrols"], 北大法意 [*Peking University Fayi*], February 2010, www.lawyee.org/Act/Act_Display.asp?ChannelID=1010100&RID=660366&KeyWord=. The EEZ patrol regime was intended to be conducted by national-level units, but local-level ships could be pressed into action if needed (which they always were). 中华人民共和国渔政渔港监督管理局 [PRC Fisheries Law Enforcement and Fishing Harbor Management Department], 《专属经济区渔政巡航管理规定》 [*Regulations for Managing EEZ Fisheries Law Enforcement Patrols*], available at www.cnfm.gov.cn/yyzfyzj/zsjjqyyzf/200512/t20051229_2681396.htm.

301. Christopher H. Sharman, *China Moves Out: Stepping Stones toward a New Maritime Strategy,* China Strategic Perspectives 9 (Washington, DC: National Defense Univ. Press, 2015), p. 11, available at inss.ndu.edu/Portals/68/Documents/stratperspective/china/ChinaPerspectives-9.pdf.

302. Japan Ministry of Defense, *Defense of Japan 2014,* p. 40, available at www.mod.go.jp/e/publ/w_paper/2014.html; "Oil and Gas in Troubled Waters," *The Economist,* October 6, 2005, www.economist.com/node/4489650.

303. Information Office of the State Council, *The Diversified Employment of China's Armed Forces;* Sharman, *China Moves Out,* pp. 13–17.

304. M. Taylor Fravel suggests that "the PLAN has conducted regular patrols in the disputed waters since around 2005." The author has been unable to verify this claim. Fravel, "China's Strategy in the South China Sea," p. 310.

305. The 2016 Japan white paper states that "Chinese naval vessels appear to conduct operations in the East China Sea continuously." Japan Ministry of Defense, *Defense of Japan 2016,* p. 53, available at www.mod.go.jp/e/publ/w_paper/2016.html.

306. Andrew Tate, "China's *Liaoning* Carrier Group Ventures into West Pacific for First Time," *IHS Jane's 360,* December 30, 2016, www.janes.com/article/66622/china-s-liaoning-carrier-group-ventures-into-west-pacific-for-first-time.

307. For excellent content on China's development of bases in the Spratlys, see the Asia Maritime Transparency Initiative website at amti.csis.org/island-tracker/chinese-occupied-features/.

308. In June 2012, a spokesperson from the Chinese Ministry of Defense stated that "the Chinese military has already established a normalized combat readiness patrol system in Chinese jurisdictional waters." 国防部:中国军队在管辖海域已经常态化战备巡逻 ["Ministry of Defense: Chinese Military Has Already Normalized Combat Readiness Patrols in Its Jurisdictional Waters"], 中国网 [*China Online*], June 28, 2012, www.china.com.cn/military/txt/2012-06/28/content_25759355.htm. In May 2013, authoritative Chinese sources revealed that Chinese vessels had "normalized" patrols within the Spratlys, and that presence would be further augmented. 中国海军对我南沙海域进行常态化战备巡逻 ["The Chinese Navy Conducts Normalized Patrols in Spratly Waters"], 中国政府网 [*Government of the PRC*], May 16, 2013, www.gov.cn/gzdt/2013-05/16/content_2403854.htm. For more on the "normalization" of PLAN patrols in disputed waters, see Li Tang, "The Navy's Normalized Patrols Cover the Ten-Thousand-Mile Maritime Border." See also 倪光辉 [Ni Guanghui] and 高毅 [Gao Yi], 南海舰队常态化战备巡逻南沙 ["South Sea Fleet Normalized Combat Readiness Patrols of the Spratlys"], 人民日报 [*People's Daily*], May 14, 2013, politics.people.com.cn/n/2013/0514/c1001-21469490.html. In May 2014, USS *Blue Ridge* observed a PLAN destroyer and frigate operating in the vicinity of Scarborough Shoal, suggesting a regular naval presence in these waters as well. Erik Slavin, "Blue Ridge Encounters Chinese Ships near Disputed Isle," *Stars and Stripes,* May 9, 2014, www.stripes.com/news/blue-ridge-encounters-chinese-ships-near-disputed-isle-1.282222.

309. This analysis borrows from the assessments of a former director of intelligence and information operations for the U.S. Pacific Fleet, Capt. James Fanell, USN (Ret.) Mina Pollmann, "Expert Panel Forecasts Asia-Pacific Dynamics and Maritime Security," *Center for International Maritime Security,* February 6, 2017, cimsec.org/expert-panel-forecasts-asia-pacific-dynamics-maritime-security/30840. Tracking of USN ships operating in especially sensitive areas probably began earlier. In May 2015, for example, USS *Fort Worth* was trailed by a PLAN frigate as it sailed through the Spratlys. Erik Slavin, "US Mulls Larger Role near Disputed South China Sea Territory," *Stars and Stripes,* May 13, 2015, www.stripes.com/news/us-mulls-larger-role-near-disputed-south-china-sea-territory-1.345817.

310. As of July 2015, Japan had identified sixteen Chinese structures in the gas fields near the median line in the East China Sea. "Japan Discloses Photos of China's Gas Development in East China Sea," *Japan Times,* July 22, 2015, www.japantimes.co.jp/news/2015/07/22/national/politics-diplomacy/japan-discloses-photos-chinas-gas-development-east-china-sea/.

311. In April 2013, CMS ships halted Japanese civilians who were attempting to approach one of the islands. 中国海监成功驱离日侵权船只 ["CMS Succeeded in Expelling a Japanese Vessel"], 解放军报 [*PLA Daily*], April 24, 2013, p. 4. See also 高悦 [Gao Yue], 筑就一道蓝色长城——记中国海警船编队首次巡航钓鱼岛 ["Building a Blue Great Wall—a Record of the First China Coast Guard Patrol to the Diaoyu Islands"], 中国海洋报 [*China Ocean News*], December 5, 2013, p. 1.

312. "Philippine Trial of Chinese Fishermen Stalls without Interpreter."

313. 中国海上巡航覆盖整个南海 海上维权更主动 ["China's Maritime Patrols Cover All of the South China Sea and Maritime Rights Protection Is More Proactive Than in the Past"], 人民网 [*People Online*], August 27, 2014, military.people.com.cn/n/2014/0827/c172467-25548356.html.

314. 苏稻香 [Su Taoxiang] and 周皓 [Zhou Hao], 护渔编队南沙行: 一日千里 4天抵西南渔场 ["Fisheries Protection Flotilla Heads to the Spratly Islands: It Steams One Thousand Kilometers in a Day and Reaches the Spratly Fisheries in Four Days"], 新华网 [*Xinhua Online*], April 7, 2010, news.xinhuanet.com/2010-04/07/c_1220494.htm.

315. See Stimson Center, "Roundtable Discussion with Indonesian Minister of Maritime Affairs and Fisheries Susi Pudjiastuti," filmed May 12, 2017, YouTube video, posted May 15, 2017, www.stimson.org/content/roundtable-discussion-indonesian-minister-maritime-affairs-and-fisheries-susi-pudjiastuti.

316. In 2011, local- and national-level FLE ships expelled fifty-three foreign fishing vessels operating "illegally" in all Chinese-claimed waters. *ODR 2013,* p. 272. During the one-year period from July 2012 to July 2013, Chinese maritime law-enforcement forces drove away 164 foreign fishing vessels operating in the Paracels alone. 段欣毅 [Duan Xinyi] and 李学山 [Li Xueshan], 三沙一年驱赶164艘次外国渔船 南海侵权侵渔势头得到遏制 ["In One Year Sansha Expelled 164 Foreign Fishing Vessels and the Rights Infringement Situation in the South China Sea Has Been Contained"], 人民网 [*People Online*], July 18, 2013, politics.people.com.cn/n/2013/0718/c1001-22245544.html. Still, one must be careful when drawing conclusions, for such numbers do not capture fluctuations in Vietnamese activities in these waters—the other key variable. According to Chinese accounts, these intrusions have increased. Sansha City officials have stated that "foreign fishing activities that violate Chinese rights in the waters of the Paracels (especially those conducted by Vietnam) are increasing year by year. In 2013, 319 boats infringed Chinese fisheries in the Paracels. In the first five months of 2014, 237 boats infringed Chinese fisheries." Zhao Yeping and Chen Aidi, "South China Sea Law Enforcement Encounters Arrogant Foreign Fishing Vessels." China occasionally has detained Vietnamese fishermen for their activities in the Paracels. For instance, on March 4, 2012, FLE forces took into custody the crews of two Vietnamese fishing boats, purportedly caught using explosive charges to fish in the Paracels. The twenty-one Vietnamese fishermen were kept in detention on Woody Island for nearly a month and a half. Ultimately they were released, after signing a letter promising never to return. They returned to Vietnam on one of the two fishing vessels, the second having been confiscated. 梁钢华 [Liang Ganghua], 中国渔政部门释放一越南西沙侵渔渔船及越南渔民 ["China Fisheries Law Enforcement Releases a Vietnamese Fishing Vessel and Vietnamese Fishermen Caught Infringing Chinese Rights"], 新华网 [*Xinhua Online*], April 21, 2012, gd.xinhuanet.com/newscenter/2012-04/21/content_25106574.htm.

317. "Presence of China Coast Guard Ship at Luconia Shoals Spooks Local Fishermen," *Borneo Post Online,* September 27, 2015, www.theborneopost.com/2015/09/27/presence-of-china-coast-guard-ship-at-luconia-shoals-spooks-local-fishermen/.

318. 吴琼 [Wu Qiong], 中国海监定巡执法全海域 ["China Marine Surveillance Conducts Regular Law-Enforcement Patrols in All Waters"], 中国海洋报特刊 [*China Ocean News,* special supplement], July 22, 2014, p. 41. The original idea to expand presence apparently came from Rear Adm. Xu Hongmeng, who proposed it after being briefed about the rights-protection situation in the East China Sea. When China Marine Surveillance was created, the scope of its rights-protection operations was fairly modest. It primarily focused on tracking and (sometimes) harassing foreign surveying vessels operating in China's (uncontested) EEZ. CMS ships seldom sailed to disputed waters, and such missions that did occur happened at irregular intervals. *ODR 2009,* p. 424. See also *ODR 2011,* p. 480. Tracking and monitoring foreign surveillance vessels in China's EEZ is a mission that China Marine Surveillance did right up until it was integrated into the China Coast Guard. For instance, from 2007 to 2010, China Marine Surveillance recorded more than one hundred instances of "tracking and monitoring" USN surveillance vessels operating in China's EEZ. Wang Xinyi, "Patrol Law Enforcement: It Changed China's Maritime Rights-Protection Situation," p. 61. For an account of the 2001 tracking of USNS *Bowditch,* see Yu Zhirong, *Rights Protection in the East China Sea,* pp. 190–91. For additional information on how the *Bowditch* incident led to the development of the model for tracking foreign naval surveillance vessels in the EEZ, see 郁志荣 [Yu Zhirong], 董奚戟 [Dong Xiji], and 张颖 [Zhang Ying], 魂系东海再铸蓝色辉煌, 记中国海监东海总队海洋维权执法 ["CMS East Sea Department Achieves New Glory, a Record of CMS East Sea Department Rights-Protection Law Enforcement"], 海洋开发与管理 [*Ocean Development and Management*], no. 4 (2005), p. 59.

319. 2007年中国海洋行政执法公报 [*2007 Report on Chinese Administrative Law Enforcement*], 国家海洋局 [*State Oceanic Administration*], March 13, 2008, www.soa.gov.cn/zwgk/hygb/zghyxzzfgb/2007nzghyxzzfgb/; 秦静 [Qin Jing], 请祖国放心—黄海定期维权巡航侧记 ["Motherland, Please Be at Ease—a Record of Yellow Sea Regular Rights-Protection Patrols"], 中国海洋报 [*China Ocean News*], January 18, 2011, p. 5.

320. For an excellent discussion of the expansion of rights-protection patrols in the South China Sea, see Andrew Chubb, "China's Expansion of 'Regular Rights Defense Patrols' in the South China Sea: A Map, Courtesy of CCTV," *South Sea Conversations,* September 4, 2014, southseaconversations.wordpress.com/2014/09/04/chinas-expansion-of-regular-rights-defense-patrols-in-the-south-china-sea-a-map-courtesy-of-cctv/.

321. This mission actually was regarded as a "special rights-protection operation" (专项维权执

法行动)—that is, not "routine." 蔡岩红 [Cai Yanhong], 中国海监东海总队加强我国钓鱼岛等海域巡航执法 ["East China Sea Contingent of CMS Strengthens Law-Enforcement Patrols to Diaoyu Island"], 法制日报 [*Legal Daily*], September 16, 2012, www.legaldaily.com.cn/index_article/content/2012-09/16/content_3844923.htm?node=5955.

322. For the nine-ship figure in 2012, see 赵颖翡 [Zhao Yingfei], 浪尖上的中国海监: 中国海监定期维权巡航执法工作发展纪实 ["CMS Up on the Wave: A History of the Development of CMS Regular Rights-Protection Patrols"], 海洋开发与管理 [*Ocean Development and Management*], no. 6 (2012), pp. 46–49. For information on the six-ship standard in the South China Sea, see 中国海监南海总队去年累计巡航南海17万海里 ["CMS South Contingent Patrolled 170,000 Nautical Miles in the South China Sea Last Year"], 新华网 [*Xinhua Online*], January 22, 2013, news.xinhuanet.com/politics/2013-01/22/c_114462283.htm.

323. The Chinese word for "patrols" used here is 艘次 *(souci)*. 2008年中国海洋行政执法公报 [*2008 Report on Chinese Administrative Law Enforcement*], 国家海洋局 [*State Oceanic Administration*], March 30, 2009, www.soa.gov.cn/zwgk/hygb/zghyxzzfgb/2008nzghyxzzfgb/.

324. 刘晓晟 [Liu Xiaocheng], 今年南海定期维权巡航执法第一航次起航 ["This Year's First Regular Rights-Protection Patrol in the South China Sea Commences"], 中国海洋报 [*China Ocean News*], January 25, 2013, p. 2.

325. China Ocean Yearbook Compilation Committee, *2014 China Ocean Yearbook,* p. 129. CMS detachments (which still exist) sometimes release information. For instance, in 2014 the 7th Detachment, located in Guangzhou, performed sixty "rights-protection" patrols, the most in its history to that date. 中国海监第七支队亮出精彩数据 ["CMS Seventh Detachment Reveals Its Excellent Data"], 中国海洋报 [*China Ocean News*], March 6, 2015, p. 2. "Regular rights-protection patrol" figures are an imperfect proxy for tracking Chinese presence in disputed waters, because they also include some operations that take place in undisputed waters.

326. For this quote, see 海洋发展战略研究所课题组 [China Institute for Marine Affairs Special Topic Group], 中国海洋发展报告 (2010) [*China's Ocean Development Report (2010)*] (Beijing: Ocean, 2010), p. 169. Also see *2008 Report on Chinese Administrative Law Enforcement.*

327. Yi Yan, "Resolutely and Unswervingly Safeguard Maritime Rights and Interests." For more on this, see Xi Zhigang, "Mainland China's CMS Is Becoming a 'Quasi–Coast Guard.'"

328. In the decade prior to the CCG reform, Fisheries Law Enforcement apparently did not see the same dramatic expansion in presence in disputed waters. The service had far fewer ships and far more responsibilities. Rights-protection missions were managed by the Ministry of Agriculture and conducted as part of the EEZ patrol system (专属经济区渔政巡航) set up in 2000. In 2006, Fisheries Law Enforcement conducted a total of 317 EEZ patrols, covering 218,000 nautical miles, with FLE cutters spending a combined 3,165 ship days at sea. 刘增胜 [Liu Zengsheng] and 柳正 [Liu Zheng], eds., 中国渔业年鉴 [*2007 China Fisheries Yearbook*] (Beijing: China Agricultural, 2007), p. 29. In 2012, Fisheries Law Enforcement conducted 279 patrols covering 283,350 nautical miles and involving 3,958 ship days at sea. 刘增胜 [Liu Zengsheng] and 李书民 [Li Shumin], eds., 中国渔业年鉴 [*2013 China Fisheries Yearbook*] (Beijing: China Agricultural, 2013), pp. 82–83.

329. "East China Sea Tensions: Approaching a Slow Boil," *Asia Maritime Transparency Initiative,* April 14, 2016, amti.csis.org/east-china-sea-tensions/.

330. 深化改革 奋发有为推动海洋强国建设不断取得新成就——刘赐贵在全国海洋工作会议上所作工作报告摘编 ["Deepen Reform and Take Action to Achieve New Results toward Building China into a Maritime Power—Excerpts from Liu Cigui's Report at the National Maritime Work Meeting"], 中国海洋报 [*China Ocean News*], January 17, 2014, pp. 2–3.

331. 深化改革 依法治海推动海洋强国建设实现新跨越--王宏在全国海洋工作会议上的工作报告 (摘编) ["Deepen Reform, Govern the Sea on the Basis of Law, Take a New Step toward Building China into a Maritime Power—SOA Director Wang Hong's Report at the National Maritime Work Meeting (Excerpts)"], 中国海洋报 [*China Ocean News*], February 10, 2015, pp. 2–3. For use of this term in the context of Second Thomas Shoal, see China Ocean Yearbook Compilation Committee, *2014 China Ocean Yearbook,* p. 129.

332. For a brilliant review of recent PRC interest in the Luconia Shoals, see Andrew Chubb, "Luconia Breakers: China's New 'Southernmost Territory' in the South China Sea?," *South Sea Conversations,* June 16, 2015, southseaconversations.wordpress.com/2015/06/16/luconia-breakers-chinas-new-southernmost-territory-in-the-south-china-sea/. The China Coast Guard also has escorted large fleets of fishing vessels to waters adjacent to the Luconia Shoals. "China Coast Guard Vessels Escort Fishing Boat Flotilla into Malaysian Waters," *Japan Times,* March 30,

2016, www.japantimes.co.jp/news/2016/03/30/asia-pacific/china-coast-guard-vessels-escort-fishing-boat-flotilla-malaysian-waters/. For a very interesting firsthand account of the CCG presence at the Luconia Shoals, see "Australian Farmer Causes Storm in South China Sea Territorial Dispute," *ABC News,* August 7, 2016, www.abc.net.au/news/2016-08-08/malaysian-flag-rasing-causes-south-china-sea-incident/7679024.

333. 国家海洋事业发展规划纲要 (2006-2010年) ["Outline Plan for National Maritime Development (2006–2010)"], *State Oceanic Administration,* September 17, 2009, www.soa.gov.cn/zwgk/fwjgwywj/gwyfgwj/201211/t20121105_5264.html.

334. While public recognition of a new policy to pursue control over all claimed waters began in 2011, this policy may have been put in place in 2010 or even 2009. Language from a September 14, 2012, article in an SOA-owned newspaper suggests this to be the case: "In recent years, the East China Sea China Marine Surveillance contingent has taken steps to achieve the work objective put forward by the State Oceanic Administration Party Committee to 'strengthen control over China's jurisdictional waters.' These steps include innovating its approach to patrols, expanding the geographic scope of patrols, and augmenting the vigor of patrols." Lv Ning, "Effectively Manifesting Sovereignty and Jurisdictional Rights in the East China Sea," p. 5. This article also states that "people in positions of responsibility in the CMS East China Sea contingent regard maritime rights and interests as 'core interests.'" That China anticipated 2012 to be a year of conflict in the South China Sea also is suggested by the comments made by Lü Bin, a senior official in the State Oceanic Administration, while visiting the 7th Detachment of China Marine Surveillance in Guangzhou in February 2012. During his visit, Lü toured *CMS 75*. Among his recorded remarks while visiting the ship, Lü promised that "this year's maritime rights-protection tasks will be heavier than in the past." Two months later, *CMS 75* and a second cutter confronted *Gregorio del Pilar* at Scarborough Shoal. 孙安然 [Sun Anran], 国家海洋局纪委书记吕滨视察中国海监第七支队 ["SOA Commissioner of Discipline Lü Bin Inspects the CMS 7th Detachment"], 中国海洋报 [*China Ocean News*], February 20, 2012, p. 1.

335. 2011年全国海洋厅局长暨党风廉政建设工作会议在京召开 ["The 2011 National Good Governance Meeting for Municipal, Provincial, and National Maritime Leaders Opens in Beijing"], 海洋开发与管理 [*Ocean Development and Management*], no. 2 (2011), p. 3. Liu reiterated this theme in June and again in November of that year. 国家海洋局加大定期维权巡航力度强化管辖海域控制力 ["SOA Expands the Force of Regular Rights-Protection Patrols and Strengthens Control over Jurisdictional Waters"], 法制日报 [*Legal Daily*], June 9, 2011, epaper.legaldaily.com.cn/fzrb/content/20110609/Articel01013GN.htm.

336. For instance, in January 2012, just a few months before the Scarborough Reef standoff, CMS officer Sun Shuxian told a reporter that the goal of China Marine Surveillance for 2012 would be to "strengthen control over jurisdictional waters." 孙安然 [Sun Anran], 推动海监事业健康有序快速发展 ["Promoting the Healthy, Orderly, and Rapid Development of Maritime Surveillance Work"], 中国海洋报 [*China Ocean News*], January 6, 2012.

337. 全国海洋功能区划 (2011-2020年) ["National Maritime Functional Zoning (2011–2020)"], *State Oceanic Administration,* April 18, 2012, www.soa.gov.cn/zwgk/fwjgwywj/gwyfgwj/201211/t20121105_5255.html. This preference for the language of control occurred in parallel with calls to "strengthen jurisdiction" (强化管辖) over claimed waters. At the commissioning ceremony for the three-thousand-ton *CMS 50* in July 2011, Liu Cigui put forth three requirements for CMS work. For his second point, Liu stated, "China Marine Surveillance must fully raise its ability to safeguard maritime rights and interests. In accordance with the plans and policies of the Party center, it must declare China's claims, strengthen jurisdiction, [and] fully deepen regular rights-protection patrol work." It is very likely, then, that this shift in language reflects a change in policy endorsed by the highest leadership. "An Awards Ceremony for the Fifth Anniversary of CMS Regular Rights-Protection Patrols Was Held Together with a Ceremony for the Commissioning of *CMS 50,*" p. 3. Frontline CMS officers clearly have internalized this aim of strengthening jurisdiction. A CMS officer interviewed in 2013 for *Traveling around China* listed "strengthening jurisdiction" as one of the service's three overall purposes. The other two were "demonstrating sovereignty" and "collecting evidence" (i.e., of foreign violations). "Blue Border Guards." Similar language appears in key documents guiding the work of Fisheries Law Enforcement. The Ministry of Agriculture's Twelfth Five-Year Plan for Fisheries Development (2011–2015), for instance, pointedly cites the goal of "strengthening normalization of Fisheries Law Enforcement patrols and the vigor of rights-protection patrols in sensitive waters." 全国渔业发展第十二个五年规划 (2011–2015年) [National Twelfth Five-Year Plan for Fisheries Development (2011–2015)], 中华人民共和国农业部网站 [*Ministry of Agriculture*],

October 17, 2011, www.moa.gov.cn/ztzl/shierwu/hyfz/201110/t20111017_2357716.htm.

338. This plan was drafted on the basis of the earlier document, so comparing the language of the two documents provides insights into changing policies. 国家海洋事业发展"十二五"规划 [Twelfth Five-Year Plan for Maritime Development], 国家海洋局网站 [*Website of the State Oceanic Administration*], April 11, 2013, www.soa.gov.cn/zwgk/fwjgwywj/shxzfg/201304/t20130411_24765.html. At a January 2013 work conference for the South China Sea branch of the State Oceanic Administration, party secretary Qian Honglin pointed out that one of the organization's goals in 2013 would be to "more effectively and more forcibly conduct law-enforcement patrols in China's jurisdictional waters and comprehensively raise capacity for true administrative control in Chinese jurisdiction waters in the South China Sea" as part of overall efforts to improve "rights-protection" work. 南海分局召开2013年工作会议 ["The South China Sea Branch of SOA Holds Its 2013 Work Meeting"], 中国海洋报 [*China Ocean News*], January 25, 2013, p. 3. On the sixtieth anniversary of the founding of the SOA, Liu Cigui published an article in which he wrote that going forward the SOA would "fully safeguard China's maritime rights and interests, and strengthen control over jurisdictional waters." 刘赐贵 [Liu Cigui], 在建设海洋强国的伟大征程中铸就辉煌——纪念国家海洋局成立50周年 ["Create Glory on the Great Journey of Building China into a Maritime Power—Commemorating the 50th Anniversary of the Founding of SOA"], 中国海洋报 [*China Ocean News*], July 22, 2014, p. 1. In the same month as the 2013 SOA work conference, CMS party secretary Sun Shuxian published an article in *China Ocean News* to set the overall tone of his agency's activities in the new year. This meant, among other things, "consolidating the fruits" of 2012 and "strengthening administrative control" over disputed waters and land features. 孙书贤 [Sun Shuxian], 做好维权行政执法工作 提高海洋综合管控能力 ["Perform Rights Protection and Administrative Law Enforcement and Raise Capacity to Achieve Comprehensive Administrative Control at Sea"], 中国海洋报 [*China Ocean News*], January 28, 2013, p. 1.

339. Michael McDevitt, *Becoming a Great "Maritime Power": A Chinese Dream* (Arlington, VA: CNA, June 2016), www.cna.org/cna_files/pdf/IRM-2016-U-013646.pdf.

340. 黄冉摄 [Huang Ranshe], 全国海洋工作会议在京召开--中央领导对大会召开及海洋工作作重要批示 ["The National Maritime Work Meeting Opens in Beijing—Central Party Leaders Provide Important Instructions"], 中国海洋报 [*China Ocean News*], January 11, 2013, p. 1.

341. 刘赐贵: 十八大报告首提"海洋强国"具有重要的现实和战略意义 ["Liu Cigui: The Fact That the *18th Party Congress Work Report* Mentions 'Maritime Power' Has Important Real and Strategic Significance"], 中国海洋报 [*China Ocean News*], November 12, 2012, p. 1.

342. In this same sentence, Admiral Wu also wrote that China should "effectively contain hot spots from escalating and getting out of control." This is the stability side of the rights-stability dialectic. Wu Shengli, "Profoundly Absorb the Historical Lessons of the First Sino-Japanese War and Unswervingly Take the Path of Strategic Management of the Sea, Safeguarding Maritime Rights, and Developing the Navy," p. 3.

343. 张兆垠 [Zhang Zhaoyin], 切实有效维护海洋权益 ["Earnestly and Effectively Safeguard Maritime Rights and Interests"], 人民海军 [*People's Navy*], March 19, 2014, p. 2. In his 2014 article in *China Military Science,* Sr. Capt. Xie Shiting discusses the need for China to "expand the space under Chinese administrative control." Xie Shiting, "A Scientific Compass for Strategically Managing the Sea and Safeguarding Maritime Rights and Interests in the Context of the New Situation," p. 84.

344. Xi Jinping, "We Need to Do More." Xi used a similar formulation in his 2017 New Year's message: "We will continue to embrace peaceful development, and we will continue to resolutely defend our territorial sovereignty and maritime rights and interest. China will not tolerate anybody taking issue with this!" 国家主席习近平发表二〇一七年新年贺词 ["Chinese President Xi Jinping's New Year's Eve Message for 2017"], 新华社 [*Xinhua*], December 31, 2016, news.xinhuanet.com/politics/2016-12/31/c_1120227034.htm. Another oft-cited Xi Jinping quote reflecting China's new, less compromising approach was uttered by Xi during a speech given in July 2016 to commemorate the ninety-fifth anniversary of the founding of the Chinese Communist Party: "The Chinese people don't believe in evil, but nor are they afraid of evil; they don't stir up trouble, but nor are they afraid of trouble. No foreign country should expect that we will barter with our core interests. Don't expect us to allow harm to be done to our sovereignty, security, and development interests. We won't swallow that bitter fruit." 习近平: 在庆祝中国共产党成立95周年大会上的讲话 ["Xi Jinping: Speech Given at the Ceremony Commemorating the 95th Anniversary of the Founding of the CCP"], 新华社 [*Xinhua*], July 1, 2016, news.xinhuanet.com/politics/2016-07/01/c_1119150660.htm. In a June 2014

meeting, Xi signaled his heightened concern for "maritime defense" (海防) by calling on Chinese forces to "resolutely safeguard territorial sovereignty and maritime rights and interests" and build "a wall of copper and iron for border and maritime defense." 李宣良 [Li Xuanliang] and 黎云 [Liang Yun], 习近平: 筑牢边海防铜墙铁壁 ["Xi Jinping: China Will Build a Solid Wall of Copper and Iron for Border and Maritime Defense"], 新华网 [*Xinhua Online*], June 27, 2014, news.xinhuanet.com/politics/2014-06/27/c_1111357748.htm. For an authoritative discussion on the evolution of Chinese maritime defense under Xi Jinping, see 侯胜亮 [Hou Shengliang], 论中国边海防转型建设 ["On the Transformation of China's Border and Maritime Defense"], 中国军事科学 [*China Military Science*], no. 6 (2015), pp. 69–75. A PLAN representative to the 2016 National People's Congress interpreted China's maritime activism in the Xi Jinping era as follows: "In recent years, under the strong leadership of the Party Central Committee and Xi Jinping, we have given some beautiful 'combination punches' in the struggle for maritime rights protection. We've achieved historic breakthroughs with respect to strategic management of the sea and safeguarding maritime rights." 孙国强 [Sun Guoqiang], 建设海洋强国需要一支 强大海军 ["To Build Itself into a Maritime Power China Needs a Powerful Navy"], 人民海军 [*People's Navy*], March 9, 2016, p. 1. For more on the concept of "strategic management of the sea," see Ryan D. Martinson, "Jinglue Haiyang: The Naval Implications of Xi Jinping's New Strategic Concept," Jamestown Foundation *China Brief* 15, no. 1 (January 9, 2015), jamestown.org/program/jinglue-haiyang-the-naval-implications-of-xi-jinpings-new-strategic-concept/#sthash.3mnZtJea.dpuf.

345. Yi Yan, "Resolutely and Unswervingly Safeguard Maritime Rights and Interests." Similar logic was outlined in an important July 2014 *PLA Daily* article published under the byline of a major research institute within the Chinese Academy of Military Science. The authors admit that in recent years China has operated more aggressively along its maritime periphery than it did in the past. This shift in behavior was prompted by a perceived need to "forcibly strike back at other disputants." The authors then write, "Experience shows that given the urgent needs of safeguarding national sovereignty, security, and development interests, the only way to establish the standing of the Chinese state and military [国威军威], deter the provocations of our counterparts, and safeguard the security of border and maritime defense is to contend for every inch of land and sea, and, at the key moment, to dare to flash the sword [亮剑] and lash out [出手]." 军事科学院国家边海防研究中心 [Academy of Military Science Border and Maritime Defense Research Center], 治国先治边, 维护边海防安全要敢于斗争善于斗争 ["To Govern the State We Must First Govern the Periphery, in Safeguarding Border and Maritime Defense We Must Dare to Struggle and Excel at Struggling"], 解放军报 [*PLA Daily*], July 1, 2014, p. 6.

346. Li Peizhi, "Ideas on Reform of the China Coast Guard," p. 49.

347. "Zhang Haiwen: The Current Maritime Situation and Thoughts on China's Maritime Strategy." For a general discussion of the rights-protection/stability-maintenance balance, see Martinson, "China's Great Balancing Act Unfolds." 张洁 [Zhang Jie], 黄岩岛模式与中国海洋维权政策的转向东 ["Huangyan Model and the Shift of China's Maritime Rights-Protection Strategy"], 东南亚研究 [*Southeast Asian Studies*], no. 4 (2013), pp. 25–31. Zhang collaborated with several other scholars on an early 2013 article that characterized 2012 as a "turning point," at which Chinese maritime policy transitioned from Deng Xiaoping's "keeping a low profile" (韬光养晦) to "taking the initiative" (主动作为). 张洁 [Zhang Jie] et al., 海上纷争与中美博弈—中国周边安全形势 ["Maritime Disputes and Sino-U.S. Contention—China's Peripheral Security Situation"], 世界知识 [*World Affairs*], no. 2 (2013), p. 15. *People's Daily* online cites a similar judgment that Jin Canrong, a professor and administrator at Renmin University's School of International Studies, made in the aftermath of China's seizure of Scarborough Shoal. Yao Chun, "China Shifts Its Maritime Strategy," *People's Daily* (English), July 16, 2012, en.people.cn/90883/7876606.html. A Chinese newspaper cited Wu Shicun, president of the National Institute for South China Sea Studies, making the following comment: "[Since 2012] China has become much more assertive [积极有为] with respect to the South China Sea issue. Strategically, it takes the initiative [lit., "proactively attacks"—主动出击]. Tactically, it is continually upgrading its rights-protection methods." "China's Maritime Patrols Cover All of the South China Sea and Maritime Rights Protection Is More Proactive Than in the Past." The authoritative *ODR 2013* states (p. 49) that "in 2012 indeterminate factors increased and frictions and disputes over maritime rights and interests became enflamed."

348. As Michael Mazarr points out, even if force is not used, the success of strategies such as the one China is pursuing in the East China Sea and South China Sea will lead to vigorous countermeasures from other disputants. Michael J. Mazarr, *Mastering the Gray Zone: Understanding a Changing Era of Conflict* (Carlisle Barracks,

PA: Strategic Studies Institute and U.S. Army War College Press, 2015), pp. 69–70.

349. Renato Cruz De Castro, "Philippine Supreme Court Approves EDCA: Unlocking the Door for the Return of U.S. Strategic Footprint in Southeast Asia," *Asia Maritime Transparency Initiative,* February 1, 2016, amti.csis.org/philippine-supreme-court-approves-edca-unlocking-door-return-u-s-strategic-footprint-southeast-asia/.

350. Kiyoshi Takenaka, "Japan to Provide Patrol Ships to Vietnam amid Maritime Row with China," *Reuters,* September 7, 2016, www.reuters.com/article/us-asean-summit-japan-vietnam-idUSKCN11D2CB; Manuel Mogato, "Philippines Gets First Coastguard Boat from Japan to Boost Security," *Reuters,* August 18, 2016, www.reuters.com/article/us-southchinasea-philippines-japan-idUSKCN10T11V.

351. These ships often transmit AIS signals, which allows open-source tracking of their operations.

352. The March 2009 attack against USNS *Impeccable* is the most noteworthy of these incidents, because of the aggressiveness of the tactics used. The decision to harass USN special-mission ships in early 2009 clearly was a national policy: harassment took place in different sea areas and involved multiple agencies. However, it appears that the head of the South China Sea branch of Fisheries Law Enforcement, Wu Zhuang, personally decided to unleash China's maritime militia on *Impeccable*. Martinson, "Panning for Gold," p. 30. According to the account published on the website of a Guangdong fisheries administration agency, "In 2009, the U.S. Navy surveying vessel *Impeccable* intruded into China's EEZ, impacting the normal production activities of Chinese fishing vessels. Chinese fishermen and trawlers spontaneously came to the scene, and a Fisheries Law Enforcement vessel commanded them to intercept and expel [the American ship], thereby forcefully protecting the rights and interests of Chinese trawlers and fishermen." 中国渔政 蓝色国土的守护者 ["Fisheries Law Enforcement Is the Protector of China's Blue Territory"], 廉江市海洋与渔业局 [*Lianjiang City Oceans and Fisheries Bureau*], February 22, 2011, www.ljhyj.gov.cn/Shownews.asp?Sid=79. The South China Sea branch of Fisheries Law Enforcement commemorated the first anniversary of the attack on *Impeccable*. According to an article appearing on the branch's website, "Chinese fishermen and China Fisheries Law Enforcement successfully intercepted and expelled the U.S. Navy spy ship *Impeccable*." For this they "received the high praise of their superiors and the Chinese people." Wu Zhuang spoke at the commemoration ceremony. 记住扬眉吐气的那一天 ["Remembering the Day We Held Our Heads High"], 农业部南海区渔政局 [*South China Sea Branch of Fisheries Law Enforcement*], March 10, 2010, www.moa.gov.cn/sydw/nhyzj/dwjs/sxjs/201003/t20100310_2110849.htm. For his success in the struggle at sea (presumably including the harassment of *Impeccable*), Wu received an award and a commendation at the Fourth National Border and Maritime Defense Work Meeting, held in January 2010. 中国渔政南海总队被授予全国边海防工作先进集体并受表彰 ["The South China Sea Contingent of Fisheries Law Enforcement Receives Collective Commendation at the Fourth National Border and Maritime Defense Work Meeting"], 农业部南海区渔政局 [*South China Sea Branch of Fisheries Law Enforcement*], February 1, 2010, www.moa.gov.cn/sydw/nhyzj/gzdt/201002/t20100201_2110433.htm. The U.S. Defense Department also concluded that the attack on *Impeccable* did not result from a decision made at a senior level. Speaking in January 2011, then–Secretary of Defense Robert Gates said, "We think the civilian leadership was not aware of the aggressive approach by Chinese ships to the USNS *Impeccable* a few years ago." Jim Garamone, "U.S.-Japan Pact Has Demonstrated Worth, Gates Says," *U.S. Department of Defense,* January 13, 2011, archive.defense.gov/news/newsarticle.aspx?id=62451. On December 15, 2016, a PLAN submarine rescue vessel snatched a USN underwater glider while USNS *Bowditch* was recovering it in waters roughly fifty nautical miles northwest of Subic Bay. This incident took place in an area that Beijing does not claim. As such, this action was either an attempt to steal an American asset for intelligence purposes or was intended to signal to American leaders China's dissatisfaction with the recent statements of then-president-elect Donald Trump on Taiwan or some other recent U.S. action that cannot be identified from publicly available sources. China officially claims that the PLAN vessel happened to find the glider and treated it as a navigational hazard. China returned the glider four days after it was taken. Terri Moon Cronk, "Chinese Seize U.S. Navy Underwater Drone in South China Sea," *DoD News,* December 16, 2016, www.defense.gov/News/Article/Article/1032823/chinese-seize-us-navy-underwater-drone-in-south-china-sea; "Statement by Pentagon Press Secretary Peter Cook on Return of U.S. Navy UUV," *U.S. Department of Defense,* December 19, 2016, www.defense.gov/News/News-Releases/News-Release-View/Article/1034224/statement-by-pentagon-press-secretary-peter-cook-on-return-of-us-navy-uuv; "China to Hand Over Underwater Drone to U.S. in Appropriate Manner," *Xinhua,* December 18, 2016, news.xinhuanet.com/english/2016-12/18/c_135913344.htm. For further analysis, see M. Taylor Fravel,

"The Implications of China's Seizure of a U.S. Navy Drone," *Maritime Awareness Project,* December 21, 2016, maritimeawarenessproject.org/2016/12/21/the-implications-of-chinas-seizure-of-a-u-s-navy-drone/.

353. As Peter Dutton points out, the new Spratly bases have turned the South China Sea into a strategic strait, in which foreign ships can be menaced from two directions. Peter Dutton, "A Maritime or Continental Order for Southeast Asia and the South China Sea?," *Naval War College Review* 69, no. 3 (Summer 2016), pp. 10–11.

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