No Substitute for Experience

Andrew S. Erickson

Austin M. Strange

Follow this and additional works at: https://digital-commons.usnwc.edu/cmsi-red-books

Recommended Citation

This Book is brought to you for free and open access by the Reports & Studies at U.S. Naval War College Digital Commons. It has been accepted for inclusion in CMSI Red Books by an authorized administrator of U.S. Naval War College Digital Commons. For more information, please contact repository.inquiries@usnwc.edu.
No Substitute for Experience
Chinese Antipiracy Operations in the Gulf of Aden

Andrew S. Erickson and Austin M. Strange
No Substitute for Experience

Chinese Antipiracy Operations in the Gulf of Aden

Andrew S. Erickson and Austin M. Strange

Contents

Authors' Note ........................................................................................................................................ vii
Introduction: Why Antipiracy in the Gulf of Aden? ........................................................................... 1

CHAPTER ONE  Modern Piracy and Its Relevance to China................................................................. 9
CHAPTER TWO  Institutional Underpinnings: Domestic Political and Policy Issues ............................... 45
CHAPTER THREE China's Views on Multilateral Coordination.............................................................. 57
CHAPTER FOUR  China's Recent Antipiracy Activities in the Gulf of Aden and Indian Ocean.................... 81
CHAPTER FIVE  Operational Trajectories ............................................................................................. 121
CHAPTER SIX  Lessons Learned and Implications for Global Maritime Governance ............................. 167

Conclusion: No Substitute for Experience............................................................................................ 187
Appendix: Notional PLAN Order of Battle by Fleet ............................................................................ 190
Abbreviations and Definitions ............................................................................................................. 192
About the Authors ................................................................................................................................. 195
Authors’ Note

This eighteen-month study is based on a comprehensive survey of more than two thousand discrete Chinese-language sources published over the past five years. It also draws on discussions with Chinese experts in China and the United States, including one former People’s Liberation Army Navy (PLAN) official and one PLAN officer. The most important of these sources are cited herein. Sources that were examined systematically include the official PLAN publications 人民海军 (People’s Navy), 当代海军 (Modern Navy), 海军医学杂志 (Journal of Navy Medicine), and 中华航海医学与高气压医学杂志 (China Journal of Nautical Medicine and Hyperbaric Medicine); the official PLA publication 解放军报 (Liberation Army Daily); and such official state media sources as 中国日报 (China Daily), 人民日报 (People’s Daily), and 中央电视台 (China Central Television/CCTV)—particularly the program “军事报道” (“Military Report”) on China’s official military channel, CCTV-7. In selected instances, particularly cases in which translations are especially substantive, lengthy, or have required significant adjudication between literal rendering of Chinese and expressions that would be most intelligible to an English-speaking audience, the original Chinese is appended in an endnote. Every effort has been made to communicate to an English-reading audience in nuanced fashion what Chinese sources themselves are expressing, even when English readers might differ conceptually or substantively. Where possible, such potential ambiguity is noted in endnotes. The one major exception is the widespread description by Chinese sources of ships seized by pirates as having been “hijacked”; from an international legal perspective, “pirated” would be the correct term.

The authors thank Bernard Cole, Gabriel Collins, Peter Dutton, Glen Forbes, William Murray, two anonymous reviewers, and one operational specialist for their insightful comments concerning previous drafts of this study, as well as military operators from multiple nations for sharing their insights. The views expressed herein are those of the authors alone and not those of the U.S. Navy or any other agency of the U.S. government.

All photographs obtained with permission from China Defense Forum.
Selected Port Calls by First 14 PLAN Antipiracy Task Forces, February 2009–April 2013
<table>
<thead>
<tr>
<th>Country</th>
<th>City</th>
<th>Dates</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFGHANISTAN</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALGERIA</td>
<td>Algiers</td>
<td>2–5 April 2013</td>
<td>Friendly Visit</td>
</tr>
<tr>
<td>AUSTRALIA</td>
<td>Sydney</td>
<td>18–22 December 2012</td>
<td>Friendly Visit</td>
</tr>
<tr>
<td>BAHRAIN</td>
<td>Manama</td>
<td>9–13 December 2010</td>
<td>Friendly Visit</td>
</tr>
<tr>
<td>BULGARIA</td>
<td>Varna</td>
<td>5–10 August 2012</td>
<td>Friendly Visit</td>
</tr>
<tr>
<td>BURMA/MYANMAR</td>
<td>Rangoon</td>
<td>29 August–2 September 2010</td>
<td>Friendly Visit</td>
</tr>
<tr>
<td>DJIBOUTI</td>
<td>Djibouti</td>
<td>24 January 2010, Replenish</td>
<td>Replenish/Overhaul 3 May 2010, Replenish/Overhaul</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13 September 2010, Replenish</td>
<td>Overhaul 22 September 2010, Replenish/Overhaul</td>
</tr>
<tr>
<td></td>
<td></td>
<td>24 December 2010, Replenish</td>
<td>Overhaul 21 February 2011, Replenish/Overhaul</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13–18 August 2012, Replenish</td>
<td>Overhaul 1–6 December 2012, Replenish/Overhaul</td>
</tr>
<tr>
<td>EGYPT</td>
<td>Alexandria</td>
<td>26–30 July 2010</td>
<td>Friendly Visit</td>
</tr>
<tr>
<td>FRANCE</td>
<td>Toulon</td>
<td>23–27 April 2013</td>
<td>Friendly Visit</td>
</tr>
<tr>
<td>GREECE</td>
<td>Crete</td>
<td>7 March 2011, Replenish</td>
<td>Replenish/Overhaul 9–13 August 2010, Friendly Visit</td>
</tr>
<tr>
<td>MALAYSIA</td>
<td>Port Klang</td>
<td>6 December 2009</td>
<td>Friendly Visit</td>
</tr>
<tr>
<td>MALTA</td>
<td></td>
<td>26–30 March 2013</td>
<td>Friendly Visit</td>
</tr>
<tr>
<td>MOROCCO</td>
<td>Casablanca</td>
<td>9–13 April 2013</td>
<td>Friendly Visit</td>
</tr>
<tr>
<td>MOZAMBIQUE</td>
<td>Maputo</td>
<td>29 March–2 April 2012</td>
<td>Friendly Visit</td>
</tr>
<tr>
<td>OMAN</td>
<td>Muscat</td>
<td>1–8 December 2011</td>
<td>Friendly Visit</td>
</tr>
<tr>
<td></td>
<td>Salalah</td>
<td>21 June–1 July 2009</td>
<td>Replenish/Overhaul 14 August 2009, Replenish/Overhaul</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 January 2010</td>
<td>Replenish/Overhaul 1 April 2010, Replenish/Overhaul</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 June 2010</td>
<td>Replenish/Overhaul 10 August 2010, Replenish/Overhaul</td>
</tr>
<tr>
<td></td>
<td></td>
<td>28 January 2011</td>
<td>Replenish/Overhaul 10 April 2011, Replenish/Overhaul</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23 June 2011</td>
<td>Replenish/Overhaul 8–11 August 2011, Replenish/Overhaul</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13 March 2011, Joint Drills</td>
<td>8 September 2012, Replenish/Overhaul</td>
</tr>
<tr>
<td>PHILIPPINES</td>
<td>Manila</td>
<td>13–17 April 2010</td>
<td>Friendly Visit</td>
</tr>
<tr>
<td>PORTUGAL</td>
<td>Lisbon</td>
<td>13–19 April 2013</td>
<td>Friendly Visit</td>
</tr>
<tr>
<td>QATAR</td>
<td>Doha</td>
<td>2–7 August 2011</td>
<td>Friendly Visit</td>
</tr>
<tr>
<td>ROMANIA</td>
<td>Constanta</td>
<td>31 July–3 August 2012</td>
<td>Friendly Visit</td>
</tr>
<tr>
<td>SAUDI ARABIA</td>
<td>Jeddah</td>
<td>27–31 November 2010</td>
<td>Friendly Visit 3 September 2011, Replenish/Overhaul 17 June 2012, Replenish/Overhaul</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1–6 January 2013</td>
<td>Replenish/Overhaul 1–6 January 2013, Replenish/Overhaul</td>
</tr>
<tr>
<td>SEYCHELLES</td>
<td>Victoria</td>
<td>14 April 2011</td>
<td>Friendly Visit</td>
</tr>
<tr>
<td>SINGAPORE</td>
<td>Changi</td>
<td>5–7 September 2010</td>
<td>Replenish/Overhaul and Joint Drills 18–20 December 2011, Replenish/Overhaul</td>
</tr>
<tr>
<td>SOUTH AFRICA</td>
<td>Durban</td>
<td>4–8 April 2011</td>
<td>Friendly Visit</td>
</tr>
<tr>
<td>SRI LANKA</td>
<td>Colombo</td>
<td>5–7 January 2010</td>
<td>Friendly Visit and Replenish/Overhaul 7–12 December 2010, Friendly Visit</td>
</tr>
<tr>
<td>TANZANIA</td>
<td>Dar es Salaam</td>
<td>26–30 March 2011</td>
<td>Joint Drills and Friendly Visit</td>
</tr>
<tr>
<td>TURKEY</td>
<td>Instanbul</td>
<td>5–8 August 2012</td>
<td>Friendly Visit</td>
</tr>
<tr>
<td>UKRAINE</td>
<td>Sevastopol</td>
<td>31 July–3 August 2012</td>
<td>Friendly Visit</td>
</tr>
<tr>
<td>UNITED ARAB EMIRATES</td>
<td>Abu Dhabi</td>
<td>24–28 March 2010</td>
<td>Friendly Visit</td>
</tr>
<tr>
<td>VIETNAM</td>
<td>Ho Chi Minh City</td>
<td>13 January 2013</td>
<td>Friendly Visit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>28 September 2009</td>
<td>Replenish/Overhaul 5 February 2010, Replenish/Overhaul</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16 May 2010</td>
<td>Replenish/Overhaul 26 July 2010, Replenish/Overhaul</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 October 2010</td>
<td>Replenish/Overhaul</td>
</tr>
</tbody>
</table>

Source: This table draws on official Chinese media sources, primarily Xinhua, People's Daily, China Military Online, and Liberation Army Daily.
Introduction: Why Antipiracy in the Gulf of Aden?

The twenty-sixth of December 2012 marked an important date in Chinese military history—the fourth anniversary of China’s furthest and most extensive naval operations to date, the ongoing antipiracy deployments in the Gulf of Aden. In the first-ever simultaneous three-fleet public display, China’s North Sea Fleet, East Sea Fleet, and South Sea Fleet all held “open day activities.” The guided-missile destroyers Qingdao, Guangzhou, and Shenzhen and guided-missile frigate Zhoushan, together with their associated helicopters and personnel, were visited by more than eight thousand people “from all sectors of the society” at the port cities after which they are named. Over the past four years, the People’s Liberation Army Navy has deployed nearly ten thousand personnel on thirty-seven warships with twenty-eight helicopters in thirteen task forces. Over the course of more than five hundred operations, these forces have protected more than five thousand commercial vessels—Chinese and foreign in nearly equal proportion, the latter flagged by more than fifty nations. They have “successfully met and escorted, rescued and salvaged over 60 ships.” Ships saved from pirates by PLAN ships include four transports loaded with World Food Programme cargo.

Beijing has rightly been recognized for this contribution: “The escort in the Gulf of Aden provided by the Chinese naval task force is a strong support in cracking down [on] Somali piracies [sic] for the international community” Ban Ki-moon, secretary-general of the United Nations (UN), has been quoted as declaring, “which reflects China’s important role in international affairs.” In a new era of international interaction, the PLAN has cooperated with counterpart vessels from over twenty foreign countries “to exchange information regarding piracy in the Gulf of Aden and the Somali sea area.”

 Undertaken primarily to safeguard China’s economic interests, the operations also stimulate interagency coordination with the PLAN in a vital position, provide irreplaceable naval training, catalyze the development of naval skill sets often taken for granted but absolutely critical for long-distance operations, and offer tentative indications of Beijing’s approach to maritime governance as a great power. The results thus far are largely positive, albeit modest. China’s navy is increasing its out-of-area capabilities, but it would require tremendous improvements in force structure, human capital, training,
and experience to translate present resources into an ability to engage in high-intensity combat operations in what Chinese strategists term the “Far Seas” (远海). Still, antipiracy operations serve as a modest springboard by which China can achieve the international status and influence that it covets, since they allow China to be seen providing public goods and cooperating to defend the global system. Whatever the ultimate trajectory of China’s maritime power, its escort missions are likely to persist for some time and hence will continue to offer a valuable window into the future of China’s naval role beyond East Asia. Indeed, they offer the first major insights into China’s Far Seas operations and its approach thereto. Four years on, the PLAN’s Gulf of Aden antipiracy mission is highlighted by ten Chinese naval breakthroughs, all of which underscore China’s most significant lesson learned through its antipiracy mission: there is no substitute for experience, and the PLAN has had to learn many things by doing them.

• The mission’s greatest organizational value is its forcing and facilitating of real-time interagency coordination of a scope, duration, and effectiveness rarely seen in Chinese civil-military and security affairs.

• The PLAN has been empowered and required to coordinate directly with civilian organizations such as the Ministry of Transportation (MoT), transcending traditional bureaucratic and civil-military stovepipes and bringing the service out from under the People’s Liberation Army’s organizational shadow.

• The transformation in organizational coordination is aided by the application of new technology to the PLAN’s Gulf of Aden mission, which serves as an invaluable venue for testing Chinese satellites and new communications technology away from home.

• As a result of antipiracy operations, the PLAN is carving out a niche role in Chinese diplomacy, as Chinese antipiracy warships increasingly work with other navies and call on foreign ports for resupply and exchanges.

• Chinese ships and their crewmen deployed to the Gulf of Aden have no choice but to master the logistical skills and concepts associated with protracted, long-distance naval operations, including balancing underway and in-port replenishment and maintaining crew morale for extended periods amid rigorous conditions.

• Perhaps the mission’s greatest operational value is forcing personnel to face unscripted, unpredictable situations—the most intense operational experience presently available to China’s navy.

• The PLAN has traversed a steep learning curve with impressive speed and resourcefulness, enhancing both specific escort protection techniques and associated supporting capabilities.
• The operations have already yielded significant procedural, training, and operational improvements and may influence maintenance procedures and even ship design.

• Having taken these challenges in stride, China’s navy is gaining confidence.

• By contributing useful public goods, antipiracy operations offer Beijing increased global maritime influence.

Propelled by both domestic and international interests, antipiracy operations in the Gulf of Aden thus bring China into a more rewarding yet more difficult realm in which expectations are rising in both respects.

On close examination, however, the PLAN’s unprecedented actions raise an important foundational question: Why did China’s leaders decide that antipiracy operations in the Gulf of Aden provided the right opportunity for the nation’s first regularized overseas naval deployments? A confluence of several specific factors was involved.

**Antipiracy operations avoid ideological sensitivities.** Unlike acts of terrorism, which are designed to further political or ideological agendas, contemporary piracy is a unique maritime phenomenon whose perpetrators are driven by purely economic factors.

Piracy is generally defined as “an illegal act of violence, depredation (e.g., plundering, robbing, or pillaging), or detention in or over international waters committed for private ends by the crew or passengers of a private ship or aircraft against another ship or aircraft or against persons or property on board such ship or aircraft.” The fact that piracy is a private, apolitical act is convenient for the leaders of the People’s Republic of China (PRC). The regime stakes its popular legitimacy on developing China as an economically dynamic world power with increasing global interests, but it remains wedded to a policy of “non-interference” in other nations’ domestic affairs. However more complex in practice this policy may already be than in theory, Beijing faces a delicate balance in safeguarding its interests and engaging more fully in the international community while avoiding political assertiveness that could be risky and off-putting. Antipiracy operations thus represent a low-risk opportunity to test Beijing’s policy preferences.

**Piracy imposes direct economic costs on all states, including China.** By disrupting flows of critical resources and destabilizing vital waterways, piracy affects all states with stakes in maritime commerce. The growing connectivity between China’s massive economy and the international economic system has made threats to the stability of important sea lines of communication (SLOCs) particularly worrisome to China, whose trade relies on more pirate-infested waterways than that of any other country.

**International cooperation is necessary to address piracy.** At the same time, pirates’ ability to disguise themselves as innocent civilians and to disperse their activities makes piracy an expensive and complex problem for modern naval forces to address. International
cooperation is therefore the natural response, and China desires to be seen as a cooperative, nonbelligerent state as it grows in power. Thus, China has joined other naval powers proactively as they deploy naval forces to the Gulf of Aden in response to this growing and serious threat.

*Chinese leaders face both internal and external pressure to exert international leadership.* Acts of piracy often create undesired international and domestic political consequences for states whose legitimacy and influence rest on perceptions of how they handle security threats to economic, environmental, and human security. This is certainly a form of domestic pressure to which the Chinese leadership is not immune. Internal and external security developments clearly drove both China’s original deployment of antipiracy forces in the Gulf of Aden and, thereafter, Beijing’s growing focus on employing nontraditional security operations to protect China’s maritime interests. China’s economic, political, and military rise over the past thirty-five years has prompted growing levels of scrutiny by international observers with respect to China’s contribution (or lack thereof) as an interested party in the global commons. The PLAN’s antipiracy mission has provided a highly visible vehicle by which China can respond to this challenge in a way that allows Beijing to balance concerns over international law and internal policy making. Of course, there are significant domestic sources of pressure as well, pressure that requires leaders to demonstrate capability within the Chinese bureaucratic system to gain confidence and resources and to show the populace the strength of the country under Chinese Communist Party (CCP) leadership.

*China’s military has been directed to broaden its missions beyond territorial defense.* China’s leaders have emphasized the need to address nontraditional security concerns as part of fulfilling the “new historic missions” (新阶段我军的历史使命) first laid out by former president Hu Jintao at an expanded Central Military Commission (CMC) conference on 24 December 2004. These new missions require the PLA to ensure military support for continued CCP rule; defend China’s sovereignty, territorial integrity, and national security; protect China’s expanding national interests; and ensure a peaceful global environment and promote mutual development. The last two missions reflected new emphases for the PLA, and the fourth was completely unprecedented. The persistence and complexity of modern piracy has therefore created a learning opportunity for China’s navy, which is particularly unproven in such out-of-area maritime regions as the Indian Ocean region (IOR). However, representing as they do the only major Chinese military effort to date that addresses all four missions, antipiracy operations are critical for demonstrating to the international community the Chinese military’s ability to execute these contemporary missions and protect Chinese citizens abroad, especially as the PLAN is growing into a pillar of China’s modern armed forces.
In 2007, Hu elaborated, “As we strengthen our ability to fight and win limited wars under informatized conditions, we have to pay even more attention to improving noncombat military operations capabilities.” That same year, a CCP constitutional amendment codified these missions further. In attempts to transform Hu’s general guidance into more specific policy, articles in state and military media have argued that the People’s Liberation Army (or PLA, meaning the Chinese military generally) must go beyond its previous mission of safeguarding national “survival interests” to protecting national “development interests”—that is, economic growth. In March 2009 Hu exhorted military delegates of the National People’s Congress (NPC) to emphasize not only “building core military capabilities” but also “the ability to execute military operations other than war” (非战争军事行动).

Finally, on 8 November 2012 at the Eighteenth National CCP Congress, which concluded Hu’s term in office, Hu reinforced these themes: “We should attach great importance to maritime . . . security. We should [undertake] active planning for the use of military forces in peacetime, expand and intensify military preparedness, and enhance the capability to accomplish a wide range of military tasks, the most important of which is to win local war in an information age.” He placed unprecedented emphasis on Chinese maritime development: “We should enhance our capacity for exploiting marine resources, develop the marine economy, protect the marine ecological environment, resolutely safeguard China’s maritime rights and interests, and build China into a maritime power.”

High-level PLA officers are now conducting a sophisticated analysis of the “nonwar military operations” needed to promote these interests, and antipiracy operations seem to have provided an important test case for carrying out the “new historic missions.” As the PLAN’s official journal Modern Navy explained in 2011, “Navy officers have adapted positively to the needs of expanding responsibilities for national interests and naval missions, the Gulf of Aden and Somali waters have become new battlegrounds for carrying out naval diversified responsibilities. [The navy] constantly explores new channels for conducting noncombat operations through escort practice.” Or, as the acting party secretary of the fourth escort task force, Gu Likang, stated, “Wherever national interests expand into, so too will the navy’s mission extend to there. Escort task forces must adjust to the maritime environment for which they are responsible as quickly as possible, and expand military training according to local conditions, toughen the force on all sides, [and] conscientiously raise the ability to fulfill missions [and] responsibilities.”

Thus, countering piracy allows China’s navy to accumulate experience and operational achievements on the Far Seas unprecedented in its history and to enhance the nation’s political image by performing successful missions in cooperation with other states. Also, it offers China itself excellent opportunities to protect its economic interests abroad and
to participate meaningfully—if, thus far, modestly—in the construction of twenty-first-century global governance architecture.

This study begins by exploring the complex issue of modern piracy, including piracy’s transformation into a serious nontraditional security threat and the implications that modern piracy poses for all states in the international system. Chapter 1 discusses the economic, political, and military challenges and opportunities created specifically for China by contemporary piracy, and the factors that catalyzed its Gulf of Aden deployment. Chapter 2 analyzes the institutional foundations of Beijing’s escort-task-force mission and the domestic policy issues and debates within China surrounding the PLAN’s continued deployments of escort task forces. Chapter 3 adds context by surveying the other multilateral and national naval forces fighting piracy in the Gulf of Aden. In doing so, it highlights the extent to which a series of factors facilitate—or, in many cases, restrict—cooperation between China and other actors. These factors include Beijing’s perspectives on the prevailing international maritime laws and norms, its views of the other countries and coalitions involved, the impact of Chinese domestic laws, and the objectives of China’s foreign policy. Building on this comparative foundation, chapter 4 details the PLAN’s Gulf of Aden mission from December 2008 to the present in key dimensions—the naval platforms used, methods of logistical support, types of interaction with other navies, and the PLAN’s operational performance. Using evidence from this discussion, chapter 5 probes the most likely future development path of the PLAN’s antipiracy operations and concludes that Beijing has many strategic decisions to make with respect to deploying naval platforms for and addressing the logistical challenges of Far Seas missions. Chapter 6 offers tentative assessments of how the Gulf of Aden mission has shaped the way Beijing views its potential contribution to twenty-first-century global governance and of what the prospects are for more meaningful U.S.-Chinese cooperation, as both great powers continue to face in common the new nontraditional maritime security threats.

Notes


4. “Number of Ships Escortd by Chinese Naval Escort Task Forces Hits 4,000,” *Liberation Army...
20. Ibid., p. 17.
Modern piracy has flourished for more than two decades. The period from 2005 to 2010 saw piracy attacks worldwide increase substantially every year. According to a report by Zhongxing News Network citing European Union (EU) naval officials, the number of pirate attacks rose threefold in 2010.\(^1\) Reported international pirate attacks peaked at 445 in 2010;\(^2\) of 439 attacks reported by the International Maritime Bureau during 2011, 275 occurred either off the coast of Somalia or in the Gulf of Guinea off West Africa.\(^3\) Moreover, attacks originating off the coast of Somalia have had a much higher success rate than in other regions. For example, in 2010 successful Somali pirate attacks accounted for over 90 percent of total ship seizures worldwide.\(^4\) Chinese writers have noted patterns in Somali pirate attacks, such as a rise in both number and intensity during the spring.\(^5\) A February 2012 article in the official newspaper of the PLAN, People’s Navy, stated that the Gulf of Aden area covers roughly 530,000 square kilometers, reflecting the wide operating space within which pirates choose and engage targets.\(^6\) Reports in late 2012 that worldwide pirate attacks had “plummeted” reflected the success of antipiracy operations by navies throughout the world. During a solo escort exercise by the supply vessel Qiandaohu of the twelfth escort task force performed in October 2012 to enhance the PLAN’s vigilance, Cdr. Fu Junqing commented that pirates were increasingly “making reckless moves in desperation” (铤而走险).\(^7\) CNTV reported, “According to the International Maritime Bureau, by October 2012 pirate attacks had dropped to a six-year low. Only one ship was attacked in the third quarter compared to thirty-six during the same period in 2011.”\(^8\) But this reduction is certainly not perceived by China and other states as signaling the eradication of this nontraditional security problem.\(^9\) As Zhou Xuming, commander of the PLAN’s twelfth antipiracy task force, remarked during a July 2012 interview on board ship, “Despite all these efforts, the present antipiracy situation still allows no optimism. The region in which the Somali pirates conduct their criminal activities is gradually extending outward: north to the Gulf of Oman and east to waters off the southwestern coast of India. In addition, the pirates have become even more seasoned and diversified in their employment of criminal means and these circumstances have presented us with new challenges in this ship-escorting operation.”\(^10\) He further affirmed, “We still dare not relax our vigilance and continue to conduct
considerable relevant preparation work based on the situation and characteristics of the pirates’ activities.” Similarly, in December 2012 Li Xiaoyan, commander of the PLAN’s thirteenth task force, stated, “The pirates may stage a comeback after a short period of peace. The escort mission may face new challenges in the coming months.” Liberation Army Daily reported in November 2012 that the coming six-month period could see a significant rise in piracy attacks because of relatively favorable sea conditions and the extension of tactics by pirates, who now operate both day and night.

Other navies also remain concerned about Somali piracy. In September 2012 Australia decided to reroute the heavy-lift ship Blue Marlin, carrying HMAS Canberra from its builder in Spain to Geelong, in Australia, around the Cape of Good Hope rather than through the Gulf of Aden. Canberra, an amphibious assault ship, is larger than a standard aircraft carrier and will be the largest ship in the Australian navy. Shipping officials worried that the enormous target would be vulnerable to pirate attack, which would constitute a major embarrassment for all parties. The detour resulted in an extra twelve thousand miles of travel and took over six weeks.

It must be kept in mind, however, that although there is scholarly disagreement on the general subject, piracy’s existence is largely rooted in the failure of domestic governance institutions, which in such states as Somalia are still extremely volatile and unstable. The deputy permanent representative of China to the United Nations, Wang Min, emphasized in 2011 his nation’s view on that point: “Military action can only mitigate the scourge of Somali piracy.”

Somalia’s centrality to modern piracy, then, is no coincidence. The former British and Italian colony is perhaps the world’s most ungoverned state today; in recent years the central authorities have controlled only several city blocks in the capital, Mogadishu. Collapse of governance in 1991 ended Somalia’s ability to patrol its own waters, allowing rampant illegal fishing and dumping that harmed its once-important marine economy. Illegal poaching by foreign fishing fleets in Somali waters, in turn, stimulated a nationalist response. As they were operating in a political vacuum, Somali fishermen soon discovered that threatening (and sometimes using) force to extort fines was far more lucrative than their erstwhile conventional profession. At the national level, Somalia’s case provides overwhelming evidence that absence of domestic governance in coastal states can spawn unbridled piracy. Indeed, of the 439 attacks that occurred worldwide in 2011, 236—or 54 percent—were at the hands of Somali pirates, who operate freely along the unmonitored coastline.

Modern Navy typifies Chinese sources in stating that these pirates are difficult to counter in part because they are hard to locate and identify:
They conceal weapons and ladders in the ship cabin and fishing nets, darting back and forth within the escort zone. Upon encountering warships they pick up fishing nets and fish, and upon running into commercial ships, rob using weapons. These ships are no different from fishing boats in external appearance, absolutely no way of distinguishing them. Also skiffs are very small in size, and often disappear within the waves as waves rise and fall, so warships’ warning radars cannot easily detect them.

While the collective response of national navies and multilateral task forces in the Gulf of Aden and parts of the Indian Ocean has contributed to a large overall reduction in piracy, risk-taking pirate crews, utterly lacking domestic economic opportunities, are willing to venture farther offshore in their small coastal skiffs to attack merchant vessels. The net result is an expanded maritime area that is vulnerable to pirate attack, making pirates more elusive and control costs higher. Moreover, China’s leadership has, on numerous occasions, learned that individual pirate attacks on commercial vessels that generate media coverage have greater impact on Beijing’s domestic and international political image than do abstract statistical trends. As long as the threat of piracy remains, states like China will be wary of taking formidable public-relations risks that carry major economic and political implications.

Whatever the debate about the root causes of modern piracy worldwide, its costs are clear—pirates pose serious threats to the economic and political stability of states throughout the world. One recent study has found that the cost of these disruptions totals between seven and twelve billion dollars annually. Many of the world’s most vital SLOCs and shipping routes—including the Bab el Mandeb, the Strait of Hormuz, the Indian Ocean, the Strait of Malacca, the Strait of Singapore, and the South China Sea—regularly face destabilizing piracy threats. For example, approximately half of the world’s container shipments pass through the Bab el Mandeb (“Gate of Grief”) connecting the Red Sea and the Gulf of Aden. Moreover, it is estimated that approximately 40 percent of global energy shipments pass through the Strait of Hormuz, a narrow body of water between Iran and the United Arab Emirates (UAE) that is considered a strategic “choke point.” While most pirate attacks are limited in scale, even a temporary disruption of trade by pirates in any of these regions could produce a ripple effect, by forcing companies to reroute shipments and thereby delaying critical energy and industrial-supply deliveries. For complex transnational production networks and just-in-time supply chains, with little spare capacity, the potential impact of such disruption would be significant. Successful pirate attacks can also bring heavy scrutiny to the international community for its failure to protect global shipping lanes adequately.

Some studies contend that rerouting is a relatively cheap and safe option for some ships, especially the older, slower, and bulkier ships that are most vulnerable to pirate attack and least equipped for protective measures. Indeed, rerouting is often preferable to
hefty ransoms or more expensive insurance premiums. Nevertheless, the aggregate costs of avoiding high-traffic waterways where piracy is rampant in favor of such less convenient routes as the Cape of Good Hope are significant. For example, one report estimates actual rerouting costs at between $2.4 and $3 billion annually. A more recent study by Oceans beyond Piracy, an American nonprofit organization, estimates annual rerouting costs at $486–$680 million. These costs stem from additional fuel and excess wages to crew members, the primary direct expenses associated with rerouting. Of course, the extra time required to circumnavigate the Cape of Good Hope rather than transiting waterways near the Middle East—estimated by China’s MoT at six days—is also very significant in terms of aggregate opportunity cost. Moreover, longer distances increase shipping times and hence require more ships to accommodate the same volume of trade. Rerouting to avoid pirate attacks thus imposes meaningful costs on the shipping industry. However, navigating waters affected by persistent piracy also raises the costs of maritime shipping, by increasing insurance premiums. These economic forces motivate greater regional and international cooperation.

China is no exception to the general vulnerability to piracy. Internal and external security developments have driven both China’s original deployment of antipiracy forces in the Gulf of Aden and Beijing’s growing focus on nontraditional security tactics to protect China’s maritime interests. Chinese-led joint patrols in other crime-infested waters, such as the upper Mekong Delta, are a prime example. Specifically, the persistence and complexity of modern piracy have created new challenges for the PLAN, which is particularly unproven in such Far Seas as the IOR. These challenges are formidable and perhaps even daunting for the CCP, for reasons explained in the introduction. Antipiracy operations thus represent a critical test for Beijing, not only operationally, but also in terms of policy and symbolism. Yet the benefits are too compelling to ignore.

China, like other nations, has opted for direct naval involvement rather than relying solely on private security initiatives to address an expanding piracy “industry.” However, one Chinese observer, Li Ruijing of the PLA Academy of Military Science, asserts that PLAN antipiracy operations alone are insufficient to protect completely PRC interests endangered by pirates:

First, [one must] understand clearly the responsibilities of “military escorts” [军队护航] and “civil protection” [民间安保]. Chinese overseas interests can only rely, [and even then] not rely completely, on military escorts [中国海外利益只能依靠而非完全依赖军队护航]. In recent years, despite major efforts by the government and military, heavy spending on executing “Gulf of Aden escorts.” . . . [T]he government and military can only protect the “main artery” [大动脉] of China’s core national interests, and clearly have no way to satisfactorily protect many of the security demands of “small blood vessels” [小血管] and “microcirculation” [微循环]. Because of this, as exemplified by [the] U.S. [company] “Blackwater,” by establishing and strengthening [the] Chinese “Red Shield” [红盾],
Threatening the “Golden Waterway”: Piracy’s Economic Ramifications for China

China relies increasingly on “SLOC security” (海上通道安全) for its economic development. China’s eleventh five-year guideline (2006–10) reiterated the goal of the tenth five-year plan (2001–2005); it addresses environmental concerns and diversification of energy supply by, first, increasing natural-gas consumption to 8 percent of total energy use by 2015 and, second, finding new sources of oil to reduce China’s reliance on coal. To do this, China must increase significantly its imports of both oil and gas in the near future, making secure SLOCs even more critical for safeguarding energy supplies to fuel China’s economic growth. That growth was estimated at 7.5 percent during the National People’s Congress in March 2012; the twelfth five-year guideline (2011–15) established a target of 7 percent.

China is indeed looking to the seas to address domestic energy security. Since China became a net oil importer in 1993, its oil-import dependence has risen steadily, with roughly half of China’s oil imported at present, 80 percent of it delivered by sea. This means that China currently relies on maritime transport for 40 percent of its oil. Oil is a vital resource for China that accounts for virtually all of the nation’s transportation fuel—for which there is no immediately interchangeable substitute. It is also irreplaceable as a military fuel for the majority of China’s air and naval assets, not to mention trucks and off-road machinery that help drive economic growth. The director of China’s
National Energy Administration, Zhang Guobao, refers to transportation as a “major consumer of oil” (用油大户) and believes mitigating the transport sector’s reliance on oil is the starting point for reducing China’s overall oil dependence.50 The vice-governor of China’s Everbright Bank, Dan Jianbao, predicts that China’s reliance on imports as a percentage of total oil consumption may increase to 80 percent by 2030.51 Meanwhile, Tong Xiaoguang of China’s Academy of Engineering has suggested that import dependence would reach approximately 65 percent during the same period.52

However divergent in specifics, overall these estimates suggest that the stability of SLOCs will continue to grow in strategic importance.53 Moreover, China became a net natural-gas importer in 2007, and imports of shipborne liquefied natural gas (LNG) have begun to compete with traditional fuels in coastal China, both for residential use and in the booming shipping industry.54 Besides energy security trends, the increase in Chinese port traffic further demonstrates China’s economic dependence on the sea. As Ju Chengzhi, Department Head, Department of International Cooperation, Ministry of Transportation, explains, China must, given its tremendous maritime interests, focus on the big picture of long-term benefits and not get lost in the details of short-term costs:

Currently, China has over 260 ship companies involved with international shipping. . . . Right now our development trend is definitely increasingly open, trade volume ever larger, [and] maritime transportation certainly has greater development. This kind of trend has given us a problem, not just the protection of the safety of the Gulf of Aden and Somali waters, [but] also the Strait of Malacca and all shipping lanes. [This is] not a one-time problem, but is a long-term problem. Warship escorts should be [considered in terms of long-term benefits, not preoccupation with short-term costs]. . . . [I]f these Far Seas shipping companies are affected [by piracy] and shut down, [this] will produce an enormous loss in national tax revenues. So, [the issue of a] warship escort task force concerns far more than just the problems of how much money should be spent and how large costs will be. The larger benefits are much more significant than [immediate] costs and prices; they are long-term [in nature].55

Similarly, Ju declared in 2009, “China has become a ‘Maritime Shipping Power’ (海运大国), with a national shipping fleet containing over 3,300 vessels with an aggregate carrying capacity of 84,880,000 tonnes, ranking fourth in the world.”56 During the same interview, Ju said that China, at the time, relied on maritime shipping for 90 percent of its international trade in goods.57 Ju added, “Now Chinese vessels may be seen at ports throughout the world. We have 40,000 crewmen [working] on the oceans. We are also a ‘seafarer power’ [海员大国]; the government has a responsibility to protect them.”58

Statistics on Chinese port traffic further demonstrate its growing dependence on maritime commerce. A 2000 PLAN study estimated that aggregate port throughput would grow from 1.8 billion tons to three billion tons by 2010.59 By 2009 total throughput had
already reached seven billion tons. While the recent global recession may have moderated this activity to some degree, it is nevertheless likely to remain high. As a maritime commercial power, China is here to stay.

China not only relies broadly on stable SLOCs but also depends heavily on sea-lanes that are some of the world’s busiest and most vulnerable to pirate attacks. China relies on five SLOCs for 86 percent of its foreign trade, the Strait of Malacca being the most important; 80 percent of China’s oil imports pass through it, and over 60 percent of the ships that transit the strait daily are Chinese.

“Maritime transportation lines have already lived up to their name of becoming national survival and development ‘lifelines’ [生命线],” states an article in Modern Navy. “Regarding economics, maritime transportation lines are important pillars and necessary prerequisites for the rapid development of the national economy.” China’s Ocean Development Report 2010 states that China’s overdependence on “a few passages and straits” for obtaining strategic resources is a primary threat to its “sea-passage security.”

Many Chinese analysts appear gravely concerned about China’s strong reliance on goods transiting vulnerable international waters and choke points, as well as China’s extensive dependence on foreign transportation. For instance, Han Xudong, a professor at China’s National Defense University (NDU), has written, “From the current situation, ocean lifelines have already become a soft rib in China’s strategic security.” Han regards this as a potential “bottleneck in China’s future economic development.” In 2011 a Chinese Academy of Social Sciences (CASS) Research Center for Forecasting Sciences researcher, Fan Ying, stated that 90 percent of China’s maritime-imported oil was transported in non-Chinese ships, which makes China’s provision of SLOC security more difficult.

During a May 2012 meeting between representatives of the eleventh escort task force and the training ship Zheng He in the Gulf of Aden, political worker Tong Zhe stated that 90 percent of China’s trade relied on secure passage through SLOCs. Similarly referring to strategic SLOCs such as the Gulf of Aden, military expert Liu Jiangping adds, “Those who control these maritime strategic channels and gulfs would have their hands put onto China’s strategic oil channels, and would be capable of threatening China’s energy security.”

Li Daguang, a professor at National Defense University and a PLA officer, goes so far as to suggest that great powers are seeking to control vital Indian Ocean energy SLOCs under the pretext of fighting piracy. Li emphasizes that presently more than a hundred ships cross the Indian Ocean daily and that 70 percent of world oil flows transit the Indian Ocean. He anticipates ship transits increasing to between 150 and two hundred by 2020. He lists the three primary oil-shipping routes through the Indian Ocean:
• Persian Gulf → Cape of Good Hope → Western Europe → North America
• Persian Gulf → Strait of Malacca → Japan
• Persian Gulf → Suez Canal → Mediterranean → Western Europe → North America.

On this basis, Li contends, “One after another, the great powers of the world are dispatching maritime power to the Indian Ocean to fight piracy, [but what is] actually valued is the Indian Ocean’s strategic geographic location.”

Disruption of SLOC security also poses a somewhat more complex challenge for China’s economy, one related to China’s well-known role as chief financier of U.S. debt. China officially held over three trillion dollars in foreign reserves in March 2011, almost half of which was in the form of American Treasury bonds. Disruptions by pirates of trade in the Gulf of Aden (termed the “Golden Waterway” [黄金水道] by Chinese reporter Meng Yan) and the Indian Ocean threaten both the global supply and the resulting price of oil, a commodity on which China relies. These factors, in turn, play major roles in determining the value of the U.S. dollar, and hence both the value of China’s holdings in U.S. Treasury securities and the ability of American consumers to purchase Chinese goods.

PLAN scholar Chen Chundi notes that given China’s estimated $1.3 trillion in U.S.-dollar-denominated foreign reserves, if oil prices are driven up “China will face an enormous loss with regard to both foreign reserves and U.S. debt.” For Beijing, SLOC security is vital not only for guaranteeing safe delivery of China’s energy and material goods but also for helping ensure the stability of the U.S. dollar, another critical pillar of China’s economy.

A January 2009 Sanlian Life Weekly article stated, “Consistent with the flow of foreign trade, the two ‘main roads’ [主干道] of China’s Far Oceans maritime transportation run through the Suez Canal to Europe and through the Panama Canal to the U.S. The only way to reach Europe is to transit the Gulf of Aden.” The burgeoning China-EU trade further increases China’s dependence on safe passage through the Mediterranean Sea, Bab el Mandeb, Gulf of Aden, Indian Ocean, and Malacca and Singapore Straits. Cargoes between China and European countries typically transit all these waterways, unless such circumstances as storms or elevated piracy risks compel vessels to take longer, more expensive alternative routes. China’s aggregate trade with EU countries in 2010 was approximately $500 billion. Chinese reporter Meng Yan wrote in 2010 that two thousand Chinese commercial vessels traverse the Gulf of Aden every year. Moreover, a reported 80 percent of all ships transiting this strategic passage either are Chinese or carry Chinese cargoes or crew members. Given these realities, MoT official Ju Chengzhi declares the Gulf of Aden to be a vital transit area: “The Gulf of Aden is a route we take to reach Europe. . . . The ‘Gulf of Aden–Red Sea–Suez Canal–Mediterranean’ line is the
most convenient route chosen by everyone. . . . [T]his route is of course also the most preferable for going to North Africa."\(^8^4\)

Adding to the strategic importance of these routes, about 20 percent of China’s imported oil, over 2 percent of its national energy supply, is purchased from Saudi Arabia.\(^8^5\) Yemen’s instability following the 2011 Arab Spring uprisings raises the specter of a Yemeni collapse that could have major domestic economic and political consequences for Saudi Arabia and subsequently threaten the stability of its oil exports, as Yemeni refugees would likely pour into that oil-rich nation. Perhaps more significantly, an unstable Yemen could “worsen the risk of piracy or terrorist attacks in or near the [Bab el Mandeb] strait.”\(^8^6\)

These relationships demonstrate the growing connection between China’s domestic economic growth and external economic, political, and social forces that Beijing is unable to manipulate directly. While China may not be able, or interested in trying, to control many of these risks, SLOC security is a global-commons issue that has seriously threatened overseas Chinese interests. For example, as one Chinese scholar points out, “Somali piracy has not only disrupted navigation security but has also inflicted grave harm on China’s national interests. This is the fundamental reason for China’s escort operations in the Gulf of Aden.”\(^8^7\) Further, Yin Zhuo—a retired PLAN rear admiral, a Chinese People’s Political Consultative Conference (CPPCC) national committee member, and frequent commentator—has cited the Gulf of Aden mission as rationale for enhancing the PLAN’s Far Seas capabilities to maximize protection of SLOCs and China’s overseas interests. Yin argues that the recent Libya evacuations were smooth and successful because of China’s naval presence in the area, whereas during a 2000 coup d’état in the Solomon Islands, Chinese nationals who were to be evacuated had to wait for a cargo ship to be rerouted.\(^8^8\)

China has come a long way since the Solomon Islands episode. Ethnic tensions there threatened Chinese citizens, but because Honiara, the capital of the Solomons, recognized Taipei, Beijing had to run the noncombatant evacuation operation (NEO) instead out of its embassy at Port Moresby, in Papua New Guinea. Following its usual practice of working with local Chinese organizations and federations to collect information and disseminate advisories, diplomats obtained situational updates from local Chinese. Having obtained the telephone number of the local rebel leader and identified the section of the city he controlled, they called him and negotiated safe passage before dispatching a China Ocean Shipping Company (COSCO) ship to evacuate approximately 120 Chinese and arranging flights out of the country. Apparently the PLAN was asked to send a vessel but was unable to do so (today things might be completely different). Subsequently, China has organized a variety of NEOs, including from Fiji during the 2006 military coup.\(^8^9\)
Professor Feng Liang of Nanjing Naval Command College and Capt. Zhang Chun, a destroyer division commander in the South Sea Fleet, cite SLOC security not only as an important component of China’s maritime interests but also as playing an increasingly important role in China’s national security and development. Moreover, Chinese analyst Wang Tao, noting that approximately 60 percent of all vessels transiting the Strait of Malacca are Chinese, argues that only a “powerful, defensive navy” armed with resources commensurate with China’s growing overseas footprint can ensure the protection of Chinese interests abroad. Zhang Wenmu, a hawkish scholar, has gone so far as to state, in 2009, “The most crucial conduit connecting China with the region and with the rest of the world is the sea lanes, and therefore, China must have a powerful navy.” China’s rapidly expanding maritime economy, evidenced by growing maritime imports of resources and the world’s largest shipbuilding industry, thus provides tremendous incentives for the PLAN to expand its antipiracy missions and, more broadly, “new historic missions,” in both the Near and Far Seas.

**Piracy’s Political Ramifications for China**

The antipiracy task forces have been a great success and have enhanced Beijing’s reputation significantly, both at home and abroad. As Beijing has quickly learned, incidents involving Chinese citizens, companies, or military forces abroad offer excellent opportunities to portray China as a responsible stakeholder. As Rear Adm. (and former PLAN escort task force commander) Zhang Huachen puts it, the PLAN’s Gulf of Aden antipiracy mission “established a good image” of China and its navy in other states’ eyes. Wei Xueyi, a commander in the sixth escort task force, declares, “Warships are mobile national territory, the escort task force is a name card for China’s image. While carrying out escorts in the Gulf of Aden, we not only need to guarantee the safety of escorted ships, but need even more to display the elegance of the Chinese navy, [and thereby] display an image of China being a responsible power.” In the words of Senior Capt. Li Jie, a well-known analyst at the PLAN’s strategic think tank, the Navy Military Studies Research Institute, the PLAN’s power conforms with “favorable weather and geography,” appropriately grasping opportunities. We rapidly dispatched task forces to the Gulf of Aden and Somali waters, not only adjusting to the needs of the powerful development of international peace, [but] also in accordance with the morale of domestic troops and citizens, [thereby] displaying China’s confidence and determination for peaceful development and global and regional protection through practical operations, [and] taking a step forward in displaying the Chinese navy’s image of a “civilized and mighty force.”

A special column in *Modern Navy* summarizes the image issue more generally: “Facing severe challenges to the safety of global shipping, the PLAN escort task force has been
persistent in adhering to legal escorts all along, [its] operations have displayed China's unremitting pursuit for the construction of harmonious seas, [and it has] given full display of the image and heart of a great naval power.  

However, nontraditional security contingencies present formidable political and public relations challenges that are complex and risky for China's externally cautious leadership to address. For example, Africa specialist Wang Xuejun notes that China's military activities in such areas as Sudan and Zimbabwe have stirred criticism that potentially detracts from China's international image as a responsible power. Specifically, antipiracy operations involve the risk of embarrassing failures at the hands of unprofessional, subnational militants. Additionally, the PLAN’s antipiracy mission in the Gulf of Aden has exposed the inherent tensions between China's traditional noninterventionist foreign policy and mounting domestic pressure on the Chinese government to protect its citizens and interests overseas within the context of poorly defined international maritime laws and norms concerning piracy. But if failure brings serious repercussions, success breeds inflation of expectations. Thus Beijing's recent forays into antipiracy operations have sparked fundamental debates within China, with some policy makers eager to reap the benefits of the mission and others hesitant to depart from a conservative foreign policy.

The deployment on 26 December 2008 of China's first antipiracy task force was preceded by several Somali pirate attacks that threatened the lives of Chinese merchant sailors and the profits of Chinese shipping companies, thereby magnifying domestic political pressure to respond. In January 2009 MoT official Ju Chengzhi recalled,

Beginning last June Somali piracy became relatively rampant, September and October being the most severe times. Chinese ships were attacked at a relatively high rate, [although] the percentage of [Chinese] ships [actually] hijacked was very low. . . . Sinotrans [Limited]'s [ship] "Dajian" was previously hijacked, the problem was resolved by paying a ransom. Currently there is also a fishing vessel, "Tianyu 8," still being held [by pirates], the seventeen crew members aboard it have been taken captive. China is still using diplomatic channels to endeavor [to resolve the situation] in various ways.

Dajian, which sails "under the flag of Chinese-foreign cargo shipping" (中外运行旗下货轮), was at the time captained by a Sri Lankan and had a twenty-three-man Chinese crew, one member of which was from Hong Kong. Upon its release, the pirates, who had not injured any crewmen, even distributed a hundred dollars to each crew member as compensation for their handheld phones. Two other Hong Kong–registered commercial vessels, Stolt Valor and Delight, were also pirated by Somalis during this period. When pirated in late 2008, Delight was crewed solely by non-Chinese. As attacks mounted, shipping companies became obligated to provide extra incentives to sailors, as stipulated in collective bargaining contracts negotiated with the Hong Kong Seamen's Union (香港海员工会). Roughly one thousand Hong Kong–registered vessels and
foreign-registered vessels owned by Hong Kong shipowners were covered by these contracts. Sailors crewing Hong Kong–registered ships that transited high-risk waters such as the Gulf of Aden were thereby entitled to double salaries and double reimbursements in instances of injury for each day they spent there. In such “high-risk areas” (高危地区), if a shipping company chose a route that would divert a ship from “internationally designated safety corridors in the Gulf of Aden” (国际社会已在亚丁湾海域划出指定安全航道), sailors were entitled to disembark beforehand, and the company would be responsible for covering the cost of their “travel fees” (旅费). 99

Pirate attacks on mainland Chinese vessels further highlighted the danger of piracy to the nation’s maritime commerce. First, in mid-November 2008, Somali pirates seized the fishing boat Tianyu and held its twenty-four-man crew hostage. 100 Three months later, following a variety of Chinese diplomatic efforts, they freed the vessel and captives. The warship Haikou collected the crew members and cared for them on board but apparently had no direct interaction with Somali pirates. 101 It took PLAN mechanics sent to Tianyu six days to render it able to sail again. 102 A month after Tianyu’s seizure, on 17 December, the Chinese tanker Zhenhua 4 came under attack from nine pirates. The crew retreated to unusually inaccessible living quarters and attempted to resist with makeshift “Molotov cocktails”; 103 however, the pirates did not withdraw until a Malaysian military helicopter arrived. 104

These incidents exemplified China’s troubles with piracy during 2008. From January to November of that year, of 1,265 Chinese ships, eighty-three were attacked; 105 several were pirated. 106 Makeshift measures advocated by MoT—such as evasive maneuvering, deployment of water cannons, and improvised explosives—were proving inadequate. 107 While COSCO ships had avoided being pirated entirely, their model defense measures and all-Chinese teams could not be extended completely to many China-connected ships. 108 In 2009, Ju Chengzhi of China’s MoT recalled that before China’s initial warship deployment, “when encountering such problems [i.e., pirating of Chinese ships], we relied primarily on foreign diplomatic channels, coordinating with local governments and the International Maritime Organization (IMO) to seek solutions, but [this] was not very effective.” 109 Addressing the surging piracy problem effectively clearly required not uncoordinated stopgaps but decisive, comprehensive action from Beijing.

For all these reasons, by 2008 the Chinese public was pressing its leaders to intervene. The media outlet Eastday reported that a survey showed that 86 percent of Chinese “netizens” (active Internet users) supported a Gulf of Aden mission. 110 Another survey was reported by People’s Daily on 24 December 2008, just two days before the inaugural deployment. 111 The survey apparently included over seventeen thousand participants, 91.2 percent of whom supported the mission and 6.7 percent of whom opposed it. 112 Chinese social networking websites, such as Weibo, captured some of the discontent felt
by Chinese citizens as a result of Beijing’s initially hesitant response to Somali piracy. Many of these netizens criticized Beijing for its inability to protect citizens living abroad, and China’s leaders surely followed these comments and blog posts.\textsuperscript{113} Paradoxically, a long-entrenched, authoritarian regime like China’s must in some respects be unusually responsive to short-term public-opinion trends, as it lacks either reserves of enduring ideological affinity or the political release valves of periodic elections and alternation of parties in power that democratic states typically enjoy.\textsuperscript{114} Domestic political pressure thus seems to have played a major role in heightening Beijing’s prioritization of the piracy issue and in strengthening its ultimate response.

In a landmark interview, MoT official Ju Chengzhi revealed the calculus behind the interagency genesis of China’s Gulf of Aden mission. He explained why Beijing finally had to act:

Piracy was relatively rampant in September 2008. By October, most of China’s large maritime shipping companies felt that pressure was too great. [Yet while] facing the threat of piracy, they had no other choice but to persist [in their current] routes. Otherwise, not only would [they] breach [their] contracts, [but also competitors] would take their share of shipping. Accordingly, maritime shipping companies reported emergencies one after another, making requests for the government to dispatch warships to escort ships as quickly as possible.\textsuperscript{115}

This perceived urgency set the stage for swift interagency coordination of a decisive whole-of-government response:

After we raised this item, [it] commanded everyone’s focus. Agencies such as the Ministry of Transportation, the Ministry of Foreign Affairs, and the military, as well as some experts researched [the matter] repeatedly, because this is not a simple measure; [it] relates to a series of weighty issues such as [requisite] capabilities, supply [logistics], and international law. Everyone [thus] shared unanimous understanding of the urgency and severity of this issue.\textsuperscript{116}

From an international political perspective, China’s announcement that it would dispatch an escort task force to the Horn of Africa came as a surprise to few, particularly since several other nations had already undertaken, or were preparing to undertake, similar actions. For example, Russia, NATO countries, and India all announced antipiracy deployments before China did.\textsuperscript{117} Of course, Chinese naval officials were extremely cautious in announcing the PLAN antipiracy mission, stipulating that it would protect specifically commercial vessels from mainland China, Hong Kong, Macau, and Taiwan, the only addition being “ships of international organizations [such as the UN World Food Programme] that are carrying humanitarian supplies to Somalia.”\textsuperscript{118} This posture conveniently allowed China to end its status as the only permanent United Nations Security Council (UNSC) member not contributing to global maritime security and thereby to enhance its international résumé as a “responsible stakeholder” (负责任的利
As an article in *Modern Navy* articulates further, “This is the fine embodiment of the Chinese navy carrying out Far Seas international duties, establishing the righteous measure of shouldering the mission of international peaceful development, and even more the style of a ‘responsible great power’ [负责任大国].” A newly published book, an introduction to the PLAN, states that the mission “embodies China’s image as a responsible large country actively fulfilling its international obligations.”

China’s antipiracy mission has also facilitated bilateral dialogues between Beijing and other countries invested in the security of the Gulf of Aden, by providing opportunities for interactions between the PLAN and counterpart navies. Through joint exercises, official visits, and information sharing, PLAN officers are establishing with their foreign colleagues ties beneficial to bilateral confidence building. An article in the Xinhua-run *International Herald Leader* cites the PLAN’s Gulf of Aden operations as one of the most successful cases of projecting Chinese soft power. These relationships are forged through activities and exchanges on board either Chinese or counterpart naval vessels. As antipiracy deployments have become a regular PLAN duty, escort crews have begun disembarking in selected ports, including some not necessarily central to global antipiracy operations, and spending several days ashore to rest and recuperate. The core message of these exchanges is that China shares manifold security interests both with other navies and with littoral states in the region; Beijing is eager to maximize the broader political benefits of cooperating with other actors vis-à-vis antipiracy operations.

China has further enhanced the underlying political gains of fighting piracy by expanding the scope of its escort operations to include foreign-flagged ships. While initially escorting only then-prioritized mainland China-, Hong Kong-, Macau- and Taiwan-flagged vessels, a flotilla under PLAN escort at any given time may now include seven to ten foreign ships, which can view escort schedules online and register for free protection. Since China’s February 2009 Spring Festival holiday, the PLAN and MoT have established routine procedures for escort services, based on maritime traffic conditions, posting announcements on the China Shipowners’ Association (CSA) website by the fifteenth of every month. In recent years, several PLAN rescues of both Chinese- and foreign-flagged vessels have been reported on heavily by the Chinese media. Of course, it is not always the PLAN that is rescuing commercial vessels of China or other nations. Occasionally Chinese vessels are rescued by others, in several instances in recent years after having been captured. Most recently, the Iranian navy freed twenty-eight sailors from the Chinese vessel *Xianghuamen*, which had been seized forty-five miles off Iran’s southern port city of Jask in early April 2012. *Xianghuamen* is owned and operated by the Nanjing Ocean Shipping Company. In May 2011 a Chinese-flagged cargo ship was pirated. On that occasion, all of the ship’s twenty-four crew members having
withdrawn to its “safe room,” forces from India and NATO (with American and Turkish air support) expelled the pirates and ensured the safety of the Chinese sailors. As noted above, because international antipiracy operations take place on a highly visible stage, they could potentially expose shortcomings of either China’s policy makers or its sailors. Yet antipiracy in itself is a low-intensity military operation, far short of traditional warfare, and so provides an expansive arena for enhancing both domestic political legitimacy and international relations through successful bilateral and multilateral cooperation. More broadly, as Li Ruijing underscores, there are soft-power gains to be made from Far Seas escort operations, in the broader context of China’s national interests:

Currently, China’s South Sea is facing the unfavorable situation of being split up by “small groups” [群小]. Under the prevailing international situation, however, directly using the South China Sea problem “as a precursor” [为牵引], and relying on a “bright muscles” [亮肌肉] method to “intimidate” each “claimant country” [声索国], will undoubtedly push them toward the embrace of the outside power. Rather, by borrowing from the “East Wind” [东风] of escorts, [we] can lower the China threat theory, in order to develop a military capable of breaking the enemy’s resistance without fighting. As Li explains, PLAN antipiracy operations are indeed being undertaken amid a complex maritime environment, one that includes competitive aspects, such as territorial disputes in the South China Sea, that threaten to harm China’s military image. The political dimension of the PLAN’s antipiracy operations must therefore be understood as contributing a cooperative element within this larger context, rather than in isolation.

**Piracy’s Military Ramifications for China**

From a purely military standpoint, widespread Far Seas piracy provides enormous incentives for PLAN intervention. Chinese naval officials and crews gain what is for them unprecedented operational experience and tests of their equipment by participating in antipiracy missions abroad. A December 2012 *Global Times* article described the PLAN’s maturation process through four years of antipiracy deployments as one of going from “maritime rookies to confident sea dogs.” Upon embarking in the eleventh escort task force in late 2011, Senior Capt. Zhou Bo summarized the comprehensive experience to be gained: “The experience definitely would be unprecedented not only for officers and sailors, but also for the durability and function of the ships. . . . And also it’s a great challenge to the officers and sailors, not only physically, but also psychologically.” The value of Far Seas experience to the PLAN was manifest even in the first deployment. As South Sea Fleet political commissar Huang Jiaxiang remarked in March 2009, “The escort mission accumulated experience and provided revelations for our armed forces in performing diversified military tasks.” More broadly, as an article in *Modern Navy* documented at the two-year point of the Gulf of Aden mission, “Contact is increasingly
frequent, areas of cooperation are rapidly expanding. For [PLAN] escort personnel, [this is] undoubtedly a good opportunity for discovering their own weaknesses, practicing and improving themselves, [and] studying ‘strong points’ [长技] of others.”

At the four-year mark of PLAN antipiracy escorts in the Gulf of Aden, People’s Daily ran an article suggesting that escort operations to date had been successful in executing diverse maritime tasks. “Through the ‘grindstone’ [whetstone] of escort missions in the past four years,” it stated, “the PLA Navy has tempered its capabilities for using, organizing, commanding and projecting military forces, and carrying out tasks in open seas in an all-round way, and fully improved its capability for performing diversified military missions.”

Additionally, from the PLAN’s perspective, the antipiracy mission also helps to secure budget share and ensure that the service will receive some of China’s most advanced weapons and information technology. The PLAN also garners noteworthy prestige by enjoying the greatest exposure abroad, the greatest diplomatic responsibilities, and the greatest potential for international interaction in peacetime of China’s three military services—ground forces, the PLA Air Force (PLAAF), and PLAN—and one branch (the Second Artillery Force). Perhaps most significantly, persistent piracy attacks afford Beijing a rationale for expanding its Far Seas military operations and for projecting sustained force farther. As Liu Yonghong and Tang Fuquan of the PLAN’s Dalian Vessel Academy write, “The expansion of maritime security frontiers means the frontiers will further expand according to the requirements of the situation and our mission as well as available and pertinent support. Not only should the frontiers cover the entire ‘maritime areas under China’s jurisdiction’ but also ‘push out beyond China’ to protect her rights abroad.” In 2012, Global Times reported that “China’s anti-piracy initiatives in Somalia were further extended by 50 nautical miles (92.6 kilometers) eastward starting from 1 January 2010 according to the Ministry of National Defense, and China will also increase its level of cooperation with other nations to fight against crimes at sea.”

Besides these benefits, the operational gains for the PLAN from antipiracy operations are tremendously important, particularly for a navy that has little experience with modern combat—in fact, none whatsoever since the Johnson South Reef Skirmish (赤瓜礁海战) of 1988. Chinese escort task forces typically include two warships and one supply ship, which require roughly two weeks to travel the ten thousand kilometers from China’s coast to the waters near Somalia. The destroyers, frigates, and landing ships chosen are among China’s newest, most advanced warships. The personnel of a given escort task force total roughly eight hundred, about 10 percent of whom are special operations personnel. By the end of 2011 over eight thousand PLAN sailors had participated in at least one Gulf of Aden deployment.
The antipiracy mission imposes special crew requirements: “With regard to crewing, according to the actual situation of many Far Seas escort responsibilities, long voyages absolutely need large numbers of long voyage command and support personnel aboard. Currently [this] includes helicopter support crewmen, special operations personnel, task force commanders, political journalists, etc. In all [the number of] personnel had increased by about 50 percent, following the normalization of escort responsibilities, in the future there may be fewer personnel from outside.” These sailors are some of the PLAN’s finest, a reflection of the careful personnel selection process and the imperative that they perform with distinction on the world stage.

Selectees enjoy the prestige of being part of China’s first sustained Far Seas military presence, one that dignifies the PLAN and China. In December 2012 Li Jian, captain of an escort medical unit, declared, “Not every warship can access the high seas. Our vessel is authorized to do so by the United Nations. For me and many sailors, it’s our dream to sail into the high seas.” (Li was referring to the rare opportunity for Chinese sailors to deploy in the Far Seas.) An October 2012 article from Liberation Army Daily, the PLA’s premier mouthpiece, reveals that at least one Gulf of Aden veteran was using his antipiracy experience to further PLAN development. Wang Hongmin, captain of the guided-missile frigate Xuzhou during a 2009 Far Seas escort deployment, in October 2012 commanded the frigate during a “20-day-and-night high-sea training” of the North Sea Fleet (NSF). The training emphasized “comprehensive defense and ship-submarine-airplane integrated confrontation.” The PLAN has also recognized the participation of women in antipiracy operations. A February 2013 China Military Online article showed eight female sailors on board the guided-missile destroyer Harbin, and according to the article, “Since December 2008, many batches of female sailors of the PLA Navy have participated in the escort mission in the Gulf of Aden. Previously, they had mainly undertaken such service and support work as medical treatment, translation and culture.”

Once deployed, PLAN sailors have the opportunity to distinguish themselves further from other escort participants by earning honors and awards. One of these honors is the “Top Ten Escort Pioneer” (十佳护航尖兵) honor, which was conferred on more than two hundred sailors over the first seven escort deployments.

In a sign that the Gulf of Aden mission represents so new an experience for the PLAN as to require fundamentally new thinking, crewmen participate in various appropriate cultural activities, such as “writing escort diaries, telling escort stories, creating escort epigrams, singing escort songs, testing escort knowledge, performing escort programs, and being escort pioneers.” Being at sea for months at a time, while psychologically challenging in many respects, provides an excellent opportunity to indoctrinate PLAN personnel in a way that complements their actual military duties. Li Yanhe of Liberation
Army Daily writes that task forces “generate combat power through culture” (文化出战斗力) and “constantly push soldiers to be brave vanguards” (不断催生官兵勇当先锋), thereby forging a “willing-to-lead-in-the-front-lines fighting spirit” (敢打头阵的战斗精神). The emphasis on “Far Seas” cultural activities demonstrates the PLAN’s eagerness to build foundational ideological capacity for long-range missions, a capacity that it perceives as lacking since essentially all previous PLAN operations focused on the Near Seas. The vice-director of the South Sea Fleet (SSF) Political Department, Chen Yanfeng, has said, “While doing a good job of escorting and training, we also need to build comprehensive capacity through self-cultivation [lit., create a high-quality cultural journey].”

In addition to experience for their personnel, PLAN aviation units also gain invaluable operational know-how and insights through their contributions to antipiracy operations. For example, the units of the North Sea Fleet aviation branch deployed to the Gulf of Aden have set multiple records during their five escort deployments, “including the shortest time spent on shifting from one degree of combat readiness to another, the longest distance of forward movement, the longest duration of single flight, the first instance of operating without ground crew support, and the first successful attempt to touch down on a ship’s deck for refueling without engine shutdown.” Furthermore, Chinese scholars Liu Wei, Wang Changqin, Wan Shuixian, and Wang Jiangqi observe the role of what they describe as “‘devil’ drones” in U.S. contributions to antipiracy efforts in the Gulf of Aden, and assert, “With the expansion of our country’s interests, our air force should [also] have the capability to protect our country’s interests in areas far away from our country’s ‘aerial territory.’”

Deployed sailors also receive some of the PLAN’s best, most intensive operational training. While the challenge presented by pirates is different from and less formidable than that of an organized navy, PLAN antipiracy task forces operate in a highly visible, high-stakes environment and occasionally are tasked with using force to deter or disperse pirates. Given the current tempo—fresh two-ship escort task forces are dispatched roughly every three or four months—China would need four or five years to give every destroyer and frigate a chance to participate. (The U.S. Department of Defense estimates that the PLAN possessed a total of seventy-five such vessels as of 2013). According to People’s Navy, antipiracy deployments have played a paramount role in encouraging integrative Far Seas training among various PLAN platforms.

More important, however, is the transfer of knowledge, skills, and perspective that occurs within China’s navy upon the return of each escort group, increasing overall competency and professionalism. As military expert Zhu Jiangming puts it, “The PLAN does not have warfighting responsibilities right now, and can obtain precious experience from escorts in the Gulf of Aden.” The Gulf of Aden service of Pan Zhiqiang, a deputy division commander, is a case in point. Pan participated in four separate escort deployments
between 2009 and 2011, and he views the mission as vital for China’s SLOC stability: “One of the requirements is the protection of our investments and strategic transportation channels. The escort missions are toward these ends.”

Perhaps most impressively, the commanding officer of Weishanhu, Chen Zailiang, has participated in the first, second, fifth, and sixth deployments, contributing over ten thousand hours of service over 550 days. The aviation units of PLAN escort task forces are also well represented. Many pilots are senior in rank and have logged thousands of hours of flight time—over four thousand for Wenzhou’s helicopter commander, Guo Qingxing. Pilot Hui Sheng has participated in three escort deployments. According to Professor You Ji of the University of New South Wales, “The hours and sorties of helicopter pilots in a four-month rotation in the Gulf of Aden far exceed their whole year’s flight time at home.”

More broadly, as People’s Navy reported in 2011, over 50 percent of all officers and sailors in the seventh task force were on their second deployment to the region. This suggests, first, that a single deployment may not offer sufficient experience to train crews to the level desired by PLAN leadership, and second, that the PLAN may be using the Gulf of Aden mission to forge an elite group of sailors. Participation in antipiracy operations is apparently affecting promotion rates. As a general rule, all other things being equal, with the PLAN not having fought a war for decades, individuals who have participated in Gulf of Aden deployments (or major exercises, some of which occur in the Far Seas during the antipiracy mission) enjoy better chances of promotion than those who have not.

The notion of spreading knowledge and operational expertise is highlighted by the rotation of antipiracy deployments among China’s three naval fleets. Long weaker and less developed than the North Sea Fleet or East Sea Fleet (ESF), the rapidly strengthening SSF sent all five ships that made the first two antipiracy deployments. The ESF sent a ship in the third round and has since occasionally done so. The first ten escort task forces were composed of vessels from the SSF and ESF, but the NSF deployed the eleventh, in early 2012. Since the NSF’s deployment of the eleventh task force, the PLAN has rotated Far Seas escort duties among its three fleets to maximize distribution of operational experience. Chinese military observer Zhu Jiangming explains, “From my point of view, [the reason for] initially selecting a SSF force was because the SSF was a relatively more experienced fleet, and also because the South China Sea maritime region is more similar to the conditions in the Gulf of Aden. Now having [dispatched] multiple escort fleets, [the PLAN task forces are] beginning to enter a cyclic battle state; allowing the ESF and SSF time to replenish, while simultaneously letting the NSF task force obtain practice.”

PLAN strategists also reap substantial benefits by studying the management and support associated with the antipiracy mission. The logistical demands of these deployments,
which typically last for four months at a time (sometimes substantially longer), are unprecedented in Chinese military history.\textsuperscript{175} The logistics and planning involved were so complex, in fact, that officials in China took nearly a year to settle into a satisfactory approach. PLAN leaders faced questions they had never had to answer before, such as how much and what types of food and medicine should be stored on board for a combined crew of nearly a thousand at sea for so long.\textsuperscript{176}

Chinese naval expert Wang Haiyun asserts that China’s global naval capabilities are trailing its stature as an international power severely, especially with regard to “technological progress” (技术先进性), “operational architecture” (作战体系), “telecommunications” (通讯), “combat teamwork” (协同作战), and “military ideology and training” (军事思想与训练).\textsuperscript{177} These operations, however, will enhance the Chinese navy’s ability to perform future power-projection tasks more reliably.\textsuperscript{178}

For instance, as Maj. Gen. Jin Yinan of China’s National Defense University has written, “For a military, the results of participating in this kind of action are not just about gaining experience at combating pirates. It is even more about raising the ability to perform missions on seas far away.”\textsuperscript{179} In the Somali operation PLAN escort fleets have improved their capabilities related to operations with foreign navies, communications with other ships in crowded international waters, and sustainment by underway replenishment at a great distance from traditional logistical sources and bases.\textsuperscript{180} This first extended transoceanic operation will give the PLAN an opportunity to refine fundamentally its doctrine and practices for “blue water” (深蓝) missions, which are widely perceived to be in their infancy.\textsuperscript{181} Political commissar Tang Gusheng of the SSF landing ship Kunlunshan remarked in 2011, “By sailing out of our coastal waters, the operation in the Indian Ocean serves as a live drill for us.”\textsuperscript{182}

The PLAN’s most advanced ships, such as Type 052 Luyang I and Luyang II area-air-defense destroyers and Type 054 Jiangkai air-defense frigates, have been deployed in the Gulf of Aden.\textsuperscript{183} To these ships are assigned the PLAN’s most decorated officers, who have participated in previous escort deployments, thereby signaling the importance of this mission to both the CMC and State Council.\textsuperscript{184} The NSF’s deputy commander, Yang Junfei, led the eleventh task force, continuing the recent trend of sending quite senior officers on these deployments. Under Yang, the eleventh task force evidently enhanced intelligence collection and adopted a more preventive approach to mitigating pirate attacks.\textsuperscript{185} According to Liberation Army Daily, “the 11th naval escort task force of the Navy of the Chinese PLA further intensified its efforts to collect intelligence on pirate activities and made various contingency plans, especially the countermeasures to be adopted when the escort task force or the escorted ships are attacked by pirates.”\textsuperscript{186}
Moreover, the PLAN’s niche role as the vanguard of PLA international noncombat operations presumably gives naval officials a bargaining chip that will pay dividends in the form not only of higher budgetary allocations but of praise in official media outlets. For the past decade or so, the PLAN, like other non-ground-force services, has been growing in representation and apparent influence in China’s highest military decision-making bodies, such as the State Council, CMC, and various PLA administrative units (e.g., PLA general departments and other central PLA institutions). There are indications that China’s military as a whole aims to become more streamlined and may be planning to reorganize its current regional setup in a more outward-focused structure, which would likely further enhance the PLAN’s role.

The PLAN also garners significant prestige from being China’s only military branch with major diplomatic responsibilities, those associated with port calls, official exchanges, and joint (i.e., “combined,” or multinational) onboard training in the Gulf of Aden. PLAN crews, more than units of any other Chinese military branch or service, personify China’s military abroad. Indeed, from 2002 to January 2012 nineteen of the Chinese military’s forty-one total joint training events and exercises were undertaken at sea by China’s navy. That said, until recently PLAN sailors in the Gulf of Aden have been highly reluctant to engage their foreign counterparts carrying out similar operations.

Cai Qing, deputy captain of the frigate *Yantai*, acknowledged, “At first, when sailors on foreign warships greeted us, we were so shy that sometimes we pretended not to have heard them. . . . We gradually realized the importance of exchanges.” Li Daguang, an NDU professor and naval officer, refers in a 2011 *People’s Navy* article to engagement with other navies almost as if the PLAN were reluctant about it: “Facing greetings and invitations, the Chinese navy, in accordance with the principles of active pragmatism and autonomy, engages in exchanges and cooperation with navies of the world.”

Nonetheless, through these exchanges PLAN crews take pride in, and are praised for, presenting a powerful and competent China to the world. The escort mission has thus helped realize the principle that “naval officials are one-half foreign diplomats” [*海军军官就是半个外交官*]. This ideal was embodied more broadly in a September 2012 *Liberation Army Daily* article, “Top Ten Firsts of Chinese Military Diplomacy from 2002 to 2012.” According to this authoritative tabulation, the PLAN was involved in five of them, including China’s first “round the world” maritime voyage, in 2002 (ranked second); its first launching of joint maritime patrols, with Vietnam in 2005 (fifth); its first deployment of ships for the international escort mission, in 2008 (eighth); its first organization of multinational naval and air force events, in 2009 (ninth); and its first dispatch of troops to evacuate Chinese personnel overseas, in 2011 (tenth).
As Beijing’s military grand strategy transforms itself from an air- and sea-based regional “counterintervention” (antiaccess/area-denial) approach to one that also increasingly includes at least low-intensity Far Seas projection, China’s navy assumes a growing share of China’s national security responsibilities. Far Seas piracy patrols provide an otherwise largely unavailable vehicle for testing new platforms and bridging the gap between development and operational capacity. Some of the experience gained off the Horn of Africa with platforms, intelligence and information-technology systems, and logistical arrangements would be transferable to a contingency around China’s maritime periphery, such as Taiwan or in the South China Sea. For PLAN officials, this indeed is a welcome opportunity to sharpen their service’s combat readiness during a relatively peaceful era of national development, particularly with respect to personnel competence.197

Undergirding all the military benefits that the PLAN derives from Far Seas antipiracy operations is the fact that they have allowed Beijing to establish a preliminary foothold for future expansion into the Indian Ocean, the vast maritime area between China and the African coastline. The antipiracy mission has served as an effective channel for sustaining a presence in the IOR. PLAN task forces constantly transit the Indian Ocean and have called in a wide variety of its ports. The PLAN presence in the IOR has renewed concerns in many quarters, particularly among Indian officials and observers, over Beijing’s growing commercial presence in the region.198 For example, China has contributed to commercial port development in such countries as Bangladesh, Sri Lanka, and the Maldives.199 Yet cooperation between China and these states is purely commercial at present.200 Maj. Gen. Peng Guangqian (Ret.) of the PLA has cautioned not only that China’s use of ports in IOR nations carries heavy political baggage but also that converting facilities in such locations as Gwadar, Hambantota, or Chittagong would require substantial expenditures.201 Amid speculation that China will develop military facilities in such locations as Gwadar and Seychelles, China Ministry of National Defense spokesperson Geng Yansheng declared in March 2013 that China currently possesses no overseas military bases, and that the notion of a Chinese “String of Pearls” strategy is “totally groundless.”202 Still, the deployment of escort task forces has allowed Beijing to project military forces directly across the Indian Ocean without heavy scrutiny, at least outside the immediate region.

Notes

1. 丁浩东 [Ding Haodong, ed.], “各国反海盗效率增强，但今年海盗量激增三倍” [Each Nation’s Antipiracy Efficiency Strengthens, but the Number of Pirates Rose Sharply This Year—Threefold], 人民海军 [People’s Navy], 2 July 2010, p. 4.


7. "It’s Four Years since the Chinese Navy Began Escorting Ships off the Coast of Somalia and through the Gulf of Aden to Protect Them from Pirates," *China National Television (CNTV)* (English), 26 December 2012, english.cntv.cn/.

8. A recent study on the Gulf of Aden mission states: "Presently, it is still not very safe in the Gulf of Aden and Somalia Waters. It is an arduous task and the convoy officers and men of the Chinese Navy still have a long way to go." Gao Xiaoxing et al., *The PLA Navy (Beijing: China Intercontinental Press*, 2012), p. 155.

9. "It’s Four Years since the Chinese Navy Began Escorting Ships." *China National Television (CNTV)* (English), 26 December 2012, english.cntv.cn/.


11. Ibid.


24. Hunter, "Somali Pirates Living the High Life."

25. 黄立 [Huang Li], 剑指亚丁湾: 中国海军远洋亮剑 [Sword Pointed at the Gulf of Aden: The Chinese Navy's Bright Far Oceans Sword] (Guangzhou: 中山大学出版社 [Zhongshan Univ. Press], 2009), p. 169. Dr. Huang Li is a professor at South China Normal University Law School, where he teaches international criminal law to master's students. He is also a member of the China branch of the International Criminal Law Association and vice president of the Guangdong Province Criminal Law Institute. Huang worked in China's public security system for twelve years, achieving the rank of third-class police inspector. He has conducted extensive research, and his reports have been praised by Ministry of Public Security leadership. Huang is an influential expert in China on organized crime. His publications include the 2008 monograph Crack Down on Speculation and Profiteering, Eliminate the Loathsome Cancer Uprooting the Harmonious Society. While Huang acknowledges that he lacks naval operational expertise, his book offers a useful compilation of open-source information and displays incisive critical analysis.


29. Martin N. Murphy, "Somali Piracy: Why Should We Care?," RUSI Journal 156, no. 6 (December 2011), pp. 4–11.


33. As an article in Modern Navy emphasizes, "According to historical records, since Portuguese explorer [Diaz] discovered the Cape of Good Hope in 1487, ships here have capsized and sunk by the thousands; in just the last twenty years, just eleven ships of over 100,000 tons have sunk off the Cape of Good Hope. But waves are small in the Gulf of Aden and in Somali waters, the route is short, [and] has become the first choice for ships throughout the world heading to Europe. If a [ship] sails around the Cape of Good Hope, [it] not only faces a perilous environment but also needs to take fourteen more days' voyage." 黄修国 [Huang Xiuguo], 丁肖虹 [Wei Xiaohong], and 吴寒月 [Wu Han Yue], "有自己的军舰护航放心了" [Rest Easy Having One's Own Warship Escorts], 甲板故事 [Deck Stories], 当代海军 [Modern Navy] (March 2009), pp. 42–43. Original text: “据史料记载，自1487年葡萄牙人迪亚士发现好望角海域以来，在这里翻沉的船只数以千计，仅近20年来，在好望角海域失事翻沉的10万吨以上的船只就有11艘。而亚丁湾和索马里海域海浪小，航程短，成为各国远洋船只去往欧洲的首选。如果说绕行好望角的话，不仅环境险恶而且还要多出14天的航程。”

34. Capt. David B. Moskoff, "Piracy Impacts and Risk Perspectives" (address on Best Management Practices for Protection against Somalia Based Piracy, Maritime Risk Symposium, Rutgers University, 7–9 November 2011), available at
dimacs.rutgers.edu/. The statistics on rerouting costs used in this study are for 300,000-DWT (dead weight tonnage) very large crude carriers and 10,000-TEU (twenty-foot-equivalent unit) containerships.


36. Xu Jingjing, "Why We Want to Escort." MoT official Ju Chengzhi rejects circumnavigating Africa as a viable solution: "Under the present circumstances of intense shipping competition and the global financial crisis, maritime shipping companies, first and foremost, cannot abandon cargoes of trade goods heading to Europe and North Africa. However, if shipping services companies choose the navigation route winding around the Cape of Good Hope, [they] must increase [the total distance traveled] by 3,482 nautical miles. Typically, it takes 18 days to sail from China through the Suez Canal route to Europe, but circumnavigating the Cape of Good Hope takes 24 days." Original text: "In 2008 the world shipping industry encountered an enormous slump [lit., “cold current,”]..." 2008年世界航运业遭遇了巨大的寒流,表明世界航运运量水平的下降。平均每日价格[支付给航运公司的国际航线运输价格直线下降。而绕过好望角则需增加3482海里,通常,从中国走苏伊士运河航线到欧洲需要18天,而绕过好望角则需要24天。Sanlian Life Weekly, the magazine that interviewed Ju, writes that other MoT officials elaborated on the effect of the economic downturn on world shipping: Zhang Shouguo, director general of the Ministry of Transportation’s Water Transportation Department, told a Sanlian reporter that “in 2008 the world shipping industry encountered an enormous slump [lit., “cold current,”]..."在目前激烈的航运竞争和世界金融危机情况下,海运公司首先不可能放弃运载前往欧洲和北非的贸易货物,而如果船务公司选择绕过好望角的航线,要增加3482海里,通常,从中国走苏伊士运河航线到欧洲需要18天,而绕过好望角则需要24天。世界报的记者对朱进行了采访,其他交通部官员则对此作了详细解释。


38. Xu Jingjing, "Why We Want to Escort." According to Ju Chengzhi of China’s MoT, for China: "Piracy is an age-old problem. Piracy has actually existed continuously around some islands in the Strait of Malacca and Indonesia, China Ocean Shipping (Group) Corporation [COSCO] CEO Wei Jiafu was hijacked by pirates while a captain in 1982. Veteran captains of ‘COSCO’ all have had such experiences, both small and large, with pirates." Original text: "海盗问题自古有之。在马六甲海峡和印度尼西亚的一些岛屿,中国远洋运输(集团)公司总裁魏家福1982年当船长的时候就被海盗劫持过。"在马六甲海峡和印度尼西亚的一些岛屿,中国远洋运输(集团)公司总裁魏家福1982年当船长的时候就被海盗劫持过。中远集团的船长都有像这样大大小小的和海盗打交道的经历。


40. Ibid.


44. Yang Jingjie, "Captains Courageous," Global Times, 24 December 2012, www.globaltimes.cn/. This paper cites Global Times (环球时报), as well as Global Net (环球网), multiple times. According to Global Net’s “About Us” section (see corp.huanqiu.com/aboutus/), it has been invested in by and developed in parallel with Global Times, hence our distinction between the two. Global Net’s establishment was approved by the People’s Daily newspaper and the State Council Information Office. According to its website, “Huanqiu.com has developed in parallel with Global Times. We form the core of the earliest team reporting from abroad, with special correspondents of diplomatic missions in over 150 countries and territories, reporting news
from all over the world in Chinese and English languages, fast and accurately.

45. 吴超 [Wu Chao] and 李大光 [Li Daguang], "海上运输线事关中国发展" [Maritime Shipping Lanes Related to China's Development], 海洋热点 [Ocean Hot Spots], 当代海军 [Modern Navy] (October 2011), pp. 50–52.

46. The first through tenth five-year national plans were termed "Five-Year Plans." Starting with the eleventh, they are now deemed "Five-Year Development Guidelines," such as the "Eleventh Five-Year Development Guidelines." See www.china.org.cn/english/features/guideline/156532.htm.


52. "Experts Warn of China's Rising Imported Oil Dependence" [Experts Warn of China's Rising Imported Oil Dependence].

53. Xu Jingjing, "Why We Want to Escort." In one indication of China's growing shipping reliance, MoT official Ju Chengzhi states: "The Ministry of Transportation plans that by 2020, China's maritime shipping will [be] built into a fleet of growing scale possessing relatively strong comprehensive competitiveness, specialization, and modernization, [and] transportation capacity of comprehensive scale at the forefront of world [shipping], especially strengthening transport capacity concerning material focal points such as energy and raw materials." Original text: "China's NDRC Submits Twelfth Five Year Plan Gas Targets to Cabinet: Official," Platts, 9 May 2012, www.platts.com/.


55. 张庆宝 [Zhang Qingbao], "海外经济利益应由自己来保护—本报记者在专访国家交通运输部合作司司长成志","We Should Protect Our Overseas Economic Interests": An Interview with Director General Ju Chengzhi of the International Cooperation Department under the Ministry of Transportation], 人民海军 [People's Navy], 9 January 2009, p. 4. Original text: "目前，我国从事国际海运的船公司有260多家。... 我们现在的发展趋势肯定是越来越开放，贸易量越来越大，海运肯定有一个更大的发展。这种趋势就给我们提出了一个课题，不仅是亚丁湾、索马里海域，还有马六甲海峡及整个运输通道的安全的保护，不是一时一地的问题，而是长久的问题。既然护航这个事情应该算大账，不要算小账，从国家战略高度来看的话我不就说了，我只想说，如果这些远洋运输公司受影响倒闭了，对国家税收损失非常巨大。所以，舰艇编队护航这个不仅仅是个要花多少钱、多大代价的问题，大的方面利益要远远高于花销和代价，更大的利益在于长远。"

56. Xu Jingjing, "Why We Want to Escort." Original text: "我们国家现在称作‘海运大国’，目前拥有船舶3300多艘，载重达488万吨位，位于世界第4位。" Ju stated, "In addition to seaborne shipping, China's ports are also developing very quickly. Port handling capacity and container capacity, while still in the process of development, are both [already] number one in the world." Original text: "我们除了海运，港口发展也很快，港口吞吐量和集装箱吞吐量都位于世界第一，并且仍在发展中。" During the same interview, Ju also related China's shipping industry to the nation's energy security, stating, "Maritime shipping assures China's energy security. During the process of economic development, China's energy consumption [has been] tremendous. By the end of 2007, oil imports were already close to 200 million tonnes, and [this] figure continues to increase. If we cannot ensure the secure transportation of such strategic commodities as oil and iron ore, [this will] have a large [negative] impact on the economic security of the country as a whole." Original text: "海运还是我国能源安全的保证。我国在经济发展过程中能源消耗很大，石油进口在2007年底就已近2亿吨，这个数字还在不断增长。如果不保证石油、铁矿石等战略物资的安全运输，整个国家的经济安全运行都会带来很大的影响。"

57. Ibid. Ju stated, "Economically speaking, thirty years since reform and opening up, [now with] trade volumes burgeoning, China relies on maritime shipping for 90 percent of its international trade in goods." Original text: "从经济上来讲，改革开放30年来，对外贸易量激增，我国90%
The international goods trade is dependent on maritime transport. In addition to highlighting China's growing economic reliance on the sea, Ju noted that for many Chinese shipping companies, the rise of contemporary piracy occurred amid an already formidable industrial climate caused by the global financial crisis. Ju stated, "Therefore, in this sense, responding effectively to Somali pirates is also related to China's maritime transportation industry ability to withstand the impact of the financial crisis. If these companies encounter severe shocks, China's position in maritime shipping will also fall sharply. So, I say that for Chinese maritime shipping companies, Somali piracy during the financial crisis is like 'making a bad situation worse' [雪上加霜], while escort warships are 'rendering assistance just when it is needed most' [雪中送炭]."

Original text: "因此，从这个意义上说，有效地应对索马里海盗，还关系到中国航运公司是否能够抵御金融危机的冲击，如果这些公司遭受严重的冲击，而我国的航运地位也就会一下子跌下来。所以，我说索马里海盗对于金融危机中的中国海运公司是雪上加霜，而军舰护航则是雪中送炭。"

58. Ibid. Original text: "现在中国船舶遍布世界各地的港口，我们有40万名船员在海洋上跑，我们也是海员大国，政府有责任来保护他们。"


60. Ibid.

61. Xu Jingjing, "Why We Want to Escort." During the aforementioned interview, Ju Chengzhi cited the example of Japan as a state heavily dependent on energy imports that invested significant resources to enhance the maritime security of national strategic resources, stating, "Therefore, in this sense, responding effectively to Somali pirates is also related to China's maritime transportation industry ability to withstand the impact of the financial crisis. If these companies encounter severe shocks, China's position in maritime shipping will also fall sharply. So, I say that for Chinese maritime shipping companies, Somali piracy during the financial crisis is like 'making a bad situation worse' [雪上加霜], while escort warships are 'rendering assistance just when it is needed most' [雪中送炭]."

Original text: "因此，从这个意义上说，有效地应对索马里海盗，还关系到中国航运公司是否能够抵御金融危机的冲击，如果这些公司遭受严重的冲击，而我国的航运地位也就会一下子跌下来。所以，我说索马里海盗对于金融危机中的中国海运公司是雪上加霜，而军舰护航则是雪中送炭。"


63. Ibid., pp. 50–52. Original text: "海上交通线已名副其实成为国家生存与发展的‘生命线’。就经济而言，海上交通线是国民经济迅速发展的重要支柱和必要前提。" The authors add: "In order to secure more interests, some maritime powers seek to capture and maintain maritime hegemony; having absolute control over strategic sea-lanes allows nations to supply [their] overseas strategic resource needs. Columbus's journey and da Gama's global navigation opened up Far Ocean navigation routes, opened up a new record in the history of humanity, and also spurred the birth of modern Far Oceans navies. Since their birth, the most basic mission and responsibility of navies is to protect the safety of maritime transportation routes."

Original text: "为了获得更大的利益，一些海上强国企图夺取和保持海上霸权，拥有对海上航线的绝对控制权，以保障国家对海外战略资源的需求。哥伦布的航海和达伽马的环球航行，开辟了海上远洋航线，开辟了人类历史的新纪元，也促使了近代远洋海军的诞生。维护海上交通线的安全，是海军诞生以来最基本的使命任务。"


66. Ibid.


68. 孙国强 [Sun Guoqiang], "军的'命脉'千里来相会" [A 1,000-Mile Meeting of 'Fate'], 人民海军 [People's Navy], 29 May 2012, p. 1.

70. Li Daguang, "Antipiracy Escorts: Are They Essential?" [Anti-Piracy Escorts: Are They Necessary?] [Modern Navy] (February 2009), pp. 39–43. Original text: "NATO's action in the Indian Ocean is a measure of historical significance; even during the height of the Cold War, NATO did not achieve a military existence in the Indian Ocean. The mastermind [leader] of NATO's operation is the United States. The United States' overall strategy is to use NATO operations to expand its range to the Indian Ocean and even Africa. To America, controlling the Indian Ocean has vital importance for carrying out its global strategy." Original text: "NATO's action in the Indian Ocean is a measure of historical significance; even during the height of the Cold War, NATO did not achieve a military existence in the Indian Ocean. The mastermind [leader] of NATO's operation is the United States. The United States' overall strategy is to use NATO operations to expand its range to the Indian Ocean and even Africa. To America, controlling the Indian Ocean has vital importance for carrying out its global strategy."

71. Wang Ziwu et al., "China Mulls New Forex Reserve Investment Funds," Caixin Online, 25 April 2011, english.caixin.com/. Original text: "China's foreign exchange reserves has already reached a shocking $1.3 trillion, and as soon as oil prices are driven up, China will face an enormous loss with regard to both foreign reserves and U.S. debt." Original text: "China's foreign exchange reserves has already reached a shocking $1.3 trillion, and as soon as oil prices are driven up, China will face an enormous loss with regard to both foreign reserves and U.S. debt."


73. Ibid.

74. Ibid. Original text: "In a separate interview, Ju adds: "In 2007 Sino-European trade reached $350 billion. Europe is an important trading partner of China, [and] over 90 percent of China-EU trade depends on maritime transportation." Original text: "In a separate interview, Ju adds: "In 2007 Sino-European trade reached $350 billion. Europe is an important trading partner of China. The United States is China's second-largest bilateral partner, behind the United States.""


76. Meng Yan, "Zero Distance," pp. 34–35.

77. Ibid.


80. As of February 2013, the EU was China's largest trading partner, and China was the EU's second-largest bilateral partner, behind the United States. See European Union External Action Service (EEAS), eeas.europa.eu/china/index_en.htm.

81. Ibid.

82. Meng Yan, "Zero Distance," pp. 34–35.

83. Yang Lingjie, "Captains Courageous.


89. All data in this paragraph derived from author's meeting with a Chinese government official, Beijing, June 2009.

90. Feng Liang and Zhang Chun, "Preparing the Chinese Navy for A Future's War?"] [China's Maritime Rights and Overseas Interests Overseas? Reflections on the War in Libya], [Special Report], Modern Ships [Modern Ships] (April 2011), pp. 14–17. "Presently, the number of China's U.S.-dollar foreign exchange reserves has already reached a shocking $1.3 trillion, and as soon as oil prices are driven up, China will face an enormous loss with regard to both foreign reserves and U.S. debt." Original text: "Presently, the number of China's U.S.-dollar foreign exchange reserves has already reached a shocking $1.3 trillion, and as soon as oil prices are driven up, China will face an enormous loss with regard to both foreign reserves and U.S. debt."
国产舰补给了‘海口’舰150吨燃油和15吨淡水，也转移了5艘被劫商船的货物。‘海口’舰为配合‘海口’舰开展护航行动，根据海军指示，5时30分，早已在该海域等待的‘微山湖’舰为‘海口’舰补给了150吨燃油和15吨淡水，并抽调5名特战队员、1名装备维修人员和1名医疗人员携带必要装备和药品。

98. 贾春晖 [Liang Chunhui], “中国海军舰艇编队在亚丁湾护航的生肖、良辰与吉日”，《当代海军》(January 2011), pp. 44–49.

99. 第六批护航编队为配合‘海口’舰与‘微山湖’舰的行动，根据海军的指示，5时30分，早已在该海域等待的‘微山湖’舰为‘海口’舰补给了150吨燃油和15吨淡水，并抽调5名特战队员、1名装备维修人员和1名医疗人员携带必要装备和药品。”

100. 李政 [Li Zhi] et al., “有效维护国家海上安全和利益：专访军队政治委员：海军原副司令员赵兴发” [Effectively Protecting National Maritime Security and Development Interests: Exclusive Interview with Military Delegate to the Chinese People’s Political Consultative Conference and Former Navy Deputy Commander Zhao Xingfa], 人民海军 [People’s Navy], 14 March 2012, p. 2.


102. 第六批护航编队为配合‘海口’舰与‘微山湖’舰的行动，根据海军的指示，5时30分，早已在该海域等待的‘微山湖’舰为‘海口’舰补给了150吨燃油和15吨淡水，并抽调5名特战队员、1名装备维修人员和1名医疗人员携带必要装备和药品。”


105. 李杰 [Li Jie] and 梁春晖 [Liang Chunhui], “中国海军舰艇编队护航成绩令人瞩目——对海军编队一年护航行动的回顾与思考” [Great Results of Chinese Navy’s Warship Task Force Escorts Catches People’s Attention: Reflection and Thoughts on One Year of Chinese Task Force Escort Operations], 本刊特稿 [Special Story], 当代海军 [Modern Navy] (December 2010), pp. 8–13. Original text: “我海军力量顺应‘天时、地利’适当把握机遇，毅然派出舰艇编队赴亚丁湾海域，不仅应了国际和平力量发展的需求，也顺应国内军心民心，以实际行动向世界表明我国和平发展和维护世界及地区和平的信心和决心，进一步展示了我海军‘文明之师、威武之师’的良好形象。”

106. 《当代海军》(January 2011), pp. 44–49.


108. 国际频道 [International Channel], 真理的海洋 [People’s Net], 17 August 2010, world.people.com.cn/GB/12466074.html.
then described exceptional circumstances that facilitated resistance: “Objectively speaking, there are multiple elements to ‘Zhenhua 4’s success. One is the efforts [of the crew]; the captain commanded correctly [and] the crewmen cooperated, [thereby] forming a team [and] adopting effective measures. Additionally, ‘Zhenhua 4’s hull structure is extremely special, there’s a very long deck in the center of the ship’s hull; usually ships are not like this. [In the exceptional case of ‘Zhenhua 4’ the living quarters are at the ship’s rear, [so that one] must use two ladders to reach the living quarters from the deck. Following the [pirates’] attack, crew members stayed in the [ir] living quarters and unharmed the ladders, [thereby] taking a temporary position of advantage. They used improvised explosive devices and high-pressure water cannons to confine pirates to one end of the deck.” Original text: “I am in the ‘Zhenhua 4’ encountered an hour and a half later, I say this is another example of the ship crew’s performance. ‘Zhenhua 4’ is a laser guideboat. They used improvised explosive devices and forming a ‘Wolf Pack offensive, these methods were effective. But if pirates are numerous, for example, the boat ‘Dajian’ was a Sri Lankan; [he] surrendered very quickly after encountering pirates. [In contrast], the captain of the aforementioned [ship] ‘Dajian’ was a Sri Lankan; he surrendered very quickly after encountering pirates, and did not resist at all.” Original text: “There’s a very interesting data [point] here, COSCO has been attacked 63 times, yet has never once been hijacked. This is because [its] ships’ self-defense and self-prevention measures are relatively effective, and is also because of the composition of our crew. ‘China-owned’ ships registered through the China Maritime Bureau basically all have a completely set crew: from the captain to sailors, everyone is Chinese, [it] is a very complete team. This facilitates the captain issuing orders effectively to the crew members; the ability to respond to pirates is relatively strong.”

104. “‘Zhenhua’ 4’s experience in dealing with pirates, such as making improvised explosive devices and using high-pressure water cannons. Previously ‘Zhenhua 4’ resisted pirate attacks successfully by adapting these methods. But if pirates are numerous, forming a ‘Wolf Pack offensive’ these methods are still of no avail.” Original text: “in没有派出军舰以前，长久以来我们都在做船舶自救自防工作。船舶本身是没有武器的，我们就制定各种方法，如船舶遇到海盗、不能直行，需要‘S’形前进等等。另外，海运公司也积累了大量对付海盗的经验，如制作土炸弹、使用高压水枪等。前段时间‘振华4号’成功抵御海盗袭击就采取了这些办法。但是如果海盗很多，形成‘狼群攻势’这些措施还是无济于事。”

105. Xu Jingjing, “Why We Want to Escort.”


107. Xu Jingjing, “Why We Want to Escort.” As MoT official Ju Chengzhi explained, initial stopgap measures proved inadequate: “Before dispatching warships, we had been working at self-protection and self-prevention. [Commercial] ships have no weapons themselves, [so] we drafted up various methods. For example, if ships encountered pirates they were not to sail straight, [but rather] needed to sail forward in an ‘S’ pattern. In addition, maritime shipping companies also accumulated considerable experience in dealing with pirates, such as making improvised explosive devices and using high-pressure water cannons. Previously ‘Zhenhua 4’ resisted pirate attacks successfully by adapting these methods. But if pirates are numerous, forming a ‘Wolf Pack offensive’ these methods are still of no avail.” Original text: “in没有派出军舰以前，长久以来我们都在做船舶自救自防工作。船舶本身是没有武器的，我们就制定各种方法，如船舶遇到海盗、不能直行，需要‘S’形前进等等。另外，海运公司也积累了大量对付海盗的经验，如制作土炸弹、使用高压水枪等。前段时间‘振华4号’成功抵御海盗袭击就采取了这些办法。但是如果海盗很多，形成‘狼群攻势’这些措施还是无济于事。”

115. Xu Jingjing, "Why We Want to Escort." Original text: "2008年9 月份时海盗比较猖獗，到10 月份，我国多家大的海运公司感到压力太大，面对海盗威胁，他们除了继续坚持航运别无选择—否则不但违反合同，自己的航运份额就会被别人抢掉，于是各海运公司纷纷告急，提出请求政府尽快派军舰为商船护航。"

116. Ibid. Original text: "我们提出这个事情后，引起各方面重视。交通部、外交部、军方等部门和一些专家反复研究，因为这不是一个简单举措，关系到能力、补给、国际法等一系列重大问题，大家对此事的严重性和紧迫性都有一定认识。"


119. 顾国良 [Gu Guoliang], "中美关系的积极发展" [The Positive Development of Sino-U.S. Relations], 学习时报 [Study Times], www.china.com.cn/chinese/zhuanti/xxb/1187267.htm. Similarly, in August 2012 Qian Lihua, director of the Foreign Affairs Office in China’s Ministry of National Defense, penned an article on China’s military diplomacy. With respect to the PLAS contribution to international security, Qian wrote: “In the pursuit of peacekeeping, economic cooperation, and counter-piracy, the goal of the Chinese military in ‘going global’ is peaceful, its method is cooperative, and its effect is that both sides win. Participation in international peace and security matters has already become an important component of the Chinese military’s building up of diversified military task capabilities. The Chinese military has established and completed institutional mechanisms such as international peacekeeping, disaster relief, and protective sea escort. It has organized related mission units, strengthened specific training, and stressed the relationship between the comprehensive planning of unit construction and participation in international security cooperation. Within the scope of its ability, it has fulfilled its international obligations;” Qian Lihua [Qian Lihua], “积极开拓进取 创新军事外交” [Actively Developing Enterpriseing, Innovative Military Diplomacy], 求是 [Seeking Truth], 1 August 2012, world.people.com.cn/n/2012/0801/c14549-18645319.html.

120. Liu Jiangping, "Far Oceans Escorts Are the Chinese Navy’s International Mission." Original text: "这是中国海军走向远洋履行国际义务，树立负责任大国形象的最好体现。" Liu adds: “Under the framework of international law, having the authority of the United Nations and approval and invitation of the state concerned, and also having a constitution for multiple countries’ warships in the Gulf of Aden and Somali waters fighting terrorism for a period of time, the Chinese naval task force’s [operations] on the western shore of the Indian Ocean are both for safeguarding China’s merchant ships, and also for safeguarding international transit routes and the international trade environment.”

121. Gao Xiaoxing et al., PLA Navy, p. 145.


123. Ibid.


125. For initial escorts, Xu Jingjing, "Why We Want to Escort." MoT official Ju Chengzhi explains: “Regardless of these escorts, we respect the principle of voluntary applications. Mainland Chinese ships submit applications to the China Shipowners’ Association for the Association to collect and submit applications to the Ministry of Transportation. Ships from Hong Kong and Macau can only apply to the National Maritime Bureau through their respective maritime bureaus. The scope of our escorts of course also includes ships from Taiwan; the Association for Relations across the Taiwan Strait [ARATS] and Straits Exchange Foundation [SEF] coordinate and submit applications to the China Maritime Search and Rescue Center." Original text: “这次护航，我们遵循自愿申请原则，大陆的船舶提前7天向中国船东协会提交申请，由中国船东协会汇总并提交给交通运输部。香港、澳门的船只可以通过两地海事局向国家海事局提交申请。我们的护航范围当然也包括台湾船舶，由海协会与海基会协商并由中国海上搜救中心提出申请。” He emphasizes that protection of China-connected ships was prioritized: “The 1,265 ships transiting the Gulf of Aden are of two types, the first being ‘China-owned’ [国字号—lit., “named under
China,” or with ownership under the auspices of the Chinese government], China-flagged ships registered through the China Maritime Bureau, [while] the other type is Chinese-invested foreign-flagged ‘flag of convenience’ ships. These ‘flag of convenience’ ships are Chinese-owned ships registered in other countries, [with] capital funded by the Chinese side, and the crew largely [composed of] Chinese people. Both of these types of ships are the intended beneficiaries of our escort [mission].” Original text: “(English), 1224 GMT, 10 May 2011.

113. Ibid.


115. 李宜良 [Li Xuanliang] and 唐忠平 [Tang Zhongping], “Who's Afraid of the Blue-Water Navy. “ Original text: “(Part 2)”, Special Column, Modern Navy (January 2011), pp. 12–15. Original text: “...Our military...” Cai adds: “While taking pride in their own equipment advancement, strict [adherence to] principles, [and] strengthening of style, escort personnel simultaneously paid even more attention to discovering and studying foreign militaries’ strong points.” Original text: “We must...” Cai concludes: “We must compete with foreign navies, but in the process, we should learn from their strong points...”

116. Huang Li, Sword Pointed at the Gulf of Aden, pp. 222, 224. According to CSA’s website (eng .csoa.cn/about_csa/Introduction/200711/ t20071109_445319.htm), it is not directly linked to MeT: “China Shipowners’ Association (abbreviated as CSA) is a voluntary trade organization composed of owners, operators and managers of merchant ships engaged in waterway transportation and relevant shipping related entities, which are registered in the People’s Republic of China. It is registered with the Ministry of Civil Affairs of the People’s Republic of China and has obtained legal corporate body status in accordance with The Regulations on the Registration and Management of Social Organizations promulgated by the State Council of the People’s Republic of China.”


120. "NATO, Indian Navy Rescue Chinese Cargo Ship from Somali Pirates,” CCTV News Content (English), 1224 GMT, 10 May 2011.

121. Ibid.


123. Yang Jingjie, “Captains Courageous.”


125. 李宜良 [Li Xuanliang] and 唐忠平 [Tang Zhongping], “Who's Afraid of the Blue-Water Navy. “ Original text: “(Part 2)”, Special Column, Modern Navy (January 2011), pp. 12–15. Original text: “...Our military...” Cai adds: “While taking pride in their own equipment advancement, strict [adherence to] principles, [and] strengthening of style, escort personnel simultaneously paid even more attention to discovering and studying foreign militaries’ strong points.” Original text: “We must...” Cai concludes: “We must compete with foreign navies, but in the process, we should learn from their strong points...”

126. Huang Li, Sword Pointed at the Gulf of Aden, pp. 222, 224. According to CSA’s website (eng .csoa.cn/about_csa/Introduction/200711/ t20071109_445319.htm), it is not directly linked to MeT: “China Shipowners’ Association (abbreviated as CSA) is a voluntary trade organization composed of owners, operators and managers of merchant ships engaged in waterway transportation and relevant shipping related entities, which are registered in the People’s Republic of China. It is registered with the Ministry of Civil Affairs of the People’s Republic of China and has obtained legal corporate body status in accordance with The Regulations on the Registration and Management of Social Organizations promulgated by the State Council of the People’s Republic of China.”


130. "NATO, Indian Navy Rescue Chinese Cargo Ship from Somali Pirates,” CCTV News Content (English), 1224 GMT, 10 May 2011.

131. Ibid.


133. Yang Jingjie, “Captains Courageous.”


135. 李宜良 [Li Xuanliang] and 唐忠平 [Tang Zhongping], “Who's Afraid of the Blue-Water Navy. “ Original text: “(Part 2)”, Special Column, Modern Navy (January 2011), pp. 12–15. Original text: “...Our military...” Cai adds: “While taking pride in their own equipment advancement, strict [adherence to] principles, [and] strengthening of style, escort personnel simultaneously paid even more attention to discovering and studying foreign militaries’ strong points.” Original text: “We must...” Cai concludes: “We must compete with foreign navies, but in the process, we should learn from their strong points...”


137. Cao Jinping and Mo Xiaoliang, "Review of China's Flag Carrier Airlines" (national and Mandarin), 24 February 2012, newscontent .cctv.com/.

138. Ibid.

139. "Chinese government, Air China (national and Mandarin), 24 February 2012, newscontent .cctv.com/.


141. Ibid.


143. Yang Yi and Cheng Hong, "Let Chinese Navy Warships Go Farther," Deck Stories, June 2011, pp. 66-69. Original text: "In terms of personnel management, the fleet must develop the numerous intellectual and professional personnel that are essential for far sea operations."


145. Ibid.


148. Ibid.

149. Ibid.

150. Ibid.

151. Ibid.


154. Ibid.

155. Ibid.


159. Ibid.

160. Ibid.


162. Wang and Xiao elaborate: “According to the task force commander’s introduction, previous Far Seas training exercises were primarily executed independently by each type of naval force. [This was] not beneficial for improving ability [to engage in] such [operations] as joint attacks and comprehensive defense. This time, not only do various combat units such as submarines, surface combat ships, and helicopters coordinate training, but [escort task forces] also carry out counterattack exercises, [with characteristics such as] the large scale of training participants, long training duration, and complex training environment [that] have scarcely been realized in the past. [The training] is aimed at exploring a new model for normalized Far Seas organized training, [by] searching for new expansion points for naval combat ability.” Original text:

163. “据编队指挥员介绍，过去，远海训练以各兵种独立训练为主，不利于联合打击、综合防护等能力的提高。此次远海训练不仅要进行潜艇、水面舰艇、舰载直升机等多兵种协同训练，还要进行对抗演练，参训兵力规模之大、训练时间之长、训练环境之复杂，均为近年来少见，旨在探索远海常态化组训模式，寻求海军作战能力新的增长点。”

164. 陈再良 [Chen Zailiang], “连续护航四批次 难忘550天” [An Unforgettable 550 Days over Four Consecutive Escorts], 综合新闻 [General News], 人民海军 [People’s Navy], 31 December 2010, p. 3.


166. Ibid.


170. The authors are indebted to Nan Li for this insight.


175. Yang Jingjie, “Captains Courageous.”


177. Ibid.


181. 葛沖 [Ge Chong], “專家解讀：淺藍走向深藍 尤需科研投入” [Expert Interpretation: From Light Blue Waters to Deep Blue Waters—There
Is a Particular Need for Investment in Scientific Research], 文汇报 [Wenhui News], 4 August 2012, paper.wenweipo.com/2012/08/04/WW1208040001.htm.


184. Antipiracy commentator Yin Zhuo stated during a CCTV program that the CMC attaches significant importance to China's antipiracy deployments. See "Focus Today" (Mandarin), CCTV-4, 25 February 2012.


186. Ibid.

187. In a Chinese media interview, Maj. Gen. Peng Guangqian, Academy of Military Science, and Zhang Zhaozong, National Defense University, state that in the future China's ground forces will be downsized, that the PLAN will be enhanced and become the second-largest service, that the PLAAF and Second Artillery will stay the same, and there will be new services, such as space and cyber forces. Senior Capt. Li Jie says that China's approach to carriers will be incremental and that once acquired, carriers will be deployed to important sea-lanes and strategic sea locations for conventional deterrence and also deployed for nontraditional security missions. 马振岗 [Ma Zhengang], “中国模式会取代‘美国模式’” [Can the “Chinese Model” Replace the “American Model”?], 人民网 [People's Net], 22 October 2009, cn.chinareviewnews.com/doc/50_1074_10111301_2_1022081349.html; 责任编辑: 吴茗, 邱丽芳 [Wu Ming and Qiu Lifang, duty editors], “七大军区的划分” [The Division of the Seven Military Regions], 新华网 [Xinhua Net], 8 April 2008, news.xinhuanet.com/mil/2008-04/08/content_7939418.htm.

188. The authors thank Nan Li for these points. This process might be facilitated by gradual development and consolidation of China's civil maritime forces, which could then assume missions within China's coastal waters and exclusive economic zone that previously occupied the navy.

189. The authors are indebted to Nan Li for this insight.

190. 邹立刚 [Zou Ligang], “保障我国海上通道安全研究” [Research on Ensuring the Safety of China's SLOC], 法治研究 [Research on Rule of Law], no. 1 (January 2012), p. 80.


192. Ibid.

193. 李大光 [Li Daguang], “向世界展现中国海军影响力” [Displaying the Influence of China's Navy to the World], 学习与实践 [Study and Practice], 人民海军 [People's Navy], 21 December 2011, p. 3. Original text: “面对问候与邀请，中国海军本着积极务实、独立自主的原则，与世界各国海军进行交流与合作.”

194. Wang Hengcheng and Zhang Weiping, "Joy and Anxiety from Three Years of Escorts."

195. Ibid.


200. Ibid.


The economic, political, and military dimensions discussed earlier help to clarify Beijing’s motivations for intervening in the Gulf of Aden, yet they constitute an incomplete account. Numerous additional institutional factors have either driven or incentivized China’s participation in antipiracy operations in the Gulf of Aden.

Internal Drivers

A perceived lack of cost-effective alternatives for addressing piracy on the Far Seas pushed Beijing to send PLAN forces to protect its interests. Furthermore, Beijing felt compelled to prevent China’s being seen as impotent compared to other large—and not so large—states. Finally, as viewed within China’s highest policy-making circles, deploying PLAN vessels implicitly allowed China to begin what many civil and military leaders viewed as the next phase in China’s twenty-first-century military modernization.

Chinese scholars like Jiang Lei of Nanjing Navy Command College generally agree that as China’s stake in the global economy grows and the number of Chinese citizens working overseas increases, China’s civilian and military leadership must devote the resources needed to expand the PLAN’s overseas capabilities adequately to defend these interests. Deliberations concerning how to respond to piracy have fueled larger internal debates over how, where, and to what extent China should project force overseas to protect national interests.

Of course, at the time of the PLAN’s initial deployment, not all Chinese observers were completely supportive. For example, Ma Xiaojun, a professor in the Central Party School’s International Strategic Studies Institute, stated in reference to the Gulf of Aden mission, “Another kind of objective is to do things in a sound and practical way, doing whatever we can according to our capability. If you truly have the capability to do long-term escort duty off the east coast of Africa, why do you not first subdue the South China Sea pirates? The international community, especially ASEAN [Association of Southeast Asian Nations], hopes more that China will make more effort to crack down on pirates in the South China Sea region. This possibility is more realistic.”
The hesitancy with which CCP and PLA officials initially deliberated how to respond to growing Gulf of Aden piracy is not surprising, given Beijing’s traditional stance of strict nonintervention in other states’ affairs. One of the most thorough accounts available to date of the genesis and initial stages of the mission documents that it took nearly a year to decide finally to send PLAN forces through the Indian Ocean to the Horn of Africa. Ultimately, alternative approaches considered simply proved ineffective or infeasible. Chinese merchants wary of pirates could not afford the premiums charged by private security firms at international-market levels and had already begun rerouting around the Cape of Good Hope. As a substitute for circumnavigating Africa, it is also possible to hug the Indian coast; since late 2010 many vessels have done so. However, while that option allows ships to avoid (narrowly) the rapidly expanding zone vulnerable to piracy, it incurs significant excess costs, as detailed above. Further, Chinese inability to meet the delivery dates of rigid shipping contracts negotiated far in advance would threaten market share.

Another dimension of the internal debates over piracy related to the aspirations of China’s public and leadership to see their nation become a great power in the twenty-first century. The “China dream” articulated by General Secretary Xi Jinping in early December 2012 has resonated throughout Chinese society, reflecting official and public desires for national rejuvenation. Indeed, for the past three years China’s “perfect record” of antipiracy patrols has been repeatedly celebrated in Chinese official statements, scholarship, and media.

The international and domestic legal issues associated with piracy also constituted a key element of Chinese internal debates and continue to do so. Antipiracy operations exemplify the legal challenges that China’s military faces as it continues to fulfill diverse military tasks. CMC Legal Department vice-director Wang Weihong drew a direct connection: “Military operations, in reality, are also a type of legal warfare.” More specific expertise and interpretation were furnished by Capt. Xing Guangmei, director of the World Naval Research Division, director of the Legal Research Office (法律研究室), and a research fellow at the Navy Military Studies Research Institute. A well-published, recognized, and influential expert on international military legal issues, Xing helped her organization play a key role in determining the PLAN’s legal approach for the Gulf of Aden task forces. An article from Southern Weekend described her role and contributions:

In mid-October of last year (2008), China’s navy officially started discussion of and preparations for operations to “send forces to Somalia [for] escorts.” At the time, at closed meetings between the Ministry of Foreign Affairs and Ministry of Transportation, everyone unanimously called for sending naval forces for escorts. Xing Guangmei’s work on the legal basis [for the mission] started from this point in time. . . . The Headquarters
of the General Staff of the PLA began [discussion and due diligence] in mid-November, [which continued] through the time when the navy officially set sail on December 26. Xing Guangmei and her colleagues needed to [provide legal advice concerning] the following questions: What kind of military operations are military antipiracy operations? [Is one] able to dispatch troops [to conduct antipiracy operations]? What will military personnel do [once] deployed? If during the voyage [warships] do not [successfully] save ships victimized [by piracy], [then] what kinds of responsibilities will warship commanders bear? What to do if [Chinese forces] enter Somali territory?10

Xing believed that the mission was justified legally, but that “there exist [areas of ambiguity] in the regulations of prevailing law. . . . The biggest shortcoming is [that] a necessary condition for a crime to constitute piracy is based on [the actor’s] having private goals.” She explained that if pirate-like activities had a political motive attached to them—that is, if pirates and terrorists came together on the high seas—then unless a new UNSC resolution were passed, nations would have no way to expand military operations against pirates in international waters.11 Xing’s “strict constructionist” approach to interpreting international law is reflective not only of her other legal research but also of Beijing’s approaches thereto in general.12

Similarly, referring to stipulations in the Geneva Convention on the High Seas and in the UN Convention on the Law of the Sea (UNCLOS), Meng Yan writes,

Looking from practical situations, Somali piracy certainly does not fully meet the above-mentioned treaty regulations. First, Somali pirates differ from traditional pirates, they are both citizens and pirates. Second, the location of Somali pirates’ criminal behavior is outside of “the limits of the high seas and national jurisdictional waters,” and still is conducted in territorial waters. Somali pirate behavior is different from the characteristics regulated in international law, and presents a certain level of difficulty for naval ships of every country with respect to distinguishing, pursuing and punishing pirates.13

Liu Jiehua of People’s Public Security University, however, asserts that the legal foundations do exist for China’s navy to punish Somali piracy behavior, through a combination of international and domestic laws and regulations. She writes,

Based on a correct understanding of the crime of piracy, both international law or Chinese domestic law provide a legal basis for our right to exercise jurisdiction over piracy crimes, and also establish a firm legal foundation for China to better punish Somali acts of piracy. According to related regulations of international treaties, [and] according to a series of UNSC resolutions, under the agreement of the Somali Transitional Federal Government [TFG], in accordance with regulations on the determination of jurisdiction and concrete confirmations of criminal charges within Chinese criminal law, we can see that China’s dispatching warships to Somalia to serve as escorts, and punishing Somali pirate crimes, is a lawful act.14

PLAN officer Zhao Xiaobin raises an entirely separate issue, arguing that current international laws for dealing with captured pirates are inconsistent and inadequate.
He states, “Considering the dangers posed by pirates, evidence collection, prosecution procedures and other problems, our navy mainly takes measures to drive them away or disarm them.” Indeed, the PLAN has been notably hesitant to detain pirates, and this defensive strategy is likely to persist until Beijing feels that an acceptable baseline of international law has been established.\textsuperscript{15}

PLAN lawyer Zheng Ren commented on the legal aspects of Chinese naval escort operations in a 2011 \textit{People’s Navy} article.\textsuperscript{16} According to Zheng, the majority of legal questions surrounding China’s naval escort activities in waters outside China’s periphery are largely unanswered as well as neglected. The article quotes her as saying,

"There exist some empty spaces with regard to the systemic legal aspects of Chinese naval escort operations. We should urgently research relevant international maritime laws and the maritime laws of each nation, [and] sort out the rights and duties of Chinese warships carrying out maritime military operations; simultaneously, [we] should actively research and draft detailed rules for the authority and implementation of Chinese military participation in maritime operational law; for example, problems such as attacking, catching, detaining and extraditing pirates and terrorists, [as well as] defining the range of navigational safety for Chinese warships, [and] how to exercise the right to undertake acts of rescue for [Chinese] naval ships and aircraft in the territorial waters or ports of other countries."\textsuperscript{17}

Jin Yongming of the Shanghai Academy of Social Sciences (SASS) offered in late 2011 a different opinion, arguing that China in fact needs domestic law reform to punish pirates more effectively. “China is facing problems with its domestic legal system that should be improved quickly,” Jin wrote,

because international laws, including those within UNSC resolutions, cannot be directly applied to Chinese domestic laws. [Rather, they] typically need to be turned into domestic laws, or domestic standards that can be directly applied to international law need to be drafted. China therefore needs to develop relevant laws banning piracy or add provisions within Chinese criminal law for attacking pirate behavior aimed at Chinese naval escort operations in waters near Somalia and in the Gulf of Aden.\textsuperscript{18}

More specifically, Chinese interpretations of exclusive economic zones have been weighted in favor of coastal states’ parochial concerns.\textsuperscript{19} Generally Beijing would require a coastal state’s consent to deploy military force in its jurisdictional waters before actually dispatching the PLAN to them; otherwise the PLAN’s actions might be seen as a breach of the coastal state’s sovereign rights and interests and thus a hypocritical act.\textsuperscript{20}

In keeping with this policy, Beijing went to great lengths at least to arrange the appearance that Somali authorities, such as they are, and the Somali people had consented to and supported Beijing’s deployment of antipiracy forces.\textsuperscript{21} As Maj. Gen. Peng Guangqian (Ret.) points out, “In history, some nations that have executed global offensive strategies have been enthusiastic about ‘new borders’ and ‘high borders’ and demarcated everywhere they have gone as their interest boundaries. China is different from them, and it
does not need to apply any of these concepts.” The existence of internal disagreements over the perceived legality of the Far Seas escort mission is suggested both by the time it took Beijing to formulate a unilateral policy and thereafter by the reluctance (which is ongoing) of the PLAN to risk capturing Somali pirates, and thus having to deal with such prisoners. It has avoided that risk by following extremely restrictive rules of engagement (ROE).

To be sure, PLAN ROE do permit some action. Pirates often ignore initial verbal and visual warnings not to approach civilian vessels, thereby requiring PLAN personnel to fire flares and sometimes even warning shots. According to You Ji, “by the end of the first two years of the mission, the escort fleet had engaged pirates twenty-one times with live fire and thereby saved thirty commercial ships.” The deputy head of the ninth task force’s special operations unit, Yang Wu, reportedly “disclosed that his sailors were under a three-second firing-readiness order.” A 2010 article in Modern Navy defended China’s restricted approach: “According to international laws and relevant laws and regulations, the Chinese navy’s operations are both practical and effective, as well as reasonable, measured, and backed by evidence; [while] driving away pirates, making ample preparations, [developing] scientific policy, [having] effective command, and moving quickly [allow the PLAN] to play an effective deterrent role.”

It is important to note that Beijing did not deploy military units in the Gulf of Aden until the UNSC adopted in 2008 three resolutions specifically authorizing the international community to intervene in Somali waters. The continuation of the PLAN’s Gulf of Aden mission still rests legally on Security Council resolutions authorizing states to combat piracy along the Somali coast. Col. Yang Yujun, deputy director of the Information Affairs Office and spokesman for the Ministry of National Defense, stated in December 2012:

Regarding the question of escort operations in the future, in November of this year the UN Security Council passed a resolution that once again extended by one year the authority of the various countries and regional organizations to crack down on piracy and armed hijacking along the coast of Somalia. Based on this resolution by the UN Security Council, escort vessel formations by the Chinese Navy will continue to fulfill escort tasks in the Gulf of Aden and the waters off of Somalia.

Moreover, China publicly supports the UN’s authority to organize international efforts against piracy, with Wang Min stating in late 2012 that “we support the coordination role played by the UN in this regard. It is important to enrich and improve cooperation mechanisms, enhance information sharing, effectively prosecute and bring those involved in piracy to trial so as to form synergy in our fight against piracy.” In a January 2009 article in Modern Navy, Capt. Xing Guangmei highlights three prickly legal issues related to fighting piracy—using violence against Somali pirates, exhibiting antipiracy
behavior in Somalia’s sovereign maritime space and airspace, and bringing antipiracy operations into Somali continental territory. She cites three instruments of international law in support of escorts and the use of violence against pirates: UNSC Resolution 1816, UNSC Resolution 1838, and the 1982 UNCLOS. Xing criticizes several navies for not abiding by international law when initially dispatching antipiracy forces. France, she argues, did not obtain approval from Somalia’s TFG before entering its waters in April 2008. India, for its part, in November 2008, sank (killing fifteen sailors) a suspected pirate craft that the IMO subsequently verified was a Thai fishing vessel that had lost its way.31

These factors, combined with the domestic preoccupation of Chinese policy makers with the Wenchuan earthquake, which devastated Sichuan Province in 2008, help to explain further why Beijing was determined to finalize a course of action quickly and decisively. In addition, Beijing’s reluctance to work within the framework of existing international piracy law, which Chinese officials view as weak and underdeveloped, probably helped to spur consensus that China’s navy should act on its own and not under a coalition’s aegis.

Policy Processes

The confluence of the internal and external drivers outlined above catalyzed China’s decision to participate in antipiracy operations in the Gulf of Aden. These factors also dictated the political process of translating plans into practice. As has been pointed out by Erik Lin-Greenberg, “the driving forces behind China’s decision to participate in antipiracy operations can be categorized as either realist or idealist.”32 Realist motivations include “a desire to protect Chinese shipping, expand China’s influence, and to provide opportunities for realistic training that will enhance the PLA’s capabilities in military operations other than war,” while idealistic forces include China’s wish to protect regional and global security.33 Lin-Greenberg also offers evidence that China’s mission may prioritize image building over operational performance at times, reasoning, “While China’s anti-piracy operation safeguards Chinese shipping vessels, it offers little protection to Chinese fishermen sailing off the coast of Somalia. The lack of protection in these fishing areas is surprising given that the first Chinese ship hijacked by Somali pirates was the Tianyu 8 fishing vessel with its 24-member crew in November 2008.”34

Practically speaking, Chinese leaders were likely reluctant to join any of the three multilateral antipiracy coalitions—Combined Task Force 151 (CTF-151), NATO, or European Union Naval Forces Somalia / Operation Atalanta (EU NAVFOR)—because all of them were under Western command, whereas the UN had no multinational antipiracy mechanism in place.35 In any case, Chinese leaders may have feared that operating under the umbrella of one of these organizations would risk exposing China’s naval capabilities to an uncomfortable degree.36 It is also worth mentioning that China was the last of all
permanent UNSC members to commit forces to the Gulf of Aden.\textsuperscript{37} It faced considerable pressure from the international community and from its domestic populace to act.\textsuperscript{38} Beijing nevertheless was uneasy about integrating itself into one of the prevailing transnational mechanisms. This policy bind may explain the surprisingly quick and effective coordination observed among China’s MoT, Ministry of Foreign Affairs (MoFA), and the PLAN, all of which cooperated with unusual alacrity in late 2008 to craft a framework for the PLAN’s antipiracy mission and thereby establish an operational foundation.\textsuperscript{39} A symposium held by these three entities, as well as the Ministry of Commerce, in early December further formalized the policy process.

Notwithstanding this appearance of being hurried or even rushed, however, the policy process settled on represented in fact the culmination of longer-term planning by Chinese naval officials. Scholars such as Li Jie and Huang Li suggest that China’s navy had been assessing the prospects of such an unprecedented mission for some time and was simply waiting for a favorable environment to take action.\textsuperscript{40} You Ji offers the following interpretation of the decision making behind the PLAN’s mission:

Soon after the first pirate attack on Chinese ships in the Gulf of Aden in May 2008, strategists in the [Navy Military Studies] Research Institute . . . and the PLA National Defense University began discussing the feasibility of an escort mission there. After the completion of various new ship designs, the PLAN could not wait to test its new “teeth.” A naval consensus on escort was discussed by Maj. Gen. Jin Yinan (金一南) in an interview broadcast in November 2008. The Central Military Commission (CMC) quickly approved the navy’s plan. In the meantime, Chinese diplomats worked frantically to acquire an invitation from the Somali government for the escort mission. Beijing announced on 20 December 2008, only four days after UN Security Council (UNSC) Resolution 1851 was passed, that a three-ship detachment would be dispatched to the Gulf of Aden. The rapid decision process reflected the navy’s eagerness to grab this opportunity, with unprecedented CMC support.\textsuperscript{41}

From the first deployment, the PLAN’s Gulf of Aden mission has been managed jointly by the MoT, the MoFA, and the PLAN.\textsuperscript{42} This sharing of responsibility among government organs requires considerable coordination.\textsuperscript{43} The MoT essentially plays the important role of coordinator, matching foreign commercial vessels with PLAN warships, otherwise unavailable to them.\textsuperscript{44} It solicits applications from foreign merchant vessels desiring PLAN escort services and proposes an escort to the task force.\textsuperscript{45} Once the PLAN has finalized its plan, the MoT guides the merchant ships to the point at which they are to meet the PLAN escorts.\textsuperscript{46} It also helps coordinate and plan port visits for refueling and replenishing in foreign countries, as well as official onboard exchanges between Chinese crewmen and their counterparts.\textsuperscript{47} MoT official Ju Chengzhi emphasizes the interagency nature of escort command:
As for the [coordination] mechanism, the Navy is in primary command of the escorts; the MoT coordinates and cooperates with the Navy. The largest characteristic of these escorts is “civil-military cooperation, military-political cooperation.” To conduct effective escorts, it is necessary to ensure that a relatively smooth, high-efficiency command system is formed during this process. This command system is not a unidirectional command model, but rather an information chain cycle: between the MoT and Navy, between the Navy and warships, between warships and commercial ships, and between commercial ships and the MoT.

There is also evidence that the MoT plays also a role in stimulating antipiracy cooperation between China and other states, as well as in handling press releases. In August 2011 it cohosted with the Maritime and Port Authority of Singapore a conference entitled “Partnerships against Piracy off the Coast of Somalia.” Several Chinese and foreign media outlets have cited announcements by MoT spokespeople of the departures and return journeys of escort task forces. MoT officials are typically present during videoconferences between escort task forces and military leaders in China, such as when in January 2011 Wu Shengli and other naval officials thanked the PLAN escort forces in the Gulf of Aden for their service. In any event, since the first deploying PLAN vessels—Wuhan, Haikou, and Weishanhu—left Sanya Port in Hainan Province for the Gulf of Aden in late December 2008, arrangements for successive PLAN escort task forces have become increasingly institutionalized and provide an unusual example of well-coordinated Chinese government action across ministries.

Escort formations have comprised roughly eight hundred personnel on two warships and a supply ship, and each has been away from home port between four and six months. China’s 2008 national defense white paper made no explicit mention of antipiracy deployments, despite a 26 December 2008 announcement that China’s navy would be sending three ships to the Gulf of Aden. The 2010 white paper reviewed the first two years of China’s antipiracy mission. The most recent biennial report, released in April 2013, provides the most comprehensive coverage of China’s antipiracy operations in the series thus far.

The economic, political, military, and institutional factors that led the Chinese government to participate in Gulf of Aden antipiracy operations catalyzed as well China’s first sustained overseas naval mission. This has brought the PLAN a measure of well-deserved pride, reflected in Liberation Army Daily’s 2011 report that Chinese naval vessels would fly larger, brighter ensigns by the year’s end to reflect the perpetually expanding role the PLAN is playing in security throughout the world. That symbolic upgrade reflects the heightened status of the PLAN, which is enjoying, as a result of the Gulf of Aden mission, more opportunities for international exposure via official visits and joint exercises than do either the ground forces or PLAAF. The emphasis attached
to the flags also reflects China’s commitment to joining the ranks of great powers at sea. According to maritime specialist Ni Lexiong, “The flag change is not only part of the PLA’s modernisation, but also indicates its determination to be a sea power, because all its new standards have been learned from Western maritime powers like the US.”

Developments within China further demonstrate that the Gulf of Aden mission is a major source of Chinese pride. For example, as mentioned earlier, the missile destroyers Qingdao, Guangzhou, and Shenzhen and frigate Zhoushan were opened for public visits in ports throughout the NSF, ESF, and SSF in late December 2012. Spectators at the overwhelmingly popular events, who obtained free tickets “through companies and institutions,” were able to watch antipiracy drills and videos on PLAN escort operations since 2008.

The same factors that initially compelled Beijing to deploy PLAN escort forces to the waters off the coast of Somalia have continued to guide China’s antipiracy operations for the more-than-four years since. The following chapter surveys the antipiracy efforts of other navies in the Gulf of Aden, as well as how China perceives and interacts with these forces.

Notes

2. Liu Yanxun, Chen Xiaoshu, Wang Jing, He Jing, Li Haoran, and Yao Yijiang, “Background of Expedition to Somalia.”
4. Huang Li, Sword Pointed at the Gulf of Aden, p. 174.
5. Bowden and Basnet, Economic Cost of Somali Piracy 2011. See also Sandra I. Erwin, “War on Somali Pirates: Big Business and Growing,” Maritime Security Review, 15 August 2012. In this piece former CTF-151 commander Terry McKnight states, “The shipping industry is avoiding the waters off Somalia and they are routing their ships, hugging the coast of India.”
6. Piracy is not the sole issue here. Indeed, COSCO has come under fire for trying to renegotiate rigid, long-term shipping contracts. See Olivia Chung, "COSCO Pays Up at Cost to Dry-Bulk Rate," Asia Times, 7 September 2011, atimes.com/.
11. Ibid. Original text: “不过，她也有困惑。‘现有法律的规定存在缺陷：她说，最大的缺陷是海盗罪的构成要件是基于私人目的的；所以，从法律上说，若是出于政治目的的——比如海盗与恐怖分子结伙，那么除非安理会做出新的决议，否则各国将无法在公海上展开打击海盗的军事行动。”

12. For a similarly constrained view by Xing of international law, see Xu Guangmei, “International law for the establishment of law, the application of IHL in Peacekeeping Operations” (presentation at the International Law of Peace Operations, International Society for Military Law and the Law of War and the Chinese Academy of Military Science, PLA, Beijing, China, 10 November 2011).


16. 张启军 [Zhang Qijun] and 潘卫群 [Pan Weiqun], “蓝色海洋里的律政之刃” [Zheng Ren: A Legal and Political Flower within the Blue Sea], 水兵与法 [Sailors and Law], 人民海军 [People's Navy], 19 October 2011, p. 3.

17. Ibid. Original text: “当前,我国海军护航行动在相关法规制度上还存在一些空白点，我们需要加强研究有关国际海洋法规以及各国的海洋法律，梳理出我国舰艇执行海上军事行动时的权利和义务；同时，要积极研究制定我军参与海上行动法律授权及实施细则，比如对海盗和海上恐怖分子的打击、抓捕、拘禁、引渡，我军舰艇作战安全范围的确定、舰机在外国领海或港口如何行使紧急避险权等问题。”


19. See, for example, 邓剑锋 [Ren Xiaofeng], “专属经济区内沿海国的国家安全利益与其他国家的航行和飞越自由” [The Security Interests of Coastal States and the Freedom of Other States within Special Economic Zones], 北大法律信息网 [Peking Univ. Law Information Web], 2004, article.chinalawinfo.com/article_print.asp?articleid=31607.

20. This is reflected in the extensive media coverage of Somalia’s request to China to assist with fighting pirates in Somali waters, a request received in the weeks before China’s first escort task force deployment. See “索马里邀请中国海军打击海盗” [Somalia Invites China’s Navy to Combat Piracy], 环球时报 [Global Times], 28 November 2009, news.sina.com.cn/c/2008-11-28/091716743777.shtml.


25. Ibid.


29. Ibid.

31. 邢广梅 [Xing Guangmei], “打击索马里海盗应注意哪些法律问题?” [What Legal Issues Should We Pay Attention to While Fighting Somali Piracy?], 海天看点 [Maritime Points], 当代海军 [Modern Navy] (January 2009), pp. 30–31. For further criticism of the Indian action by one of Xing’s major colleagues, see the interview hosted by Li jie, 李杰 [Li jie], ”索马里海域护航各国海军能有多大作为” [How Big a Role Can Each Country’s Navy Play in Escorts in Somali Waters?], 海上争鸣 [Contending Maritime Schools of Thought], 当代海军 [Modern Navy] (March 2009), pp. 65–66.


33. Ibid.

34. Ibid., p. 221.

35. Ibid., p. 220.

36. Ibid., p. 224.

37. Ibid.

38. Eighty-six percent of Chinese surveyed agreed that “China should send warships to fight international pirates and protect cargo ships of China.” See Huang Li, Sword Pointed at the Gulf of Aden, p. 174.

39. The authors are indebted to Nan Li for this insight.

40. See Xu Jingjing, ”Why We Want to Escort,” and Shen Liang and Wei Di, ”Military Law Precedes Movement of Troops and Horses.” The authors thank Nan Li for directing them to these sources. See also 李韬伟 [Li Taowei], ”今日长缨在手—海军司令部作战部长沈浩答本报记者问” [Today We Hold the Most Advanced Technology and Capabilities (lit., ”the Long Lance”) in Our Hands: Shen Hao, Director of the Operations Department at PLAN Headquarters, Answers Our Reporter’s Questions], 人民海军 [People’s Navy], 27 December 2008, p. 3, and Huang Li, Sword Pointed at the Gulf of Aden, p. 174.


43. The authors are indebted to Nan Li for these insights.

44. Xu Jingjing, ”Why We Want to Escort.”

45. Ibid.

46. Ibid.

47. ”交通部长视频慰问中国海军护航编队” [Ministry of Transportation Expresses Appreciation to Naval Escort Task Force through Video], CCTV News, 4 October 2010, news.cctv.com/china/20091004/100916.shtml.

48. Xu Jingjing, ”Why We Want to Escort.” Original text: “从机制上讲，这次护航以海军指挥为主，交通运输部协助配合海军。这次护航最大的特点是‘军民合作，军政合作’，实施有效护航，必须保证在这个过程中形成一个比较顺畅、高效的指挥系统。这个指挥系统不是单向指挥的模式，而是交通运输部与海军、海军与军舰、军舰与商船、商船与交通运输部形成了一个循环的信息链。” Ju details interagency coordination of escort requests: “After receiving information on ship applications, the Ministry of Transportation holds consultative meetings; analyzes various information, such as ship ability; [and then] provides escort recommendations to the Navy. After the PLA Naval Headquarters verifies final escort plans, the Ministry of Transportation notifies dispatched ships [seeking to be escorted], [in order to] allow [the] ships to arrive at maritime rendezvous areas at the scheduled time.” Original text: ”交通运输部收到船舶申请信息后举行协商会议，对船舶能力等各方面信息进行分析，向海军提供护航建议。在海军指挥部确定最终护航方案后，由交通运输部来通知调度船舶，让船舶在指定时间赶到指定海区”


51. 邹德元 [Zou Deyuan], 梁庆松 [Liang Qingsong], and 蒲海洋 [Pu Haiyang], ”海军首长春节视频慰问529护航编队官兵—吴胜利辞职刘晓江主持—张永义丁一平苏士亮徐洪猛范印华徐建中杜景臣王兆海出席” [Navy Commander Wu Shengli Expresses Appreciation to 529th Escort Task Force Officers and Crew over Video during the Spring

52. Based on authors’ calculations. See exhibit 4 for statistics on each escort task force.


55. Over four years ago, "a naval equipment research institute" (most likely the Navy Equipment Research Institute) was tasked with researching and developing new ensigns for the PLAN, which previously sported ensigns considerably smaller and less noticeable than did vessels in Western navies. Ibid.


57. Ibid.
Given the transnational economic and political damage that piracy wreaks, the vast area of the western Indian Ocean in which pirates attack, the large number of merchant ships traversing these waters, the diversity of flag states responsible for them, and the resource-intensiveness of naval response options, it is most beneficial for navies around the world to act in unison to protect vulnerable maritime regions. Accordingly, numerous regional and international antipiracy mechanisms have been established in key strategic areas on the basis of this principle. These systems have achieved important gains in reducing pirate attacks in such areas as the Gulf of Aden. Nonetheless, the Chinese government has chosen that the PLAN is to act unilaterally, albeit in parallel with international efforts.

Collective Action against Piracy: Groups and Authorities

Dozens of states in the Americas, Europe, Asia, and Africa have joined the collective fight against pirates in the Gulf of Aden. The navies of countries providing support for antipiracy activities in the region—save for China, India, Iran, Japan, Malaysia, and Russia—have primarily operated directly under one of several multilateral coalition forces. These are the U.S. Navy–led Coalition Maritime Forces (CMF), NATO’s Operation Ocean Shield, and the EU’s Operation Atalanta, sometimes referred to as the “three forces” operating in and near the Gulf of Aden. A voluntary coordination mechanism called Shared Awareness and Deconfliction (SHADE), which is now reported to be cochaired rotationally by CMF, NATO, and EU NAVFOR, has recently enhanced interaction among independent actors like China and the above-mentioned organizations. Besides operational actors, various multilateral agencies, businesses, and nongovernmental organizations, such as the Contact Group on Piracy off the Coast of Somalia created after UNSC Resolution 1851, are involved in the fight against piracy. These entities regularly engage with navies fighting piracy through SHADE.

Coalition Maritime Forces. CMF, the first sustained military presence in the Gulf of Aden, is headed by the U.S. Naval Forces, Central Command (NAVCENT) and consists of Combined Task Forces (CTFs) 150, 151, and 152. It is tasked with safeguarding maritime security in the Arabian Sea, Persian Gulf, Gulf of Oman, Gulf of Aden, Red Sea, and...
Indian Ocean. A twenty-nine-member multinational coalition, CMF’s presence as an antipiracy force off the Horn of Africa can be traced to 2008, when CTF-150, which has a much broader, post-9/11 national-defense and regional-security mission than piracy alone, helped outline a maritime security patrol area in the Gulf of Aden to facilitate safe passage for commercial vessels. In January 2009, CTF-150’s piracy-combating function was taken over by CTF-151 (CTF-150 still conducts other operations in the region, such as counterterrorism; CTF-152 operates in the Persian Gulf).

CTF-151 and its members have helped to lower pirate attacks dramatically. CTF members often help patrol the “internationally recommended transit corridor” (IRTC) which was established by the Maritime Security Center—Horn of Africa (MSCHOA) of EU NAVFOR in 2009. The IRTC is designed to minimize maritime congestion of international vessels and Somali and Yemeni fishermen. The United States has advised all American-flagged merchant shipping to travel through the IRTC established by CMF. NAVCEN’s command headquarters in Bahrain serves as the base for CTF activities. Other major contributors to CMF include Canada, Denmark, France, Germany, Greece, Italy, the Netherlands, Pakistan, Saudi Arabia, Spain, South Korea, Turkey, the United Kingdom, and Yemen. CTF-151 has been commanded by naval officers from Denmark, Singapore, South Korea, Thailand, Turkey, the United States, and Pakistan, which at this writing heads the task force.

North Atlantic Treaty Organization. NATO’s antipiracy efforts in the Gulf of Aden have undergone three stages. Initially, NATO action was a response to calls in late 2008 from Ban Ki-moon, secretary-general of the United Nations, to provide escorts for World Food Programme vessels. These escorts, which were combined with NATO deterrence patrols in the waters off Somalia, were followed by Operation ALLIED PROTECTOR (OAP), which assumed a broader mission set involving antipiracy operations around the Horn of Africa. ALLIED PROTECTOR was under way from March to August 2009; the third phase, Operation OCEAN SHIELD (OOS) (Task Force 508), began that month, replacing OAP.

NATO’s relevant forces in the region had preexisting mandates and thus its initial focus was not to monitor ships transiting the IRTC.

European Union. The EU’s Operation ATALANTA (EU NAVFOR Task Force 465) was operationally established in December 2008 as the first operation of the European Union Naval Force; it was tasked with promoting maritime security off the coast of Somalia by protecting humanitarian vessels and suppressing piracy. EU NAVFOR’s initial mandate was reportedly limited to protecting World Food Programme shipping of humanitarian aid, while commercial shipping protection was of secondary importance. This eventually changed as Somali piracy continued to spread outwards. To date, France, Spain, and Germany have contributed the most ships and equipment to the mission. While it has not always maintained a warship helping to monitor the
IRTC, the United Kingdom contributed the location of the EU NAVFOR headquarters and provided the majority of its staff, and hence has had a constant presence in EU antipiracy efforts since their inception. In early 2012 the EU reaffirmed its commitment to suppressing piracy off the Horn of Africa by extending the Alatanta mandate through December 2014. Moreover, the EU has recently made progress in developing systems for cross navy cooperation in antipiracy operations. At a two-day symposium in early 2012 it showcased the Mercury Network–based system created in 2009 that allows by-the-minute assessments of piracy conditions. On 14 May 2012, EU NAVFOR helicopters fired on a Somali beach at Haradheere, 220 miles north of Mogadishu. According to an EU military official, this night raid was meant to “make life as difficult for pirates on land as we’re making it at sea.” It was the first time that the EU’s antipiracy mission had attempted to suppress Somali pirates onshore. The assault reportedly destroyed pirate speedboats, fuel supplies, and an arms depot.

The United Kingdom’s Strategic Defence and Security Review and China’s 2010 defense white paper, taken together, suggest that European nations and China are both eager to enhance cooperation against emerging nontraditional security threats. This willingness is reflected in the increasing number of official visits and cooperation agreements between Chinese and European military officials. The United Kingdom, for its part, has been particularly receptive to China’s growing role in UN peacekeeping. In early November 2012, China’s twelfth task force hosted the EU NAVFOR commander on board the guided-missile frigate Yiyang for an exchange of views on antipiracy operations.

The “three forces” combating piracy in the Gulf of Aden and adjacent waterways collectively operate an average of nine ships at any given time and complete ninety maritime patrol and reconnaissance aircraft sorties monthly. Increasingly, these task forces interface through SHADE, which seats the “three forces” and various independent deployers, such as China, at the same table.

*Shared Awareness and Deconfliction.* SHADE, which has gained recognition in recent years, meets quarterly in Bahrain. All naval ships or convoys fighting piracy are considered affiliated members. SHADE is not an organization but a facilitating venue. SHADE meetings were initially cochaired by CMF and EU NAVFOR. With NATO also having helped cochair more recent meetings, SHADE seeks to avoid redundancies within naval-task-force and independent-deployer operations. SHADE was originally established by EU NAVFOR, NATO, and CMF because they all recognized the “benefits of a loose confederation of the willing.” After writing SHADE’s Terms of Reference, which explains its mandate and functions, the three parties decided that a tri-chairmanship was most suitable. SHADE is funded by the United States; however, it is not simply American led, as U.S. Central Command and U.S. Naval Forces, Central Command do not assign any tasking and all involved navies maintain sovereignty and vetoes over their...
participation. SHADE meetings, often attended by manifold antipiracy stakeholders—including representatives from navies, governments, businesses, and nongovernmental organizations—are reported to be marked by a collegial atmosphere based on the common goal of eradicating piracy.

SHADE’s core mission is to “ensure effective coordination and de-confliction of military resources and operations in combating piracy.” The “success formula” for eradicating piracy, according to SHADE officials, is a combination of joint military and industry responses to piracy and socioeconomic development in the pirates’ countries of origin.

SHADE’s twenty-third meeting was held in March 2012, hosted by CMF and chaired by Capt. Phil Haslam of the Royal Navy, representing EU NAVFOR; it met again in Bahrain in June, September, and December of that year. The March meeting brought together approximately 150 delegates from navies, international organizations, and the shipping industry. Most recently, representatives from thirty-one countries met in Bahrain on 19 March 2013 for the twenty-seventh SHADE Conference.

One expert testifying before the U.S.-China Economic and Security Review Commission in April 2012 praised SHADE for bringing CTF-151, NATO, EU NAVFOR, and China closer to meaningful cooperation, even suggesting that a SHADE-type model of multilateral coordination could be applied to various land-based counterterrorism operations.

Parties involved appear unanimously to perceive SHADE’s efforts as positive and successful. For example, South Korea’s Rear Adm. Anho Chung, who held alternating duties as Somali Basin and Gulf of Aden Coordinator for CTF-151 (CMF), CTF-465 (EU NAVFOR), and CTF-508 (NATO OCEAN SHIELD) between June and September 2012, stated that “out of 5,500 merchant vessels that transited through the Gulf of Aden during this period there were a total of 3 piracy attacks and none successfully hijacked,” and that the “efforts of CMF, EUNAVFOR, [and] NATO as well as other independent nations including Japan, Republic of Korea, China, Russia, Malaysia and India all contributed to safeguarding the high risk areas by providing a naval presence and leading convoys through the Internationally Recommended Transit Corridor.”

According to U.S. naval officials, media reports that China was to assume chairmanship of SHADE are erroneous. China reportedly lobbied to chair SHADE as early as November 2009 but was unsuccessful. While English-fluent Senior Col. Zhou Bo has attended all twenty-seven SHADE meetings thus far, Chinese chairmanship would mean giving an independent state, rather than a multilateral organization, a leading role in SHADE. While all independent deployers have seats at the main table during SHADE meetings, no representative of an independent navy has ever chaired the mechanism. According to SHADE’s Terms of Reference, “In order to be eligible to chair SHADE, a nation or coalition must provide enduring assets available for task allocation within the IRTC (patrol boxes) and actively coordinate in accordance with the provisions of the IRTC
Coordination Guide.” That said, China’s navy has been welcomed to the Gulf of Aden by the United States and other navies with a long-standing presence there. The former commander of CTF-150 wrote a letter to the commander of China’s first antipiracy escort task force, Rear Adm. Du Jingchen, notifying him that CTF-150 has a robust presence in the Gulf of Aden and would seek to coordinate with the PLAN at every opportunity. As of March 2009, CTF-151 had Chinese linguists on board and, in addition to the aforementioned onboard exchanges, exchanged routine pleasantries with the PLAN. China has made genuine contributions to the collective effort in parallel with Western navies, such as adjusting its escort convoy route five miles north to avoid coverage overlap with CMF. China has likewise participated actively in SHADE.

SHADE meetings offer a forum in which to address internavy coordination issues that persist as a result of various multilateral and independent naval forces conducting complementary but separate antipiracy operations in the same arena. For example, during the September 2012 SHADE meeting, Chinese lieutenant colonel Chen Peiling presented on the PLAN’s postrelease efforts and escort of the Taiwan fishing vessel Shiuh-fu 1. Subsequent discussion revealed that China’s Ministry of Foreign Affairs had alerted the MoT and CSA. EU NAVFOR had also been contacted and requested to assist Shiuh-Fu 1. This raised concerns among SHADE members that all requests and agreements to provide assistance to ships in the Gulf of Aden should take place over Mercury so as to avoid duplication of effort. In general, the PLAN engages in routine communications with other navies in the Gulf of Aden such as bridge-to-bridge radio and the Mercury chat room, which it watches regularly. Reportedly, PLAN task forces were quick to incorporate Mercury into their communication efforts with CMF, EU, and NATO forces because it is more secure than commercial e-mail providers that navies were previously using. Moreover, Mercury served as a window for the PLAN to learn NATO-based procedures and nomenclature, including code words that have been used openly on Mercury to increase communication efficacy.

While SHADE remains chaired by Western naval forces, Beijing may prefer such a cooperation model, since participation is voluntary and does not place any navy under the authority of another, whereas multilateral forces such as CTF-151 are commanded by the U.S.-led CMF. Moreover, in the unlikely event that China did wish to integrate into CTF-151’s antipiracy mission in principle, it would probably not adopt membership prerequisites in practice. To participate in CTF-151, one must first be a member of CMF, which requires navies to install Combined Enterprise Regional Information Exchange System (CENTRIXS) software, a classified platform that allows internavy cooperation through encrypted channels. CENTRIXS provision hinges completely on stable trust among CMF forces. Non-Western navies such as China and Russia remain unlikely to allow the installation of U.S. communications infrastructure on
their surface platforms, which is one reason why Mercury has successfully facilitated internavy communication among diverse parties. The U.S. reportedly attempted to create a support tool to aid internavy coordination under SHADE called “SHADE-t,” but other navies proved uncomfortable with installing U.S. equipment. Furthermore, SHADE-t’s bandwidth requirements were far more taxing than the relatively agile Mercury system.

Nevertheless, the active participation by China (as well as other non-CMF states, such as Russia) in SHADE activities already represents a breakthrough in terms of integration into preexisting security mechanisms that the United States has played a central role in establishing and leading. In March 2013 Lt. Col. Chen Peiling, during a report for the twenty-seventh SHADE meeting, stated that PLAN vessels had deployed units south of the Bab el Mandeb following the completion of their escort duties to help the “three forces” fill patrol gaps. He also reported that in September 2012 the frigate Yiyang delayed its replenishment stop at Saudi Arabia and spent twenty hours assisting the U.S. containership President Polk, which was having engine problems. During the twenty-sixth SHADE meeting, in December 2012, it was revealed that China was continuing to work positively with the “three forces,” including the sharing of maritime patrol craft imagery during recent operations. It must be emphasized, however, that cooperation within SHADE and the forum it provides are not equivalent to internavy cooperation that occurs in mechanisms that are able to capitalize on secure communications.

Moreover, engagement between multilateral and independent naval forces vis-à-vis SHADE has elucidated key differences in the nature of everyone’s contributions. For example, while China’s operations are limited in scope as they are focused on IRTC security and commercial escorts, the “three forces” conduct active patrols throughout the Indian Ocean. As one SHADE participant put it, “In SHADE and in other aspects of antipiracy operations, China is trying to validate its own contributions, but not to change the status quo.” Such contributions are certainly welcome, though the “three forces” still desire deeper cooperation. For example, EU NAVFOR has attempted to persuade the PLAN to adopt underway replenishment doctrine compatible with its own, albeit unsuccessfully.

Placing SHADE in the historical context of naval relations between powers, a seat at the SHADE table reflects the broader positive shift in maritime power interactions, at least in the Gulf of Aden. For example, in December 2008, at the time of SHADE’s creation, Royal Navy lieutenant commander Dave Bancroft remarked,

The great achievement in the SHADE is the fact of who sits at the table. I started my time at sea chasing Russian submarines. If you would have told me that in five years the Berlin Wall would come down then, I would not have believed you. But if you said before I retired from the sea, I would be seated at a table in the middle of an American base with
a Russian admiral and his staff to my left, and a Chinese brigadier general and his staff to my right, then I would have thought you insane—but it happened and is still happening. Seafarers have a code: we are all one family and we always help each other. Politicians build the barriers, but the seaman finds a way around them.40

Coordination among Independent Antipiracy Forces: Chinese Perspectives

China has actively coordinated its escort operations with other navies, particularly with other independent deployers through the Convoy Coordination Working Group (CCWG), which meets the day before SHADE’s quarterly meetings. China, India, and Japan reportedly began coordinating their antipiracy operations as early as 2011.41 A Sino-Japanese-Indian escort coordination, with recent formal and informal participation by the Korean and Russian navies, respectively, reportedly assigns countries in rotation to act as the “reference” country, responsible for formulating a monthly escort schedule.42 As the Indian navy’s Assistant Chief of Naval Staff, Rear Adm. Monty Khanna, explained in February 2012, “Earlier what was happening was that the convoys of all these three countries would be spaced by [only a] few hours and there would be long hours in a day when no convoy was available for escorting the vessels.”43 Now this disparity is being rectified, and these independent escort forces are reporting their progress during quarterly CCWG meetings.

January through March 2012 was considered a trial period for coordinating escort schedules among China, India, and Japan. They did so twenty-nine times with China acting as the coordinator for ten escorts, India for ten, and Japan for nine.44 By July 2012 Korea was set to join the third cycle of the coordination mechanism, China having completed the first three-month coordination cycle as the coordinator for ten escorts, India for ten, and Japan for nine.45 It appears that by September 2012 Korea had begun formally participating in escort coordination with China, Japan, and India; early in that month India, China, and Korea all announced escort services for commercial ships during September.46 China, India, Japan, and Korea successfully completed a coordinated convoy schedule between June and September 2012.47

CCWG participants have agreed that the coordinated escort schedules can be published on the MSCHOA website.48 During a September 2012 SHADE meeting, CCWG’s operations were described as “established, working and sufficient.”49 SHADE has several other functioning groups or elements that do not have tasking authority but help coordinate antipiracy operations, including the Air Coordination Element.50

With respect to Sino-Indian military relations, recent coordination under SHADE represents the first instance of a “working relationship on the high seas” between the PLAN and the Indian navy.51 While the efforts between China and India have been welcomed,
they certainly do not signal a major shift in Sino-Indian military or bilateral relations. Recent actions by both countries suggest that both the South China Sea and the Indian Ocean will remain contentious between the two navies. Antipiracy coordination between the PLAN and the Indian navy in the Gulf of Aden region may represent, more than anything else, a relationship of convenience—both sides acknowledge the importance of coordination to minimize the negative economic impact of subnational piracy. In any case, coordination with other independent states allows China to enhance its image as a cooperative stakeholder without having to operate under CTF-151 and does not require China’s navy to make policy adjustments that could be sensitive and undesirable for Beijing.52

Generally speaking, China’s navy has publicly lauded cooperation with the above-mentioned antipiracy forces, but in practice China’s response has been measured, with the exception of SHADE. Since the PLAN’s initial deployment, Chinese official statements have welcomed international cooperation. In January 2009 the Chinese ambassador to the United States, Zhou Wenzhong, stated, “In the course of Chinese naval ships providing escort, the Chinese side, in light of the situation, is willing to exchange information and conduct cooperation with various countries’ naval ships, including [those of] the United States, and, if necessary, to participate in humanitarian rescue efforts.”53 A SASS researcher, Zhang Ming, states that China needs not only to play an active role in discussions on security of the global commons but also to accompany its verbal diplomacy with concrete contributions in areas such as maritime security and cybersecurity.54

But while Chinese scholars like Zhang acknowledge the importance of the global commons, their work reflects major conceptual divergences from the views of other states regarding what actually falls under the umbrella of the “global commons.” In Zhang’s opinion, emerging powers like China differ from Western powers in their views concerning both maritime sovereignty and cyberspace;55 also, as Zhang states, the conflicting strategic interests of both Western and emerging powers may make impossible universal norms and principles to govern the international system. China is not inclined to achieve consensus with Western states about such practices unless it determines that such agreements would serve its own interests, not buttress an international order that it views as catering to Western interests and serving as the foundation of American hegemony.56 From this perspective, it is understandable that Beijing remains highly reluctant simply to join existing multilateral antipiracy mechanisms. Rather, states Zhang, resources within the global commons should be exploited in a way that considers all states in the global commons.57

In a May 2011 article, Zhang Wenzong of the China Institutes of Contemporary International Relations further outlined Chinese views concerning Beijing’s role in the global commons, including maritime security operations such as antipiracy escorts.58
“What worries people,” Zhang states, is that “America has not changed its biased view of China as an outlier while establishing ‘global commons’ hegemony and strengthening its hegemony through the process of international cooperation.”59 Such views remind us that optimism for greater cooperation with China in such zones as in the Gulf of Aden must be tempered by consciousness that Beijing is quite uncomfortable with U.S. views on and behavior in the American-termed “global commons.”

That said, Chinese scholars like Zhang Wenzong do share one common ideal with their American colleagues: a desire for better U.S.-Chinese policies concerning issues of common concern in the global commons. Zhang writes, “Just as a war in a globalized era between great powers will have no winners, an arms race in the ‘global commons’ is doomed to be a loss-loss and multiple-loss game. Perhaps China’s and the U.S.’s intersection and deep binding of interests in the ‘global commons’ can provide a new angle for U.S. policies towards China and for China-U.S. military relations.”60

While engaging in numerous highly publicized confidence-building activities with counterpart navies and multilateral antipiracy forces, the PLAN has preferred that its escort task forces operate largely on their own, treating exchanges with other navies as bilateral diplomatic sweeteners, added bonuses to its core piracy responsibilities. This behavior comports with China’s official approach, which advocates “striving to make independent, self-derived, peaceful foreign policy” (坚持独立自主的和平外交政策).61

The PLAN is not alone in deploying independent forces to the Indian Ocean and the Horn of Africa to mitigate the effects of piracy. States such as India, Iran, Japan, and Russia have also deployed substantial naval capacity outside multilateral structures. Japan typically operates two warships in the area tasked with antipiracy support at a time, and Russia and India typically one each. All four independent operators have taken part in official exchanges with multilateral mechanisms, but they have not operated under CTF-150 or CTF-151, nor have they adopted policies identical to those of any of the multilateral task forces in the Gulf of Aden.62 As Chinese scholars Liu Jingsheng and Shao Guoyu point out, China, Japan, India, and Russia generally have preferred to carry out “accompanying escorts” (伴随护航), while other navies use “zoned escorts” (区域护航).63 The latter approach has been a key facilitator of the coordination mechanisms among these navies. This viewpoint was reiterated by Col. Yang Yujun, deputy director of the Information Affairs Office and spokesman for the Ministry of National Defense, during a press conference in December 2012.64

At present, the naval forces of multilateral organizations such as NATO, the EU, and a number of countries have launched escort duty by zones, while independent escort countries such as China, India, Japan, and South Korea (ROK), etc., have adopted a cooperative approach involving shipping-schedule coordination. . . . Beginning in January this year, by coordinating their respective escort schedules with one another and balancing escort
resources, independent escort countries such as China, India, and Japan have improved their escort efficiency.\textsuperscript{65}

See exhibit 1 for a comprehensive representation of unilateral approaches to Gulf of Aden counterpiracy and a representation of the potential gains to the international community were the independently operating countries to integrate fully into international mechanisms to fight piracy.

\textit{Beijing’s “Zoned Escorts” Proposal.} In mid-October 2009, Beijing suggested officially that waters around the Horn of Africa be apportioned into discrete zones in each of which a participating nation would exercise responsibility for security. The idea was a response to the unexpected broadening of Somali pirate attacks beyond the sixtieth meridian toward the south and east.\textsuperscript{66} At least one Chinese analyst has stated that while China’s proposal would reduce costs and increase effectiveness, relative gains concerns on the part of other nations may well preclude its implementation.\textsuperscript{67} In November, China convened a conference to promote the proposal.\textsuperscript{68}

But what were Beijing’s underlying reasons? Rear Adm. Yin Zhuo (Ret.), described as the “director of a naval expert committee,” explains that China lacks formal relations with NATO.\textsuperscript{69} Closer cooperation “would involve the sharing of intelligence codes, which is a sensitive military and political issue.”\textsuperscript{70} Lack of experience and preparation (that is, reluctance to risk exposing these shortcomings to counterpart navies) is no longer a major factor in Beijing’s promotion of the “zoned escort” approach, but others remain, such as sensitivity regarding sovereignty and concerns about revealing Chinese capabilities. There appears to be concern that Chinese vessels would be subjected to scrutiny; Rear Adm. Yang Yi reports that “some secretive reconnaissance does take place.” In any case, as Senior Capt. Li Jie of the Navy Military Studies Research Institute adds, “as long as all parties keep their activities to a minimum, military powers will not engage in disputes.”\textsuperscript{71}

A number of factors, however, limit the appeal to others of China’s “zone” approach. First, because some sea areas are much busier than others, it would result in an inefficient distribution of forces. Second, the zones assigned to nations whose navies are relatively less capable or experienced might be less secure than others. (That could be very difficult to solve, as any nation would be reluctant to acknowledge that its forces were not able to perform adequately.) Third, such a distributed unilateral approach seems regrettable in principle when there is support in the international community for a genuine cooperative multilateral arrangement. Perhaps because of such problems, China is not promoting zoned escorts in SHADE.\textsuperscript{72}

Most Chinese mentions of multilateral mechanisms imply that the current Chinese participation on a largely bilateral, case-by-case basis is sufficient, and that little if anything else is required beyond incremental improvements. As one Modern Navy article put it,
“While insisting on ‘focusing on self’ [以我为主] when conducting escorts, China’s navy [also] is actively expanding international maritime military exchanges and cooperation, [and] gradually establishing and exploring escort methods and mechanisms with relevant countries.”73 Another Modern Navy article suggests a desire to “free ride” on international resources, on an ad hoc basis, rather than helping to build multilateral capacity in peacetime.74

**Exhibit 1. Notable Antipiracy Operations outside CMF, NATO, and EU NAVFOR**

<table>
<thead>
<tr>
<th>Country</th>
<th>Date of First Task Force Dispatch</th>
<th>Total Ships Escorted</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>26 December 2008</td>
<td>5,000+ (as of 26 December 2012)</td>
</tr>
<tr>
<td>Japan</td>
<td>14 March 2009</td>
<td>2,805 (September 2012)</td>
</tr>
<tr>
<td>India</td>
<td>23 October 2008</td>
<td>1,870 (2 December 2011)</td>
</tr>
<tr>
<td>Iran</td>
<td>20 December 2008</td>
<td>1,400+ (28 February 2012)</td>
</tr>
<tr>
<td>Russia</td>
<td>October 2008</td>
<td>700+ (17 October 2012)</td>
</tr>
</tbody>
</table>

Notes:
a. A cable from 2009 stated, “(C) Summary: Two Japanese Maritime Self-Defense Forces (JMSDF) destroyers departed Japan on March 14 bound for the Horn of Africa (HOA) region on an anti-piracy mission. The vessels will operate independently from CTF-151 and other multi-national efforts in the region, but will interact closely with other navies on logistics and communications. Although initially bound to protect only Japanese vessels or ships carrying Japanese goods, strong public support for the mission bodies well for passage of a new law broadening the JMSDF’s mission. While operations experts continue to finalize logistical in-theater arrangements for the deployment, JMSDF vessels steam towards what is one of their most significant operations since their establishment. End Summary.”13 MAR 2009 Embassy Tokyo Daily Activity Report, “13 March 2009, www.cablesearch.net/cable.php?id=09TOKYO610#para-231331-1.

b. This is a summary of operations by the largest states that pursue Gulf of Aden antipiracy operations unilaterally. Other states such as Pakistan and Malaysia also have limited independent operations. It is important to note that statistics provided by independent deployers vary in their reliability. Iran’s particularly so. Iran has occasionally deployed a tanker and frigate to contribute to antipiracy operations; however, they reportedly spend considerable time at anchor. In fact Iran’s only actual IRTC escorts involve Iranian security forces boarding and protecting specific ships traveling to and from Iran via the Gulf of Aden. As such, these statistics are offered simply to convey a rough sense of independent deployer operations and should not necessarily be appraised at face value.


**Indicators of Openness to More Proactive Approaches?** In one of the few examples of Chinese government–affiliated individuals calling for further cooperative antipiracy mechanisms, Cha Changsong has proposed the following in Modern Navy:

First, a maritime military mutual trust mechanism should be constructed. Maritime military mutual trust is the foundation of maritime military cooperation, [and] is the precondition for the establishment of all other cooperation mechanisms. A maritime military mutual trust mechanism entails establishing various measures directly involving improvements [to] the security environment; mainly increasing the transparency and predictability of military activities, undertaking military activities within controllable specifications; [and] reducing the uncertainty of maritime military safety areas, mutual suspicion, mutual misjudgment and misunderstanding. [This] can clarify the military security intentions of both sides, [thereby] lowering the probability of deliberate confrontations.75
Cha also advocates a “maritime military security discussion mechanism” (海上军事安全磋商机制) founded on the basic principles of “respect, mutual trust, equality, and reciprocity” (尊重, 互信, 对等, 互惠). Next, Cha calls for an “emergency intelligence sharing mechanism” (海上安全应激情报共享机制). Cha says China and Russia already have a mature mechanism of this type, but one limited to antipiracy escorts. Other recommendations from Cha include a “maritime warning mechanism” (海上预警机制) and a “mechanism for joint escorts” (联合护航机制).

A speech by Gen. Chen Bingde, chief of the PLA General Staff—delivered on the sidelines of U.S.-Chinese naval talks in Washington in May 2011—represented a noteworthy departure from traditional Chinese foreign policy, a departure that suggested China might be more willing to adopt more proactive measures while cooperating with others in Gulf of Aden antipiracy operations. Chen advocated cooperation among international militaries against pirate bases within Somalia, arguing on the grounds that Somalia was no longer a sovereign state and pirate ransoms were fueling broader terrorist activities. He went so far as to declare, “For counter-piracy campaigns to be effective, we should probably move beyond the ocean and crush their bases on the land.” On the same trip, during a speech at NDU in Washington, D.C., Chen stated,

As I discussed with Secretary Clinton today and Admiral Mullen yesterday, as for counter-piracy operations I personally believe that we should not only fight with pirates on the sea, but also on the ground; because those pirates operating on the sea are simply low-ranking ones, and the true masterminds are on the ground. All the ransoms and treasures they obtained were all later handed over to their chiefs of organizations. Countries must work together in fighting against pirates.

Whatever their genesis or congruence with the government’s line, Chen’s comments underscored an evolution of official Chinese views on piracy. Ideologically, if not operationally, the PLAN is gradually departing from its conservative policy of defense-based deterrence of piracy and appears to be considering the suppression of specific sources of Somali piracy. Average ransoms have risen from $150,000 to well over seven million dollars, as pirates take advantage of the political pressure that their attacks can generate to influence the governments of merchant seamen held captive. Therefore, according to Chen, “it is important that we target not only the operators, those on the small ships or crafts conducting the hijacking activities, but also the figureheads.”

China is facing major policy decisions, then, just as the larger international community inches toward a policy that involves antipiracy operations ashore on a larger scale, a policy that could alter fundamentally how the international community addresses subnational piracy in the future. It would not be surprising if Beijing remained content simply to escort commercial vessels off Somalia’s coast, deterring attacks and magnifying its own contributions to their observed aggregate reduction. However, Chinese
official commentary has echoed the international consensus that piracy is rooted in systemic problems onshore and is not simply a matter of isolated groups of seafaring bandits seeking easy profit. General Chen has voiced this notion. Nevertheless, it seems unlikely that China’s military, as long as it continues to operate independently, will move from offshore patrols and escorts to aggressive assaults on suspected pirate lairs on land. Moreover, as an article in Modern Navy (in addition to that cited to similar effect above) suggests, China retains a strong impulse to free ride on other nations’ “public goods”: “Reconstructing Somali national order is the basic path to solving the piracy issue. It is unrealistic to rely solely on Somalia’s own power to solve these problems. International society, mainly Western countries, should relinquish self-interest and use good faith, in order to conscientiously push forward the solution to Somali piracy and realize regional peace and calm.”

For Beijing to contribute to a continental deployment would be seen by many as a major foreign-policy shift and could set an unhealthy precedent. But perhaps Beijing is closer to such a change than previously believed. In August 2012, Angola extradited thirty-seven Chinese citizens back to the PRC on suspicion of “kidnapping, robbery, blackmail, human trafficking and forcing women into prostitution,” according to the Ministry of Public Security. This episode, combined with similar Chinese law enforcement activities in other regions, such as Southeast Asia, suggests that China may be increasingly willing to intensify nontraditional security operations to protect its citizens overseas.

Regardless, several trends and decisions over the past two years signal that China is considering deeper cooperation to minimize the expense of continuing to deter piracy through naval operations alone. First, naval officers of the states that operate independently have been increasing internavy antipiracy dialogues as they interact through SHADE with representatives of navies currently under the command of the CTF-151, NATO, and EU antipiracy structures. Second, the PLAN has assigned one of its vessels to monitor the IRTC alongside CTF-151 ships. Third, the PLAN’s escorts of World Food Programme supplies through the Gulf of Aden, highly publicized domestically and internationally by state media, signal Chinese willingness to increase its international responsibilities for the stability of the world economy. Finally, as previously mentioned, Somalia’s TFG has essentially invited Chinese presence onshore. This last factor in particular could help surmount China’s major foreign-policy hurdles concerning sovereignty issues, since consent of the sovereign is the strongest authority under international law for a country’s forces to act within another’s territory. This is especially important in that when it made the initial decision to deploy naval forces to the Gulf of Aden, Beijing emphasized that sovereign consent and UN imprimatur were key factors it had considered.
Chinese Official Views regarding Antipiracy Law and Related Maritime Laws

As is commonplace for Chinese leaders when discussing Gulf of Aden piracy, Wang Min, China’s deputy permanent representative to the UN, remarked in July 2012, “It is imperative for the international community to strengthen coordination and cooperation to cope with these developments.” According to scholar Zou Ligang, China is a signatory to over thirty-five international laws and treaties related to SLOC security. Zou states that the complexity of international maritime law, as well as a lack of consensus regarding such issues as the fate of captured pirate suspects, often precludes decisive action. These characteristics of existing maritime law, coupled with Beijing’s supreme sensitivity concerning sovereignty issues—still a cornerstone of its foreign policy—make differences in opinion and interpretation with regard to international law a potentially costly bottleneck for the enhancement of China’s antipiracy cooperation with other states and mechanisms.

It may therefore be most effective, in engaging Beijing vis-à-vis antipiracy, to focus on China’s interests. Statements from its foremost leadership echelon clearly reflect the great importance that Beijing attaches to the security of major international SLOCs. Official Chinese views on antipiracy law, as well as rules associated with naval engagement in international waters, underscore the need for stronger legal institutions regarding SLOCs. Official Chinese media sources have frequently challenged the international community to be more proactive in this regard. Feng Xinhua asserts that the UN should form a new entity tasked specifically with strategic SLOC security worldwide. The essential claim is that UNCLOS, while exhorting countries to cooperate in the interest of general maritime security, contains no specific provisions on how to address SLOC-related security issues. Furthermore, Feng believes, regional agencies should be established both to implement UN-mandated regulations on SLOC security and to serve as communication centers for states invested in the given region. Simultaneously, other scholars have praised current multilateral and state-to-state partnerships that focus on ensuring safe SLOCs.

Official Chinese statements reflect the extreme degree of caution with which Beijing is proceeding. China supported all four UNSC resolutions aimed at Somali piracy that were passed in 2008, including declarations that states may intervene within Somalia’s twelve-nautical-mile territorial waters (Resolution 1846) and even fight pirates on Somali shores (Resolution 1851) if necessary. Since the passage of these resolutions, however, China has gone to great lengths to emphasize that Somalia remains a sovereign country. Its official statements, for instance, frequently note that all international assistance and operations against piracy in Somali waters should take place only with Mogadishu’s permission. They also repeat the appreciation expressed to it by Somalia’s government on behalf of its people for Chinese assistance. China’s legal mandate for
the PLAN antipiracy mission was initially confined to (with minor exceptions) defending Chinese commercial ships participating in PLAN escort flotillas. At the outset, task forces escorted only vessels flagged by mainland China, Hong Kong, Macau, and Taiwan, but, as noted, the MoT has since allowed the commercial vessels of other flag states to request China’s escort services in advance.

Legal frameworks offer a platform for institutionalizing the Chinese navy’s antipiracy operations, but perceived limitations to the legality of certain antipiracy activities are also preventing more meaningful contributions by Beijing. While training has expanded notably in the past three years and China’s antipiracy capabilities and confidence have grown accordingly, PLAN ships and troops involved in antipiracy escorts do not actively pursue suspected pirates; they simply deter them from attacking PLAN vessels or merchant ships under escort. They also respond to rescue request calls from areas sufficiently close to the Gulf of Aden. Moreover, despite the fact that China’s navy has dispatched more escort task forces than any other independently operating navy, China, unlike several other Western and Asian states, has not kept a single pirate in detention on its own soil. As an article in *Modern Navy* explains, navies face “three main [legal] problems” (三难) in this regard. The first is identifying and confirming pirate targets accurately at sea. The second regards evidence, of which four types are required: “相关物证 [related material evidence], 照录相证据 [photographic evidence], 行动证人证言 [witness evidence], [and] 受害船舶证据 [evidence from victimized ships].” Collection is difficult, because pirates often discard materials into the ocean. Third, trying pirates is problematic.

Rather, as official statements by Chinese officials such as Wang Min suggest, Beijing may prefer “Special Courts” (特別法庭) that would be universally agreed on and would allow China to circumvent the thorny issue of trying foreigners on Chinese soil. This preference is likely because, lacking specialized domestic judicial mechanisms for trying pirates, China would be uncomfortable prosecuting a suspected Somali pirate in its own courts. Beijing has repeatedly attempted to solve this complex issue by advocating the establishment of such a court on Somali soil. No such formal courts have been opened in Somalia, but in March 2011 a detention center designed especially for holding pirates captured by international navies at sea was opened in Hargeisa, the capital of Somaliland, a relatively stable autonomous region in northern Somalia. As of May 2012, this prison was already processing prisoner transfers from Seychelles and other countries. In addition, by early that same year roughly a thousand suspected or convicted pirates were being detained in twenty countries throughout the world. In April 2011 the international community resolved to consider establishing specific Somali courts for the purpose of trying suspected Gulf of Aden pirates. The resolution, drafted by Colombia, France, Italy, Russia, Spain, and Ukraine, was approved by the
fifteen-nation UNSC. A 22 November 2011, U.S.-drafted UNSC document mentions the need to “investigate and prosecute not only suspects captured at sea, but also anyone who incites or intentionally facilitates piracy operations, including key figures of criminal networks involved in piracy who illicitly plan, organize, facilitate, or finance and profit from such attacks.” Moreover, the official document reiterates the consensus that piracy near Somalia funds the purchase of weapons and recruitment of individuals that help sustain the piracy “industry” in the region, allowing it to continue to interfere with global commerce flows.

At present, the Hargeisa detention center either releases captured pirates or sends them to regional states, which themselves have only limited prisoner capacity. Greater capacity to hold prisoners on Somali soil would likely enable more active Chinese antipiracy operations, as jailing suspects in Somalia under UN jurisdiction might avoid uncomfortable sovereignty issues. Furthermore, Interpol, the United States, and various other states are cooperatively constructing an antipiracy intelligence center to track pirates’ financial flows. The agency, formally called the Regional Anti-Piracy Prosecutions and Intelligence Co-ordination Centre (RAPPICC), is located at a Seychelles coast guard base near that nation’s capital, Victoria, and reportedly opened in March 2013. RAPPICC’s staff, including its director, Garry Crone, will initially be provided by Britain’s Serious Organised Crime Agency. Beijing, if invited, may be willing to cooperate with other nations at the center, which could make the PLAN’s piracy contribution more meaningful; however, unless it were located on Somali soil, few would likely see Chinese participation as a major breakthrough. Beijing’s unwillingness to hold suspected pirates reflects not only its reluctance to confront the complex issues involved in trying criminals from other states but also its view that prisons and court systems in Somalia are no substitute for the stabilizing effects of comprehensive development of economic and social institutions in the failed state, a viewpoint that Wang Min and PLAN officials emphasize regularly.

Most countries on the UNSC share this stance, and in fact China has many more similarities to than differences from other UN members with respect to piracy policies. But it has yet formally to join a multilateral antipiracy organization, suggesting that its leaders are simply unwilling to appear subordinate to a higher decision-making body or another nation, such as the United States, even symbolically. Scholar Huang Li adds that endorsing and pursuing policies that kill pirates could cause pirate groups to target Chinese ships particularly, creating a self-inflicted problem and potentially undermining the initial goal of protecting Chinese citizens abroad. Thus, despite earlier indications that China’s navy may gradually adopt more assertive tactics to help eradicate Somali piracy, one might still expect Beijing to maintain policies that avoid creating new sources of political vulnerability for the regime. Similarly, at the central level, Chinese leadership
may be unlikely to approve more aggressive approaches such as onshore attacks and piracy trials in China, though China has signaled it will not oppose other countries in such efforts.

Chinese official statements and scholarship on international antipiracy law largely reflect the notion that cross navy cooperation should be enhanced to ensure economic benefits for all states involved. People’s Navy has reported that President Hu Jintao first introduced China’s “harmonious oceans” (和谐海洋) concept in April 2009 as a basis for Chinese cooperation in the global maritime commons, appealing to the values of shared peace and prosperity achieved through meaningful cooperation among states. These values should be pursued, Chinese leaders believe, by creating international sea-lane security laws through building an international organization, specifically identifying strategic SLOCs, and promoting regional cooperation through regional mechanisms that pool resources.

The PLAN will likely be open in principle to the possibility of greater cooperation in the Gulf of Aden and in other regions where antipiracy operations remain nascent. There are no signs, however, that China will decide to operate under the aegis of a multinational apparatus in the near future: Beijing does not perceive benefits in joining a collaborative effort as outweighing the costs. Independent operation avoids any situation in which China would have to subordinate itself—even symbolically—to another state or organization, and it provides the PLAN with considerable freedom to alter its operations without having to notify its partners or undergoing lengthy multilateral consultations and deliberations. For now it appears that while Beijing is eager to increase cooperation quantitatively off the Horn of Africa, this cooperation is likely to be one of increased basic coordination, low-level information sharing, navy-to-navy exchanges, and joint operations—all of which China’s navy does already, and none of which would represent a qualitative breakthrough.

Notes

1. As of November 2012, twenty-seven states participated in the CMF: Australia, Bahrain, Belgium, Canada, Denmark, France, Germany, Greece, Italy, Japan, Jordan, the Republic of Korea, Kuwait, Malaysia, the Netherlands, New Zealand, Pakistan, Portugal, Saudi Arabia, Seychelles, Singapore, Spain, Thailand, Turkey, the United Arab Emirates, the United Kingdom, and the United States; Combined Maritime Forces, combinedmaritimeforces.com/. According to its website, EU NAVFOR consists of forces or resources from EU member countries and has received contributions in various forms also from Croatia, Montenegro, Norway, Serbia, and Ukraine; EU NAVFOR, www.eunavfor.eu/. While Japan is listed formally as a member of CMF, it reports individual escort task-force statistics and largely operates outside CMF; Japanese coordination with China, India, and Korea is a case in point. NATO’s Operation OCEAN SHIELD states that all NATO allies are contributing members: Albania, Belgium, Bulgaria, Canada, Croatia, the Czech Republic, Denmark, Estonia, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Turkey, the United Kingdom,

2. CMF is “comprised of three principle [sic] task forces: CTF-150 (maritime security and counter-terrorism), CTF-151 (counter piracy) and CTF-152 (Arabian Gulf security and cooperation).” It is “commanded by a U.S. Navy Vice Admiral, who also serves as Commander U.S. Navy Central Command and U.S. Navy Fifth Fleet. All three commands are co-located at U.S. Naval Support Activity Bahrain.” See Combined Maritime Forces.


9. “PLA Navy Calls for More Cooperation against Piracy.” Mercury is a communications software technology company. Its effectiveness in the realm of antipiracy stems largely from the broad applicability of its systems in the Gulf of Aden. It provides an Internet-based communications channel that allows countries to share information immediately. It has contributed enormously to communication among civilian and military vessels. See “How to Catch a Pirate: Cooperation Is Key,” Navaltechnology.com, 24 November 2011.


11. Available at Gov.uk.


15. Correspondence with SHADE participants, March 2013.

16. Ibid.


18. “Counterpiracy Operational Update.”


22. Christina Lin, “NATO-China Cooperation: Opportunities and Challenges,” testimony before the U.S.-China Economic and Security Review Commission, China-Europe Relationship and
23. “Combined Maritime Forces Host 25th International Meeting of SHADE.”
24. Ibid.
25. Correspondence with SHADE participants, March 2013.
28. Ibid., pp. 168–70. Rear Adm. Terry McKnight’s personal account of commanding CTF-151 also reveals that in the Gulf of Aden, U.S. and Chinese naval forces could interact with fewer of the bureaucratic procedures typically associated with in-country exchanges (p. 171).
29. Correspondence with SHADE participants, March 2013.
30. Unless otherwise specified, the insights in this paragraph are from the minutes of the twenty-fourth and twenty-fifth SHADE meetings.
31. Ibid.
32. Correspondence with SHADE participants, March 2013.
34. Ibid.
35. Minutes of the twenty-sixth SHADE meeting.
36. Correspondence with SHADE participants, March 2013.
37. EU NAVFOR and NATO focus primarily on antipiracy off the coast of Somalia; CMF conducts active patrols throughout the Indian Ocean, while addressing counterterrorism and antipiracy in the Gulf of Aden.
38. Correspondence with SHADE participants, March 2013.
39. Ibid.
40. McKnight and Hirsh, Pirate Alley, p. 166.
47. At the September 2012 SHADE meeting, India presented the coordinated schedule, as it had already received China and Japan’s escort schedules for the June–September period. India was scheduled to initiate an escort convoy schedule program that coordinated Chinese, Indian, and Japanese naval forces between October and December 2012; correspondence with SHADE participants, March 2013. According to a presentation at the twenty-seventh SHADE meetings, on 19 March 2013, CCWG’s 2013 proposed escort coordination schedule was as follows: 20 March–8 April 2013, South Korea; 8–29 April 2013, China; 29 April–20 May 2013, India. On 10 June 2013, Japan was to submit completed program to the MSCHOA, an initiative of EU NAVFOR to facilitate information sharing with industry stakeholders. On 17 June 2013, MSCHOA was to post the program for 13 July on its website. “Convoy Coordination Working Group (CCWG)” (brief to SHADE Plenary Session, twenty-seventh SHADE meeting, 19 March 2013).
48. The Russian navy has agreed in principle to receive information on CCWG’s three-month
escort coordination programs and to attempt to fill gaps; China has never offered to coordinate so closely. Correspondence with SHADE participants, March 2013.

49. Ibid.

50. Lars Munkholm, "SHADE Air Working Group" (twenty-seventh SHADE meeting, 19 March 2013).

51. Banerjee, "India, China Join Hands on the High Seas to Tackle Pirates."

52. Gokhale, "India, China and the Pirates."

53. Zhang further argues that to ensure China's desire to impact international norms is a matter of "tolerant development" an appropriate policy, one that he defines as a tiered system of cooperation among developed, emerging, and other state actors at all levels.

54. "While Russia typically sides with China on space weaponization and cyberspace issues, in practice it does not differ from the United States in its views on the role of the global maritime and aerial commons. In this regard, Zhang's characterization (original text: "不仅美国学界和职能部门之间存在分歧,中国、俄罗斯与西方国家之间也尚未达成共识") does not appear to be factually accurate. It is offered here to illustrate the range of Chinese views on this important topic. Ibid.

55. While Russia typically sides with China on space weaponization and cyberspace issues, in practice it does not differ from the United States in its views on the role of the global maritime and aerial commons. In this regard, Zhang's characterization (original text: "不仅美国学界和职能部门之间存在分歧,中国、俄罗斯与西方国家之间也尚未达成共识") does not appear to be factually accurate. It is offered here to illustrate the range of Chinese views on this important topic. Ibid.

56. Ibid. Zhang further argues that to ensure China's role in global-commons security, "at the present stage, so as to heighten China's situational awareness in all 'global commons' arena, for force projection, and for executing nonmilitary humanitarian aid and disaster relief missions, it is necessary to, as quickly as possible, build a complete space infrastructure and network infrastructure, as well as build a mighty air force and "blue water [lit. 'blue-colored'] navy." Original Chinese: "必须尽快建设完备的太空基础设施、网络基础设施，建设强大的空军、蓝色海军." China's contributions to the security of the global commons are limited to date, and Zhang asserts that more "practical actions," such as Gulf of Aden patrols, are needed to accumulate experience commensurate to China's desire to impact international norms for defending these public areas of governance.

57. Regarding cooperation with other states, Zhang terms "tolerant development" an appropriate policy, one that he defines as a tiered system of cooperation among developed, emerging, and other state actors at all levels.

58. "张文宗 [Zhang Wenzong], "重构中美军事关系应对美国战略东移" [Rebuilding China-U.S. Military Relations in Response to America's Strategic Shift East]. 中国社会科学报 [China Social Science Journal] 13 (26 May 2011). China Social Science Journal is a biweekly publication. Zhang maintains that "given the 'common ground' [公地] attribute of the 'global commons' [全球公地], each country could destroy the 'ecological systems' [生态系统] in these fields because of competition for limited resources. Thus it is very necessary to establish and improve international rules on the ocean, in space, in Internet space and in polar regions. But in the process of establishing rules, every country should accord to a fair and consultative spirit and positively explore, China and America are powers with global influence, they are able to, and should, wield a constructive hand."

68. 吴末方 [Wu Mofang], “分区护航将是有效反制海盗的新举措” [Zoned Escorts Will Be an Effective Piracy Countermeasure], 本刊特稿 [Special Story], 当代海军 [Modern Navy] (January 2010), pp. 21–23. Wu’s analysis supports Beijing’s proposal effusively: ‘Based on international society’s need for joint escorts, China’s proposal for ‘zoned escorts’ is timely. From a military standpoint, using zoned escorts can avoid each country operating independently politically and militarily during escorts, thereby raising the effectiveness of escorts. Simultaneously, we can preserve escort power, and reduce escort costs. Currently, globally there are five publicly acknowledged maritime zones with high piracy levels. [They are] the West African coast, the Somali peninsula and adjacent waters, the Red Sea and Gulf of Aden adjacent waters, Bay of Bengal coast and all of Southeast Asia’s maritime areas. Most Chinese ships must transit these maritime regions. If [escorts] are executed according to China’s proposed maritime ‘zoned escort’ recommendation, [this] will be beneficial to global maritime transportation. If [China] is really able to specially hold a meeting in Beijing to research this issue, in order to search for a common strategy, then the PLAN’s international position and the image of China as a responsible world power will achieve acceptance by the international community.” Original text: “基于国际社会对联合护航的需求，中国提出‘分区护航’建议时，从军事角度上看，通过分区护航，可以避免护航时各国各自为政，单兵作战，提高护航效率。同时，还可以节省护航力量，节约护航开支。当前全球有五大公认的海盗多发区，分别是西非海岸，索马里半岛，红海和亚丁湾，东南亚水域。对于大多数中国船只要来讲，这几处海域都是必经之地，如果按照中国提出的‘分区护航’实施海上护航的建议，将对全球海上运输都十分有利。如果能够真的在北京专门召开一次会议研究此事，以寻找一个共同方案的话，那么中国的海军的国际地位以及中国作为负责任的世界大国形象必然会得到国际社会认可。”


72. Correspondence with SHADE participants, March 2013.


74. “国防大学教授张京: 亲历中巴亚丁湾联合” [National Defense University Professor Zhang Jing: Experiencing China-Pakistan Gulf of Aden Joint Exercises], 中国海军在行动 [Chinese Navy in Action], 当代海军 [Modern Navy] (February 2012), pp. 38–40. Zhang states: “The majority of foreign warships, regardless of whether they are replenishment vessels or vessels being replenished, can all mutually supply each other. Even Indian warships not part of an alliance can receive fueling from American replenishment vessels. Currently, China’s advocacy for independence is correct, but it cannot hurt to try adding another tactic during crucial moments. More importantly, currently this type of Chinese-style independent refueling system is not beneficial for expanding joint replenishment supply with other navies [and] has a definite influence on the Chinese navy’s ascension to the international stage.” Original text: “据了解，大部分的外国军舰无论是补给舰还是被补给的舰船都可以互相保障，就连没有同盟关系的印度监听都能接受美国补给舰的补给。当前，我们力主独立自主没错，但在关键时刻多一两种手段未尝不可，更重要的是，当前这种独一无二的中国式海上补给制式，不利于中国海军在海上与外国军舰艇展开联合补给保障，对中国海军走上国际舞台造成一定影响。”

75. 查长松 [Cha Changsong], “上军事合作需建构海上合作机制” [Maritime Military Cooperation Requires the Construction of a Maritime Cooperation Mechanism], 本刊特稿 [Special Story], 当代海军 [Modern Navy] (January 2010), pp. 18–20, quotations from pp. 20. Original text: “首先，要建立海上军事互信机制，海上军事互信是海上军事合作的基础，是建立其他一切合作机制的前提条件。海上军事互信机制就是在海上军事领域建立各种直接涉及改善安全环境的措施，主要是增加军事活动的透明度与可预测性，使海上军事活动在一个可控的范围内进行，减少海上军事安全领域的不确定性，相互猜疑，彼此误判。”
For a representative example, see "Invasion to Stop Piracy," [editorial], Bangkok Post, 23 May 2011, editorialcollections24.blogspot.com/.


For an argument that the piracy issue needs to be addressed both at sea and ashore, see "How Do Navies Confront Growingly Rampant Somali Piracy?", 海天看点 [Maritime Points], 当代海军 [Modern Navy] (January 2009), pp. 26–29.

"Invasion to Stop Piracy" (editorial), Bangkok Post, 23 May 2011, editorialcollections24.blogspot.com/.

"Attack Pirate Bosses on Land, Chinese General Says."


104. 危玮 [Wei Wei], “中国支持国际社会继续探讨起诉和监禁索马里海盗问题” [China Supports the International Community in Continuing to Discuss the Issue of Prosecuting and Detaining Somali Pirates], Xinhua, 22 June 2011, news.xinhuanet.com/world/2011-06/22/c_12156611.htm.


115. Mo Xiaoliang, Shen Shu, and Liu Wenping, “Hand-in-Hand Joint Creation of Harmonious Oceans,” p. 2. At the time, Hu stated, “Promoting the establishment of harmonious oceans is an important component of establishing long-lasting peace, shared prosperity and a harmonious world, [and] is the beautiful pursuit and hope of the people of all nations of the world. . . . China's navy will use more an open-minded, pragmatic, and cooperative spirit to actively participate in international maritime security cooperation, in order to persistently strive towards and realize the lofty goal of creating harmonious oceans.” Original text: "Hand-in-Hand Joint Creation of Harmonious Oceans," p. 2. At the time, Hu stated, “Promoting the establishment of harmonious oceans is an important component of establishing long-lasting peace, shared prosperity and a harmonious world, [and] is the beautiful pursuit and hope of the people of all nations of the world. . . . China's navy will use more an open-minded, pragmatic, and cooperative spirit to actively participate in international maritime security cooperation, in order to persistently strive towards and realize the lofty goal of creating harmonious oceans.”

The PLAN’s first antipiracy operation took place in the Gulf of Aden on 6 January 2009 at roughly 11 AM, when four Chinese-flagged vessels were taken under escort. Later that day the PLAN faced its first challenge. Pirates closing in on one of the escortees, Chinese motor vessel (MV) Zhenhua 25, failed to respond to two red flares fired from helicopters deployed off a PLAN warship. The helicopters approached within two hundred meters, closer to the ocean surface; “special operations soldiers had already opened safety locks and aimed [at] the pirates[,] getting ready to pull the trigger.” The helicopters, “the pirates’ bazookas and rifles . . . targeting” them, “flew over pirates’ heads just against the sea surface” as “the explosive bombs fired by the special operations soldiers exploded and clapped in the air in quick succession.” Minutes later the pirates dispersed.

Since the end of 2008 PLAN escorts, area patrols, and on-ship protection activities have made substantial contributions to the safety of the Gulf of Aden and neighboring economic lifelines at sea. China’s navy has learned valuable lessons, and several of its warships have participated in multiple deployments. Occasional encounters with pirates and dozens of exchanges with other navies have allowed the PLAN to exhibit its competence in deterring piracy and have also helped identify areas for logistical and operational improvement for future missions and, potentially, real combat.

Shortly after the first Gulf of Aden mission began, Li Daguang laid out several key performance criteria for China’s naval escorts:

- Rapid reaction ability (迅速出动能力)
- Far Oceans deployment ability (远洋部署能力)
- Weapons supply (武器装备)
- Logistical security ability (后勤保障能力)
- Special operations combat ability (特种作战能力)
- Regular training level (平时的训练水平)
• Joint war-fighting ability (联合作战的能力)
• Emergency response ability (应对紧急情况能力).

By all accounts, the PLAN has met initial requirements in all these areas.³

Missions Details: December 2008–December 2012

The recent development of China’s naval order of battle demonstrates the rapidity with which the PLAN is updating its maritime platforms. As of 2013, China’s navy possessed twenty-three destroyers and fifty-two frigates, as well as newly commissioned aircraft carrier Liaoning.⁴ It also had twenty-nine amphibious ships and twenty-six medium landing ships. As Ronald O’Rourke of the Congressional Research Service explains, “[The Department of Defense] stated in 2011 that the percentage of modern units within China’s submarine force has increased from less than 10% in 2000 and 2004 to about 47% in 2008 and 50% in 2009, and that the percentage of modern units within China’s force of surface combatants has increased from less than 10% in 2000 and 2004 to about 25% in 2008 and 2009.” Researchers at the U.S.-China Economic and Security Review Commission offer even more detailed percentages for destroyers and frigates respectively. Based on the International Institute for Strategic Studies volume The Military Balance: 1990 (0% each) and 1995 (5%, 8%). Based on their 24 June 2013 correspondence with the U.S. Office of Naval Intelligence: 2000 (20%, 25%); 2005 (40%, 35%); 2010 (50%, 45%); as well as projections for 2015 (70% each) and 2020 (80% each).⁵

Platforms Used

As noted previously, PLAN antipiracy task forces typically rotate every three or four months and deploy (for the most recent deployments) about 170 days from departure to return to home port. The total days spent at sea for PLAN ships increased steadily between the first and seventh task forces, with the eleventh task force holding the record of two hundred days away from home port.⁶ Similarly, the number of ships escorted in both aggregate and per-escort terms also increased. Task forces usually consist of two warships, either destroyers or frigates, and a replenishment ship. Thus at any given time the PLAN typically has three naval vessels stationed in the Gulf of Aden.

The Gulf of Aden deployers are the first modern PLAN surface ships sent for sustained periods outside the “second island chain”—that is, from the Kuriles westward around the Marianas to Indonesia.⁷ Beijing appears poised to continue the trend of deploying some of its most advanced surface ships to the Horn of Africa. During antipiracy operations, these platforms cover distances unprecedented for the PLAN. For example, the NSF Jiangkai II (Type 054A)—class guided-missile frigate Yantai sailed over forty-two thousand nautical miles, or two times the earth’s circumference, during a
two-hundred-day antipiracy deployment. Currently, PLA task force platforms usually consist of various combinations of Type 052 Luyang-class destroyers, Type 054 Jiangkai-class frigates, and amphibious landing ships that primarily function as support and replenishment vessels. Assignment of these types reflects China’s naval aspirations to deploy first-class, blue-water technology on a sustained basis. Exhibit 2 details the twenty-five PLAN vessels employed in the first fourteen task forces.

**Logistical Underpinnings**

Crews undergo substantial predeparture training. This reportedly includes predeparture instruction for PLAN officers, some of whom participate in antipiracy courses such as the two-week classes reportedly held at Nanjing Naval Command College (南京海军指挥学院) beginning on 13 February 2012. According to *Liberation Army Daily*, “This training class will last for 14 days. 84 persons from the leading organs of the PLA Navy, the 12th and 13th naval escort task forces, the North China Sea Fleet and the NCC attend the training class.” Aimed at high-level officers, “the training class will exert effort to improve the capability of the naval commanders at all levels, the frontline commanders in particular, in executing the oceangoing diversified military tasks by ways of theory lecture, experience exchange in groups, concentrated study and discussion as well as commanding drill.”

In addition to high-ranking officers, all crew members to be deployed conduct extensive preparation. Prior to deployment, for instance, sailors of the eighth task force completed specialized training updated for trends observed in the most recent escort operations. This targeted preparation included “72 action programs in four categories, 150 emergency plans in response to various scenarios, and 15 drill scenarios of various types,” as well as training for heavy weather. Notable drills simulated rescue operations, live firing, rappelling from “shipborne helicopters (舰载直升机),” and boarding of merchant vessels. Similarly, the eleventh escort task force conducted three months of “prewar” (战前) training after leaving its home port, Qingdao. It underwent over 260 hours of training while passing through the Yellow Sea, East China Sea, Miyako Strait, and northwest Pacific.

More broadly, all newly enlisted servicemen in ESF brigades (大队) must reportedly undergo special training to improve the fleet’s ability to fulfill Far Seas escort responsibilities. One aspect of this training is learning how to throw hand grenades accurately under challenging conditions. One examination requires personnel to hit both stationary and moving doughnut-shaped targets with an inner and outer circle of three and six meters’ diameter, respectively, as the targets move at varying speeds from multiple axes to simulate pirate skiffs’ unpredictable movements. The exercise highlights the imperative to target pirates urgently when they approach within seventy meters.
### Exhibit 2. PLAN Vessels Deployed in Gulf of Aden Antipiracy Operations

<table>
<thead>
<tr>
<th>Vessel</th>
<th>Hull Number</th>
<th>Class</th>
<th>Type</th>
<th>Full-Load Displacement (tonnes)</th>
<th>Builder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wuhan</td>
<td>169</td>
<td>Luyang I (052B)</td>
<td>Destroyer</td>
<td>7,112</td>
<td>Jiangnan Shipyard, Shanghai</td>
</tr>
<tr>
<td>Haikou</td>
<td>171</td>
<td>Luyang II (052C)</td>
<td>Destroyer</td>
<td>7,112</td>
<td>Jiangnan Shipyard, Shanghai</td>
</tr>
<tr>
<td>Shenzhen</td>
<td>167</td>
<td>Luhai (051B)</td>
<td>Destroyer</td>
<td>6,096</td>
<td>Dalian Shipyard</td>
</tr>
<tr>
<td>Guangzhou</td>
<td>168</td>
<td>Luyang I (052B)</td>
<td>Destroyer</td>
<td>7,112</td>
<td>Jiangnan Shipyard, Shanghai</td>
</tr>
<tr>
<td>Lanzhou</td>
<td>170</td>
<td>Luyang II (052C)</td>
<td>Destroyer</td>
<td>7,112</td>
<td>Jiangnan Shipyard, Shanghai</td>
</tr>
<tr>
<td>Qingdao</td>
<td>113</td>
<td>Luhu (052A)</td>
<td>Destroyer</td>
<td>4,674</td>
<td>Jiangnan Shipyard, Shanghai</td>
</tr>
<tr>
<td>Harbin</td>
<td>112</td>
<td>Luhu (052A)</td>
<td>Destroyer</td>
<td>4,674</td>
<td>Jiangnan Shipyard, Shanghai</td>
</tr>
<tr>
<td>Huangshan</td>
<td>570</td>
<td>Jiangkai II (054A)</td>
<td>Frigate</td>
<td>3,963</td>
<td>Huangpu Shipyard, Guangzhou</td>
</tr>
<tr>
<td>Zhoushan</td>
<td>529</td>
<td>Jiangkai II (054A)</td>
<td>Frigate</td>
<td>3,963</td>
<td>Hudong-Zhonghua Shipyard, Shanghai</td>
</tr>
<tr>
<td>Xuzhou</td>
<td>530</td>
<td>Jiangkai II (054A)</td>
<td>Frigate</td>
<td>3,963</td>
<td>Huangpu Shipyard, Guangzhou</td>
</tr>
<tr>
<td>Ma’anshan</td>
<td>525</td>
<td>Jiangkai I (054A)</td>
<td>Frigate</td>
<td>3,963</td>
<td>Hudong-Zhonghua Shipyard, Shanghai</td>
</tr>
<tr>
<td>Wenzhou</td>
<td>526</td>
<td>Jiangkai I (054A)</td>
<td>Frigate</td>
<td>3,963</td>
<td>Huangpu Shipyard, Guangzhou</td>
</tr>
<tr>
<td>Chaohu</td>
<td>568b</td>
<td>Jiangkai II (054A)</td>
<td>Frigate</td>
<td>3,963</td>
<td>Hudong-Zhonghua Shipyard, Shanghai</td>
</tr>
<tr>
<td>Yulin</td>
<td>569</td>
<td>Jiangkai II (054A)</td>
<td>Frigate</td>
<td>3,963</td>
<td>Hudong-Zhonghua Shipyard, Shanghai</td>
</tr>
<tr>
<td>Yuncheng</td>
<td>571</td>
<td>Jiangkai II (054A)</td>
<td>Frigate</td>
<td>3,963</td>
<td>Huangpu Shipyard, Guangzhou</td>
</tr>
<tr>
<td>Yantai</td>
<td>538</td>
<td>Jiangkai II (054A)</td>
<td>Frigate</td>
<td>3,963</td>
<td>Huangpu Shipyard, Guangzhou</td>
</tr>
<tr>
<td>Yiyang</td>
<td>548</td>
<td>Jiangkai II (054A)</td>
<td>Frigate</td>
<td>3,963</td>
<td>Huangpu Shipyard, Guangzhou</td>
</tr>
<tr>
<td>Changzhou</td>
<td>549</td>
<td>Jiangkai II (054A)</td>
<td>Frigate</td>
<td>3,963</td>
<td>Hudong-Zhonghua Shipyard, Shanghai</td>
</tr>
<tr>
<td>Hengyang</td>
<td>568</td>
<td>Jiangkai II (054A)</td>
<td>Frigate</td>
<td>3,963</td>
<td>Hudong-Zhonghua Shipyard, Shanghai</td>
</tr>
<tr>
<td>Laid Down</td>
<td>Launched</td>
<td>Commissioned</td>
<td>Home Port</td>
<td>Task Forces Participated In</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>----------------</td>
<td>------------------</td>
<td>-------------</td>
<td>----------------------------</td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>9 September 2002</td>
<td>18 July 2004</td>
<td>Sanya, SSF</td>
<td>1, 9</td>
<td></td>
</tr>
<tr>
<td>November 2002</td>
<td>29 October 2003</td>
<td>20 July 2005</td>
<td>Sanya, SSF</td>
<td>1, 10</td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>25 May 2002</td>
<td>18 July 2004</td>
<td>Sanya, SSF</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>June 2002</td>
<td>29 April 2003</td>
<td>18 July 2004</td>
<td>Zhanjiang, SSF</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>January 1993</td>
<td>October 1993</td>
<td>March 1996</td>
<td>Qingdao, NSF</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>21 December 2006</td>
<td>3 January 2008</td>
<td>Zhoushan, ESF</td>
<td>3, 7</td>
<td></td>
</tr>
<tr>
<td>December 2001</td>
<td>11 September 2003</td>
<td>18 February 2005</td>
<td>Zhoushan, ESF</td>
<td>4, 8</td>
<td></td>
</tr>
<tr>
<td>February 2002</td>
<td>30 November 2003</td>
<td>26 September 2006</td>
<td>Zhoushan, ESF</td>
<td>4, 8</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>23 May 2007</td>
<td>30 June 2008</td>
<td>Sanya, SSF</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>28 April 2009</td>
<td>1 February 2010</td>
<td>Zhanjiang, SSF</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>8 February 2009</td>
<td>15 January 2010</td>
<td>Zhanjiang, SSF</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>24 August 2010</td>
<td>9 June 2011</td>
<td>NSF</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>17 November 2009</td>
<td>26 October 2010</td>
<td>Zhoushan, ESF</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>December 2009</td>
<td>21 May 2010</td>
<td>30 May 2011</td>
<td>Zhoushan, ESF</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>
three tries, sailors who hit at least two from thirty meters or at least one from forty meters are deemed “outstanding” (优秀); hitting none from thirty meters constitutes failure. En route training for escort forces has been institutionalized. For example, the seventh task force held a first comprehensive training session in November 2010 after it departed for the Gulf of Aden, with plans for “taking one road, practicing one road” (走一路, 练一路).

Since English is mandated by the International Maritime Organization for all international communications at sea, another important component of predeparture training is language instruction. PLAN crewmen are expected to possess baseline English communication skills to communicate effectively with foreign civilians, pirates, and counterpart naval officials. For example, crew members of the ninth escort task force received bilingual Chinese and English study materials such as the hard-copy Blue Shield Bulletin (蓝盾快报) and The Escort Voice (护航之声) radio broadcasts. Crew members also reportedly spend a good deal of time studying English. The recent emphasis on English training and on comprehensive education of task forces suggests that the PLAN may foresee an increase in the number of foreign ships escorted. It also reflects the importance that the Chinese government and military attach to their capabilities and image when interacting face-to-face with other states, engagements that have grown in frequency and substance. The twelfth escort task force had an on-duty translator aboard the frigate
Yiyang, though it is unclear whether all task forces have carried official translators. Additionally, according to a Chinese media article, during the first escort deployment the destroyer Haikou was equipped with thirty laptops and a local area network that allowed crew members to listen to music and watch movies. Each PLAN task force member receives four “pocket books” that cover the psychological aspects of deployment, security, international law, and the application of international law to military operations. Also, in preparation for meeting ships of other nations, a naval officer who specializes in international law provides full-time legal support to officers and crews.

Organizing Operations

Antipiracy services provided by the PLAN to commercial ships have included area patrols, escorts, and on-ship protection. Wang Yongxiang, deputy commander of the tenth escort task force, explains that the choice of modes depends on multiple factors: “the schedules of the merchant vessels to be escorted, their characteristics, and how well our warships have rested. We want to not only ensure the safety of our charges, but also improve the efficiency of escort protection.” Area patrol—monitoring certain maritime zones in and around the Gulf of Aden—is the approach least employed by the PLAN. When China’s navy does engage in this type of operation, it typically maintains two base points 550–600 nautical miles apart—one a hundred nautical miles north of Yemen's...
Socotra Island and the other seventy-five nautical miles southwest of Aden Harbor.\textsuperscript{30} PLAN vessels travel between these points, typically taking two to three days to do so.\textsuperscript{31} As of July 2010, the fifth task force had begun adjusting escort rendezvous points in response to geographic trends in pirate attacks.\textsuperscript{32} The commander of the fifth task force, Zhang Wendan, stated, “We shall strengthen communication and contact with our charges in light of changes in the weather conditions of these waters and the way in which pirates operate. When the sea conditions are favorable, we shall extend the route of escort cover toward the eastern part of the Gulf of Aden. When a single warship provides accompanying escort, we shall send other ships to the patrol area to provide area escort.”\textsuperscript{33} Additionally, the PLAN has divided the main shipping lane into seven area-patrol zones, so as to secure the maritime region immediately east of the Gulf of Aden.\textsuperscript{34} PLAN task forces are also changing their training methods and placing emphasis on emerging trends in pirate attacks.\textsuperscript{35} In late 2012 China Daily reported that pirates were focusing more heavily on larger vessels carrying energy supplies, such as coal and oil, rather than smaller, slower merchant ships.\textsuperscript{36} Task forces are improving communication with escorted vessels, sharing information with foreign navies, and improving advance patrols and warning.\textsuperscript{37} Broadcasting in English over very-high-frequency (VHF) radio, which has been the universal hailing frequency for decades, Yuncheng, of the tenth escort task force, announced, “All ships, all ships, this is the Chinese naval convoy. If you need any assistance, please report to us on VHF channel 16. Out.”\textsuperscript{38} While the immediate benefits of enhanced communication between PLAN ships and commercial vessels include improved escort provision, PLAN profits from these interactions transcend the specific antipiracy mission set. Insights from antipiracy communication “best practices,” such as managing rendezvous, working with merchant captains who do not take orders but must be induced to listen, figuring out optimal formations for steaming, and accounting for discrepancies in the speeds of various vessels, are all transferable to future wartime scenarios that involve real operations, such as a “Malacca dilemma” contingency.\textsuperscript{39} PLAN crewmen are sometimes stationed aboard commercial vessels on routes with relatively little traffic and that have therefore lower risk of coming under attack, to limit wear and tear on warships; this is referred to as “on-ship protection.”\textsuperscript{40} This service is usually provided by PLAN Marine Corps Special Operations Forces (中国海军特种作战部队) with the assistance of helicopters that provide monitoring and, if needed, gunfire.\textsuperscript{41} A typical escort task force has between seventy and ninety of these elite soldiers, who have received extensive land-based training.\textsuperscript{42} Special Forces (特战队) personnel are transported by helicopter and rappel onto the decks of the civilian vessel.\textsuperscript{43} As of 2010, special operations units could comfortably escort seven commercial ships at a time, deploying from five to seven personnel on the front and rear vessels in the convoy. Special Operations Forces marines are armed with deck-mounted grenade launchers
that can destroy pirate targets at two thousand meters. They also carry Type 56 assault rifles, QBZ-95 automatic rifles, QBU-88 sniper rifles, and infrared night-vision goggles. In extreme circumstances, civilian crewmen may be given weapons. Modern Navy reports that further efforts are required to use equipment more effectively: “With regard to electronic armament deployment, escorts serve as an important long distance responsibility, [the PLAN] needs some experience to test whether [it] is using relatively effective electronic armament to serve as set equipment [to] arm ships, including photoelectric equipment, [Automatic Identification System] equipment, 12.7 mm machine guns, high-power searchlights, high-power telescopes, portable night vision, and such.”

In practice, most of the intense operations are performed during training exercises for Special Forces units, often conducted during inclement weather or at night. As an article in Modern Navy explains, “Escort task forces insist on ‘taking one road, practicing one road, [and] researching one road (走一路, 练一路, 研究一路); [on] organizing helicopter groups; [on having] Special Forces crewmen perform maritime antipiracy training deployment exercises, stressing training exercises using real weapons, [including] Special Forces air mobile and ground level [training]; [and on having] helicopter patrol warning, maritime rescue and various other categories; [thereby] raising [the PLAN’s] ability to complete all [requisite] tasks [comprehensively].”

Examples include the Special Forces exercises during the third escort task force deployment, held in “complex weather conditions.” During such training sessions PLAN units simulate combat operations to eliminate or disperse pirates. Reportedly, exercises routinely last over nine hours. One report describes a training session that ran continuously for three days and encompassed all operational aspects of the PLAN antipiracy mission. A 2012 training exercise demonstrated how Special Forces units adapt to inclement weather such as rain, which makes decks slippery and blurs vision, often slowing reaction speed. While searching cabins during the training exercise, Special Forces personnel crouched to lower their centers of gravity and moved more slowly to ensure that their cabin checks were effective. They also practiced sign-language communication, simulated firing, cross-protection methods, and searches for targets. In a description of a similar exercise it was revealed that Special Forces commandos carried thirteen kilograms of equipment, including a camera on each commando’s upper left chest that transmitted video to the command post to enhance decision making.

Of all the services provided by China’s antipiracy forces, escorting civilian ships is the most common; it has become a daily practice for PLAN task forces in the Gulf of Aden. Since the first task force, the two warships stationed in the Gulf of Aden have led separate flotillas of merchant ships, sometimes in opposite directions, through an area west of longitude fifty-seven degrees east and south of latitude fifteen degrees north. PLAN escort efficiency has improved significantly since 2008. As a 2010 Liberation Army
A Daily article states, “From the first escort to the escort of the 1,000th ship the Chinese naval task force used over 300 days, from the 1,000th to the 2,000th ship used over 220 days, and from the 2,000th to the 3,000th ship only used over 180 days’ time. More and more ships apply to enter only Chinese naval escort task forces, they believe firmly that following the Chinese navy is safe, this type of dependence and endorsement originates from the willingness of the Chinese navy to take on international humanitarian responsibilities, and comes from the 100% safety assurance of escorted vessels over the last two years.”

These impressive statistics could not have been attained without substantial improvements in escort organization and capacity. During the first month there was considerable organizational confusion, as a result of which commercial ships failed to adhere to escort procedures. After the 2009 Spring Festival, therefore, the Chinese ministries and organizations involved began scheduling escort trips on the basis of the level of traffic in various sections of the Gulf of Aden, using research provided by the PLAN and MoT. Today, before the fifteenth of every month, the China Shipowners’ Association posts detailed escort schedules. Ju Chengzhi of the MoT explains that escort scheduling is not a simple task, as several factors must be considered: “Scheduling and coordination of ships is very precise work. Slow ships need to increase speed, [while] fast ships need to decrease speed; however, [ships] cannot wait in dangerous areas if they arrive before the warships. At the same time, [one] must consider the Suez Canal issue, because the Suez Canal gate opens at fixed times.”

According to Liu Haitao, head of the eleventh escort task force, task forces in early 2012 were publishing their schedules about one month in advance. The PLAN generally requires merchant ships to work around the posted schedule, but given at least a week’s notice, on a case-by-case basis it also accepts requests for special provisions, such as for ships with speeds below ten knots.

**Escort Procedures**

Convoy formations depend on the numbers of both escorting warships and commercial vessels. One-column convoys arrange the merchant ships equidistantly, typically flanked by one warship, which travels at a speed similar to that of the flotilla. For two-column escorts, either a single warship steams between the columns or one takes station on each side. Alternatively, as seventh escort task force commander Wang Xianzhong explains, escorts may be “composed of three units. Escort warships are situated at the front left and back right of the escort flotilla. In order to facilitate flexible maneuvering, both ends look after each other, defending against pirate attacks.” Methods may be combined: the third task force used four escort methods during one escort operation and, during another separate joint escort operation with a foreign navy, was able to provide protection for twenty-five ships. Because of the variety of displacements and speeds of ships applying for Chinese escorts, the eleventh task force began grouping convoys into low- and high-speed flotillas, each led by one warship.
Occasionally warships meeting each other with convoys from opposite directions trade flotillas, as in a “relay race.” The ninth task force emphasized placing commercial ships with lower freeboards in closer proximity to PLAN escorting ships. The eleventh task force performed a textbook relay-style escort in 2012 while protecting three commercial vessels. Yantai began a solo escort transit, handing off to the Type 052 guided-missile destroyer Qingdao when it reached a temporary replenishment area in the central Gulf of Aden. Throughout, a PLAN helicopter provided aerial monitoring and security.

Task force components detach as necessary. On 6 June 2011, when the merchant vessel Hyderabad was threatened twenty-five nautical miles from an escort formation, the escorting Type 054 frigate Wenzhou dispatched helicopters to disperse the pirates and left its convoy to collect Hyderabad, deploying smaller craft to cover the merchant ships until its return.

Accommodations are made for ships with special requirements; PLAN warships remain behind with them if necessary. On 18 March 2010 the Chinese MV Zhenhua 9 arrived late at the rendezvous because of its “extremely low speed.” The replenishment ship Weishanhu detached to provide an individual escort. Pirates converged on the easy “prey,” and Weishanhu interposed itself, its Special Forces personnel manning heavy machine guns. When the pirates neared to a mile and a half, Weishanhu fired two red flares, to no effect. A second firing, this time of “explosive bombs and flash bombs” at one nautical mile, likewise failed to deter the pirates. Thirty-four minutes after the first firing, Weishanhu’s commander “ordered the sailors to intercept and shoot at the pirate boats for warning.” Machine-gun fire roiled the water in front of the pirate boats, which finally dispersed.

Convoys, initially four ships at any given time, quickly expanded to as many as twelve. According to Rear Adm. Yin Zhuo (Ret.), escorted flotillas in 2011 and 2012 sometimes included twenty or thirty merchant ships. In March 2010 People’s Navy reported that the fourth escort task force had broken the record for the number of ships escorted in one convoy, arranging thirty-one ships into three columns. Li Shihong, commander of the tenth escort task force, stated, “On the first escort assignment, there were only four merchant vessels. Today, each batch includes 10 vessels or more on average. We have won extensive praise from the international community and the trust of foreign merchant vessels with safe and efficient escort operations.”

**Special Forces**

This increase in vessels per escorted group reflects the valuable operational lessons learned by the initial PLAN task forces, especially by the Special Forces personnel responsible for on-ship protection. Rather than deploying to all vessels in a flotilla, Special
Forces teams now board the first ship, the ships on the outside of the convoy, and any with low freeboards that make them especially vulnerable to skiff-based pirate attacks. In April 2012, the eleventh task force was deploying special operations units on commercial ships with low freeboards, low speed, and poor self-protection ability for three days at a time. Jiang Jixiang, leader of the eleventh task force’s 1st Special Operations Squad, remarked, “Before boarding the merchant vessel, we have drafted a detailed plan of action on the basis of her structure and characteristics. Our men are equipped with radios, a variety of weapons, and advanced optical reconnaissance devices. There are seven Chinese and foreign-flagged merchant vessels in this convoy. They are general cargo ships, bulk carriers, and oil tankers from China, Panama, and Germany.”

In late 2011, PLAN special operations units conducted integrated training with commercial ships in which civilian seamen took up makeshift weapons and manned the sides of their ships while PLAN forces used water cannons to fight off hypothetical pirates. Chen Jihong, commanding officer of the tenth escort task force’s Special Forces, commented, “The on-board escort operation can strengthen the antipiracy deployment of a merchant vessel and enable her crew to acquire a greater antipiracy consciousness on the one hand and, on the other, step up the exchange of antipiracy experience between the military and civilians and enable [Special Operations Force] soldiers and crew members to become familiar with each other’s antipiracy practices and processes.” By the end of 2011 over seven hundred commandos had participated in PLAN escort deployments.

Additionally, helicopters now play a larger role than earlier in monitoring the seven PLAN-identified transit zones in the Gulf of Aden, allowing earlier detection of potential threats and thus earlier adjustments to escort flotilla organization, as required. Helicopters often patrol out in front of escort formations. “As the forward eyes, the helicopters unit ensures that the escort formation can discover and discern the pirates early, and make an early decision. . . . Sometimes, the crews on helicopters have to tackle . . . the pirates single-handedly and fulfill the mission of driving them away.” Supply ships have responded in instances where combat and monitoring capacity is perceived as insufficient, sometimes serving directly (like Weishanhu, in the incident described above) as escorting ships themselves.

The various adjustments made by the PLAN escorts have been lauded by Chinese media as manifestations of the “scientific spirit” with which PLAN crews carry out their deployments. The eleventh escort task force exhibited this spirit during a routine escort of three ships in March 2012. After receiving notice that the COSCO merchant vessel Fu Yuan would be unable to meet its escorts punctually at the rendezvous point, Qingdao left with the two faster vessels that had arrived, while Yantai waited three hours to escort Fu Yuan. These consecutive convoys reflected the PLAN’s flexibility in reacting to sudden schedule changes. Earlier, Special Forces units of the eighth task force had created
antipiracy security guidance teams, an innovative service for commercial escortees in which teams examined their security equipment, such as netting, security cabins, and resources for deterring approaching pirates.\textsuperscript{83} It appears that while PLAN escort task forces in general observe rigid convoy departure schedules, escort groups “often leave one warship behind to wait for merchant ships that are late due to extreme weather.”\textsuperscript{84} According to an individual identified only as “Captain Liu” of Nanjing Ocean Shipping Company, Ltd., this flexibility allows commercial companies to save thousands of dollars as well as avoid the dangers of piracy.\textsuperscript{85}

\textit{Foreign Vessels}

At this writing, roughly 70 percent of ships escorted by China’s navy are foreign.\textsuperscript{86} In terms of aggregate escorts over the four-year period of December 2008–December 2012, roughly 50 percent of PLAN-escorted commercial vessels have been foreign flagged.\textsuperscript{87} \textit{People’s Navy} reported in mid-2011 that China had provided escort services to ships from over fifty foreign countries.\textsuperscript{88} \textit{People’s Daily} emphasizes that escort services have always been free of charge for both Chinese and foreign commercial ships.\textsuperscript{89} Other observers, such as Zhai Dequan, deputy secretary-general of the China Arms Control and Disarmament Association, assert that “China shoulders responsibility for foreign vessels based on growing national strength and a friendly policy,” as many other states do not send escort forces, because of limited interest and enormous cost.\textsuperscript{90} In Zhai’s opinion, “Such international cooperation and exchanges also help the rest of the world to know more about China and accept it.”\textsuperscript{91} Foreign civilian ships can apply online at the CSA website to join a PLAN convoy. Presumably, Beijing began providing escort protection to vessels of other countries after assessing that PLAN performance and experience were sufficient, that domestic needs could be met at the same time, and that the political benefits of escorting foreign ships outweighed the potential risks of refusing or failing to protect them adequately.

\textbf{Long-Duration Voyages: Meeting New Challenges}

Additional operational challenges of the antipiracy mission include what are for the PLAN unprecedentedly harsh conditions. The Gulf of Aden and surrounding regions are marked by high temperatures, salinity, and humidity, factors that present formidable problems for deployments lasting three or four months.\textsuperscript{92} Temperatures on the “control deck” (甲板) of PLAN warships can reportedly reach 122° F (50° C). In one indication of the trials of the environment, PLAN soldiers speak of their tanned faces as “black mirror” (黑镜) faces.\textsuperscript{93}

These conditions test the quality and durability of equipment, and they stress PLAN platforms considerably.\textsuperscript{94} For example, in August 2009 a helicopter fired signal flares
Another suggestion of the uniqueness of this deterrence operation is the fact that the replenishment ship Qiandaohu, charged primarily with supporting destroyers and frigates, was tasked with establishing a temporary command center to direct helicopters. People’s Navy reports that the vessel did so in just twenty minutes, marking the first time that Qiandaohu played a role in battle-like circumstances. Ordinarily, sailors on board PLAN supply ships are often referred to as “provisions officers” (粮草官).

In an indication that the Gulf of Aden mission may even be influencing Chinese naval architecture and engineering, an article in Modern Navy suggests, “Because power equipment frequently needs repair and maintenance during escorts, and [sometimes] even needs [to] undergo overhaul and such, maintenance space needs to be considered during the design [process].” Maintenance and spare parts are important: “With regard to cabin supply, according to reflections on escort warships’ usage, because escort time is long, carried spare parts and accessories are numerous and [the system] is insufficiently optimized. This results in the shortage of spare parts and accessories.” Specifically, “with regard to equipment reliability, during escorts, electromechanics, toilets, air compressors fail most frequently, domestically produced equipment has the highest fault rates, domestically produced equipment needs to undergo long term inspection before being installed on ships.” As a result, “with regard to repair security, because systematic equipment faults are complex during long voyages, yet we do not currently allocate adequate [physical] space for equipment maintenance and repairs, we need to make improvements in these areas. Additionally, [we] need to supply an electronic manual that can secure the needs of crewmen.”

Operating in inclement conditions raises overall competence, and in fact China apparently considers it necessary to improve antipiracy capabilities in all conditions. As Wang Min remarked in late July 2012, “At present, acts of piracy are still running rampant. They are getting apparently industrialized and violent, with increased all-weather piracy capabilities and expanding scope of attacks.” This may be evidence of improved pirate capabilities, as assessed by the Chinese, and also of the PLAN’s own growth and development.

Long deployments also challenge crews’ physical and mental endurance. Problems include the fact that while “raising crew members’ life security ability is an important way to ensure war-fighting ability” at present “material and mental life [is] relatively arduous and mundane.” PLAN specialists are studying health problems linked to long-duration deployments and recommending countermeasures. According to one study, the five most common ailments for PLAN crewmen on escort operations are respiratory infections, traumas, dermal diseases, digestive system disorders, and stomatological (mouth) diseases. A similar study found that the most common medical problems for crewmen
were respiratory diseases, dermatitis, and exercise-induced injuries. All female participants experienced menstrual disorders. To combat these health problems and thereby better fulfill escort mission requirements, the authors suggest, “efforts should be made on health care propaganda and education coupled with disease prevention and treatment.”

Another study found that rates of xerophthalmus, or “dry eye”—in which the conjunctiva and cornea desiccate abnormally—was more prevalent among PLAN escort sailors than among ground troops. Task force–related factors include lengthy exposure to video displays, air pollution, and marine wind. The seriousness of gum disease also increases for crew members as they stay at sea longer, one study documents. That study’s authors too suggest timely and effective propaganda and education for PLAN sailors. To improve sanitation and prevent disease during long voyages, another study advocates

- Increasing training for reserve disease prevention
- Strengthening the establishment of teams with specialized expertise
- Strengthening the establishment of informatization for disease prevention
- Expanding the disease prevention functions of warships and complementary sanitation ships.

However mundane, seasickness too is a problem. One study shows that seasickness and duration aboard vary inversely—the longer crewmen deploy, the less serious their seasickness. The study suggests that older crew members need special attention and that measures should be adopted to prevent seasickness and thereby improve quality of life. Other researchers suggest the following to prevent motion sickness for sailors on board ship for long periods: build confidence, relax mentally, adjust eating habits, improve hygiene, enhance physical training, increase officers’ stamina, and expand medicinal treatments. PLA No. 425 Hospital has been assisting PLAN officers and crewmen of escort ships. On board ships medical resources are limited, but officers and crews have access to medical “teleconsultations” with hospital staff ashore. During an October 2010 Gulf of Aden visit, the PLAN hospital ship Peace Ark held a joint medical training exercise, Blue Sea Angel, with Weishanhu and the Type 052C destroyer Lanzhou. The exercise simulated providing medical care to victims of pirate attacks, including coordinated response, deployment of medical helicopters, and consultative contact with experts at Navy General Hospital in Beijing. A more narrowly specialized study found that the cognitive ability of helicopter pilots decreases as time at sea increases, especially “distinguishing special graph” (特殊图形辨认) ability. The authors suggested that aeromedical measures be installed to ensure necessary cognitive and flying ability.
An embedded journalist reports that breakfast on board task force ships usually consists of milk, eggs, porridge, steamed buns, bread, and two or three more dishes, while lunch and dinner offer four dishes each. One study in *Journal of Navy Medicine* proposed a new food scheme designed for long-distance voyages. The study created ten recipes whose caloric content and nutrient composition were “reasonable”—that is, in accordance with the dietary requirements of a naval crew.

In late 2010 CCTV-7 reported that a PLAN support base’s logistics department had developed a vegetable preservation technology for warships that encompassed picking, processing and packaging, loading, onboard cold storage, and onboard management. The technology allows PLAN crews to keep vegetables fresh up to forty days, from twenty-five. An SSF logistical crew aboard *Weishanhu* developed a technology for vegetable preservation that preserves leafy vegetables for forty days and root vegetables for sixty days, with a wastage rate of under 5 percent. This is important, as Chinese sailors eat vegetables with every meal.

Morale is also a problem on prolonged voyages. One study found that while crewmen are in high spirits predeployment, tests taken on the seventy-seventh day of escort operations reveal that the psychological state of a crew has “degraded markedly,” displaying “hostility and crankiness.” Tests administered on the 142nd and 204th days revealed further-degraded crew psychology. Another study found that prolonged deployment reduced the mental health of female midshipmen. Psychological problems among sailors were apparently especially prevalent during initial antipiracy deployments, before China’s navy had secured arrangements for resupply and replenishment in foreign ports. Such problems as homesickness and conflicts among crew members led the PLAN to bring psychiatrists aboard. Moreover, writes *People’s Navy* reporter Zhu Hongliang, who accompanied PLAN escort forces to the Gulf of Aden, sailors’ shared berthing spaces are typically only ten square meters in size, and sailors must awaken at 6:20 AM every morning, sometimes after standing watch at night. Special Forces personnel are expected to execute their responsibilities, in conjunction with helicopter units, for eight to ten hours a day, not including unexpected action. “Getting salty,” as one active-duty U.S. naval helicopter pilot emphasized to the authors, is an intangible element of long-term naval deployments that should not be overlooked. China’s growing focus on the morale and health of Gulf of Aden sailors suggests that the PLAN understands this concept.

To maintain morale, task forces often organize cultural activities, skill-building events, and celebrations while at sea. A diary kept by a journalist while on board an escort ship records that weekends are the “happiest” times for crewmen, because they are allowed to telephone family members then. They are also permitted to use the popular Chinese instant-messaging program Tencent QQ for ten or fifteen minutes. Additionally, ships are now equipped with CDMA telecommunications systems (i.e., that allow several
users to employ one channel). Crewmen also have access, via satellite, to Liberation Army Daily, the CCTV News Broadcast, and the CCTV Military Report. One People’s Navy article reports that PLAN sailors commonly enjoy several types of on-ship activities outside of work, such as listening to music, watching TV, drinking coffee, exercising, and surfing the Internet. As long as they are not preparing to discharge responsibilities imminently or to replace others on watch, crewmen are free to engage in entertainment activities. The article describes an “activity room” boasting a “modern feel,” various information outlets such as TVs, magazines, and Internet-connected computers; European coffee; three treadmills; and two exercise bikes. An April 2012 Modern Navy article profiled the various ways in which Chinese escort sailors get sufficient exercise at sea. Because time and deck space are limited, sailors must select activities that conserve them. Popular fitness activities include running laps, jumping rope, long jumping, sit-ups, and push-ups. The PLAN also provides Gulf of Aden crews vitamin packs and other health products.

Challenges to the health of PLAN escort task force crewmen and the substantial amount of coverage of this topic by Chinese scholars demonstrate how substantially the Gulf of Aden mission has broadened the PLAN’s range of operational considerations.

**Intranaval Coordination**

Chinese antipiracy operations require considerable synchronization among military and civil agencies. To mitigate inefficiencies stemming from vertical, asymmetrical information flows among various government and military agencies, China’s navy adopted for this effort a flat command structure in which CMC orders can be passed directly to vessels on duty rather than through fleet and base command levels. This expedites decision making in times of urgency. For example, in June 2012, while serving on the eleventh escort task force, Yantai experienced a radar system malfunction. According to an article in Science & Technology Daily, “the radar’s automatic plotting device suddenly ‘went on strike’ one day. People in the ship formation checked repeatedly but could not find the cause of the breakdown. So they activated the ‘ship’s equipment remote maintenance and repair technical support’ group consultation system. Very quickly, people aboard Yantai ‘invited on board’ technical experts at an electronic science and technology organization in Shanghai, and the problem was easily solved.”

This coordination mechanism reportedly allowed the NSF task force to gain troubleshooting access to over four hundred naval and technical experts in Shanghai, reflecting PLAN efforts to ensure that its relatively inexperienced units are able to operate smoothly in the Gulf of Aden. One exercise drill held by the tenth task force in February 2012 suggests that the PLAN has recognized the need to regularize emergency repair. During the exercise a repair team boarded a ship whose “navigation radar” had
“failed” after a pirate attack and “repaired” it in twenty minutes while medical personnel treated “injured” crew members.140

More generally, experience in coordination gained in Gulf of Aden operations has set a standard for future instances in which Beijing needs to respond swiftly in the Far Seas or other regions outside China. Given the PLAN’s enhanced role in safeguarding national interests, Chinese authors Yang Jun, Zou Debin, and Xu Yanshan argue, China must abandon the tendency to view naval development independently but should rather “include maritime material flow into the building system-of-systems of the whole military, into the maritime material flow system-of-systems of the whole nation; and . . . build according to the support thinking of ‘joint logistics in charge of general support, navy in charge of special support’ under the overall planning of the nation and the General Headquarters.”141

**Encounters with Pirates**

The first Chinese naval officer actually to encounter pirates in the modern era was aboard a Chilean naval vessel participating in training exercises while circumnavigating the globe in August 2008. The pirates fled when the warship fired warning shots.142 In the Gulf of Aden, PLAN task forces are occasionally forced to contend with armed pirates, whether in area patrol, on-ship protection, or escort operations. Antipiracy operations can also involve encounters with unexpected personnel. In one such instance, sailors on the Type 054A frigate Zhoushan discovered a ten-meter skiff carrying forty-five unarmed stowaways, whom they subsequently inspected and released.143 Typical PLAN responses to pirates involve launching signal flares, flash bombs, or stun grenades either from the decks of warships or from helicopters, as well as warning by loudspeaker that an organized military force is present and advising the pirates to withdraw.144

On 14 March 2009, for instance, the Type 051B destroyer Shenzhen was escorting seven vessels in two columns. Suddenly, helicopters patrolling ahead reported eighteen speedboats approaching from multiple axes. With the nearest support, the Type 054A guided-missile frigate Huangshan, nine nautical miles away, Shenzhen approached the pirates, as the helicopters circled closely and special operations forces took positions on deck. At three nautical miles, pirates on each boat aimed bazookas and rifles periodically at Shenzhen and the helicopters. In response, Special Forces personnel “aimed at the pirates . . . with the machine guns in their hands.” After a two-minute standoff, the pirates fled.145

In November 2010, a crewman on board Le Cong sustained injuries after being attacked by pirates.146 After sailing 2,300 kilometers to the scene in over thirty-seven hours, Xuzhou sent medics on board to treat the victim’s wounds.147 On 20 November 2010,
Special Forces responded to a situation in which the Chinese-flagged MV *Taiankou* (泰安口) had been attacked and boarded by four pirates; the fate of the twenty-one crew members was unknown. The cargo ship belonged to COSCO. Within minutes, four Special Forces personnel were dispatched in a helicopter and eight more in two speedboats. The helicopter-based forces used “photoelectric infrared” and other means to survey the merchant vessel and surrounding waters. “Snipers targeted the pirates on board, while other personnel launched flares, flash-bang and percussion grenades as a warning and dropped hooks and shelf ladders.” Personnel from the boats boarded and searched the vessel compartment by compartment. Within twenty minutes they had rescued the crew from the security cabin, where they had been trapped for ten hours. All twenty-one civilian personnel on board were unharmed.

Yan Zhigang, a sailor on board the Type 054A guided-missile frigate *Xuzhou*, recounts an experience involving *Taiankou* and a reported pirate attack in November 2010:

On the vast ocean, the warship, small boat, and Special Forces team members formed a safety net, and wrapped “Taiankou” into it. When I heard the sound of Special Forces transmitting over the intercom—“no pirates were discovered on the platform,” “the operating room is secure,” “the cabin is secure”—I was especially excited. Following 80 minutes of fighting searches, after we confirmed that the merchant vessel was secure, 21 captive compatriots exited the cabin consecutively. We then used the small boat to give supplies such as food and medicine to “Taiankou.”

The attack on *Taiankou* reportedly happened just two days after the crew of the Chinese commercial vessel *Le Cong* successfully warded off pirates, which meant that its escort, the guided-missile frigate *Xuzhou*, had to take *Le Cong* quickly to a secure point and then rush to *Taiankou*’s location.

In March 2010 *Weishanhu* fired warning shots from its heavy machine guns when approximately 130 suspected pirate skiffs approached it during a solo escort of MV *Zhenhua 9*. In December 2011, five pirate boats harassing merchant vessels in a PLAN convoy fled naval and aerial pressure. In February 2011, shortly after the Chinese New Year, helicopters sent from *Xuzhou* after a distress call fired warning shots and scared away pirate skiffs that were chasing a South Korean merchant ship. In April 2012, an eleventh task force escort convoy was surrounded by twenty-two suspected pirate skiffs, toward which the escort fired stun grenades after they defied helicopters. This incident was preceded by several smaller-scale contingencies the month before in which small groups of suspected pirate skiffs approached eleventh task force convoys only to be repelled by a combination of helicopter pursuit and warning flares. Then, in May 2012, approximately seventy suspected pirate boats began speeding toward a convoy under escort of the eleventh task force, approaching the column on both sides. The pirates continued the pursuit even after special operations personnel on *Qingdao* fired stun
grenades and flash bombs. Special Forces men then fired machine guns into the water in front of the skiffs as a warning, to which the pirate skiffs responded by turning toward the starboard side of Qingdao. (Such deterrence by machine-gun fire has become fairly common.) Special operations soldiers in helicopters fired warning shots until, after four hours, the pirates finally sped off.

Warning tactics employed during a training session of the ninth task force appeared to be increasingly assertive; for instance, the guided-missile destroyer Wuhan used high-decibel sound and strong light to deter pirates during the simulation. When the simulated skiffs ignored warnings, Special Forces units manned machine guns and evidence-acquisition officers boarded speedboats to approach the skiffs. During another training exercise, in 2011, PLAN units practiced negotiating with pirates. PLAN warships also project English- and Arabic-language messages by loudspeaker to suspected pirates. A broadcast from the tenth escort task force announced, “Warning, warning, warning. This is the Chinese navy. This is the Chinese navy. Go away, go away.” In response, pirates usually retreat hastily. Most exchanges between the PLAN and Somali pirates are of this type. Modern Navy reported in January 2011 that task forces had warned away over a thousand “suspicious” vessels and thwarted hundreds of attacks during the first two years of antipiracy operations.

However, task forces are sometimes forced to engage pirates, those who either ignore warnings or are already attacking a vessel when the PLAN arrives. As of April 2012, the PLAN had reportedly “rescued” forty-eight vessels chased and attacked by pirates. It had also escorted eight ships that had been released from captivity.

In what may have been the PLAN’s most difficult, risky, and unpredictable operation in its first four years of Gulf of Aden operations, in July 2012 its forces again received civilians who had previously suffered pirate attacks. This time Changzhou, of the twelfth escort task force, took aboard twenty-six Chinese and foreign crew members from the Taiwanese fishing vessel Shiu-fu 1. The freed sailors, who had been held captive ashore in Somalia for 571 days, were to be transferred to Tanzania, before returning home. On the day Changzhou received them, high winds complicated the boarding. Wang Mingyong, Changzhou’s commanding officer, explained, “The wind was too strong in the area, so we employed a helicopter to get them. It took five flights and 65 minutes to fly all 26 members back, safely.”

The area was frequented by pirates, a factor that heightened the risks associated with PLAN assistance. Accordingly, personnel involved conducted rapid, meticulous analysis. The task force commander, Zhou Xuming, and political commissar Zhai Yongyuan received a flurry of preplans and plans including “Armed Forces Operations Plan and Preplan” (兵力行动方案预案), “Political Work Orders” (政治工作指示), “Special
Reconnaissance Proceedings Plan and Preplan” (特情处置方案预案), “Crewmen Arrangements and Life Security Plan and Preplan” (船员安置和生活保障方案预案), “Escorting and Pickup Preplan” (护送和交接预案), and “Armament Supply Plan and Preplan” (装备保障方案预案). Helicopter units of the twelfth task force apparently faced in this operation the possibility of landing on Somali soil as well as confronting pirates directly, the former a prospect that PLAN forces had never confronted previously.

A People’s Navy article elaborates,

Facing a real situation in which helicopter groups, Special Forces members and small boat drivers might [have to] land on the Somali coast, or even face pirates directly during the pickup [and] escort process, the temporary Party Committee command preparation center sent out political orders to mobilize. [It] called on all officers and sailors to dedicate themselves passionately to the pickup [and] escort, [while] facing a test of life and death, to not fear hardship, [to] attack and overcome difficulties, [and to] use real actions to carry out unlimited loyalty and devoted promises to the Motherland and the people.

The hostage pickup brought PLAN assets closer to Somali territory, and potential pirate bases, than ever before. Because of wave conditions, Changzhou was unable to get close to shore, so it dispatched two dinghies with five Special Forces members and four sailors to search the surf zone. The team found the released hostages but was unable to extract them in the boats because of high waves near shore. As mentioned above, Changzhou dispatched a helicopter to conduct the pickup, which also ran into trouble because the wet, sandy beach was unsuitable for landing. The approach of nightfall would put the freed hostages at risk of recapture. Two experienced Special Forces members were therefore sent to the beach to facilitate the helicopter’s landing, after which PLAN forces were finally able to pick up the twenty-six hostages, separated into fives batches according to height, weight, and other factors that affected their safe transport.

The above-mentioned “preplans” appear to have represented a twelfth-task-force innovation based on the experiences of the previous eleven task forces. Zhou Xuming stated in a July 2012 interview with Liberation Army Daily, “Regarding the drafting of plans and preplans, for instance, we borrow from previous experience, [and] analyze the prevailing escort situation, [to] draft plans and preplans [for areas such as] escort operations and logistical support, [we] make the greatest efforts to think meticulously, completely and thoroughly about possibilities emergencies that may occur during escorts. Additionally, we have strengthened command training, and organized training to strengthen basic capabilities for responsible teams.”

In yet another instance, on 3 December 2010 pirates attacked the PLAN’s 275th escorted flotilla. In a seventy-minute saga, “a pirate skiff pretending to be a fishing vessel suddenly initiated an attack on the Marshall Islands–flagged Nordic-Apollo [北欧－阿波罗号]. After being deterred, [the pirates] again disappeared in the middle of the flotilla,
subsequently attacking the vessel **Safire-T** [“萨菲尔－T”号].” Machine gunners aboard **Xuzhou** as well as ship-based helicopters opened fire on the pirate skiff after it hooked a ladder onto **Nordic-Apollo**.

Even pirates who give up on attacks may cause problems for PLAN forces. In one instance during the seventh task force, for example,

In the process of fleeing, cunning pirates constantly adopted a zigzag approach [lit., “**zhi**-shaped approach,” i.e., in the shape of the character 之], making large turns in the opposite direction, and other methods, wanting to avoid [the Chinese navy's] pursuit. Due to pressure from the PLAN’s comprehensive power attack, pirates threw oil barrels and guns into the ocean in the process of fleeing, continuing to flee at high speed. . . . At 1:59 PM, after the pirate skiffs and warships circled around for forty minutes, while [PLAN forces] consecutively shouted [at them] and firing warning shots, blocking [pirate] shooting, five pirates were forced to stop their ship, raising their hands high and surrendering.

On 15 May 2012, *Liberation Army Daily* reported that the eleventh task force had “evicted” seventy suspected pirate boats. While the precise nature of these operations remains unclear, it appears that China’s navy envisions its level of engagement with pirates as evolving gradually toward a more assertive and preemptive approach. For example, May 2011 training simulated an on-ship assault on pirates who refused to abandon a pirated vessel. Thus far, however, intimidation remains the core of PLAN antipiracy action. During a solo escort of eleven vessels in August 2012, **Yiyang** repelled numerous suspected pirate skiffs by speeding toward them. In October 2012 during a night escort of five merchant ships, **Changzhou** of the twelfth task force identified via radar three suspicious boats 7.2 nautical miles from the escort convoy. When the ships approached within half a nautical mile, **Changzhou** fired signal flares and the skiffs retreated promptly. This followed a similar incident in which Panamanian-registered merchant ship **Dehang**, pursued by four pirate boats to within a hundred meters, placed a distress call to **Changzhou**. **Changzhou** immediately pursued the boats and fired warning explosives. The pirates subsequently abandoned their weapons and fled.

In an article in the Beijing-based journal *Law and Life*, reporter Meng Yan documents the PLAN’s encounter with pirates who attacked a nearby commercial vessel during escort patrols. On 13 July 2009, **Huangshan** received a mayday call from the Liberian-flagged vessel **Elephant** while on a zone patrol. Ten minutes later **Huangshan** headed toward the distressed vessel and dispatched helicopters, which flew within three hundred meters of pirate skiffs and released warning flares. The attackers changed direction and began pursuing the nearby Maltese-flagged commercial vessel **Polyhronis**. PLAN helicopters fired additional flares and explosives, and the pirates soon retreated. According to Meng, the encounter lasted just over ninety minutes.
While Beijing’s official statistics depict its forces as antipiracy stalwarts, the degree of operational engagement of China’s navy with pirates is still much lower than that of other navies. An illustration is Beijing’s recent policies on ransom payments, which reflect the limits of Chinese ability and willingness to protect civilian ships militarily. The Dexinhai incident remains a case in point. A Chinese-flagged bulk coal ship owned by a subsidiary of COSCO, Dexinhai was pirated on 19 October 2009 about seven hundred miles east of the Somali coast. 192 Though early rumors suggested that Zhoushan and Xuzhou were racing to the rescue, it was soon revealed that the twenty-five-member crew was being held hostage in Hobyo, a harbor town in central coastal Somalia. 193 Chinese naval officials explained that the PLAN warships were a thousand miles away and could not have caught the pirates before reaching shore; in fact, Chinese press reports suggest that Chinese leaders were collectively relieved that the pirates had taken the Dexinhai crew ashore, which provided a rationale for military inaction. 194 On 28 December 2009, a four-million-dollar ransom payment was dropped aboard Dexinhai, and all twenty-five Chinese crewmen were released. Interestingly, CCTV-7’s Military Report stated that on 20 October 2009 Xuzhou had been ordered to prepare for an armed rescue mission of Dexinhai’s crew. 195

In stark contrast to China’s willingness to make payoffs, since 2008 French, Indian, and American naval forces have performed armed rescues to extract hostages without paying ransoms. 196 For example, in April 2009 U.S. Navy SEALs successfully rescued American captain Richard Phillips of Maersk Alabama after using sniper rifles to kill three pirates holding Phillips on a lifeboat. 197 China’s central government is wary of potential embarrassment and domestic political damage from appearing weak and thus has done its best to suppress news of ransom payments. The PLAN’s heavily publicized “100% safety record” in the antipiracy mission should be viewed in light of the fact that PLAN operations are far more risk averse than those of counterpart navies. 198 Moreover, appeasing Somali pirates’ demands unilaterally without seeking the advice or assistance of nearby navies is hardly conducive to fighting piracy in the long run; in fact, it risks encouraging further piracy by offering incentives. The Dexinhai incident is a sobering reminder that the extent of Beijing’s Far Seas maritime cooperation is limited by perceived domestic and political liabilities.

**Engagement with Other Navies**

Of the many Chinese “firsts” achieved by the PLAN through the Gulf of Aden mission, the first naval operation involving shipboard exchanges and information sharing with foreign navies was particularly significant in the eyes of both Chinese and foreign observers. 199 As Rear Adm. Michael McDevitt, USN (Ret.), states, “In terms of international engagement, the first decade of the 21st century should be divided into a pre-anti-piracy
operations period and a post-anti-piracy period, because once the PLAN began to conduct anti-piracy operations, the entire nature of its approach to international naval engagement changed appreciably.\textsuperscript{200} China has since made considerable strides in naval engagement and diplomacy; interaction with foreign navies that was novel in 2008 has today become daily routine in the Gulf of Aden. In December 2012 People’s Daily stated, “[Over] the past four years, the Chinese naval escort task forces have [continued to inform] the outside [world about] the information they [possessed concerning] the activities of suspicious ships through network mailbox and radio station every day and shared information resources with 50-odd warships of 20-plus countries and organizations.”\textsuperscript{201}

During a port call in Djibouti, PLAN officers hosted a buffet reception aboard the assault ship \textit{Kunlunshan} and invited foreign naval officers.\textsuperscript{202} More substantively, in February 2012 China’s navy hosted the first International Symposium on Counter-Piracy and Escort Cooperation at the PLAN Command College in Nanjing. During the symposium EU NAVFOR chief of staff Philip James Haslam remarked, “We work closely together anywhere at [the] tactical level. . . . We have a common understanding [and] . . . can generate that synergy between us.”\textsuperscript{203} Navy Military Studies Research Institute senior researcher Cai Weidong states, “The Chinese navy hopes to build up a platform for international cooperation that will allow naval forces of different countries to familiarize themselves with each other. I hope the platform well-serves our anti-piracy goals.”\textsuperscript{204} Modern Navy lists several barriers to more meaningful coordination that were explored during the symposium, including the “piracy situation and intelligence information work” (海盗形势和情报信息工作), “organization of maritime force operations” (海上兵力行动组织), “escort law” (护航法律), and “escort provision” (护航保障).\textsuperscript{205}

PLAN task forces continue to operate independently of multilateral organizations, but Beijing has enhanced cooperation with counterpart navies in the Gulf of Aden through shipboard exchanges, joint drills and escorts, and coordination through SHADE. See exhibit 3 for a summary of exchanges to date. This exhibit surveys the rough frequency of PLAN task force exchanges with traditional forces in the region.

Shipboard exchanges in the Gulf of Aden help establish simple but important relationships among China’s navy and foreign military units operating in close proximity. These on-ship interactions are highly publicized by Chinese media as symbols of the PLAN’s growing competence on the international stage and of China’s peaceful outward military development. Chinese task forces have held exchanges with multilateral naval forces operating under CTF-151, NATO, and EU NAVFOR. Such interactions have increased considerably since the PLAN’s initial deployment. In 2011 Han Xiaohu, commander of China’s eighth escort task force (Task Force 526), visited the NATO force’s flagship, a frigate, in March; hosted the Singapore navy’s Rear Adm. Harris Chan, then commander of CTF-151, on a PLAN warship in May; and hosted the EU NAVFOR force commander
Exhibit 3. Selected Commander-Level Exchanges between PLAN and Multilateral Antipiracy Maritime Security Forces in Gulf of Aden

<table>
<thead>
<tr>
<th>Date</th>
<th>Counterpart</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 2009</td>
<td>CTF-151</td>
<td>Hosted CTF-151 commander aboard PLAN vessel</td>
</tr>
<tr>
<td>May 2011</td>
<td>CTF-151</td>
<td>Hosted CTF-151 commander aboard PLAN vessel</td>
</tr>
<tr>
<td>July 2012</td>
<td>CTF-151</td>
<td>Hosted CTF-151 commander aboard PLAN vessel</td>
</tr>
<tr>
<td>May 2013</td>
<td>CTF-151</td>
<td>Hosted CTF-151 commander aboard PLAN vessel</td>
</tr>
<tr>
<td>January 2010</td>
<td>NATO</td>
<td>Hosted NATO antipiracy commander aboard PLAN vessel</td>
</tr>
<tr>
<td>January 2011</td>
<td>NATO</td>
<td>Hosted and visited NATO antipiracy commander</td>
</tr>
<tr>
<td>March 2011</td>
<td>NATO</td>
<td>Visited NATO antipiracy commander on counterpart ship</td>
</tr>
<tr>
<td>January 2012</td>
<td>NATO</td>
<td>Hosted and visited NATO antipiracy commander</td>
</tr>
<tr>
<td>April 2012</td>
<td>NATO</td>
<td>Met with counterpart officials</td>
</tr>
<tr>
<td>July 2012</td>
<td>NATO</td>
<td>Hosted NATO antipiracy commander aboard PLAN vessel</td>
</tr>
<tr>
<td>August 2012</td>
<td>NATO</td>
<td>Visited NATO antipiracy commander on counterpart ship</td>
</tr>
<tr>
<td>January 2013</td>
<td>NATO</td>
<td>Visited NATO antipiracy commander on counterpart ship</td>
</tr>
<tr>
<td>February 2013</td>
<td>NATO</td>
<td>Hosted NATO antipiracy commander aboard PLAN vessel</td>
</tr>
<tr>
<td>November 2009</td>
<td>EU NAVFOR</td>
<td>Met with counterpart officials</td>
</tr>
<tr>
<td>February 2011</td>
<td>EU NAVFOR</td>
<td>Visited EU NAVFOR commander on counterpart ship</td>
</tr>
<tr>
<td>June 2011</td>
<td>EU NAVFOR</td>
<td>Hosted EU NAVFOR commander aboard PLAN vessel</td>
</tr>
<tr>
<td>July 2012</td>
<td>EU NAVFOR</td>
<td>Visited EU NAVFOR commander on counterpart ship</td>
</tr>
<tr>
<td>November 2012</td>
<td>EU NAVFOR</td>
<td>Hosted EU NAVFOR commander aboard PLAN vessel</td>
</tr>
</tbody>
</table>

Sources: This table draws on official Chinese media sources, primarily Liberation Army Daily, Xinhua, People’s Daily, and China Military Online, as well as from the websites of PLAN antipiracy partners such as CMF, NATO, and EU NAVFOR. While it is impossible to guarantee that all visits are covered, it is interesting that significantly fewer data concerning exchanges with CTF appear to be available.

on board the frigate Wenzhou in June. The PLAN and Singapore navy had previously conducted bilateral exchanges in September 2010 in the Gulf of Aden, sending personnel on board each other’s ships. China’s navy conducted more exchanges with CTF-152 in July 2012 and with NATO in April and July 2012.

PLAN task forces off the Horn of Africa too have been active in a variety of bilateral exchanges with counterpart navies. People’s Navy reported that the PLAN and the Russian navy executed joint antipiracy escorts for the first time in October 2009 in the PEACE BLUE SHIELD 2009 (和平蓝盾－2009) exercise.

Additionally, China’s navy held extensive joint exercises with Russian navy BLUE SHIELD units in May 2011. Scholar Lu Dehua has referred to BLUE SHIELD as the inauguration of a new “battle domain” (战场) of Chinese cooperative exercises with other navies.
Most recently, during comprehensive joint naval exercises in April 2012, Chinese and Russian naval forces performed extensive piracy-deterrence and rescue joint training off the coast of Qingdao.\textsuperscript{212}

In addition to regular collaboration with Russia’s navy, PLAN military officials met with Dutch counterparts to perform on-ship inspections and exchanges in November 2009, and in 2010 PLAN forces collaborated with South Korean naval units in antipiracy exercises in the Gulf of Aden.\textsuperscript{211} In May 2012 “Chinese and South Korean naval escort task forces organized a joint military drill during which helicopters of the two sides landed on each other’s warships for the first time.”\textsuperscript{214} In April 2011, Senator Mark Kirk of Illinois paid a visit to the eighth PLAN escort task force in the Gulf of Aden and held talks with the task force commander, Han Xiaohu.\textsuperscript{215} That same month, China’s eighth escort task force sent \textit{Wenzhou} and \textit{Qiandaohu} to conduct joint antipiracy exercises with the Pakistani guided-missile destroyer \textit{Khyber}.\textsuperscript{216} The main components of these exercises were “joint escorts” (联合护航), “communications exercises” (通信演练), “ship landings dispersed for maximum coverage” (交叉着舰), “joint visits” (联合登临), and “search and rescue exercises” (搜救演练). These joint drills followed the Pakistani-hosted \textit{Peace} 11 multinational maritime exercises, which included naval ships from, among other states, China, the United States, Britain, France, Japan, and Pakistan.\textsuperscript{218} China sent frigates \textit{Wenzhou} and \textit{Ma’anshan}, as well as two helicopters and seventy Special Forces commandos, to participate.\textsuperscript{219} In March 2013, China’s navy, as well as the U.S. Navy, again sent forces to take part in Pakistani-hosted five-day international antipiracy joint exercises, this time titled \textit{Aman-13} (Urdu for “peace”), which included naval participants from thirteen navies as well as twenty other observer countries. China has participated in all four Pakistani-sponsored antipiracy exercises held since 2007, and sent the destroyer \textit{Harbin}, the guided-missile frigate \textit{Mianyang}, and the replenishment ship \textit{Weishanhu} to participate in \textit{Aman-13}, assigning a total of two helicopters and 730 troops to partake in the exercise.\textsuperscript{220} Pakistan’s navy stated that the exercises are focused primarily on “information sharing, mutual understanding and identifying areas of common interest.”\textsuperscript{221}

Then in September 2012, \textit{Yiyang} of the twelfth escort task force arrived in Karachi for its second period of rest and replenishment, as well as seminars and other exchanges with Pakistani counterparts.\textsuperscript{222} Later that year, Rear Adm. Zhou Xuming and members from the twelfth escort task force met with Commo. Jonathan Mead, Acting Commander of the Australian Fleet, in Sydney on an official visit during the task force’s journey home. The Australian chief of navy, Vice Adm. Ray Griggs, remarked, “I welcome the continued opportunity for our navies to share their experiences today as we exchange lessons learned in the conduct of counter-piracy operations.”\textsuperscript{223} Perhaps of even greater interest to observers concerned about potential rivalries between China and other ascendant
no substitute for experience

naval powers, recent evidence suggests that India too is open to Chinese nontraditional security contributions in the IOR. The footprint of the Chinese Navy has been increasing as a result of [Chinese] economic development,” Vice Adm. Satish Soni, Flag Officer Commanding-in-Chief of India’s Southern Naval Command, stated in December 2012. “They are also contributing to antipiracy tasks. We hope as their Navy develops, it contributes to the overall maritime security operations of the Indian Ocean Region and its neighbourhood.”

The Gulf of Aden operations also help to facilitate PLAN maritime engagement with the countries themselves, in the region and beyond. People’s Daily reports that “since the second Chinese naval escort task force, the Chinese Navy has established a new mechanism of organizing escort warships to pay friendly visits to foreign countries, and the Chinese naval escort task forces have successfully paid friendly visits to more than 20 countries, such as India, Pakistan, the United Arab Emirates (UAE) and Singapore.” Upon the completion of their escort duties in the Gulf of Aden, the Type 052B destroyer Guangzhou and the frigate Chaohu visited Egypt, Italy, Greece, and Myanmar in succession and also stopped in Singapore to resupply. During March 2011 PLAN Special Forces engaged with civilian Tanzanian counterparts working for a marine company during a joint training session that included training in individual tactics and coordinated training. The two sides practiced infiltration at sea, the capture of enemy personnel, and martial arts. PLAN Special Forces also performed hostage rescue and concealed rowing, among other challenging exercises. Along with Zhoushan, Xuzhou visited South Africa on 4 April 2011 to conduct exchanges with the South African navy in Durban. In mid-May 2011 China invited twenty representatives from eight African nations, including Algeria, Gabon, and Cameroon, to participate in a twenty-day maritime law enforcement program in Zhejiang Province. During its voyage back home from the Gulf of Aden, the tenth task force paid an official visit to Mozambique, the first ever by PLAN task forces, followed by an official five-day visit to Thailand.

In summer 2012, the eleventh task force visited Ukraine, Romania, Turkey, Bulgaria, and Israel in succession. Previously, the fifth escort task force had stopped in Egypt, Italy, Greece, and Myanmar. Similarly, the indigenously built destroyer Lanzhou visited Saudi Arabia, Sri Lanka, and Indonesia upon conclusion of the sixth escort task force’s deployment. Homeward bound following the conclusion of the ninth escort task force’s escorting, Wuhan and the frigate Yulin stopped at Changi Port in Singapore for replenishment; over three days their personnel interacted with Singaporean navy counterparts and visited the Information Fusion Centre, which promotes maritime information sharing. They had previously stopped in Kuwait and Oman. These visits demonstrate a growing tendency of PLAN task forces to use their departure and return journeys as opportunities for overseas diplomacy.
The PLAN commander, Adm. Wu Shengli, visited Turkey in September 2012 to discuss various forms of naval exchanges, including enhancing Sino-Turkish escort cooperation.\textsuperscript{239} Escort vessels have visited such destinations as Saudi Arabia and Australia, and in March 2013 the thirteenth escort task force docked at Malta on 26–30 March, the first such visit of Chinese escort warships to Malta.\textsuperscript{240} Of course, in addition to visiting other countries the PLAN also hosts foreign navies in China. For example, French naval units visited Zhanjiang, SSF headquarters, in June 2010.\textsuperscript{241} Such experiences have established intermilitary dialogues between China and countries throughout the world, contacts of varying strategic significance to Beijing.

Notes

1. 虞章才 [Yu Zhangcai], 肖勇利 [Xiao Yongli], and 李唐 [Li Tang], "我舰艇编队首次成功远洋护航" [Chinese Warship Task Force Successful in First Far Oceans Escort], 本刊特稿 [Special Story], 当代海军 [Modern Navy] (February 2009), p. 11.
4. O’Rourke, China Naval Modernization, p. 44.
5. For the figures cited, respectively, see O’Rourke, China Naval Modernization (2013), p. 44; and Craig Murray, Andrew Berglund, and Kimberly Hsu, "China’s Naval Modernization and Implications for the United States," U.S.-China Economic and Security Review Commission Staff Research Backgrounder, 26 August 2013, p. 7, origin.www.uscc.gov/.
8. Yang Jingjie, "Captains Courageous."
9. 王智涛 [Wang Zhitaotao] and 侯瑞 [Hou Rui], "谋时而动, 顺势而为, 专访第八批护航编队指挥员, 东海舰队副参谋长韩小虎" [Act in Good Time and Go with the Trend: Exclusive Interview of Han Xiaoohu, Commander of the Eighth Escort Formation and Deputy Chief of Staff of the East Sea Fleet], 人民海军 [People’s Navy], 1 March 2011, p. 1.
12. Ibid.
13. Ibid.
14. Ibid.
15. Ibid.
16. Mi Jingwo and Cui Yue, "战鼓声声旌旗猎—声声旌军第十一批护航编队出征之际" [Battle Drums Sounding and Hunting Banners and Flags: Written at the Departure of the Eleventh Escort Task Force], 专题新闻 [Special News], 人民海军 [People’s Navy], 28 February 2012, p. 3.
17. Ibid.
19. Ibid.
20. Ibid.
21. Ibid.
22. Ibid.
23. Li Gaojian and Fang Lihua, "劈波斩浪驱‘海盗’—制服‘海盗’综合演练" [Parting the Waves to Pursue the “Pirates”: Witnessing the First Comprehensive Training Exercise of “Zhoushan” of the Seventh Escort Task Force], 人民海军 [People’s Navy], 10 November 2010, p. 1. Xu Haihua, chief of staff of the escort task force, remarked of the exercise, “Setting sail is a [form of] combat. Today we organized and
executed comprehensive antipiracy exercises for crew members and special forces on ‘Zhoushan’ [that] exercised and tested the unit’s organizational command, communications network, and ability to manage emergency situations. Moving forward, [we] still need to conduct more cooperative training according to escort responsibilities. The seventh escort task force will persist in ‘taking one road, practicing one road’ during the escort process; integrate organizational [methods such as] follow-on escorts, zoned escorts, and on-ship escorts; strengthen training such as warships’ Far Seas movement, coordination between warships and aircraft, and maritime rescue and assistance; and thereby continuously increase the capability of warship task forces to fulfill Far Seas escort responsibilities.” Original text: “起航就是战斗, 我们今天组织‘舟山’舰艇编队与海军特战队员进行反海盗联合演练, 教练并检验了部队组织指挥、通信联络和处置突发情况的能力。接下来还要根据护航任务进行多次合练。第七批护航编队将坚持在护航过程中‘走一路、练一路’, 结合组织伴随护航、区域护航、随船护卫等, 加强舰艇远海机动、舰机协同、海上救援等训练, 不断增强舰艇编队遂行远海护航任务的能力。”


26. Liu Yanxun, Chen Xiaoshu, Wang Jing, He Jing, Li Haoran, and Yao Yijiang, “Background of Expedition to Somalia”


33. Ibid.

34. Sun Zifa, “Chinese Navy Escort Fleet to Adopt Three Modes of Action in Escort,” and Fu Zhiwei, “China’s Escort Fleet Will Set Up Seven Patrol Zones in the Sea Area to Which It Is Tasked.”


37. Li Gencheng, “Ninth Naval Escort Task Force Maintains a High Pressure Position,” p. 1. Li explains: “To address the difficulty of discovering and identifying small targets on the water, especially [given] the nonstop increase in the phenomenon of pirate attacks at dusk and during the evening, escort task forces are strengthening communication with Chinese and foreign ships being escorted, on the foundation of information sharing with escort warships of all navies. [They are adopting] measures such as the scientific application of examination resources, the rational distribution of warning power, expanding the range of helicopter patrols, and strengthening warning [mechanisms] during high vulnerability periods [by] discovering as early as possible, reporting immediately, ensuring rapid observation and warning, accuracy, and high efficiency.” Original text: “针对海上小目标发现难、识别难的情况, 尤其是海盗利用黄昏、夜间作案的现象不断增加, 护航编队在加强与被护中外船舶信息沟通、与各国护航舰艇情报交流的基础上，科学运用观察资源、合理配置警力，采取扩大直升机巡逻范围、监测高危期观察警戒等措施，做到尽早发现、及时报告，确保观察预警快速、准确、高效。”

38. “PLA Navy’s Escort Formations Showcase China’s Positive Image on International Arena,”
39. The authors are grateful to have received the insights contained in the latter half of this paragraph from a U.S. Navy officer.

40. Huang Li, Sword Pointed at the Gulf of Aden, pp. 226–36. For more details on Special Forces Operations during escorts, see [Shao Hong], Cao Hailua, and Gao Yi, “蛟龙突击队，护航揭秘” [Revealing Escort Secrets of the "Flood Dragon Shock Brigade"].

41. Huang Li, Sword Pointed at the Gulf of Aden, pp. 226–36.

42. Ibid.

43. Ibid.

44. As Huang Li explains: "In order to handle pirate attacks, the Chinese navy especially installed antiaircraft machine guns and grenade launchers on the warships. According to informed sources, the caliber of these antiaircraft machine guns is 12.7 mm. They can also be used to fire bullets horizontally above the water. The range is about 1.5 kilometers, and the firing rate is 80 bullets per minute. Grenade launchers are mounted on platforms above the deck of the warships, with a shooting range of 400–2,000 meters. The strong firepower net put up by these two weapons, though inadequate for battles between warships, is most suitable for close-range combat with the pirates. In face of this firepower net, there is only one outcome for the pirates—extermination." Ibid.

45. Ibid.


52. Ibid.

53. Ibid.


55. Sun Zifa, "Chinese Navy Escort Fleet to Adopt Three Modes of Action in Escort," and Fu Zhiewei, "China’s Escort Fleet Will Set Up Seven Patrol Zones in the Sea Area to Which It Is Tasked."


57. "战斗篇" [Chapter on Combat].

58. Xu Jingjing, "Why We Want to Escort." Original text: “在军舰与海盗的较量中，我们还必须树立忧患意识。因为苏伊士运河的问题，不仅让海盗的问题，还会影响到油价的问题，”


60. See China’s Shipowners’ Association, eng.csaoa.cn/Notice/201204/t20120426_1232559.htm.

maintaining the same direction and speed as the escort column. When there are two columns, if two warships are escorting at the same time, one is placed on each side of the column. If there is only one warship, it is placed in the middle of the two columns, using a certain distance between the commercial ships, heading forward in parallel. During each escort, each escorted ship is assigned a number to facilitate communication within the [flotilla]." Original text: "由于商船数量较多，为确保被护商船航行安全，每次护航军舰都要对商船进行编组。编组方式一般根据被护商船数量决定。有时是一字单纵队，有时是双纵队。单纵队时，商船前后保持一定距离，我军舰在纵队外侧。一般与纵队保持同向同速航行。双纵队时，如果是两艘军舰同时护航，就各在一纵队的外侧，如果是单船军舰护航，就在两路纵队中间，以一定的间距与商船平行前进。每次护航，都要给所有被护商船编号，以便彼此之间的通讯联系。"


63. Li Jie and Liang Chunhui, "Great Results of Chinese Navy's Warship Task Force Escorts Catches People's Attention," p. 11.


65. "Chapter on Combat," and Huang Li, Sword Pointed at the Gulf of Aden, pp. 222–36.


68. Gao Xiaoxing et al., PLA Navy, p. 144.

69. Ibid., pp. 149–50.


75. Ibid.


77. Ibid.


79. Gao Xiaoxing et al., PLA Navy, p. 147.


84. Zhao Shengnan, "Navy Protects Ships from Pirates." 

85. Ibid.

86. "Number of Ships Escorted by Chinese Naval Escort Task Forces Hits 4,000." 

87. Zhao Shengnan, "Navy Protects Ships from Pirates." 


89. Cao Jinping and Mo Xiaoliang, "Review of Chinese Navy's Escort Missions in Gulf of Aden in Past 4 Years." 

90. Zhao Shengnan, "Navy Protects Ships from Pirates."
91. Ibid.
92. "Pelagic [Open Sea] Support Tested by Routinized Escort Mission," 军事报道 [Military Report], CCTV-7 (Mandarin), 24 December 2010. According to Modern Navy, "With regard to power equipment, escort warships typically are quite overloaded. Additionally, temperatures are high in the Gulf of Aden maritime region, the sand and dust levels in the air are highest, and diesel engines are not able to work very effectively. As such, [this] demands ample power reserves for power equipment. Because during escorts [speed] is mainly under 12 knots, currently warships using [power equipment] at low speeds causes carbon accumulation, because of this power equipment needs to carry a wide load." Yang Yi and Cheng Hong, "Let Chinese Navy Warships Go Farther," p. 67.

95. 胡宝良 [Hu Baoliang], "飞向深蓝的舰载雄鹰: 访我军第一支舰载机部队部队长齐向龙" [Ship-Based Fierce Eagle Flying toward the Deep Blue: Interview with the PLA's First Ship-Based Aircraft Unit Commander Qi Xianglong], 兵器知识 [Ordnance Knowledge] 6 (June 2011), pp. 22–24.
97. Ibid.
98. Ibid.
100. Ibid.
101. Ibid., p. 68.
102. Ibid. Original text: "目前对维修通道, 空间, 设备考虑得不充分。"
104. Yang Yi and Cheng Hong, "Let Chinese Navy Warships Go Farther," p. 68. The authors elaborate: "Despite having already adopted many ways to improve crew members' living conditions, there still exist problems such as beds being too small, irrationality of bed and cabinet design, unsatisfactory bathing equipment, a lack of personal electronic charging infrastructure, a lack of various cold storage facilities, a lack of multifunctional canteens, poor grease resistance in kitchens, poor trash disposal ability, [and] incomplete fitness and entertainment infrastructure."
Consultation and Diagnosis “Takes the Pulse” of Ships on Shipping Protection Duty], 科技日报 [Science & Technology Daily], 5 June 2012, www.stdaily.com/kjrb/content/2012-06/05/content_477193.htm.


140. Our navigation radar has broken down. Two crew members sustained injuries in an accident when working outside. We are requesting support. Having received the distress call, the formation immediately sent support teams to the MV. After the equipment repair team boarded the MV, they immediately worked on the breakdown and restored the navigation radar in 20 minutes.”


142. 刘永路 [Liu Yonglu] and 吕晓琳 [Lü Xiaolin], “第一位直面索马里海盗的中国海军军官” [The First Chinese Naval Officer to Face Somali Pirates Directly], 甲板故事 [Deck Stories], 当代海军 [Modern Navy] (March 2009), pp. 44–47.


146. “PLA Navy Escort Formation Escorts MV ‘Le Cong’ Safely to Salalah,” 军事报道 [Military Report], CCTV-7 (Mandarin), 22 November 2010. Original source text: “At 1557 on 18 November local time, Chinese merchant vessel ‘Le Cong,’ which was transiting the Arabian Sea was attacked by two pirate boats and a crew member sustained gun wounds. Under the protection of four special operations soldiers, the MV and the wounded crew member reached Salalah, Oman, safely at 0000 on 21 November local time.”

147. Ibid. The following is a direct quotation: “When the attack happened, the warship Xuzhou was over 2,300 km away. It immediately sailed at high speed toward the incident area. After sailing for 37 hours, the Xuzhou rendezvoused with MV Le Cong. Three medics immediately provided preliminary treatment for the wounded crew member. As the wounded [individual] required better medical care, MV Le Cong started sailing toward the nearest port, Salalah of Oman.” The characteristics given in the most recent Jane’s Fighting Ships seem incompatible with so fast a transit.

148. 邵洪 [Shao Hong], 曹海华 [Cao Haohua], and 高毅 [Gao Yi], “蛟龙出击一千昼夜—南海舰队某特种大队亚丁湾护航纪事” [The Flood Dragon Attacks for a Thousand Days and Nights: Chronicling Escorting by a South Sea Fleet Special Forces Unit in the Gulf of Aden], 人民海军 [People's Navy], 28 December 2011, p. 3.


150. Ibid.

151. Ibid. Original text: “狙击手瞄准船上海盗，发射闪光弹和催泪弹进行警告；抛钩，梯架。”

152. Ibid.


154. 颜志刚 [Yan Zhigang], “营救 ‘泰安口’ 轮，我在大线立功” [Rescuing “Taiankou”: I Succeeded in the Line of Fire], 综合新闻 [General News], 人民海军 [People’s Navy], 5 December 2011, p. 3. Original text: “茫茫大洋中，军舰、小艇、特战队‘员，三方面构成立体安全网，把‘泰安口’轮紧紧裹其中。当听到特战队队员在耳边传出‘钻井平台没有发现海盗’，‘驾驶室安全’，‘机舱安全’的声音时，我格外激动。经过近80分钟的战斗搜索，在我方确认商船安全后，21名被困的祖国同胞陆续出舱，然后，我们又用小艇将食品、药品等物资送到‘泰安口’轮。”

156. “Escort Operations in Gulf of Aden: Real Combat-Oriented Escort Training Boosts Innovation Capability,” [Military Report], CCTV-7, 22 December 2010. The program states: “In March this year, Warship 887 [Weishanhu] was providing solo escort cover for MV Zhenhua 9 when its radar detected over 130 skiffs coming toward them at high speed. Warship 887 immediately moved forward to block them. After the signal flares, flashbangs, and stun grenades they fired were ignored, they fired warning shots from a heavy machine gun, sending the pirate skiffs fleeing.”


158. 李高健 [Li Gaojian] and 方立华 [Fang Lihua], “我护航编队成功解救遭海盗追击韩国商船” [China’s Escort Fleet Successfully Rescues South Korean Merchant Ship Chased by Pirates], 人民海军 [People’s Navy], 14 February 2011, p. 1.

159. “PLA Navy’s Eleventh Escort Formation Successfully Chases Away 22 Suspect Boats,” [Military Report], CCTV-7 (Mandarin), 1130 GMT, 1 April 2012.


162. Ibid.

163. Ibid.


166. Ibid.

167. Ibid.


169. “PLA Navy’s Tenth Escort Formation Conducts Day-and-Night Training to Improve Escort Capabilities.”


172. “Changzhou Warship of PLA Navy’s Twelfth Escort Formation Successfully Receives 26 Crew Members of Taiwan’s ‘Hsu Fu-1’ Fishing Vessel,” [Military Report], CCTV-7 (Mandarin), 1130 GMT, 18 September 2012.


174. Ibid.


176. Ibid.

177. Ibid.

178. Ibid.

179. Ibid, Original text: “针对直升机机组、特战队员和小艇驾驶人员在接护过程中有可能登临索马里沿岸，甚至直接面对索马里海盗的实际情况，预备指挥所临时党委一方面发出政治动员令，号召全体官兵以高昂的战斗热情投入一接护行动，在生死考验面前，不畏艰险、攻坚克难，用实际行动践行对祖国和人民的无限忠诚和热爱的誓言.” The account of this incident in the following paragraph is taken from this source.

180. Ibid. Wave crests reportedly reached five to six meters (sixteen to twenty feet).


182. Ibid, Original text: “就拿方案预案的制定来说，我们借鉴以往经验，分析当前护航形势，制定了护航行动、后装保障方案等多套方案预案，尽量把护航可能出现的各种突发应急情况预先想细、想全、想透。此外，我们还强化了指挥所训练，组织任务部队加强基本技能训练.”


197. Yang Jingjie, “Captains Courageous.” The article elaborates: “Gradually, various ice-breaking activities were organized such as a friendly soccer match between the Chinese and British navies. Kunlunshan once also held a buffet reception on its deck while docked in Djibouti, inviting foreign naval officers aboard.”


201. PLA Navy Sends Forces to Somalia to Fight Piracy in Gulf of Aden,” CCTV News (English), 1223 GMT, 27 February 2012.


203. “Chinese Downplay Somali Pirate Ransom.”
207. 张鑫鑫 [Zhang Xinxin] and 余黄伟 [Yu Huangwei], “我护航编队与新加坡护航编队互访” [Chinese and Singaporean Escort Task Forces Exchange Visits], 人民海军 [People's Navy], 28 September 2010, p. 1.

208. 吴德春 [Wu Dechun], 胡全福 [Hu Quanfu], and 米晋国 [Mi Jinguo], “第十一批护航编队与美盟508特混编队指挥官会面交流” [Commanders of Eleventh Escort Task Force and NATO 508 Special Forces Hold Informal Exchanges], 人民海军 [People's Navy], 13 July 2012, p. 1, and 陈典宏 [Chen Dianhong] and 米晋国 [Mi Jinguo], “第十一一批护航指挥员与北约508特混编队指挥官方会面交流” [Commanders of Eleventh Escort Task Force and NATO 508 Special Forces Hold Exchanges], 人民海军 [People's Navy], 18 July 2012, p. 1.

209. For an interview on the exercise hosted by Li Jie, see 李杰 [Li Jie], “中俄联合护航行动意义非凡” [Sino-Russian Joint Escort Operations Have Profound Meaning], 海上争鸣 [Contending Maritime Schools of Thought], 当代海军 [Modern Navy] (November 2009), pp. 56–58. East Sea Fleet Deputy Commander Wang Zhiqiao reflected on this exercise: “How to expand exchanges and cooperation with nations of the world while during escort deployments has already become a new topic that China's naval escort task forces have encountered. This instance of joint exercises [had] strong command, meaningful content, [and] deep cooperation. [Participants] successfully completed the planned exercises, amply displayed the fine spirit and style of Sino-Russian naval officials, and laid an excellent foundation for fulfilling the next stage of escort responsibilities.” Original text: “护航途中如何与世界各国海军开展交流与合作，已成为中国海军护航编队遇到的一个新课题...此次联合军演指挥有力，内容丰富，合作深入，圆满完成了演习计划，充分展示了中俄海军官兵良好的精神风貌，对执行下一阶段的护航任务打下了良好的基础.” See also 钱宏 [Qian Hong], “演习科目精彩纷呈 演习取得重要成果 中俄联演海上实兵演习捷报频传” [The Exercise Subjects Are Splendid and Varied, the Exercise Has Produced Important Results: News of Success Keeps Pouring In during the Maritime Actual-Troop Exercise of the China-Russia Joint Exercise], 人民海军 [People's Navy], 27 April 2012, p. 1. PLA NDU professor Meng Xiaoqing described the importance of the “Maritime Cooperation 2012” Sino-Russian naval exercises: “This joint maritime military exercise between China and Russia is one of the larger ones we have seen in recent years. The vessels and aircraft deployed by both sides are representative of their more advanced main battle vessels. They include, for example, missile destroyer Harbin on the Chinese side and missile cruiser Varyag on the Russian side, which represent the more advanced main battle vessels currently available to them. The second highlight is its rich and colorful range of drills. This joint exercise is divided into four stages. The first is operational planning; the second, live-troop drills; the third, naval review; and the fourth, thematic seminar. The theme of this joint exercise determines that it is defensive in nature. It means that the Sino-Russian joint military exercise is not directed at any third party and is defensive in nature. It also serves the purpose of protecting sea-lanes. The operations to protect marine traffic cover a wide range of drills, including joint search and rescue, joint air defense, antisubmarine warfare at sea, and so on. Thirdly, I think the third and fourth stages are very interesting, too. Take the naval review for example. Because of the wide variety and large number of vessels taking part in this joint exercise, the naval review would be quite a spectacle. The thematic seminar will lay a foundation for further cooperation, exchange, and joint exercises between the two navies and for reviewing the experience. What should be emphasized in particular is that the Chinese and Russian navies are in different stages of development, each having some comparative strengths. Through this exercise, the two navies can learn from each other. All this will lay a good foundation for the future joint exercises”; “Maritime Cooperation–2012’ Sino-Russian
Military Exercise: Main Highlights,” 军事报道 [Military Report], CCTV-7 (Mandarin), 1130 GMT, 23 April 2012.


217. Hu Baoliang, “翱翔在亚丁湾上空的舰载雄鹰: 记亚丁湾第八批护航编队直升机机长郭希春” [Ship-Based Fierce Eagles Soaring above the Gulf of Aden: Recounting the Helicopter Unit Commander of the Eighth Escort Task Force Guo Xichun], Aviation World (January 2012), pp. 30–33. CCTV-7’s regular news broadcast Military Report described the joint exercises: “On the morning of 22 April local time, warships Wenzhou and Qiandaohu of the eighth PLA Navy escort formation and their Pakistani counterpart, guided-missile destroyer Khyber, jointly conducted their first antipiracy exercise in the Gulf of Aden and Somali waters. At 0730, the exercise began. They first performed the drill of chasing away suspect boats in a joint escort operation. Other drills included alternate deck landing of helicopters, joint boarding, fast-roping of special operations forces soldiers, aerial search and rescue by helicopter, and so on. The Chinese warship Wenzhou and the Pakistani missile destroyer Khyber took turns to command the exercise. At 0900, Wenzhou, Qiandaohu, and Khyber left their places in the convoy and performed a joint boarding drill. Two skiffs of the Wenzhou, each carrying several SOF [special operations forces] soldiers, sped along toward Qiandaohu, a hypothetical hijacked merchant vessel. The SOF soldiers boarded the vessel on the portside. Several Pakistani SOF soldiers were ferried to the vessel in a skiff and climbed up the vessel on the starboard side. Afterward, several Chinese SOF soldiers fast-roped onto the deck from a helicopter, which subsequently stayed airborne to keep watch. Meanwhile, the three skiffs moved around the vessel to cover the SOF soldiers as they went about their operation. Ten minutes later, thanks to effective collaboration, the Chinese and Pakistani SOF soldiers subdued the pirates and accomplished their mission with flying colors. That was followed by joint search-and-rescue, underway abeam replenishment, and some other drills.” “Chinese, Pakistani Naval Escort Vessels Hold Joint First Anti-piracy Exercise in Gulf of Aden,” 军事报道 [Military Report], CCTV-7 (Mandarin), 23 April 2011.


219. Ibid.


225. Ibid.


227. 江山 [Jiang Shan] and 曹海华 [Cao Haihua], “大洋彼岸展示新形象--海军第五批护航编队出访侧记” [Displaying a New Image on Both Coasts of the Big Ocean: Elaborating on Visits Made by the Fifth Naval Escort Task Force], 综合新闻 [General News], 人民海军 [People’s Navy], 17 September 2010, p. 2.


229. Ibid.


231. “African Officials Study Maritime Law Enforcement in China,” People’s

232. 高飞 [Gao Fei] and 李根成 [Li Gengcheng], “第十批护航编队访问泰国” [Tenth Escort Task Force Visits Thailand], 解放军报 [Liberation Army Daily], 21 April 2012, news.mod.gov.cn/headlines/2012-04/22/content_4360649.htm.


235. 李章龙 [Li Zhanglong], 肖迎辉 [Xiao Yinghui], and 高毅 [Gao Yi], “兰州’舰--铁甲雄风震海疆” [The Muscular Steel-Clad Destroyer “Lanzhou” Pacifies the Seas with Its Awesome Power], 人民海军 [People’s Navy], 3 July 2012, p. 4.


237. Ibid.


Since 2008 the PLAN has found that there is no substitute for experience. Over time, China’s approaches to various aspects of antipiracy operations have evolved; however, its strategic direction for several aspects of PLAN antipiracy operations remains debated.

This chapter examines trends and debates in PLAN approaches concerning such issues as logistical support—international relationships, basing options, existing platforms—and the potential impact of new platforms, such as China’s aircraft carrier.

Logistical Support Trends

From the outset, Chinese planners were seriously concerned about logistical challenges associated with deployments to Somali waters. Since then, using experience, they have gradually streamlined the logistical underpinnings of Far Seas antipiracy operations. China’s navy has received considerable logistical support from other countries, from various other Chinese military and governmental agencies, and even from China’s state-owned enterprises (SOEs) operating in foreign countries near the Gulf of Aden and IOR. Most onshore support for the supplying and replenishing of escort task forces comes from Chinese embassies and enterprises located in IOR coastal states.¹

Sustained overseas deployments are difficult and require multiple skills that the most advanced navies may consider routine but that the PLAN is learning incrementally. For example, executing replenishment at sea is far more difficult than logistics that can be planned in advance or ship handling and cargo transferring that can be simulated and practiced in the Near Seas. It requires maintaining schedules, planning stores distribution, and exercising the supply system—repeatedly—as well as improvising, when, for example, a “just in time” delivery to a transfer port fails to occur. Unlike during training simulations in restricted Chinese waters, poor performance in the Far Seas generates real consequences, often before the eyes of other navies or nations, as well as the public back home.²

PLAN antipiracy task forces rely partially on underway replenishment to supply critical fuel and stores. When task forces transfer escort duties, outgoing PLAN warships usually
convey materials and equipment to incoming vessels. The PLAN is learning the craft of blue-water at-sea replenishment, albeit gradually. One U.S. Navy helicopter pilot whom the authors consulted has witnessed Chinese ships conducting at-sea replenishment in the Gulf of Aden by halting and tying up. U.S. ships, by contrast, usually maintain thirteen knots.

Refueling and maintaining ample stocks of high-quality water, food, and medicine on board have been enduring challenges. Food supplies often spoil;⁶ innovative approaches to that problem were discussed in the previous chapter. Water, too, is apparently a particular problem. According to a June 2011 article in *Modern Navy*, in the PLAN all drinking water for the duration of five or six months is obtained from shore, sometimes via replenishment ships; water purified from salt water tastes bad and is used only for bathwater.⁴ Potable water needs to be replenished monthly, but this is complicated by the limited number of replenishment ships. An article in *Journal of Navy Medicine* examines the risk of contamination in drinking water on board, which the authors see as a significant problem. They recommend that

- Water storage compartments be cleaned thoroughly on a regular, set basis
- Stored water be bleached on a regular, set basis, and the amount of bleaching powder used be according to the amount of water being stored
- Purification equipment be installed in water supply pipes throughout the ship, especially on pipes leading to the galley
- Crew members be provided boiled water.⁵

In February 2012 *People’s Navy* ran a special report on securing fresh drinking water for sailors in the Gulf of Aden.⁶ During the first deployment, in 2008, crewmen faced a major dilemma in that regard:

Most maritime areas near the Gulf of Aden are desert-like zones lacking water [resources], freshwater can even be sold for between fifty and sixty U.S. dollars per ton, over a hundred times the price of water in Chinese cities. If warships want to replenish freshwater on the coast, not only is the degree of difficulty great, [but, in addition, money] spent on foreign exchange is extremely high. However, the warships’ costs for purifying salt water were also extremely high. [Therefore, in performing] battle-ready shifts for hundreds of days [at a time], [while facing] limited freshwater supplies, personnel did everything possible to save water, often shaving their heads bald during the escort [mission].⁷

Bernard Cole sees these logistical challenges related to freshwater supply as evidence of the PLAN’s grossly inadequate distilling plants and water-management practices. He states, “Any ship that cannot depend on its onboard distilling plants for freshwater supplies for all purposes is hampered severely.”⁸
Operating in high temperatures and saltwater environments is especially dangerous for helicopters, which face the risk of “high-salinity crystallization” (高盐颗粒结晶) and resulting exterior corrosion. Helicopters must therefore be washed after every flight. More generally, in the early deployments freshwater scarcity created problems for entire crews; some sailors even developed skin diseases. *People’s Navy* suggests that the main cause was that the vessels deployed to the Gulf of Aden had been designed for Near Seas operations and thus did not have the water-purification equipment needed for longer voyages. In September 2009, managers and technicians of Qinghuang Dao Mountain Heavy Industries Machinery Company, Ltd., began researching the problem. By May 2010 the problem had been largely solved by the installation of new purification equipment, and sailors on escort warships enjoyed a constant supply of freshwater for cleaning, laundry, showers, and other maintenance of personal hygiene. The article adds that crewmen use 5–10 liters of water and roughly 20 liters of water daily for drinking and washing, respectively. At this rate a crew of 200 would require 5–6 tonnes every day. However, various operational machinery and equipment on board requires high amounts of freshwater, including diesel engine generators in “closed cooling systems” (闭式冷却系统), “high-pressure compressors” (高压空气压缩机), and “charging storage batteries” (蓄电池补充). Large-scale steam-powered ships that require large amounts of water to refill boilers place particularly large amounts of strain on freshwater supply. Relying solely on on-ship stores of freshwater cannot even come close to meeting these demands, and as such, medium- and large-scale ships have all installed high-production saltwater purification equipment to supply backup water for crewmen and equipment, and to ensure the persistent escort ability of ships.

In late 2010 *People’s Navy* reporter Liang Qingsong outlined several logistical innovations made by PLAN escort task forces. They had

- Strengthened safeguards according to the integrative methods of system support and follow-on ship, specialized support and general support, intramilitary support and local support, domestic support and preassistance support. [They] gradually established various support capability systems such as crew member–level ability; and strengthened their ability [to perform] follow-on [support], long voyage technology repair assistance support, domestic assistance support, [and] foreign emergency support.

- Established types of support methods such as obtaining supplies from passing commercial ships, transferring supplies hand to hand, foreign purchases, airborne shipping, multichannel backup supplies [and] emergency delivery mechanisms, ensuring that task force equipment could be discarded promptly if accidents occurred, [and] guaranteeing that living materials are supplied promptly.

- Established a mechanism for foreign port resupply reliably and emergency health and sickness rescue and delivery. [They] borrowed from the experience of foreign escort task forces. Through research [they] offered suggestions such as condensing the replenishment period on relying on foreign ports by comprehensive replenishment ships, [and] establishing foreign comprehensive support points, [thereby] improving
the strength and completeness of long-term, high efficiency mechanisms for foreign logistical support.\textsuperscript{12}

At sea, antipiracy task forces rely on a combination of underway replenishment and port visits for fuel and stores. When escort duties are handed off to an incoming task force, the outgoing group transfers “materials, equipment and spares” to its reliefs, such as in the twelfth/thirteenth task force handover.\textsuperscript{13}

Wang Weiyuan of PLA Naval Engineering University catalogs several problems with the PLAN’s current refueling strategy in the Gulf of Aden:

Because of continuous escort duration limits for escort warships, [PLAN escort ships] must undergo refueling every three weeks on average, but comprehensive supply ships typically require three days to load supplies (including oil fuel, freshwater and provisions). This means that the only comprehensive supply ship in the escort task force must frequently rush back and forth between port and the escort ships. Not only [does this make] the work intensity for comprehensive supply ships high, [but it also] severely restricts the escort ships from fulfilling their responsibilities.\textsuperscript{14}

One major trend in logistical support has been the PLAN’s growing reliance on foreign ports where its ships can moor temporarily for maintenance. For example, during the inaugural antipiracy deployment, only supply ship \textit{Weishanhu} made two brief stops, for replenishment, at Aden Harbor, while destroyers \textit{Haikou} and \textit{Wuhan} received only at-sea replenishment and made no port visits, apparently because Chinese decision makers were concerned about the possibility of local opposition.\textsuperscript{15} This unusual initial approach surprised some American naval observers with whom one of the authors spoke, who had expected that the destroyers would certainly enter port repeatedly.\textsuperscript{16} Warships within escort task forces are now, in contrast, relying increasingly on overseas ports for supply and replenishment, a major reason why some Chinese scholars are calling for a more systematic overseas replenishment mechanism for PLAN escort operations.\textsuperscript{17} One reason for this trend is the extended duration of recent operations—the inaugural task force was at sea for 124 days, whereas the most recent deployments have averaged roughly half a year away from their home ports, as discussed above; the eleventh deployment lasted nearly seven months. Of course, an underlying, pragmatic rationale for increasing the frequency of PLAN port calls is that Beijing uses the antipiracy mission to pursue broader diplomatic objectives along the IOR littoral and in the Middle East, such as enhancing bilateral ties with important energy suppliers. Since 2011 the “normalization” (常态化) of PLAN port calls has occurred rapidly; warships in recent escort task forces have stopped in foreign ports an average of once per month, typically staying in port for five days.\textsuperscript{18} While on land in other countries, crews often participate in collective shopping, sightseeing, and other group activities. A third option for resupplying task forces in the Gulf of Aden has been to rely on Chinese SOEs whose vessels operate out of coastal-state ports. COSCO, the PRC’s biggest shipping company, has working relations
with husbanding agents and suppliers in most foreign coastal states.\textsuperscript{19} Apparently a COSCO subsidiary, COSCO West Africa, Ltd., has become the PLAN’s largest partner in procuring supplies for escort ships.\textsuperscript{20} According to COSCO’s website, at the close of fiscal year 2011 the company operated a fleet of 157 vessels, which were active at 159 ports in forty-eight countries.\textsuperscript{21} These preexisting relationships have helped facilitate coordination between PLAN ships at sea and suppliers in littoral states. They also embody the PRC’s growing comprehensive overseas presence in regions viewed as critical to China’s future economic and energy security.

In May 2009 the COSCO ship Taicang supplied Weishanhu with twenty tons of Chinese-made products, the first transaction of its kind and a new form of PLAN logistical support in which Chinese commercial vessels transport supplies from China directly to the navy.\textsuperscript{22} Indeed, Liao Xilong writes that to date PLAN refueling and replenishment in the Gulf of Aden have relied primarily on Chinese overseas commercial enterprises, in what Liao views as a successful instance of civil-military integration.\textsuperscript{23} In an interview shortly after the initial task force deployment, Senior Capt. Shen Hao (沈浩), director of the Operations Department in PLAN Headquarters, explained, “[Logistical support] is based on self-provision, and will, according to needs, in accordance with the ways of other relevant countries, actively expand relevant cooperation with any relevant coastal states in the maritime region [in order to] properly resolve logistics and supply problems.”\textsuperscript{24}

Of course, China’s Gulf of Aden civil-military relationship is not one-sided. Vessels owned by COSCO and other SOEs regularly take advantage of the safety of PLAN escorts. According to Xu Minjie, by the end of October 2011 the PLAN had escorted COSCO ships 685 times, with 100 percent safety.\textsuperscript{25}

Above-noted scholar Wang Weiyuan highlights two problems associated with this civil-military supply coordination:

First, this type of purchasing model relies on the COSCO Group (state-owned) to a very high degree. The navy has to no way to control information safety at every segment of the buying process. [It also] has no way to ensure that it can initiate effective supervision and control during each segment. Second, the implementing of oil security is not sufficiently standardized. [It] lacks guiding laws and documents, the security process has a high degree of unpredictability, [and] elements of employee uncertainty are numerous.\textsuperscript{26}

Some logistical challenges for China’s navy are neither routine nor predictable. In August 2009, for instance, Weishanhu’s starboard engine failed. A severely damaged gearbox required heavy repairs. To minimize loss of time, the PLAN dispatched a small team to the port of Djibouti, where Weishanhu was allowed to call for six days of extensive maintenance.\textsuperscript{27} This independent repair capability represents a tremendous improvement over what was available in the PLAN’s first-ever global circumnavigation in 2002. During that
cruise the destroyer Qingdao’s diesel engines failed in the Mediterranean, and the crew was unable to fix them. Technicians from Germany’s MTU Corporation, the manufacturer, had to be flown in.\[^{28}\]

PLAN task forces have also experienced situations in which vessels under escort encountered problems that forced warships to react on the fly.\[^{29}\] For example, in November 2011 Russian-flagged fishing boat Powei, with a crew of seventy-six Chinese citizens, was crossing the Gulf of Aden for the first time.\[^{30}\] A slow ship with a low freeboard and no security cabin, Powei fell behind the convoy, whose escort was led by Yulin, and was specially accompanied by Qiandaohu.\[^{31}\] In September 2009, a PLAN sailor aboard a task force vessel suffered an acute attack of appendicitis; his condition became too severe for shipboard treatment. In the first real-life test of the PLAN’s Far Seas medical emergency support system, the sailor was airlifted to Salalah Royal Hospital in Oman.\[^{32}\] Two years later, in response to a request by radiotelegraph, the ninth escort fleet provided basic medical treatment to a British crew member of the foreign vessel Orion Trader (猎户贸易者) who had torn his calf open on barbed wire that had been strung to protect against pirate attack.\[^{33}\]

In both cases, to obtain the necessary assistance the PLAN relied on the effective coordination systems often supported by other PLAN agencies, such as the Armament Department. Experiences such as these will undoubtedly shape the future development of China’s Far Seas logistical systems and practices as well as emergency-response coordination mechanisms within the military. Relatedly, and regarding speed of response to piracy threats, Wei Jianhua, director of an ESF division’s political department, stated in December 2012 that PLAN task forces had, after over a thousand tests, lowered “decision time” to ten seconds and “antipiracy deployment” time to two minutes.\[^{34}\] These statistics and the enormous sample size that was used to generate them reflect a heavy emphasis on improving emergency-response capabilities.\[^{35}\]

Effectiveness of Logistical Support in Practice Absent Formal Basing Agreements

Despite notable logistical innovations and resulting efficiency gains since 2008, Chinese planners are keenly aware of the great expense of sustaining the Far Seas antipiracy mission. While responding to a query following his speech at the National Defense University in Washington, D.C., in May 2011, PLA Chief of General Staff Chen Bingde suggested that China’s navy might not be able to support the Gulf of Aden mission much longer. Referring to deploying naval power to protect the maritime commons, Chen acknowledged that “if the situation continues like this, it will create great difficulties for us to continue with such operations. Although the development of the Chinese PLAN has come a long way in recent years and we have developed a number of new ships ...
are not that strong yet.”36 He continued, “Then we have this dilemma: on the one hand, if we continue to build new ships we will [face the] constraints of [the] national defense budget. And what is more, it will lead to the issue of hype of the ‘China threat’ again because of our growing capabilities. On the other hand, if we stop building those new ships, we will not only be unable to send more ships to Gulf of Aden, but we will find it even difficult to protect and maintain our own maritime interests. So I think we still need a long-term solution to that.”37

At the time, Chen’s authoritative speech seemed to suggest a scaling-back or even an imminent end of China’s Gulf of Aden presence. Yet as this study went to press, China’s naval operations in the Gulf of Aden were going strong, as the fifteenth task force executed its antipiracy escort duties. The fourteenth task force comprises slightly older naval warships, which could perhaps signal the start of a gradual scale-back. The fifteenth task force, however, is composed of newer platforms: guided-missile frigate Hengshui, amphibious dock landing ship Jinggangshan, and comprehensive supply ship Taihu. Regardless, one thing is clear—the PLAN has maintained a robust antipiracy presence in the Gulf of Aden well after Chen’s speech in Washington.

Given the immense logistical and operational benefits obtained during the first four years of escorting, it is understandable that Beijing was initially willing to pay a premium to send forces to the Gulf of Aden. After all, absent these operations there would have been virtually no other near-term opportunities to project military power outside China’s immediate maritime periphery.38 However, while logistical and operational efficiency gains continue to accumulate, the PLAN’s learning curve has flattened progressively. High-ranking PLAN officials are quickly becoming proficient in shipboard diplomacy, and China’s navy has a growing list of completed joint exercises and antipiracy operations with foreign navies. All of this raises the larger questions: Do the benefits of future escort task forces outweigh the costs, and, if so, to what extent, using which metrics?

The most obvious direct costs of the mission include fuel, food, and health supplies, and the ammunition and equipment used in training exercises and live fire, as well as depreciation of PLAN vessels and equipment. Additionally, Chinese naval planners are surely calculating the opportunity cost of deploying supply and landing ships to the Gulf of Aden when these ships could be preparing for more regionally based operations, such as a potential Taiwan contingency or, even more likely, a militarized South China Sea dispute or an escalation in the East China Sea. Some basic operational procedures applicable to the Gulf of Aden mission may be transferrable to these hypothetical regional initiatives, but amphibious vessels like the Yuzhao-class Type 071 landing platform dock (LPD) could derive more strategic benefits from specialized training in regional waters.
This strategic reality has long been on the minds of such Chinese strategic planners as Liu Jiangping. Referring to the PLAN’s evolving Near Seas active defense strategy shortly after the first task force deployment in 2009, Liu stated that the benefits of the mission include not only experience fighting against pirates “but also an experience for the navy’s capability to conduct Far Oceans quasi-combat operations” (还是对海军执行远洋准作战能力一次经验).39

That said, Beijing may view its Gulf of Aden cost structure quite differently from what has been outlined above. For example, the PLAN may well desire to continue to spread experience and operational gains from the Gulf of Aden mission farther through its ranks. That would help explain the NSF’s deployment of the eleventh escort task force in early 2012, and it would also suggest that task forces may continue to be deployed for some three to five more years to expose additional destroyers and frigates to Far Seas operations. China is clearly using its Gulf of Aden mission to provide learning experiences for its most advanced surface vessels. For example, as of October 2012, 79 percent of all frigates deployed off the coast of Somalia had been Jiangkai II air-defense ships, currently the PLAN’s most advanced frigate platform. Similarly, 57 percent of PLAN destroyers used in the antipiracy mission have been members of the Luyang I and Luyang II classes, the PLAN’s leading area-air-defense ships.40 Viewed in larger perspective, the emphasis on sending elite ships to the Gulf of Aden becomes even clearer.

The Gulf of Aden mission has provided tremendous opportunities for operational gains for China’s small number of advanced replenishment ships. For example, CCTV-7’s Military Report program stated in May 2012 that Weishanhu had broken several replenishment records while serving in the Gulf of Aden, using a variety of methods, including “abeam replenishment, vertical replenishment, and lighterage.”41 Alternatively, perhaps China’s navy wants to continue to derive benefits incrementally by adjusting and adding features to its current missions. One area where value might be added is the Z-9 helicopter; the Gulf of Aden mission could provide more opportunities for testing Chinese-made platforms. Rear Adm. Yin Zhuo (Ret.) believes that helicopters are central to raising escort forces’ productivity and dynamism, because the extended coverage range they provide makes operations more efficient and allows the PLAN to respond more effectively to nontraditional attacks.42 By making its escort operations more dynamic, the PLAN can continue to make modest operational discoveries that will be applicable in other areas of PLA modernization.

For example, a 2012 issue of Chinese journal Aviation World recorded the experience of Guo Xichun, deputy commander of the Seaborne Aircraft Division of the seventh escort task force, as a naval aviation commander in the Gulf of Aden. In May 2010, Guo’s division performed live-fire training exercises a thousand meters above the sea. This
training exercise was the first in which PLAN ship-based helicopters fired .50-caliber machine guns in the Gulf of Aden. In March 2011, helicopter units began nighttime training to raise combat readiness against the possibility of a pirate attack during the night, including “blackout procedures”, in which pilots were hard-pressed to distinguish precisely the sea surface. They had to rely on dim lights of PLAN vessels to discern their locations in relation to the flight decks. In another example, the eleventh task force conducted its first “day-into-night ship-aircraft training exercises” in March 2012. Commenting on the training, helicopter group commander Ma Lei stated, “When we fly under dark night conditions at high seas, there are no reference features whatsoever. From the moment you take off from the deck, what you see ahead of you is the black bottom of a wok. You cannot make out anything visually. You have to rely entirely on instrumentation to judge the altitude, velocity, and all other statuses.”

Guo further remarked, “The Gulf of Aden airspace is a stage for navies of the world to display their level of ship-based helicopters. As the ‘national team’ of China’s ship-based helicopter field, we are representing our country’s helicopter division’s image and actual capabilities. In front of foreign militaries, we certainly want to strive to be number one, achieving the ‘gold medal, strive for our mother country’s honor.’ The enhanced role of helicopter units is thus recognized as an important component of the PLAN’s image and abilities manifested in the Gulf of Aden. For example, the PLAN’s first ship-based aircraft unit commander, Qi Xianglong, remarked: "Practice proves that ship-based
Utilization of Different Platforms

Considering the lack of other opportunities to deploy naval platforms in the Far Seas, it is understandable that the PLAN is eager to send its most advanced platforms to the Gulf of Aden. While not all PLAN destroyers and frigates are modern, all PLAN task forces to date have employed a combination of one or two Type 052 Luyang-class destroyers or Type 054 Jiangkai-class frigates. The largest platforms used in China’s antipiracy operations have been those performing supply and replenishment functions. Thus far, the PLAN has dispatched Type 903 Qiandaohu-class replenishment ships as the base platform throughout its escort operations. Weishanhu served during the initial deployment and has since participated in the second, fifth, sixth, and eleventh task forces. Qiandaohu, meanwhile, has served in various capacities during several escort task force deployments. With displacements of twenty-three thousand tons, Type 903s were the PRC’s most experienced replenishment ships at the outset of the antipiracy mission. In 2007 Weishanhu participated in the Sino-British Friendship 2007 and Sino-French Friendship 2007 exercises.50

Three Yuzhao-class Type 071 LPDs, the PLAN’s largest vessels aside from the recently commissioned aircraft carrier Liaoning, remain the most formidable platforms available for supporting PLAN antipiracy operations in the Gulf of Aden.51 The Type 071 flagship Kunlunshan participated in the sixth escort task force. It was deployed to the Gulf of Aden in 2010, shortly after being commissioned in late 2007, reflecting the PLAN’s eagerness to deploy its best platforms in the Far Seas. On 28 August 2010, as part of the sixth task force, Kunlunshan helped to repel three different pirate groups. Having itself discovered the first group, it brought special operations personnel into position and dispatched helicopters before intercepting the pirates at full speed. It repeated this process...
with a second wave of pirates. In each case, when pirate skiffs approached the PLAN escort column, Kunlunshan-launched helicopters circled above the suspects, eventually firing concussion rounds and causing them to retreat.

Jinggangshan, a two-hundred-meter-long Type 071 commissioned into the South Sea Fleet in October 2011, engaged in joint training with PLAN helicopters in February 2012 and is likely to participate in future task forces. It cost $300 million to build, comes equipped with four hovercraft vehicles and two Z-8 helicopters, and requires a crew of roughly eight hundred. As several analysts have noted, Type 071 ships, in addition to supporting the PLAN’s current antipiracy mission, move China’s navy closer to an ability to assemble a comprehensive carrier group. Type 071 LPDs provide antipiracy task forces with unprecedented capacity—one ship can hold fifteen to twenty amphibious armored vehicles, a number of landing craft, and helicopters for extended voyages. As Dennis Blasko points out, these features give the PLAN “its first true ‘blue water’ amphibious capability.”

The deployment of Type 071 LPDs has allowed China’s navy to test smaller platforms during Far Seas operations as well, such as an air-cushion vehicle, hull 3320. During September 2010 the hovercraft was deployed from Kunlunshan and conducted patrols in the Gulf of Aden, successfully identifying a benign target six nautical miles away. This is in addition to the indigenously developed speedboats that Chinese LPDs carry, boats that are very maneuverable and suitable for chases. Moreover, helicopters deployed from Kunlunshan have been shown to play important roles in deterring suspected pirates, especially when flotillas include a large number of ships.

One observer has suggested that China’s Gulf of Aden mission reflects the need for more warships capable of operating for extended periods in the Far Seas. The PLAN entered the international fight against Somali piracy to protect national interests, and executing this Gulf of Aden mission has utilized a large portion of China’s most advanced warships. If similar threats to China’s economic security arise in other regions throughout the world, they could impose excessive demands on China’s existing Far Seas–relevant inventory.

At least some PLAN vessels tasked to the Gulf of Aden mission appear to have propulsion systems optimized for such long-range voyages. For instance, Type 052C Luyang II area-air-defense destroyers reportedly use a combination of two QC-280, twenty-eight-megawatt, aero-derivative gas turbines (reverse-engineered Ukrainian GT2500 marine gas turbines) and two six-megawatt diesel engines. While reliability remains unproven, no significant propulsion problems have been reported. This dual arrangement, known as combined diesel or gas, enables warships to enjoy maximum speeds significantly faster than their cruising speeds. It gives vessels the best of both worlds. Marine gas
turbines offer a number of tactical advantages over diesel power plants, including a high power-to-size ratio that allows powerful units to drive small ships without occupying much space; rapid start-up, acceleration, and maneuvering; and minimal low-frequency mechanical noise, although cavitation from ships’ screws tends to be the most important factor in acoustic detection. Diesels, for their part, are far more efficient than fuel-hungry gas turbines, particularly at low speeds.

If the PLAN adopts gas turbines widely and conducts extensive high-speed operations, it will require additional oilers, the exact number depending on the scope of operations envisioned. China is already building one or two new replenishment ships, but this is far from sufficient to support substantial out-of-area operations. On a related note, submarines need nuclear propulsion to engage in such long-distance operations efficiently, but China only has a total of five operational nuclear-powered attack submarines at present, and they remain relatively noisy.

Prospects for New Platforms, Such as Aircraft Carriers

The commissioning of China’s first aircraft carrier, Liaoning, on 25 September 2012, coupled with the present lack of overseas bases, raises the question whether the PLAN might eventually use that carrier to support antipiracy efforts and collect experience in the process. A PLAN officer told one of the authors in 2011 that the naval platforms China then possessed were “still not enough” to achieve its security goals: “The majority of our ships are small, and can’t navigate on the high seas. Even the Gulf of Aden task groups had a very hard time. In the future, China will have three or four carrier groups, with one operating at a given time.” Similarly, Chinese naval expert Li Jie believes China should possess a minimum of three aircraft carriers “to accomplish sea combat missions and fulfill international obligations.” The same article suggests a greater role for larger PLAN warships in future nontraditional security operations, such as antipiracy: “As a responsible major power and one of the five permanent members of the United Nations Security Council, China will shoulder more international responsibility in various fields such as disaster relief and combat against terrorism and piracy. Therefore, the country’s naval force, particularly large warships, will become more and more useful.”

Initial Chinese scholarly reactions view China’s first aircraft carrier, the 990-foot-long then-Varyag, purchased for $20 million from Ukraine in 1998, as a necessary step in China’s self-defense-based military modernization and not primarily as a resource for winning bilateral regional disputes. Chinese carriers may add substantially more value when deployed abroad for contemporary noncombat operations, such as peacekeeping, disaster relief, and antipiracy, at least in the near term. Indeed, when Liaoning was delivered to China’s navy, People’s Daily noted the carrier’s importance for developing Far Seas cooperation and the nation’s ability to respond to nontraditional security threats.
Even so, deploying a carrier out of area would not simply entail “showing the flag” but reflect China’s arrival as a blue-water naval power.\textsuperscript{70}

Regarding the value added by deploying a carrier near the Gulf of Aden, CASS researcher Wang Hanlin wrote in 2009 that “the rotation of warships sent to the region has also revealed the necessity of an aircraft carrier for China. . . . It will be much easier for an aircraft carrier combat unit to safeguard merchant vessels in such a remote area.”\textsuperscript{71} Similarly, a \textit{China Daily} op-ed stresses the relationship between carrier deployment and nontraditional security: “The increasing threat from nontraditional elements like terrorism and piracy also require China to have its aircraft carrier to ensure the security of its transportation in the sea.”\textsuperscript{72} Rear Adm. Yin Zhuo (Ret.) echoes this sentiment, suggesting that deploying a carrier should enhance, not detract from, the global fight against common security threats in nonsovereign waters. According to Yin, “[Seeking] harmonious oceans, with aircraft carriers, it will be even more possible to implement our aim of harmonious oceans.”\textsuperscript{73}

Of course, rather than as simply enhancing global maritime security, CCP and PLA officials may view this option as a convenient way eventually to gain invaluable operational experience under the legitimate mandate of promoting SLOC security and making an even greater contribution to the fight against regional piracy. For example, \textit{Modern Ships} editor Cui Yiliang views the accumulation of experience as the foremost function of China’s first carrier.\textsuperscript{74} Current Chinese operations in the Gulf of Aden have limited air coverage, because they rely solely on shipborne helicopters.\textsuperscript{75} The relatively brief endurance of these airframes has been identified as a shortcoming of PLAN antipiracy operations.

As China fields a fixed-wing, carrier-deployed aircraft such as the J-15, or if it fields a capable carrier-based unmanned aerial vehicle in significant numbers, in operating it \textit{Liaoning} will provide the Chinese antipiracy mission with much greater aerial coverage, in addition to alleviating the constraints imposed by limited deck space of other surface vessels. Additionally, antipiracy operations could also represent excellent opportunities to learn important lessons on logistics, training, and operations. Relatively low-risk missions against pirate crews could serve as effective training. Carrier crew members at all levels would benefit substantially from participation in PLAN efforts off the Horn of Africa.\textsuperscript{76} Already, Gulf of Aden deployments allow experimentation with PLAN task group composition, as will be necessary when new vessels enter the fleet, particularly in preparation for a carrier group.\textsuperscript{77}
**Type 081 LHD Landing Ship**

Although *Liaoning* has dominated Chinese and international media coverage of China’s naval modernization, the reported development of the Type 081 landing helicopter dock (LHD) provides another advanced platform suitable for Gulf of Aden and other antipiracy missions. Chinese analysts such as Ye Qi have suggested that further development of amphibious ships would make a great contribution to antipiracy operations. As was revealed at the International Maritime Defence Exhibition and Conference in May 2007, China is developing an LHD landing ship. A *Global Times* article reported that the ship was identified as the rumored Type 081 and that it will be comparable in displacement and size to the Type 071 LPDs, which carry helicopters and transport and deploy ground forces, but with a flat, or “flush,” helicopter deck. The same article, citing *Jane’s*, suggests that the Type 081 will possess greater aviation capabilities than its Type 071 predecessor and that the PLAN may construct from three to six of them. Reportedly, the Type 081 will be able to transport twelve helicopters and a crew of over a thousand uninterruptedly for approximately one month.

Many observers believe that Type 071 and Type 081 amphibious ships between them provide substantial utility and are suited for nontraditional operations beyond the Near Seas, as opposed to regional missions. Large deck space is conducive to military-to-military exchanges and other peacetime naval activities, and the dynamic ability of amphibious ships to deploy ground, air, and sea support in a short time is particularly suitable for rescue and emergency situations outside China. Chinese scholar Chen Chuanming asserts that China’s future amphibious platforms need to upgrade from “traditional beachhead warfare” (抢摊登陆作战) to amphibious assault vehicles and to incorporate such modern weapons technology as amphibious transport docks, helicopters, and unmanned aircraft.

There is no open opposition to continued deployments to the Gulf of Aden of the PLAN’s most advanced amphibious platforms, such as newly commissioned Type 071 LPDs, though efficiency concerns are emerging. You Ji finds that the large PLAN vessels currently tasked to the Gulf of Aden are inflexible, ill suited to the antipiracy mission, and extremely expensive to operate there. Perhaps, as part of a global pattern whereby navies are shifting missions to smaller and smaller ships, the PLAN may increasingly search for opportunities to balance its desire to adapt to this trend while still providing operational experience for some of its major platforms. For example, You Ji writes, “Rear Admiral Yin Zhuo (尹卓) raised the idea of building simplified Type 054 frigates to cater to IHA [international humanitarian assistance] and antipiracy operations. These frigates would have smaller displacement of three thousand tons, fewer weapons systems—such as missiles—and enhanced special equipment for HA [humanitarian assistance] and other NTS [nontraditional security] tasks. In order to cut cost, their construction...
standards could be set as half military, half civilian.”86 Yin has also stated that antipiracy operations have “shown the Navy’s equipment is not particularly suited to blue water operations . . . [and] our equipment, our technology, especially our level of information infrastructure and communication means, as well as our blue water deployment capabilities . . . still have a relatively long way to go to catch up with that of the Western countries.”87

The notion that China’s navy needs more efficient ships to perform new missions such as antipiracy operations may be gaining acceptance in Beijing, as evidenced by the commissioning in early 2013 of four hulls of the Jiangdao-class Type 056 corvette. According to Xinhua, “The new [light] frigate requires only one-third of the crew needed by its predecessor, the Type-053, and it is expected to be deployed primarily for escort missions and antisubmarine operations.”88

The entrance of larger and more advanced PLAN naval platforms into the fight against piracy would be a significant event in Chinese naval modernization. Navy planners simultaneously face an even more significant decision—whether China should use antipiracy operations, which have continued uninterrupted for five years and have no end in sight, as a rationale for pursuing military basing arrangements in other countries. There are strong opinions among Chinese observers both for and against basing. Proponents assert that China’s global interests are too large to ignore anymore, while advocates of the status quo stress the ideological contradiction between basing and China’s traditional stance of noninterference.

**Basing Prospects for Antipiracy Missions**

Modern naval platforms can improve the efficacy of PLAN antipiracy operations markedly. However, resource constraints limit investments in large naval platforms, including carriers and landing ships, and thereby the PLAN’s ability to project force in the Far Seas in the long term. Without permanent bases as platforms for the antipiracy mission in the Indian Ocean and off the Horn of Africa, PLAN escort forces must refuel at sea or during official port calls arranged well in advance. Carriers, modern landing ships, and auxiliary vessels are simply unable to provide the same services as would permanent onshore basing facilities.89 This section examines the potential for China to pursue basing arrangements to bolster its antipiracy operations.

As of May 2011, PLAN escort forces had completed port calls in nineteen countries to refuel and replenish, as well as to enhance bilateral military ties through joint drills and other onshore exchanges. PLAN vessels have called primarily in ports in countries surrounding the Gulf of Aden, such as Djibouti, Yemen, Saudi Arabia, and Oman. They have also stopped in countries such as Pakistan and Seychelles, the ports of which have
increasing strategic importance both for combating pirates willing to attack ships far from the Gulf of Aden and for enhancing China’s broader presence in the IOR. While the frontispiece depicts the locations and purposes for which China’s antipiracy task forces have visited, Exhibit 4 compares their respective escort statistics.


<table>
<thead>
<tr>
<th>Task Force</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time at Sea</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec 2008–28 Feb 2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>April 2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>124 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>April 2009–20 April 2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>August 2009–21 August 2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>124 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec 2009–30 June 2010</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>April 2010–20 April 2010</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>124 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec 2010–20 Nov 2010</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sept 2010–17 Sept 2010</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>124 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec 2010–9 May 2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec 2011–21 Dec 2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>124 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Escorts</td>
<td>212</td>
<td>393</td>
<td>582</td>
<td>588</td>
<td>578</td>
<td>615</td>
<td>41</td>
</tr>
<tr>
<td>Batches</td>
<td>41</td>
<td>45</td>
<td>53</td>
<td>46</td>
<td>49</td>
<td>38</td>
<td>38</td>
</tr>
</tbody>
</table>

Sources:

In early December 2011, the foreign affairs minister of Seychelles, a small island nation situated strategically in the southern Indian Ocean, formally invited China to establish a base for refueling and replenishing warships involved in antipiracy operations in the region. As an article written by an author from the PLA Border Defense Academy (中国人民解放军边防学院) explains, in March 2012 China confirmed that it planned to establish a presence on Seychelles to contribute to its antipiracy mission. The invitation came after China donated two Y-12 twin-engine, turbo-prop reconnaissance and utility aircraft to Seychelles earlier in 2011.

The Chinese were defensive about Seychelles’s offer, insisting that use of Seychelles’s ports for logistical and supply purposes would in no way be tantamount to establishing a military base. China’s Ministry of Defense stated on its website, “According to escort needs and the needs of other long-range missions, China will consider seeking supply facilities at appropriate harbors in the Seychelles or other countries.”

Sino-Seychellois military ties had been initiated in 2004, when a military cooperation agreement sent roughly fifty Seychellois soldiers to China, but they have since grown over the years. China’s Peace Ark hospital ship visited Seychelles in November 2010, and two Chinese frigates called in April 2011. In May 2012 the two countries finalized an agreement to allow China’s navy to transfer detained suspected pirates to Seychelles.
for further legal proceedings.\textsuperscript{137} In July 2012, Gen. Ma Xiaotian, deputy chief of staff of the General Staff Department of the PLA, visited President James Michel in Victoria to discuss implementation of defense programs and to enhance bilateral cooperation.\textsuperscript{138} By 2011, logistical support for PLAN efforts in the Gulf of Aden must have been seen as the natural next step. Accordingly, notwithstanding China’s firm refusal to establish a long-

<table>
<thead>
<tr>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>507</td>
<td>280</td>
<td>240</td>
<td>184</td>
<td>198</td>
<td>166</td>
<td>181</td>
<td>5,000+</td>
</tr>
<tr>
<td>46</td>
<td>41</td>
<td>40</td>
<td>43</td>
<td>45</td>
<td>36</td>
<td>63</td>
<td>500+</td>
</tr>
</tbody>
</table>


Official Chinese responses to the offer in 2012 essentially deflected the notion that China is beginning its military expansion into the Indian Ocean. One official remarked, “It is common practice for all navies of the world to seek supplies in nearby international ports while carrying out long-distance missions.” He refused to discuss the potential nature or details of the agreement.\textsuperscript{139} Chinese responses more generally have defended a potential PLAN base at Seychelles as both legal and rational, pointing out that the United States and India already have permanent military presences there.\textsuperscript{140} Chinese media have also noted Japan’s establishment of a military base in Djibouti to fight piracy.\textsuperscript{141} Pan Chunming, a deputy director of a political department under a division of the SSF, notes that China’s basing arrangements as of 2012 were far inferior to, and could even be negatively influenced by, those of other navies.\textsuperscript{142} Pan states, “Once we coordinated with a foreign port to berth for three days. However, the port later only allowed us to stay for one day, because a Japanese ship was coming.”\textsuperscript{143} Pan Zhiqiang, of the ESF, also cites Japan’s relatively advanced basing presence abroad as motivation for reconsidering China’s conservative approach.\textsuperscript{144} Pan remarks, “China has invested a large amount of money
in Djibouti, and helped the country build its infrastructure. However, our influence over the country cannot compete with that of Japan[;] . . . maybe it’s time to adjust our strategy to reverse the passive position.”

In March 2013, Djibouti reportedly invited China to establish a military facility there, where PLAN antipiracy task force vessels have docked more than fifty times over the past four years.

At least one Chinese observer, Rear Adm. Yin Zhuo (Ret.), has lobbied, on the basis of existing logistical deficiencies in the PLAN antipiracy mission, for fixed port access along China’s vital sea lifelines. Most nations around the Gulf of Aden being Muslim, there is essentially no supply of pork, critical for feeding a Chinese crew of eight hundred affordable. Essential fruits and vegetables also have to be shipped long distances. Yin further argues that current refueling and replenishment arrangements are inadequate in the long run and need to be replaced by port agreements that allow large PLAN warships to moor alongside, shut down their engineering plants, and receive proper inspection and maintenance.

Others have also promoted a more global PLAN presence to protect all of China’s overseas interests. Chen Chundi advocates a Chinese naval presence in what he terms the “‘Islamic Crescent’ of Chinese Transport” (中国国运的“伊斯兰弧带”), a band of largely Muslim states, encompassing a quarter of the world’s countries, running from Southeast Asia through South Asia, Central Asia, and the Middle East, to North Africa. Chen maintains that this zone contains two-thirds of global petroleum reserves and is one of its most politically and socially unstable regions. Chinese assets based in “Islamic Crescent” nations are not only critical for economic growth and energy security but also potentially the most vulnerable to disruption. For example, Chen argues that China should use its good relations with “Islamic Crescent” states to establish mutually beneficial port-call agreements. Such arrangements would mitigate serious logistical challenges that Far Seas antipiracy operations create for the PLAN, and they would show respect for the sovereignty of China’s littoral hosts.

That said, even Chen’s modest policy recommendation might unnerve many of China’s trading partners, as he calls for destroyers and frigates to be deployed in the Mediterranean Sea, Gulf of Aden, Bay of Bengal, and the Arabian Sea.

The notion of establishing “Far Oceans footholds” (远洋立足点) in relative proximity to vulnerable maritime regions has been supported by multiple PLA scholars, including retired PLA general Peng Guangqian, who argues that such footholds are fundamentally different from military bases. The former are bilateral, mutually beneficial access agreements that have no effect on the host nation’s sovereignty. These fixed access points would ensure that PLAN task forces have access to supplies and emergency support. Reflecting a slightly different perspective based on a review of the escort operations to date, scholars Xu Ge and Zhu Qianwang of China’s Naval Engineering University suggest that
given the rapid and unpredictable nature of issues arising at sea, future missions require better overall planning. Solid preparation is needed with respect to equipment. To ensure effective responses to challenges that might conceivably arise, the authors argue, reliance on coastal bases and ports may be needed for comprehensive support. In their opinion, perhaps the most significant revelation of escort operations over the past three years has been the need for fixed supply access.

Other Chinese observers are more explicit in their advocacy of some form of bases or “places.” Ni Lexiong has suggested that Seychelles would become a basing location if China’s navy determined that a permanent presence closer to the Gulf of Aden was needed to continue antipiracy operations. Fudan University professor Shen Dingli agrees that China should establish overseas bases to protect its many economic channels, stating that such bases would contribute to regional security in the Indian Ocean and global security as a whole, rather than escalating interstate tension. Mounting unrest in Oman, for example, provides a material incentive to look for new ports in which to refuel and replenish supplies for operations that contribute to maritime security.

Similarly, PLAN scholar Jing Aiming argues that the PLAN’s future Far Seas development will rely on three levels of “support points” (支撑点). First, on the most basic level, the PLAN should rely on ports such as Djibouti, Aden, and Salalah for routine refueling and resupply. In these areas, China’s navy could meet its supply needs using commercial standards. The second class of support points would include such ports as Victoria, Seychelles, that can support relatively fixed schedules of PLAN ship supply, routine air-based reconnaissance operations, and replenishment stops. The third level of support relies on longer-term contractual agreements that would permit China to perform more comprehensive supplying, replenishment, and large-scale repairs of shipboard weapons. Jing suggests Pakistan as a likely third-level support point that would primarily use mid-to-long-term agreements for supply, replenishment, and large-scale warship and weapon repair. The need for various levels of overseas maritime support, according to Jing, is the result of the PLAN’s current status of “Three Lacks and One Without” (三无一没有), a reality that many Chinese analysts see as stifling the PLAN’s Far Seas development. This phrase refers to “lacking fixed supply points” (无固定补给点), “lacking rest and replenishment bases” (无固定修整地), “lacking fixed-wing aircraft support” (无固定翼飞机支援), and “being without a large-scale equipment supply and maintenance center” (没有大型装备修理中心). A system such as the one Jing articulates would ensure for future task forces stable access to replenishment and combat supplies, not just in the Gulf of Aden, but throughout much of the IOR. That prospect may provide Beijing with sufficient incentive to seek basing arrangements that, if realized, would certainly improve the PLAN’s effectiveness in and around the Gulf of Aden.
While Beijing has been mute on its plans for overseas bases, there are, as mentioned above, several littoral states with port facilities that could potentially add value to antipiracy and other PLAN Far Seas operations. As Chinese analyst Wang Zhongsheng noted shortly after China’s first task force deployment in 2009, China needs to enhance research on overseas basing and facilities, particularly in regions close to areas where China’s navy is likely to be charged with future “diversified tasks.”

Exhibit 5 examines ports along the IOR and near the Middle East that have received Chinese attention in recent years.

**Exhibit 5. Ports for Potential PLAN Overseas Access and PLAN Visits Thereto**

<table>
<thead>
<tr>
<th>Port</th>
<th>Country</th>
<th>Quality of Repair Facilities</th>
<th># PLAN Antipiracy-Related Visits since 28 December 2008</th>
<th>Nature of Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salah</td>
<td>Oman</td>
<td>Only small craft facilities currently available.</td>
<td>15+</td>
<td>Replenish/overhaul</td>
</tr>
<tr>
<td>Aden</td>
<td>Yemen</td>
<td>National Dockyard Company offers range of limited facilities, services. Workshop, large lathes, electrical, casting, refrigeration, other repair shops; in-water repair services. Two floating docks.</td>
<td>8+</td>
<td>Replenish/overhaul</td>
</tr>
<tr>
<td>Djibouti</td>
<td>Djibouti</td>
<td>Multiple foreign naval/military bases; China reportedly invited to establish its own military facility. Small repairs possible; container terminal phase 1 construction completed; can berth two large container vessels together.</td>
<td>11+</td>
<td>Replenish/overhaul</td>
</tr>
<tr>
<td>Gwadar</td>
<td>Pakistan</td>
<td>500-acre shipyard two 600,000 DWT dry docks planned. Very large crude carrier + ultra large crude carrier construction planned. Expansive second phase of the port was supposed to be completed in 2010 but has not yet begun construction. Further development to include fifteen to twenty berths, ship cargo handling equipment, port machinery, and warehouses; not commercially viable at present. China contributed $198 million of initial $250 million port investment. China Overseas Ports Holding Company Limited assumed port management control on 23 May 2013, with China Communications Construction Company as project contractor. Nineteen million tonnes/yr. capacity oil refinery planned.</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Karachi</td>
<td>Pakistan</td>
<td>PLAN’s preferred Indian Ocean repair facility. Two dry docks available; 18,000/25,000 DWT; development of bulk cargo, deepwater container terminals, and other expansion under way, including 18 m container terminal.</td>
<td>4+</td>
<td>Friendly visits/joint drills</td>
</tr>
<tr>
<td>Hambantota</td>
<td>Sri Lanka</td>
<td>Ship-serving capabilities planned; port to be constructed in four stages over fifteen years. Phase 1 accommodated first vessel in 2010; general cargo berth of 610 m; handles vessels up to 100,000 DWT; phase 2 initiated.</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Port</td>
<td>Country</td>
<td>Quality of Repair Facilities</td>
<td># PLAN Antipiracy-Related Visits since 28 December 2008</td>
<td>Nature of Visits</td>
</tr>
<tr>
<td>------------</td>
<td>----------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Colombo</td>
<td>Sri Lanka</td>
<td>Multiple aloft repair berths. Dry docks available up to 120,000 DWT; Colombo South Harbor Development project will increase depth to 18 m, then 23 m; phased development of four new terminals with three to four berths each.</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Trincomalee</td>
<td>Sri Lanka</td>
<td>Minor repairs possible. Slipways for naval, commercial vessels.</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Chittagong</td>
<td>Bangladesh</td>
<td>Private repair yards available. Dry dock available for vessels up to 16,500 DWT. New collocated port to be completed in three phases by 2015; will increase capacity from current 1.1 million to 3 million TEU for container traffic, and 30.5 million to 100 million tons for bulk cargo.</td>
<td>2</td>
<td>Replenish/overhaul/joint drills</td>
</tr>
<tr>
<td>Sittwe</td>
<td>Burma</td>
<td>Available; Kyaukpyu deep-sea port on Maday Island by Thanzit river mouth; initiated in 2009, project will produce ninety-one berths, accommodate 300,000-ton oil tankers.</td>
<td>1</td>
<td>Friendly visits</td>
</tr>
<tr>
<td>Victoria</td>
<td>Seychelles</td>
<td>Limited repairs. Divers, underwater welding equipment available. Dry dock shipways available for vessels &lt;300 gross tonnage.</td>
<td>1+</td>
<td>Friendly visits</td>
</tr>
<tr>
<td>Singapore</td>
<td>Singapore</td>
<td>Excellent; one terminal, nine subports; military ports.</td>
<td>1</td>
<td>Replenish/overhaul/friendly visits</td>
</tr>
<tr>
<td>Bagamoyo</td>
<td>Tanzania</td>
<td>Not yet built. Announced in March/April 2013 that China plans to fund Bagamoyo port with capacity of 20 million TEU/year to be completed by 2017. China to commit 800 billion Tanzanian shillings ($500 million) in 2013 for starting port construction; remainder of Chinese financial aid package will follow in 2014–15; $10 billion total Chinese investment; will include the building of new 34 km road joining Bagamoyo to Mlandizi, 65 km railway connecting Bagamoyo to Tanzania-Zambia Railway and Central Railway.</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Notes
a. Plus signs indicate the possibility that not all port calls have been included. For more information on possible PLAN overseas access points, see Andrew Erickson, “China’s Modernization of Its Naval and Air Power Capabilities,” in Strategic Asia 2012–13: China’s Military Challenge, ed. Ashley J. Tellis and Travis Tanner (Seattle, Wash.: National Bureau of Asian Research, 2012), pp. 89–91; “Djibouti Welcomes China to Build a Base”; Deodatus Balle, “Tanzania and China Sign Port Development Package,” Sabahi, 27 March 2013, sabahionline.com/.
Trends and Best Practices in Operational Thinking

In the absence of overseas basing agreements and radically new platforms, at least for the short term, the PLAN has focused on executing missions with limited resources essentially unchanged since late 2008. At the two-year anniversary, in December 2010, of the PLAN’s Gulf of Aden mission, top-level naval officials met to discuss breakthroughs made, lessons learned, and challenges remaining.\textsuperscript{120} Starting with the departure of the eleventh task force in February 2012, China’s navy has increased its focus on training special operations troops. Dozens of such soldiers have joined each task force and have actively conducted a variety of training drills, including live-fire exercises, climbing, and “helicopter gliding.” A growing emphasis is also being placed on dispelling pirate attacks at night and in the rain (a logical precaution, given seasonal Indian Ocean monsoons), including how to coordinate between helicopters and shipboard officers to ensure proper landings.\textsuperscript{121}

Specifically, “equipment support” (装备保障), “maritime intelligence” (海上情报), and “telecommunications support” (通信保障) have been identified as major challenges for China’s blue-water operations.\textsuperscript{122} This is a problem not just of technology but also of personnel. According to one article in \textit{Modern Navy}, “With regard to systems integration, in order to facilitate utilization and decrease manning, various types of information integration must be on display. Currently, the degree of integration among various types of information is insufficient, equipment is dispersed, [and] the number of operating personnel is high.”\textsuperscript{123}

China has learned that it can study the equipment, tactics, and operations of advanced navies in the Gulf of Aden. Task forces reportedly enjoy access to information on foreign intelligence, telecommunications, and radar signals;\textsuperscript{124} they are even able to turn foreign surveillance into countersurveillance opportunities. You Ji asserts that the Chinese fleet has been followed by “unidentified spy planes, surface ships, and submarines” throughout the journey from Chinese waters to the Gulf of Aden. These vessels try to pick up the PLAN’s communication signals, the pattern of coordination between ships in the formation, and their contact-management behavior. In fact, to Chinese naval officers the escort mission itself can be viewed as quasi electronic warfare, ASW warfare, and air-defense warfare.\textsuperscript{125}

For example, the PLAN has observed trends concerning U.S. unmanned aircraft and satellites and has begun to develop similar capabilities to address maritime intelligence shortcomings.\textsuperscript{126} \textit{A Liberation Army Daily} article from June 2012 hinted that the eleventh task force had benefited substantially from upgraded satellite systems.\textsuperscript{127} Xu Guangjin, communication officer of the task force, told reporters that “the convenient satellite communication network has played a crucial role in expeditious handling of emergencies and successful accomplishment of escort missions. This drill has once again verified
that the communication network system of the task force can meet the needs for the implementation and successful completion of escort missions.”

Just as the U.S. Navy has been building up its Broad Area Maritime Surveillance capabilities with unmanned aerial vehicles (UAVs), so too are the Chinese beginning to look at their own. There is also recent reporting from the Chinese press about use of UAVs for maritime domain awareness (MDA) patrols in the Yellow Sea and perhaps also in the East China Sea. According to a detailed Project 2049 Institute study,

The PLAN appears to have an unidentified UAV regiment. Its ship-based systems possibly include the V750 unmanned helicopter. The PLAN has conducted research on utilizing ship-based UAVs as communications relay platforms for over-the-horizon missile strikes on shore targets. This body of PLAN sponsored research has included using helicopters as a guidance platform for long range missile strikes. The PLAN’s South Sea Fleet began training on the use of fixed wing UAVs for battlefield communications support over long distances in 2011. . . . The PLAN has also utilized target drone UAVs in air defense drills used to train destroyer squadron commanders.

China may apply its burgeoning UAV, and even perhaps some form of unmanned underwater vehicle (UUV), capabilities to the Gulf of Aden when it is confident of its ability to use them successfully and to avoid embarrassing mistakes in front of foreign militaries and observers.

One of the most valuable aspects of the Gulf of Aden mission is the PLAN’s commitment to exposing officers and crewmen to the irreplaceable crucible of unpredictability. Less certain is the extent to which training and procedures enable effective responses to truly challenging events. Official media reports in 2012 reflected the growing level of difficulty in PLAN escort task force training. One video showed Special Forces sailors conducting a “real-battle” exercise composed of rappelling from a helicopter, live firing on a ship’s deck, and performing in-cabin search and rescue under pitch-dark conditions.

A February 2012 helicopter training exercise required special operations personnel to communicate via sign language owing to loud rotor noises as they fast-roped down from helicopters to ships’ decks. After landing, they boarded skiffs—apparently small PLAN rigid-hulled inflatable boats—and practiced firing at floating targets from the skiffs.

Yuan Xinyuan, commanding officer of the Special Forces of the tenth escort task force, declared, “Live-ammunition firing from a skiff is an essential skill of SOF soldiers for maritime patrol, investigation, and chasing away of suspects. It has to be strengthened and enhanced on an ongoing basis as an important part of training.”

Special Forces had previously practiced live sniper-rifle shooting in windy conditions in a December 2011 exercise, firing a total of sixty rounds at balloons twenty centimeters in diameter approximately 150 meters away. Aboard Haikou, Yuan Xinyuan commented, “In today’s fire drill, the sea current, sea wind, and the movement of the ship posed a
significant challenge. Three snipers hit 54 balloons with 60 rounds. This is consistent with our intended training result.” Of course, PLAN officials value other aspects of live-fire exercises, especially ones that require team coordination in simulated emergency situations. Such aspects arose in ninth task force exercises in August 2011 that involved live firing and boarding of vessels. Zhao Zhenfeng, an instructor in the ninth task force, stated, “This is not simply a matter of marksmanship skills. It is an issue of coordination between the tactical teams. Through this exercise, our targeted drills can be used in the event of an armed rescue situation.”

A video clip aired on CCTV-7 in April 2012 showcased helicopter training exercises by the eleventh task force, scenarios that included “battle alert switch for ship and helicopter, night-time coordination between ship and helicopter, and coordination among helicopter and [special operations forces] soldiers.” Ma Lei, commander of the eleventh task force helicopter group, was quoted as saying, “When scrambling for Level One emergency deployment, we hardly have any preparation time. Therefore, we have to know all the conditions in a given sea area like the back of our hand in advance and memorize all the contingency plans. This is the only guarantee that every takeoff we perform is swift and timely and that we can accomplish our mission safely and effectively in compliance with the intentions of the formation command post.”

This commander’s focus on memorizing contingency plans rather than learning how to react to the unexpected raises a distinct possibility that Chinese personnel have difficulty handling events for which they have not rehearsed detailed responses. In a possible example of this centralized approach, ninth escort task force commander Guan Jianguo insisted, “We have prepared ourselves for all manner of difficulties and challenges. We have revised and perfected our escort contingency plan, with focus on the strengthening of various types of targeted training. We have the confidence and competence to successfully accomplish the ninth escort mission.”

Rote training constitutes an important aspect of learning to perform new missions in new environments, but there is no substitute for thinking effectively on one’s feet. PLAN officials are certainly aware of this reality and are working to address it—at least to some extent. This awareness was reflected during an August 2011 training session of the ninth escort task force. To ensure that “program” (报幕) had no “script” (节目单), during the drill commanders sent no “advance orders” (预先号令) to crewmen. When the alarm sounded, crews reportedly were unaware whether they were participating in a drill or there was an actual pirate attack. As People’s Navy reporters Li De and Li Gencheng document,

measuring the actual power [of a naval force], often lies not in the theatrical troupe’s brilliant performance of the existing script, but [rather] how [they] sing and dance to a few impromptu sound tracks live without prior rehearsal. This exercise, the guiding
adjustment group adopted a “point-play” method tailored to the actual situation of increasingly concealed and intense pirate attacks. It emphasized anticipating “sudden outbreaks”, composed test questions based on “emergency response”, gave no advance notification for any “situational scenarios”, did not allow for prerehearsal. [This] really tested the task force’s rapid-reaction and emergency response ability.  

The tenth task force likewise conducted training geared at improving rapid-response capability. Relevant exercises emphasized training topics like “maritime verification”, “joint ship-aircraft deterrence”, and “flying under complex conditions”. As previously mentioned, in April 2012 the eleventh task force also conducted training designed to boost emergency response capabilities and carried out “rappelling, live-fire shooting on the deck of a maneuvering vessel, and conducting search-and-rescue mission in cabins in pitch darkness.” In mid-May 2012 the eleventh task force also carried out exercises along Gulf of Aden escort routes designed to improve rapid response.

Earlier, in November 2010, the sixth escort task force conducted a drill attempting to simulate real-time conditions. Simulated pirates in two speedboats attacked a ship and boarded despite antipiracy measures. The vessel’s crew shut off the engines and retreated to a safety compartment. Amphibious assault ship Kunlunshan dispatched helicopters, air-cushion craft, patrol boats, and Special Forces. Despite pirate resistance, the crew was rescued without casualties. This raises the question of how realistic this exercise actually was and the extent to which conditions are simulated in which things go wrong.

En route to the Gulf of Aden in July 2012, the twelfth escort task force conducted in the South China Sea a day-into-night helicopter training exercise designed to simulate the stormy and windy conditions typically experienced off the coast of Somalia. A CCTV video mentions the difficulties of such conditions, particularly at night: “It is much harder to take off and land while at sea. The pilot has to overcome turbulence and the erratic movement of the deck. At night, in the absence of lighting on the ground, it is easy to misjudge heading, velocity and altitude by relying only on visual indicators. It is even harder to establish the deck landing approach at night. A slight lapse may lead to unforeseen consequences.” This statement further underscores the difficulties of dealing with “unforeseen consequences” when training has not progressed beyond “memorization” to deal with “contingencies.” PLAN escort task forces en route to the Gulf of Aden, leaving the South China Sea, transit such maritime choke points as the Strait of Malacca. PLAN forces prepare for their passages through this potentially treacherous waterway. Tenth escort task force command team leader Liu Haitao remarked, “The shipping lanes in the Straits of Singapore and the Strait of Malacca are rather complex, heavily trafficked, and periodically plagued by pirate activities. In view of this situation,
we drafted very detailed plans to respond to various emergencies. We demanded that all vessels organize their navigation in strict accordance with the rules, keep a close watch, and strengthen duty shifts, to ensure that our formation can pass through this area safely and smoothly.”

Besides consistent emphasis on Special Forces and helicopter training, such PLAN warships as Wuhan have used the Gulf of Aden mission to foster their own unique training methods and cultures. Almost weekly, Wuhan holds asymmetrical training that pits a “Blue Force” of experienced officers against a less experienced “Red Force.” Referring to the Blue Force’s role in the training exercise, Wuhan’s Communications Department commander Wang Min stated in January 2012, “Actually we play the role of a ‘whetstone’; and yet we are no ordinary ‘whetstone,’ because we know the weaknesses of our opponents. That is why we are often able to hit them where it hurts.”

The exercise is preceded by simulations and followed by playbacks and stocktaking; there are also weekly methodology seminars focused on the newest combat and training methods. Chen Yueqi, Wuhan’s SSF destroyer flotilla commander, lauded the ship, commenting, “Our high-quality officers and men ensure the level of quality to which our missions are accomplished. It is fair to say that Wuhan is a benchmark for our flotilla’s development. It is a sharp knife that the commanding officers are confident about and not hesitant to use, to win battles.”

Additional aspects of PLAN special operations training in the Gulf of Aden are probably designed to prepare for rescuing captured ships and crews in the future, which suggests that Beijing is eager to join the ranks of the most capable military powers and to demonstrate a capacity to conduct high-intensity rescues. A successful mission of this sort could end the humiliation of having to pay pirate ransoms. Training events have therefore begun to incorporate moving-target shooting, long-range blocking and attacking, and other rescue-related exercises. Additionally, the PLAN has begun to categorize antipiracy mission requirements and train to them systematically. In March 2012 an ESF flotilla organized thirty ships of various types to “comprehensive assistance support exercise in adverse weather conditions using scenario-based tactical subjects.”

Clearly, China’s navy is ensuring that it spreads the “fruit” gained from the Gulf of Aden mission throughout its ranks through systematic training. This is a good first step toward achieving the foundational expertise necessary to deal with the many routine tasks that antipiracy operations require. However, there is less evidence to suggest that Chinese naval officers and sailors are being trained to think through on their own how to deal successfully with unexpected conditions.

Regardless, the PLAN clearly hopes to introduce lessons learned in the Gulf of Aden service-wide. Chinese analysts express the opinion that China’s navy must use its
antipiracy experience to diversify China’s operational abilities for military operations other than war. They state, “The Navy should, through summing up the experience of the escort actions in the Gulf of Aden, explore the ‘task-oriented’ force organizational form that is suited to independent operations, joint operations, and nonwar military actions at sea.”

Under the PLAN’s current antipiracy framework, adjusting the rules of engagement is likely the most pressing issue, but it is one that can be mitigated with adequate preparation over time, without fundamentally changing the mission’s nature. While a more permissive approach would open up a broader range of operational possibilities, the PLAN is unlikely to adopt a more aggressive “shoot first, ask questions later” approach, as some observers describe the Indian navy as having done in encounters with suspected pirate vessels. That said, some observers seem skeptical about Chinese restraint in actual practice, and there is always the possibility that PLAN antipiracy rules of engagement are looser in reality than in doctrine. The PLAN is tactically aware and may be quite aggressive in specific situations. There could indeed be a scenario in which PLAN forces would be willing to shoot whereas the “three forces” may be unable to do so because of more stringent restrictions.

If this is indeed true, there are several possible explanations. First, as for any military force, incentives and local objectives could outweigh written guidance and influence behavior in contingencies at tactical levels. Second, some of what actually occurs at the operational level may not be reported back to higher authorities or be noticed by the outside world, leaving room for improvisation. Third is the possibility that a departure from official doctrine could be an intentional move at the service level—the PLAN may be beginning to think more like other navies, which tend to exercise relative autonomy, and less like an adjunct of the PLA. Common characteristics of navies include independence in action and thought, willingness to act with initiative, and addressing circumstances creatively—all without openly violating instructions but perhaps not fully complying, either. A final possibility is that Beijing is purposefully instructing the PLAN to pursue more aggressive rules of engagement than official statements may imply, so as to exploit a divergence between strategic communications and operational necessity that is largely invisible to outsiders and thereby achieve the “bonus without the onus.”

China’s navy is also concerned with taking advantage of best practices from industry. For example, in July 2012 thirteen Chinese sailors on board Taiwan fishing boat Shiuh-fu 1 were released from pirate captivity along with the vessel’s Taiwanese captain and twelve Vietnamese shipmates, after being captured in late 2010. In response to such incidents, Chinese scholar Sheng Qingbo has examined the possibility of installing “security cabins” on commercial vessels that would allow seafarers to avoid capture while awaiting naval rescue forces. Sheng cites the Russian navy’s successful rescue of
twenty-three crewmen from the oil tanker Moscow University as an example: The “Moscow University” oil tanker sent out a danger warning after being attacked by pirates, all of the crew hid inside a safe place, which is crucial for a navy to have a successful boarding rescue mission. It is critical that ships install ‘security cabins.’”

It will be interesting to see whether Chinese government organizations attempt to encourage such measures to reduce the need for the PLAN to render assistance after the fact.

While successful cases of civilian defense against pirates, such as the case of China’s Zhenhua 4, have been lauded as heroic acts, MoT official Ju Chengzhi has suggested that self-defense alone remains insufficient. Naval support is necessary to ensure the safety of Chinese civilian vessels: “I think the ‘Zhenhua 4’ example is a case with larger significance, but is not typical [or universally applicable].” Further, “This ship constantly maintained close contact with support elements, using INMARSAT [international maritime satellites] to call them [with updates] once every five minutes. [This] made the support elements very clear of the ship’s movements, [and allowed for] effective command.”

Ju described how Zhenhua 4 worked with Malaysian naval forces to thwart the pirate attack:

I think “Zhenhua 4’s” escape hinged on more than the abilities of its crew alone. If warships and aircraft had not arrived in time, it is very difficult to say what the outcome would have been. At the outset of being attacked, the captain contacted Malaysia’s Antipiracy Center in Kuala Lumpur, [and] coordinated the dispatch of a [nearby] helicopter, [which] sank a pirate boat, and forced the pirates on board “Zhenhua 4” into one corner of the ship’s deck. But the helicopter was running low on fuel after 20 minutes and had to return for refueling, when our support elements received information, the helicopter has already returned. We again contacted the Antipiracy Center urgently. Fortunately, a Malaysian warship was in nearby waters, and [could] rush to the site of the incident within an hour and a half to two hours. Moreover, additional dispatched helicopter(s) could arrive within half an hour.

Ju asserts that Zhenhua 4’s brave crew relied on both its own courage and ability as well as the support of naval forces, but he also admits that even as navies polish their antipiracy operations, commercial sailors must remain vigilant:

Looking at the actual situation of the first escort convoy, it was effective. I dare say there were no major problems, it’s just that we need to make improvements in adapting and perfecting operations. Additionally, it must be emphasized [that] just because we have warships it does not mean that everything is all right. This maritime region is 550 nautical miles long, which is 1,020 kilometers. The maritime region is [thus] immense, [and] warships certainly cannot take care of all of it. It therefore remains necessary for ships to continue doing a good job of “self-protection, self-prevention” [自防自救].
Trends in Engagement with Other Navies

Since its first deployment in 2008, China’s navy has cooperated with other navies and international organizations in various capacities. Most recently, the aforementioned symposium hosted by the PLAN in late February 2012 assembled naval officials from twenty countries with experience in antipiracy in the Gulf of Aden. At this symposium it was revealed that the PLAN provided each participant nation with its detailed escort schedules and planned to serve as the reference point and coordinator for navies in the region performing escorts. Also at the symposium, PLAN officials lauded EU NAVFOR’s Mercury Information Technology information-sharing system but also expressed the need to make further improvements to the e-mail-and-data-transmission-based platform. Mercury is used by China’s navy to interface with commercial vessels applying for Chinese escorts. In late 2012 Wang Fanchun, on-duty translator for the twelfth escort task force warship Yiyang, lauded the PLAN’s use of Mercury. He told Liberation Army Daily, “MERCURY Net is a web-based information platform where international antipiracy forces can communicate with each other; exchange piracy related unclassified information, and is also an important bridge and window of military diplomacy. As active users of the MERCURY Net, the Chinese naval escort task forces have been outstanding in terms of the quantity and quality of its shared information and intelligence on it.” Moreover, Zhang Jianhua, “leader of the commanding group” of the twelfth escort task force, states, “Based on the MERCURY Net, the task force will expand the space for military exchanges and disclose more information on piracy, take-off and landing of helicopters and escort situations. On the private chat channel, the reporters also saw some records of communications and liaison between commanders of Chinese and foreign naval escort task forces on their invitation to meet with each other.”

PLAN captain Hu Weibiao asserts that Mercury cannot guarantee sufficiently timely internavv communication to thwart pirates that are expanding their range of attack. Here it is worth revisiting a statement of Du Jingchen, commander of the first Gulf of Aden task force, after visiting CTF-151 and EU NAVFOR flagships: “First the construction of [their] intelligence information security systems merits our study. Foreign militaries have a complete, strict and tight intelligence security system, including satellite methods. [They] can carry out surveillance for the entire Gulf of Aden maritime region. We are still awaiting strengthening of development and usage in this regard.”

Achievements in Practice

The aforementioned decline in piracy attacks worldwide reflects the collective success of the international community in combating piracy. The year 2011 was the first in which Somali pirate attacks declined since the international community first deployed naval vessels on a large scale to the Gulf of Aden and surrounding waters. In mid-2012 the
New York Times reported that pirate attacks worldwide had “plummeted,” due largely to the efforts of many nations’ navies.\textsuperscript{179} According to the International Maritime Bureau, there were no pirate attacks off Somalia for the entire month of July 2012.\textsuperscript{180} The PLAN’s efforts to fight piracy since 2008 contributed significantly to this reduction and should be recognized for their positive contribution.

Moreover, in the context of China’s antipiracy mission, by their own calculations PLAN task forces have achieved various improvements over the past four years. Most noteworthy is that the PLAN rose from its previous character as a regional navy to the stature of one with meaningful blue-water reach. The initial, 2008–2009 deployment—a task force of two destroyers, Wuhan and Haikou—established several new “firsts”:

- “The first time multiple naval service arms, including surface vessels, seaborne aircraft, and Special Forces, were organized to cross the ocean and execute operational tasks.”
- “The first long-term ocean task execution that did not include port calls throughout its entire course, breaking records in continuous time under way and sailing distance of a PLAN vessel formation and in flight sorties and flight time of seaborne helicopters.”
- “The first execution of escort tasks with the navies of multiple countries in the same sea area and holding of shipboard exchanges and information cooperation.”
- “The first sustained, high-intensity organization of logistical and equipment support in unfamiliar seas far from coastal bases, accumulating comprehensive ocean support experience.”
- “The first organization of base-oriented logistical support using commercial methods in a foreign port.”
- “The first time civilian vessels delivered replenishment materials for a distant sea formation.”
- “The first all-dimensional examination of multiple replenishment methods, including underway, alongside connected, helicopter, and small vessel replenishment.”
- “The first long-range video transmission of medical consultations and humanitarian assistance such as medical care for casualties from other vessels conducted on the ocean.”
- “Finally, this first escort formation set a record of 61 days for the longest sustained support of a formation at sea, without calling at port for replenishment, and also set a record for the longest number of days of sustained support of a combatant vessel at sea without calling at port.”\textsuperscript{181}
More broadly, the PLAN Gulf of Aden escort mission represented the following:

- “The first time that the Chinese Navy organized warships, shipborne aircraft and special operations to carry out trans-oceanic missions engaging combined service arms, defended national strategic interests effectively and displayed to the full the resolution and capabilities of the Chinese Navy to accomplish multiple military missions.”

- “The first time that the Chinese Navy carried tasks for long period in the ocean without docking for the whole voyage. The convoy formation set new records for continuous sailing time, farthest voyage, flight sorties of ship-borne aircrafts, and flight hours.”

- “The first time the Chinese Navy organized rear services and equipment support and accumulated experience of synthesis support in the ocean.”

Other “firsts” achieved by task forces to date include

- “Executing integrated military operations with warships, aircraft and Special Forces”
- “Executing prolonged Far Seas operations without relying on ports”
- “Discharging responsibilities in a maritime region with other navies”
- “Sustainably organizing high-intensity logistics and equipment supply”
- “Executing joint escorts with foreign navies.”

**Long-Distance Communications**

A particular area of operational achievements yielded by the Gulf of Aden mission is that of telecommunications. Utilizing cutting-edge communications platforms was an operational priority from the time of the genesis of China’s Gulf of Aden mission, as evidenced by demands from the PLAN commander, Adm. Wu Shengli, and PLAN political commissar Adm. Liu Xiaojiang for “comprehensive coverage, all-time linkage, and full-course support” in advance of China’s December 2008 deployment to the Gulf of Aden. The notion that the PLAN was eager to equip its escort warships with the latest satellite capabilities is underscored further by an interview with Ju Chengzhi of the MoT. During the interview published in January 2009, shortly after the inaugural deployment, Ju stated, “In terms of technology, we have adopted cutting-edge world-class communications methods—ship movement tracking systems. The Ministry of Transportation has maritime satellite ground stations; once escort information is confirmed, [we] can instantly track a ship, and can connect [with it] through video.” According to *People’s Navy*, the PLAN Political Department, PLAN Headquarters Communications Department, and State Information Center worked to provide a communications platform that integrates a land base information collection and transmission system, an information integration and distribution system, a shore-to-ship information wireless transmission
system, and an information terminal receiving system. They also sent technical personnel to Sanya [on Hainan Island] to conduct satellite receiving equipment debugging, system installation, and personnel training on the three combat ships that were about to set sail for escort operations. Moreover, they specially developed and improved a total of seven information processing software programs, which can send text, images, as well as video and audio documents quickly.  

The PLAN Control Center (海军指挥中心) and MoT’s China Maritime Search and Rescue Center (中国海上搜救中心) now track all relevant Chinese merchant ships, on board which the MoT has installed devices to support a “maritime satellite-based ship movement tracking system” (船舶动态跟踪系统). Supported by newly developed software, this architecture permits “all-dimensional tracking” (全方位跟踪) and video-based communications “at all times.” Beijing’s ability to locate PRC-flagged vessels clearly benefits from the China Ship Reporting system, which requires “all Chinese-registered ships of gross tonnage (GT) over three hundred tons engaged in international routes” to report a daily position to the PRC Shanghai Maritime Safety Administration.

In April 2009, General Political Department Director and CMC member Li Jinai praised China’s navy for “active exploration of the new ‘shore and ship integrated’ political work mode.” This entails a shift from transmission of political materials via “plain code telegraph” (明码电报), a process that once took as long as an entire day during a month-long deployment, to more sophisticated satellite communications. The deployment witnessed many other communications firsts, including “a communication satellite [being] used to provide 24-hour coverage for the oceangoing formation[,] . . . shipborne helicopters [being] used to provide surveillance on battlefield situations, and . . . the formation [being] connected to the Internet.” A web-based Internet protocol network was developed to allow crew members to call any landline or cell phone in mainland China.

The PLAN’s satellite use for the Gulf of Aden mission exemplifies the PLA’s gradual realization of the “scientific development” component of China’s military modernization. As of June 2012, escort deployments used a satellite communications network for “organizational command” (组织指挥), “intelligence acquisition” (情报获取), “information sharing systems” (信息共享系统), and “logistics and supply security” (后勤和装备保障). Moreover, task force commander Yang Junfei states that communication systems now allow escorting ships to exchange information with commercial escortees.

A major reason these improvements in satellite usage could be made is that deployed units rely on services provided by China Transport Telecommunications and Information Center (CTTIC), a company formed in 1989 by various Chinese ministries and commissions and now considered a “first-level organization unit” (一级事业单位) of
the MoT. CTTIC handles a variety of tasks, including “communications for the transportation industry” (交通运输行业通信), “navigation” (导航), “wireless and informatized management technology policies” (无线电和信息化管理的技术政策), and “technology standards” (技术标准). Among its other duties, CTTIC represents China in the International Telecommunication Union of the United Nations and in related IMO activities. CTTIC is responsible for Chinese international maritime satellites and establishing a search-and-rescue satellite system and thus works closely with PLAN escort task forces in the Gulf of Aden.

According to CTTIC’s website, information support to the Gulf of Aden mission is provided primarily for the Escort Activities Command Department (护航行动指挥部), the China Maritime Search and Rescue Center, and PLAN escort warships and commercial ships applying for escort. Principal services include “regulating the process of examining and approving escort applications” (主要内容包括规定护航申请审批流程), “ship-to-ship and ship-to-command center audio and visual communications” (船舶与船舶及船舶与指挥部之间的语音和视频通信), and “comprehensive platforms for ship monitoring and control command management” (船舶监控指挥管理综合平台). This comprehensive system, based on “international mobile satellite” technology, offers PLAN vessels global audiovisual and locating and surveillance, making deterrence of piracy far more effective and efficient. Since CTTIC also provides services for China’s commercial sector, PLAN use of satellites during Gulf of Aden deployments demonstrates effective application of dual-use space technology as part of China’s military development.

Additionally, Beidou, China’s budding positioning, navigation, and timing system, is playing an important role. Beidou offers PLAN surface vessels deployed to the Gulf of Aden real-time positioning and the ability to plot vessel locations accurately. Unlike its GPS counterpart, Beidou includes a “two-way short digital message communications function” that facilitates intership communication. Zhao Huashu, the destroyer Qingdao’s observation and communication chief, states, “The Beidou system is highly secure, sends messages rapidly[,] . . . can satisfy general message and communications needs [and] has greatly reduced our communications time.” Apparently the entire NSF has been upgraded with Beidou systems that complemented NSF surface vessels “Far Seas training needs.”192 By flattening intership information flows and arming PLAN vessels with accurate maritime surface location capabilities, Beidou is quickly raising PLAN antipiracy operational performance.

**Information Sharing to Support MDA**

Related to the PLAN’s enhanced long-range communication ability is its capacity to develop and share relevant tactical information to enhance MDA. As the PLAN’s reliance on satellite communications for Far Seas operations grew, such Chinese researchers as
Zhou Youliang and Xu Xiaoming of the PLA Naval Engineering University explored ways in which China's navy could improve its intelligence operations during antipiracy operations. They suggested that PLAN deployed units should

first, positively strive [to] provide civilian satellites and military reconnaissance, satellite information support, [and] use satellite surveillance advance warning methods for near-real-time long-distance advance warning intelligence support for military operations. Secondly, [the PLAN should] fully display ship-based helicopter reconnaissance advantages, adopt the linking of planned flight surveillance and emergency takeoff verification, take off quickly [as needed], and ensure and verify that commanders have control of conditions on the ocean surface while passing through high-risk maritime regions.93

**Overseas Crisis Response**

A final area of operational advancement is the ability of China’s navy to respond to incidents overseas and thereby for the first time to add a military component to China’s efforts to protect its interests. In March 2011, the seventh task force responded to the crisis in Libya, making its presence felt, however symbolically, during the evacuations of Chinese citizens from Libya. On 24 February, Type 054A Jiangkai II–class guided-missile frigate *Xuzhou* (hull 530) was ordered to depart the Gulf of Aden for the Mediterranean. On 1 March 2011, it escorted a chartered civilian vessel transporting Chinese evacuees in the PLAN’s first noncombatant evacuation operation overseas.94 Wei Jianhua, director of the political department of an ESF division deployed in the task force, stated, “If we hadn’t been on an escort mission in the Gulf of Aden, it would have taken at least three weeks for us to get there from a Chinese port.”95 According to official Chinese media reports, *Xuzhou* provided support and protection for commercial vessels evacuating Chinese citizens from Libya.96 Reportedly 4,200 Chinese citizens were evacuated to the island of Crete, Greece, on two Greek passenger ships chartered by China’s embassy in Athens. Two thousand more Chinese citizens were shipped to Tunisia and another 2,100 to Malta.97

The task force was later cited for having made five breakthroughs—only one of which was related to the assistance it provided to noncombatant evacuation operations in Libya:

- “The first long-distance rescue of commercial vessels under pirate attack” (首次千里驰援接护遭海盗袭击船舶) (of *Taiankou*, described in chapter 4)
- “The first armed rescue of a commercial ship boarded by pirates” (首次武力营救遭海盗登船袭击船舶)
- “The first successful thwarting of consecutive pirate attacks on commercial ships in a PLAN escort flotilla” (首次成功挫败海盗对我被护商船编队发动的连续袭击)
• “The first armed comprehensive training exercise rescuing vessels held hostage by pirates at night” (首次进行夜间武力营救被劫船舶综合演练)

• “The first evacuation escort of endangered Chinese citizens overseas” (首次为撤离我国驻海外受困人员船舶护航).

“It is important to note that the PLA naval ship was on a mission to solve a humanitarian crisis and not a ploy by China to wield political and military influence in the Middle East,” writes Cai Penghong, director of the Shanghai Academy of Social Sciences’ APEC Research Center. Nevertheless,

The Xuzhou mission is an example of the People’s Liberation Army Navy (PLAN) implementing its new mission to maintain Chinese overseas interests. . . . The action has upgraded and expanded the navy’s mission to a new level in line with President Hu’s emphasis for it to be prepared for contingencies in distant regions to protect China’s national interests. This is not simply a naval mission but more importantly is a rising power’s strategy to use military assets to respond to its citizens’ needs. It serves to demonstrate how an independent country is confident enough in its capacity to protect its nationals overseas, action which also builds a positive image.199

Clearly, the PLAN has achieved breakthroughs in preparation and operations. Yet despite these encouraging developments, the piracy problem remains unsolved: the area is vast, pirates are hard to identify in advance of their piracy attempts, and the sources on land of their activities remain largely unaddressed. As previously mentioned, both Chinese and other naval experts are prepared for potential increases in Somali pirate activity, which is poised to remain as a nagging security threat to SLOCs for the foreseeable future. It comes as no surprise that China’s navy, like other navies, has recognized the seriousness of piracy, by sending no fewer than thirteen escort task forces to the Gulf of Aden during the period covered in this study (2008–12). With no end to the mission in sight, China’s navy is poised to accrue further benefits, the scale of which depends on China’s choices regarding various operational aspects of these deployments.

Notes


2. Correspondence with U.S. Navy officer, January 2013.


4. Though the article does not mention it, in U.S. Navy ships, water produced by shipboard evaporators is also used in auxiliary boilers. It has to be extremely soft, and therefore its taste is generally regarded as unpleasant.


6. 庞文强 [Pang Wenqiang], 陈洪钧 [Chen Hongjun], and 邓显伟 [Deng Xianwei], “海水淡化通航舰船的生命之源” [Purifying Salt Water: The Lifeline of Far Seas Warships], 海洋经纬 [Maritime Latitude and Longitude], 人民海军 [People’s Navy], 27 February 2012, p. 4.
10. Pang Wenqiang, Chen Hongjun, and Deng Xianwei, “Purifying Salt Water,” p. 4. The original Chinese text from which this information is derived is “原来今每艘护航舰艇上都安装了两台海水淡化装置。每天平均每船生产近40吨的淡化水，满足了舰员洗澡、洗漱、洗衣服及舰上清洁扫除等日常生活用水”

11. Ibid. Original text: “据统计，舰员每天需饮用淡水5~10升，需洗涤水约20升，对于编制200多人的船队，每天需生活用淡水5~60吨。而机械设备用水量更大，如机闭式冷却系统的柴油发动机、高压空气压缩机、蓄电池补充水等。尤其对于大型蒸汽动力船，锅炉补充水量约为动力系统蒸汽耗量的1.5倍，因此总的淡水需求。单靠船舶自身携带的淡水是远远不够的。严重限制了船舶远洋活动，所以，大型船队都装备有高产量的海水淡化装置，以保障船员和设备用水，保证船舶的续航力。”

12. Ibid. Original text: “在接力护航中实施定点补给，不仅综合补给舰必须有高产量的海水淡化装置，而且也极有可能在巡逻区域内设置临时油料补给点，如在巡逻区域内设置临时油料补给点，在接力护航中实施定点补给方式，在伴随护航中实施横向油料补给方式，多样的保障方式对综合补给舰上油料保障人员的工作能力提出了更高要求。由于护航舰艇续航能力的限制，平均每3周左右必须进行一次油料补给，而综合补给舰的装载时间通常需要3天（包括燃料、淡水和给养），这使我们舰编队唯一综合补给舰必须频繁奔波于港口和护航舰艇之间。不仅综合补给舰的工作强度很大，而且也极大牵制了护航舰任务执行。”


22. Lin Hongmei, "Chinese Navy a 'Bright Sword' in Fighting Pirates.”


24. Senior Captain Shen is director of the Operations Department (second level) within the Command Department (first level) in PLAN Headquarters. The position is important, but it is only division grade. Li Taowei, "Our fleet has attached great importance to the escort mission. We have done much technical planning and organization to ensure the safe passage of the boats. Especially when the main engine of the Powder failed, the Yulin ship kept watch in surrounding areas while the repairs were taking place. After more than 120 hours, the fleet successfully escorted the fishing boat away from the dangerous sea area.”


26. Wang Wei, "Humble Opinion on the Fuel Security Issues of Gulf of Aden Escort Operations," pp. 139–40. Original text: "Our fleet has attached great importance to the escort mission. We have done much technical planning and organization to ensure the safe passage of the boats. Especially when the main engine of the Powder failed, the Yulin ship kept watch in surrounding areas while the repairs were taking place. After more than 120 hours, the fleet successfully escorted the fishing boat away from the dangerous sea area.”

27. Liang Qingsong, "escort support, how have we innovated? a robust review of two years of carrying out escort responsibilities by the People’s Navy (Part 4)" [Escort Support, How Have We Innovated? A Robust Review of Two Years of Carrying Out Escort Responsibilities by the People’s Navy (Part 4)], p. 2. After the successful treatment, Li Min, chief physician of the ninth escort task force medical team, stated, "He had a badly infected cut in the upper middle part of his right lower leg. We cleaned the wound, stopped the bleeding, and checked the blood vessels. We found that one of the veins was evidently bleeding; "Ninth Escort Formation of PLA Navy Successfully Treats a British Sailor," 16 August 2011, p. 2. After the successful treatment, Li Min, chief physician of the ninth escort task force medical team, stated, "He had a badly infected cut in the upper middle part of his right lower leg. We cleaned the wound, stopped the bleeding, and checked the blood vessels. We found that one of the veins was evidently bleeding; "Ninth Escort Formation of PLA Navy Successfully Treats a British Sailor," 16 August 2011, p. 2.


30. Ibid.

31. Ibid. Escort task force commander Pan Yifeng explained the significance of properly protecting Powder: "Our fleet has attached great importance to the escort mission. We have done much technical planning and organization to ensure the safe passage of the boats. Especially when the main engine of the Powder failed, the Yulin ship kept watch in surrounding areas while the repairs were taking place. After more than 120 hours, the fleet successfully escorted the fishing boat away from the dangerous sea area.”

32. Liu Nan and Li Gencheng, "I will always remember the Chinese Navy: Highlighting an Injured Foreign Crew Member’s Being Assisted by the Chinese Navy: Highlighting an Injured Foreign Crew Member’s Being Assisted by the Chinese Navy," [Military Report], CCTV-7 (Mandarin), 13 September 2011.

33. Yang Jingjie, "Captains Courageous.”

34. Wang Wei of Nanjing University summarized, in a February 2012 publication, the deficiencies and areas for improvement with respect to PLAN task force logistics: "Under the situation of escort operations gradually becoming more ‘regularized’ [常态化], Far Seas escort logistic security mechanisms need to be improved. [We need to] progressively solve the difficulties of ‘maintaining variety in food consumed’ [伙食调剂], ‘supply and provision equipment’ [补给设备] is awaiting improvement, elements of overseas supply uncertainty are numerous. Mechanisms for supply by passing commercial vessels are incomplete and have other problems. [Task forces] need to rely on Chinese overseas companies to improve cooperation and do a good job of overseas port supply work, [as well as] transition from ‘temporary reliance to long-term reliance’ [临时依托向长期依托], [and] transition from ‘short-term mechanisms toward long-term and efficient mechanisms’ [短期机制向长效机制]. Meanwhile, [the PLAN] needs to do good propaganda work, explore effective forms of local maritime capabilities to support the army and front under new conditions, [and] strengthen the logistical security ability of far seas operations realistically" Wang Wei, "Military Report," CCTV-7 (Mandarin), 13 September 2011.

35. Wang Wei of Nanjing University summarized, in a February 2012 publication, the deficiencies and areas for improvement with respect to PLAN task force logistics: "Under the situation of escort operations gradually becoming more ‘regularized’ [常态化], Far Seas escort logistic security mechanisms need to be improved. [We need to] progressively solve the difficulties of ‘maintaining variety in food consumed’ [伙食调剂], ‘supply and provision equipment’ [补给设备] is awaiting improvement, elements of overseas supply uncertainty are numerous. Mechanisms for supply by passing commercial vessels are incomplete and have other problems. [Task forces] need to rely on Chinese overseas companies to improve cooperation and do a good job of overseas port supply work, [as well as] transition from ‘temporary reliance to long-term reliance’ [临时依托向长期依托], [and] transition from ‘short-term mechanisms toward long-term and efficient mechanisms’ [短期机制向长效机制]. Meanwhile, [the PLAN] needs to do good propaganda work, explore effective forms of local maritime capabilities to support the army and front under new conditions, [and] strengthen the logistical security ability of far seas operations realistically" Wang Wei, "Military Report," CCTV-7 (Mandarin), 13 September 2011.
While China has routinely sent PLA units for UN peacekeeping and medical assistance throughout the world, the benefits of such experiences are not comparable to the experience gained by PLAN antipiracy deployments. Also, China’s contribution to peacekeeping operations has been under the umbrella of the UN rather than a unilateral PLA mandate.


Hu Baoliang, "Recounting the Helicopter Unit Commander of the Eighth Escort Task Force Guo Xichun," pp. 30–33.

Hu Baoliang, "Interview with the PLA’s First Ship-Based Aircraft Unit Commander Qi Xianglong," pp. 22–24.

"Chinese Navy Develops New Models of Rapid and Efficient Escort Protection," *Military Report*, CCTV-7 (Mandarin), 1130 GMT, 26 December 2010. This view was echoed by Zhao Baoran, deputy commander of a PLAN destroyer flotilla, who referred to a 2010 escort adjustment made possible by helicopter support: "Our original plan was to provide protection by air-landing four special operations soldiers onto the MV. That plan had to be adjusted. In its place, we provided accompanying cover by having the helicopter, carrying two special operations soldiers, hover over the MV. To this end, we gave the helicopter an appropriate amount of fuel oil and managed to extend its airborne endurance by 40 minutes, thus seizing the initiative for the use of helicopter in the subsequent action." “FFG Chaohu Holds Multiple Records in PLA Navy Pelagic [Open Sea] Escort Operations,” *Military Report*, CCTV-7 (Mandarin), 1130 GMT, 15 December 2010.


Huang Li, *Sword Pointed at the Gulf of Aden*, pp. 214–16.

*A Modern Navy* article discussed some of the potential uses of amphibious assault warships, such as Type 071 LPDs: “Because amphibious assault ships carry relatively more helicopters and fixed-wing aircraft as well as other equipment for land deployments, have aerial assault ability, and can execute responsibilities such as sea-to-land [operations], provide fire support and undertake assaults [against targets on] land; most local conflicts allow for employment of comparative expertise [lit., have “room for using arms” (用武之地)] and even become important ‘accomplices’ [帮凶] for some countries to intervene in others’ internal affairs. Moreover, within nontraditional security operations such as antipiracy and antiterrorism, [amphibious assault ships] are similarly able to display their prowess fully. While conducting escort operations in the Gulf of Aden, the U.S. Navy’s amphibious assault ship *Boxer* has shouldered the responsibility of being the flagship of multilateral joint escort forces. It employs the wide-range surveillance capabilities of on-ship helicopters, allowing it to respond rapidly to ‘pirate’ [海盗] operations.”


67. Ibid.

68. For example, see an article by Navy Military Studies Research Institute researcher 徐起[Xu Qi], “航母入列开启蓝色征程” [Enlisting of an Aircraft Carrier Marks the Start of a Blue Journey]，瞭望新闻周刊 [Outlook Weekly]，9 September 2012，pp. 40–41，www.lwgcw.com/NewsShow.aspx?newsId=29025.

69. 闫嘉琪[Yan Jiaqi]，”中国首艘航空母舰‘辽宁’号正式交接入列” [China’s Aircraft Carrier started a Blue Journey]，瞭望新闻周刊 [Outlook Weekly]，25 September 2012，mil.eastday.com/m/20120925/u1a6885784.html.

70. 李晨[Li Chen]，”航母入列海军走向深蓝” [Navy Moves towards Blue Water as Carrier Enters Ranks]，北京青年报 [Beijing Youth Daily]，26 September 2012，news.hexun.com/2012-09-26/146258399.html.


78. See, for example, Ye Qi, “遥望小平顶: 浅谈中国大型两栖作战舰艇的未来” [Gazing into Small Flat Platforms: Discussing the Future of China’s Large Amphibious Warships], 现代海军 [Modern Navy], no. 11 (November 2011), pp. 42–44.

79. "简氏称081直升机登陆舰项目获确认 裁机12架” [Jane’s Says Type 081 Landing Ship Program Obtains Confirmation, 12 to Be Built], 环球网军事 [Global Net: Military], 28 March 2012, mil.huanqiu.com/Observation/2012-03/2563535.html; O’Rourke, China Naval Modernization, pp. 36–38.

80. Jane’s Says Type 081 Landing Ship Program Obtains Confirmation, 12 to Be Built.

81. Ibid.


83. O’Rourke, China Naval Modernization, pp. 38–39.


86. Ibid.


92. Song Liwei, “Fighting Pirates Is Not the Only Reason the United States and India Are Establishing a Presence in the Seychelles,” China Youth Daily article stated: “China upholds a defensive military strategy and emphasizes that it will not build military bases or maintain military forces in other countries. The other day, a spokesperson for China’s Ministry of Foreign Affairs said that China does not take the approach of establishing military bases overseas. This has avoided the suspicions and hype of certain media and neighboring countries, and it has allowed China to win the upper hand on the stage of international diplomacy. . . . [T]he Chinese government’s refusal to establish a military base in the Seychelles is based on protecting the ecology, environment, and people’s lives there. Seychelles has a wonderful natural environment but limited resources. Potable water and food, in particular, are far from plentiful. Setting up a long-term military base there would inevitably involve, as part of its price, the destruction of the local environment and a decline in the standard of living for the people there.”


96. “Seychelles and China Sign Accord on Transfer of Suspected Pirates,” Seychelles Nation, 19 May 2012, article.wn.com/view/2012/05/19/Seychelles_and_China_sign_accord_on_transfer_of_suspected_pi/.


99. Song Liwei, “Fighting Pirates Is Not the Only Reason the United States and India Are Establishing a Presence in the Seychelles.”

101. Yang Jingjie, "Captains Courageous."
102. Ibid.
103. Ibid.
104. Ibid.
107. Ibid.
112. Ng Tze-Wei, “Beijing Will Consider Seychelles Basing Offer.”
117. Ibid.
118. Ibid.
126. “Shall the PLAN Take Lessons from Today’s Escort Missions or Yesterday’s Vietnam War?”
129. China is constructing eleven unmanned-aerial-vehicle bases in eleven coastal provinces and regions to monitor nearby waters. “China to Build 11 Unmanned Aerial Vehicles Bases,”
Regarding aerial refueling between UAVs, technology-wise, as long as the autonomous control technology could be realized, there should not be a problem, and research has already been carried out both at home and abroad.”

"As night falls, the helicopter takes off from Haikou, to commence its nighttime takeoff and deck landing training. During a night flight, the pilot cannot look for an effective reference object with the naked eye. He has to perform the landing with the help of on-board instruments and the ship’s signal lights. In the mid-section of the flight, the helicopter hovers above an underway warship. The SOF soldiers have to use sign language to communicate with one another because of the loud rotor noise. They complete the fast-roping process and land on the deck in a clean maneuver. They then board a skiff to start firing at floating targets at sea. The rough sea tosses the skiff about. The soldiers have to seize the right moment to pull the trigger."

"As night falls, the helicopter takes off from Haikou to commence its nighttime takeoff and deck landing training. During a night flight, the pilot cannot look for an effective reference object with the naked eye. He has to perform the landing with the help of on-board instruments and the ship’s signal lights. In the mid-section of the flight, the helicopter hovers above an underway warship. The SOF soldiers have to use sign language to communicate with one another because of the loud rotor noise. They complete the fast-roping process and land on the deck in a clean maneuver. They then board a skiff to start firing at floating targets at sea. The rough sea tosses the skiff about. The soldiers have to seize the right moment to pull the trigger."

As night falls, the helicopter takes off from Haikou to commence its nighttime takeoff and deck landing training. During a night flight, the pilot cannot look for an effective reference object with the naked eye. He has to perform the landing with the help of on-board instruments and the ship’s signal lights. In the mid-section of the flight, the helicopter hovers above an underway warship. The SOF soldiers have to use sign language to communicate with one another because of the loud rotor noise. They complete the fast-roping process and land on the deck in a clean maneuver. They then board a skiff to start firing at floating targets at sea. The rough sea tosses the skiff about. The soldiers have to seize the right moment to pull the trigger.


138. Ibid.


140. Ibid.


142. For details of the seventh task force’s intensive exercise involving the warship Wuhan, a helicopter, and close firepower support, see 李德 [Li De] and 李根成 [Li Gencheng], “假戏该如何真作?” [How to Make “Fake Axe” a Reality?] Recording Perceptions and Thoughts in the Navy Ninth Escort Fleet’s Comprehensive Antipiracy Drill, 人民海军 [People’s Navy], 9 August 2011, p. 3.

143. Ibid. Original text: “衡量其实力高低,往往不在 于看戏班子事先确定曲目演得如何精彩,而是要看在现场临时抽点曲目演唱中表现如何,此次演练,导调组针对海盗活动日趋隐蔽和猖獗的实际情况,采取行家‘点戏’的方式,着眼‘突发’做文章、立足‘应急’设考题,对所有‘情况想定’都做到不事先通报、不提前彩排,其正检验了编队的快速反应和应急处置能力。”


145. Ibid. Original text: “护航编队还着重进行了海上查证、观察预警、舰机联合慑阻、复杂条件飞行等训练科目,提升了编队快速反应能力和反劫持营救能力。”

146. “PLA Navy Holds Drill in Gulf of Aden to Boost Emergency-Response Abilities,”

147. Chen Dianhong and Mi Jinguo, “Drilling Troops in High Winds and Waves Crashing in Rapid Succession, Attacking in Black Night and Thick Fog: Eleventh Escort Task Force Seizes the Opportunity to Expand Big Ocean Military Activities,” p. 1. The exercises “made escort officials and sailors better understand various characteristics of the use of equipment operations [and] law. They raised the escort task force’s and crew’s operational ability to fulfill Far Seas escort responsibilities for long periods, as well as the ability of commanders to apply combat tactics, [and] coordination ability among various battle stations. They tested the comprehensive functional performance of equipment. Various abilities were improved, such as: escort command coordination, situational proceedings, maritime zone control, rapid reaction, [and] Special Forces [employment].” Original text: “使护航官兵进一步摸清了各种装备使用特点、规律，提高了护航编队长时间远海执行护航任务时舰员的操作能力、指挥员战术应用能力、各战位间的协同能力，检验了装备的整体性能、编队指挥协同、情况处置、海区控制、快速反应、特种作战等多种能力得到全面提升。”

148. 廖志勇 [Liao Zhiyong] and 张鑫鑫 [Zhang Xinxin], “「海空」联合作战进入‘实战’”，[Two Hours of Air-Sea ‘Rescue’: Witnessing Drills Involving the Navy’s Sixth Escort Fleet Rescuing a Hijacked Ship], 人民海军 [People’s Navy], 17 November 2010, p. 2.

149. Ibid.

150. Ibid.

151. Ibid.


153. “PLA Navy’s Tenth Escort Formation Sails into Strait of Malacca,”军事报道 [Military Report], CCTV-7 (Mandarin), 1130 GMT, 7 November 2011.

154. Ibid.


156. Ibid.

157. Ibid.

158. Ibid.

159. Ibid.


161. 姚维军 [Yao Weijun] and 虞起正 [Yu Qizheng], “东海舰队某支队扎实做好成果转化工作：经
Han Qinggui, principal writer; Chen Yushu and Chen Peng, participating writers; Hu Guangzheng, coordinator; "IV. Further Optimize the Structural Composition of the Armed Forces" section of chapter 9, "Invigorating the Armed Forces Organizationally (Part 2)—Reforming and Improving the Armed Forces' Structural Establishment," in China’s Peaceful Development: China’s Strategy for Invigorating the Armed Forces amid Peaceful Development (Beijing: Military Science Press, 2011), pp. 266–70.

163. U.S. Navy officer who had served in the region and observed live footage of Indian navy attacks on suspected pirate vessels, interview with one of the authors, Newport, Rhode Island, 1 December 2012.

164. Correspondence with SHADE participants, March 2013.

165. The authors thank CMSI director Peter Dutton for the insights throughout the rest of this paragraph.


167. Zhang Yunfa of Guangdong Maritime Affairs Department writes, "On 17 December 2008, Zhenhua-4 fishing vessel abided by the ship safety plan, facing a pirate attack, locked all passages leading to the living area, organized crew members using oil bottles and other simple tools to successfully block pirate hijackings, issued [an] emergency report and waited for rescue. This successful case... provided rare material for researching how captains and crew members use effective methods to defend against pirates and armed hijackings."

168. Xu Jingjing, "Why We Want to Escort." Original text: "I believe ‘振华4号’的脱身，不仅依靠船员的力量，如果当时没有军舰、飞机及时到达，很难说结果如何。遇袭最初，船长与马来西亚吉隆坡的反海盗中心取得了联系，通过海事卫星5分钟通话一次，使后方对船上的动态都很清楚，能够有效指挥。"

169. Ibid. Original text: "我认为‘振华4号’的脱身，不仅依靠船员的力量，如果当时没有军舰、飞机及时到达，很难说结果如何。遇袭最初，船长与马来西亚吉隆坡的反海盗中心取得了联系，通过海事卫星5分钟通话一次，使后方对船上的动态都很清楚，能够有效指挥。"
173. Yang Jingjie, "Captains Courageous."


171. Ibid.

170. Ibid.

169. Cai Nianchi, “Far Oceans Sudden Attacks, What Have We Experienced and Practiced? (Part 2),” pp. 12–15. Original text: “First is a strong intelligence and information system. By using satellites, we can monitor the situation on the sea.”


165. Gao Xiaoxing et al., PLA Navy, p. 156. The text has been modified slightly to correct obvious grammatical errors and fit the text format, without altering the substantive meaning.

164. Li Jie and Liang Chunhui, "Great Results of Chinese Navy's Warship Task Forces Catches People's Attention," pp. 8–13. Original text: “We have experienced and practised.”

163. "Why We Want to Escort."

162. Xu Jingjing, "Why We Want to Escort."


160. Zhang Qingbao, "We Should Protect Our Overseas Economic Interests," p. 4; Xu Jingjing, "Why We Want to Escort."


157. Gao Xiaoxing et al., PLA Navy, p. 156. The text has been modified slightly to correct obvious grammatical errors and fit the text format, without altering the substantive meaning.

156. Li Jie and Liang Chunhui, "Great Results of Chinese Navy's Warship Task Forces Catches People's Attention," pp. 8–13. Original text: “We have experienced and practised.”

155. Xu Jingjing, "Why We Want to Escort."


153. Zhang Qingbao, "We Should Protect Our Overseas Economic Interests," p. 4; Xu Jingjing, "Why We Want to Escort."


150. Gao Xiaoxing et al., PLA Navy, p. 156. The text has been modified slightly to correct obvious grammatical errors and fit the text format, without altering the substantive meaning.

149. Li Jie and Liang Chunhui, "Great Results of Chinese Navy's Warship Task Forces Catches People's Attention," pp. 8–13. Original text: “We have experienced and practised.”

148. Xu Jingjing, "Why We Want to Escort."


146. Zhang Qingbao, "We Should Protect Our Overseas Economic Interests," p. 4; Xu Jingjing, "Why We Want to Escort."


144. Sun Yanxin and Zhu Hongliang, "Chinese Naval First Escort Task Force Achieves Multiple 'Firsts' in History of People's Navy.

143. Gao Xiaoxing et al., PLA Navy, p. 156. The text has been modified slightly to correct obvious grammatical errors and fit the text format, without altering the substantive meaning.

142. Li Jie and Liang Chunhui, "Great Results of Chinese Navy's Warship Task Forces Catches People's Attention," pp. 8–13. Original text: “We have experienced and practised.”

141. Xu Jingjing, "Why We Want to Escort."


139. Zhang Qingbao, "We Should Protect Our Overseas Economic Interests," p. 4; Xu Jingjing, "Why We Want to Escort."


136. Gao Xiaoxing et al., PLA Navy, p. 156. The text has been modified slightly to correct obvious grammatical errors and fit the text format, without altering the substantive meaning.


134. Xu Jingjing, "Why We Want to Escort."


132. Zhang Qingbao, "We Should Protect Our Overseas Economic Interests," p. 4; Xu Jingjing, "Why We Want to Escort."


129. Gao Xiaoxing et al., PLA Navy, p. 156. The text has been modified slightly to correct obvious grammatical errors and fit the text format, without altering the substantive meaning.


127. Xu Jingjing, "Why We Want to Escort."


125. Zhang Qingbao, "We Should Protect Our Overseas Economic Interests," p. 4; Xu Jingjing, "Why We Want to Escort."


190. 陈典宏 [Chen Dianhong] and 米晋国 [Mi Jinguo], “中国海军护航编队亚丁湾通信演练检验护航能力” [Chinese Naval Task Force Tests Escort Ability], 中国海军 [People’s Navy], 17 May 2011, p. 3. 

191. Information in this and the following paragraph is based on content directly from CTTIC’s website, www.cttic.cn/zxsk/zxskg.aspx, as well as from relevant sections of the Ministry of Transportation’s website, lwlk.mot.gov.cn/html/ReleasePage/lwlk-dw3s.html.


193. 周尤良 [Zhou Youliang] and 许晓明 [Xu Xiaoiming], “亚丁湾护航行动中军事情报支援研究” [A Study of Intelligence Support to the Navy Operations Countering Piracy off the Somali Coast], 海军工程大学学报 [Journal of Naval University of Engineering], 8, no. 4 (December 2011), pp. 62–65. Original text: “首先，积极争取民用卫星和军用侦察卫星的信息支援，利用卫星侦察预警手段为远海军事行动提供近实时的远程预警情报支援。其次，要充分发挥舰载直升机空中侦察优势，采取计划飞行巡逻和应急起飞查证相结合的方式，在通过高危海区和发现可疑目标时主动、及时升空查证，保证指挥员对海上态势的掌握。”


197. Ibid.

198. 郭长博 [Guo Changbo], 李建文 [Li Jianwen], and 方立华 [Fang Lihua], “仗剑走大洋--海军‘徐州’舰执行多样化军事任务风采录” [Striding toward the Open Ocean Brandishing a Sword: The Resplendent Odyssey of Naval Warship ‘Xuzhou’ in Carrying Out Diverse Military Tasks], 综合新闻 [General News], 人民海军 [People’s Navy], 17 May 2011, p. 3.

What is the larger significance, the legacy, of China’s Far Seas antipiracy mission thus far? MoT official Ju Chengzhi encapsulates what China’s initial task force deployment has meant for the Chinese strategic mind-set:

This instance of China’s dispatching warships to escort Chinese commercial ships has brought us a new concept: as a government, in order to ensure that Chinese commercial ships are able to perform regular seaborne transportation overseas, facing some suddenly erupting situations, appropriately adhering to international common practices, [and] adopting more effective measures. This is a transformation in thinking．

Over four years later, what specifically has Beijing learned from the PLAN’s experiences in the Gulf of Aden thus far, and what lessons will it seek to apply in the future? Given the opportunities and challenges documented in this study, what are the prospects for Chinese engagement in future nontraditional security missions? What are the implications for global maritime governance, particularly with respect to Sino-American relations? This final chapter will address these important questions and suggest possible implications and future prospects.

**China’s Antipiracy Experience and Future Nontraditional Security Missions**

By and large, Beijing will surely take away more positives than negatives from its experience in the Gulf of Aden during the period from December 2008 to December 2012. In 2011 a former PLAN official told one of the authors of this book that he was “very satisfied with the performance” of China’s antipiracy operations: “Long-distance operations offer good lessons for us,” such as “how to coordinate well with foreign navies, conduct joint operations with other navies, and exchange views with foreign navies regarding approaches.”

For the foreseeable future, it is not difficult to envision a trend in which China’s national strategic interests continue to impel more substantive PLAN contributions to maritime stability operations in the Gulf of Aden and other places where nonstate actors are disruptive. Indeed, as Ju Chengzhi, MoT, asserts:
As a rapidly developing economic power, China should interact with other countries and engage in trade. Looking from a long-term perspective, the government must establish an effective long-term mechanism to safeguard China’s overseas economic and security interests. [The] Somali escorts should not just be an isolated, short-term event; rather [we] should regard this as a regular, ongoing practice. These situations conveniently marry China’s own security interests—such as enhancing its economic, political, and military influence in regions critical to China’s energy security—with its interest in contributing to the broader well-being and stability of the global commons. As demonstrated by Beijing’s tendency to exploit the pre- and post-operational movement to the Gulf of Aden to accomplish diplomatic exchanges, China is eager to derive maximum political benefits from its antipiracy mission.

Chinese leaders have certainly learned valuable lessons that will guide the ways in which Beijing formulates policy on other issues involving substate actors. While a combination of domestic and international pressures originally catalyzed China’s involvement in the Gulf of Aden antipiracy operations, it is worth noting that to date all of China’s substantial international, military, noncombat, operational deployments have occurred in areas deemed vital to its national security and for specific material reasons, as opposed to the more abstract, normative ends that the United States and other Western powers sometimes pursue. Similarly, future Chinese decisions about participation in international maritime security efforts will likely seek to balance, on one hand, the expectations of China’s domestic audience and the international community that China will make increasing contributions against, on the other hand, the direct strategic relevance of the issue or region in question to China’s concrete national interests. As American policy makers in the future seek ways to cooperate with China and benefit from its participation in larger initiatives, they will have to search for such potential areas of intersection.

**Chinese Thinking about Nontraditional Maritime Security Operations as a Function of Maritime Strategy**

Nontraditional maritime security operations will likely become, collectively, a larger component of China’s overall approach to maritime operations and strategy. Rear Adm. Yin Zhuo (Ret.) stated in early 2011 that “the Chinese people occupy two large areas of both land and sea, so we must develop a national maritime strategy as soon as possible.” China’s millennia-old strategic posture as a continental power with significant maritime potential was permanently altered as a result of the naval wars from 1839 (Opium War) through 1945 (the Second Sino-Japanese War / World War II), which ensured that China would refocus its strategic attention on the sea. It was given particular geographic focus by the Chinese Civil War, in which Nationalist forces led by Jiang Jieshi (Chiang Kai-shek) fled to the island of Taiwan. Subsequently, the PLA has gradually become more
maritime oriented, particularly since the Soviet Union’s collapse and the surfacing of Near Seas territorial and maritime disputes in the East and South China Seas.

These factors, plus Taiwan’s increasingly assertive push for independence during the 1990s and early 2000s and the growing intimacy of U.S.-Taiwan relations in the same period, compelled the PLA to redirect its focus to China’s maritime periphery. The PLAN’s antipiracy efforts largely complement the navy’s transition from a Near Seas counterintervention force to one increasingly capable of addressing nontraditional security threats and protecting China’s interests farther afield. In the process, China is increasingly becoming a continental and maritime power, as opposed to the solely continental power that it was in the past. Wu Chao and Li Daguang of *Modern Navy* assert that antipiracy operations are a manifestation of this shift: “Escort operations in the Gulf of Aden and [off the coast of] Somalia already are behavior of a maritime state. Maritime states require that their navy protect overseas interests and ‘maritime lifelines’ that affect the national economy and the people’s livelihood, and [whose mission] is not just limited to ‘preventing imperialists from invading [its] continental territory.”

Amid the push for a more maritime orientation, various Chinese scholars are calling for a greater emphasis to be placed on the legal framework of maritime security. Hainan University Law School professor Zou Ligang argues that poor domestic laws on maritime defense are accompanied by an inadequate research system and the absence of a comprehensive maritime security strategy. From a perspective that highlights China’s continuing sense of vulnerability from the sea, Zou contends that China’s peaceful development in the twenty-first century relies directly on Beijing’s ability to achieve maritime security. Chinese scholar Feng Xinhua has written that in the post–Cold War international system, such nontraditional security threats as piracy, maritime terrorism, and “accidental channel jams” (海峡航道的意外堵塞) have become the main threats to the security of strategic international SLOCs. An article by Xin Jingping in *People’s Daily* called on the central government to take three steps in protecting overseas Chinese citizens. First, it should send police attachés to countries where local forces are incapable of effectively protecting Chinese citizens living there. Second, China should deploy armed convoys in accordance with international law in regions plagued with piracy and drug smuggling. Finally, China should create a “risk-assessment” system to gauge the security of its periphery and overseas regions.

Regional counterintervention centered on Taiwan and other disputed Near Seas areas remains the cornerstone of China’s military modernization. But under both Jiang Zemin and Hu Jintao, the PLA has also been called on to sharpen its ability to win nontraditional wars under modern, high-technology circumstances. As China’s commercial interests and activities become ever more enmeshed in the global economy, China’s navy will increasingly be charged with protecting China’s interests beyond the nation’s
immediate nautical borders. Gulf of Aden antipiracy operations exemplify this trend, but they also highlight the sensitivity for Beijing of military operations beyond China’s periphery. While China has been cautious in institutionalizing a strategy of protecting its national interests in the Far Seas, PLAN antipiracy operations to date demonstrate that China’s national security strategy is evolving to allow China’s armed forces to be increasingly assertive abroad. On the basis of this principle, PLAN officers like Zhang Huachen, former ESF deputy commander, assert that their service should integrate systems, ideas, and practices from its Near Seas and Far Seas operations, especially as capabilities in the latter fall far short of what is required to protect China’s overseas interests.\footnote{11}

More broadly, the rationale for protecting vital SLOCs helps to propel a larger PLAN focus on critical international, commercial waterways. Deployments off the Horn of Africa help secure the Gulf of Aden, Bab el Mandeb, Strait of Hormuz, western Indian Ocean, and East African coastal regions. But China’s heavy SLOC-security dependence is certainly not limited to these crucial maritime zones. Goods and services flow into and out of China to and from every direction, transiting vital international waterways. Even after safely traversing the zones just mentioned, commercial vessels en route to China typically must transit the Strait of Malacca, the Strait of Singapore, and the South China Sea. China relies on stable SLOCs also for trade in goods and services with countries and regions in the Western Hemisphere, such as the United States, Canada, Mexico, Central America, and South America.\footnote{12} It is conceivable that China will broaden its perspective on maritime stability operations accordingly. As Zhao Yang writes,

\textit{Escorts have allowed China’s navy to liberalize its mentality; it did not just go out of the first Island Chain, but also rid itself of the inner, self-designed line of defense. And China’s open-mindedness and undertakings put an end to preexisting international suspicion. . . . As a permanent member of the UNSC, China’s dispatching [of] warships to participate in escorts near Somalia is more the embodiment of actively participating in global public governance. A nation’s authority is not just decided by the size of its power, but also by whether it is willing and able to take responsibility.}\footnote{13}

The PLAN’s escort mission has been described by Chinese media as that of a “strategic, comprehensive and international armed service” (战略性, 综合性, 国际性军种), one that has changed Chinese naval philosophy fundamentally. Now many sailors fully understand the concept of “being at home at sea and a guest on land” (海上为家, 陆上做客).\footnote{14} Furthermore, escorting has transformed China’s military thinking fundamentally from “maintain an army for a thousand days to use it for an hour” (养兵千日, 用兵一时) to “maintain an army for a thousand days to use it for a thousand days” (养兵千日, 用兵千日).\footnote{15}

Beyond all this, antipiracy escorts have furthered China’s strategic and doctrinal shift from a purely land-based power to an oceanic power, in part by fostering maritime
culture in and through the PLAN. When PLAN escort task forces cross “China’s traditional maritime boundary” on their way to the Gulf of Aden, the ships’ crews each reportedly conduct a solemn ceremony of taking and signing pledges. Indeed, many Chinese view escort operations as only the beginning of a larger process in which China’s military development will increasingly mirror its rapidly expanding national interests. If indeed this proves true in practice, decades from now China’s Gulf of Aden mission will be seen as the genesis of the nation’s ascent as a global maritime power. Indeed, at a symposium in Beijing in January 2012 to mark the three-year anniversary of China’s Gulf of Aden mission, Adm. Wu Shengli remarked that escort operations were a landmark event in the historical development of China’s navy.

**China’s View of the Proper Role of State Power in Achieving Global Governance**

PLAN antipiracy missions since late 2008 mirror larger developments in Chinese military foreign policy. Thus far, as has been seen, Beijing has proceeded with caution. Official PLAN statements constantly reiterate that while China will increase its presence and influence throughout the global commons to protect the world economy, it is firmly opposed to “gunboat diplomacy” and will project naval power only to secure shipping lanes, conduct search and rescue, and carry out disaster relief. During times of peace, the PLAN is viewed as the only means for China to protect “overseas interests” (海外利益) that are actually “national interests abroad” (境外的国家利益). The PLAN can extend into the international public domain and perform operations like armed deterrence, crisis management, humanitarian assistance, antipiracy activity, and preventive defense.

China’s overseas economic interests are increasingly perceived as vulnerable to external shocks triggered by a myriad of possible disturbances, including political turmoil in other states and their economic ramifications. For example, an article in *Modern Ships* asserts that fifty Chinese projects in Libya were halted during the Arab Spring uprisings in February 2011, resulting in an aggregate loss of nearly $20 billion. The same article also emphasizes the enormous economic and strategic value to China of the “Islamic Crescent,” characterized as it is by high levels of both intrastate and interstate political conflict. More broadly, it is revealing that as of December 2012 roughly 60 percent of PLAN-escorted merchant vessels had been “connected with China’s international trade.”

But if Beijing still adheres steadfastly in official statements and publications to its noninterference policy, China’s foreign policy is subtly but definitely shifting toward interactions beyond China’s periphery. There has been at least some evidence for this claim since the start of the twenty-first century, such as China’s initiative to lead the Six Party
Talks in 2003. Many observers now believe that more intervention overseas by China is inevitable as it seeks to protect its growing interests.\textsuperscript{24} China has an estimated 5.5 million citizens living abroad at any given time, a nearly 40 percent increase since 2005.\textsuperscript{25} Strongly connected to the PRC in most cases, they, like their compatriots back home, have rising expectations of governmental protection in times of crisis. As Yang Rui, the bureaucratically well-connected, fiercely nationalistic host of the CCTV program \textit{Dialogue}, stated in a February 2012 broadcast, “China has been cautious but determined to send its own fleets on different overseas missions as our global economic stakes and the safety of Chinese workers could become easy targets of international terrorism. The military buildup enjoys the backing of a majority of Chinese taxpayers to define and defend our growing national security interests the world over.”\textsuperscript{26}

By “buildup” Yang meant China’s rapidly increasing military spending. Following this political line, during the 2013 annual meetings of the NPC and the CPPCC—referred to in China colloquially as “the two meetings” (两会), because of their policy importance—China revealed its latest official defense budget: a projected 10.7 percent nominal increase to 720.2 billion yuan (U.S.$114.3 billion) for 2013;\textsuperscript{27} this sum is thrice that of India and second only to that of the United States. Thus, in future crises China’s populace will watch any misfortunes afflicting fellow citizens overseas more closely and with more expectation that the Chinese government will respond. Since the state is perceived to have the means, military and otherwise, to come to their aid, Beijing will not be able to sit idly by. Chinese leaders will be expected to employ the new tools they have purchased to help Chinese citizens affected by such critical, if ideologically inconvenient, events.

Beyond China’s own expanding interests, the key variable is Beijing’s perception of its appropriate contributions to the international community, particularly in the security realm. As Ju Chengzhi of China’s MoT explains, China is also aware of how other states, such as the United States, perceive its global contributions:

Americans have [the following critical] opinion: “For many years, China’s overseas economic interests have been protected by others; now China is a responsible great power, [so] it [should] protect its own ships.” This is indeed a tremendous change. I handled the entire escort issue, [and] deeply understand the whole process. The reform and opening up policy has given our government considerable inspiration; this is an excellent example of what a service-oriented government should do.\textsuperscript{28}

Robust debate continues in Chinese scholarly and policy circles concerning how Beijing should conceptualize and fulfill its global responsibilities, particularly in light of foreign encouragement and pressure. There is widespread concern that U.S. and other Western efforts to encourage Chinese contributions do not serve Beijing’s interests and may even be designed specifically to constrain China’s rise by tricking it into assuming overambitious burdens that in fact further parochial Western objectives.\textsuperscript{29} A more politic and
positive expression of such concerns may be found in the remarks of Le Yucheng, assistant minister of foreign affairs, who acknowledges that “some have criticized China as a 'selective stakeholder' [选择性的利益攸关方], one that speaks of itself as an 'elephant' or an 'ant' as needed, and hope that China can become a 'comprehensive stakeholder' [全面的利益攸关方].” What they must understand, Le counters, is that while Beijing contributes where it can, such as in the Gulf of Aden, “China's 'limitations' remain numerous, [and it] is both unwilling and unable to assume more international obligations and play the role of a major power.”

More encouragingly, however, a growing school of thought suggests that China should increasingly contribute public goods in proportion to its overall national power. “With increasing national strength, China's international standing has been in constant ascendance,” Zhang Ming maintains. “Its international influence has continuously expanded and is increasingly expressed in the area of 'global commons' security governance.” Citing the PLAN’s Gulf of Aden deployments as a key example, Zhang adds, “China must not only participate proactively in discussions on 'global commons' security governance; it should actively work to maintain the security of the 'global commons.'”

This approach is given official, if qualified, sanction in a State Council white paper insisting that Beijing is already “actively living up to its international responsibility” but allowing that “China will assume more international responsibility as its comprehensive strength increases.”

**Prospects for Leading Operations and for Continued Participation Otherwise**

As China’s interests, capabilities, and presence grow in key SLOCs, its naval forces will of necessity interact with other nations. This prospect raises important questions as to what shape such interaction should take. China’s previously noted reluctance to subordinate itself to a higher multilateral maritime authority initially constituted an obstacle for those desiring to see China’s navy assume a leadership role in the Gulf of Aden. To Beijing’s credit, however, the PLAN has made an effort to coordinate with various navies the better to integrate its antipiracy efforts with those of others, as was underscored by the aforementioned support that PLAN commanders contributed to the SHADE process. The signals are currently mixed as to whether Beijing wants to play a leadership role in the international antipiracy mission.

One issue is the evolution of operational approaches to countering Somali pirates. While China has been at the forefront of innovation and collaboration concerning escort-based operations, other navies in the region are slowly adopting more assertive approaches, such as land-based preventive measures. The PLAN is less forceful in its antipiracy tactics than most naval counterparts; unless China undertakes significant changes in its international-relations strategy, it is unlikely to participate directly in operations ashore.
Moreover, as others have contended, and from a purely practical standpoint, current PLAN command and control (C2) capabilities likely limit the extent to which China would be able to lead an international contingency representing tens of navies. As You Ji explains, “The warships participating in the PLAN’s Somalia operations are all capable of real-time vertical and horizontal communications—that is, with headquarters and among themselves—a key criterion for their selection for the mission.” But international leadership requires even more advanced C2 capacity, which means that China’s navy would have to invest heavily in new systems. As Zhang Ming writes,

> We must work hard and provide a solid foundation for China’s taking part in “global commons” security governance. In terms of capability, there is a certain threshold in technologies and capabilities for the exploitation and security governance of the “global commons.” . . . At the present stage, so as to heighten China’s situational awareness in all “global commons” areas, for force projection, and for conducting nonmilitary humanitarian aid and disaster relief missions, it is necessary to build as quickly as possible a complete space infrastructure and network infrastructure as well as a mighty air force and blue sea navy.

Given these enduring realities, China is likely to continue antipiracy operations, while limiting overt leadership, even avoiding it outright when it cannot be arranged on Beijing’s terms. China’s prospects for cooperation with other major parties have certainly brightened since the announcement of Sino-Indian coordination of Gulf of Aden merchant escorts and the conduct of PLAN on-ship exchanges with the U.S. Navy. When the twelfth task force left China for the Gulf of Aden on 5 July 2012, its commander (and East Sea Fleet deputy chief of staff), Zhou Xuming, stated that he planned to increase the intensity of exchanges and cooperation with international antipiracy forces. Nevertheless, it seems highly likely that China’s navy will continue to carry out task force operations independently.

### Success and Deficiencies: U.S. and PRC Perspectives

Beijing is likely satisfied with the PLAN’s quasi-leadership position among the navies committed to fighting piracy. It has technically assumed a leadership position within a multilateral antipiracy mechanism without having to subordinate itself to the U.S. Navy and other traditional forces in the Gulf of Aden. These two major sources of Chinese pride—antipiracy participation and its leadership position, however limited—are viewed as great contributions to the stability of the global trading system. A Xinhua article embodies this perspective: “Despite some ideological differences with the West, China has increasingly integrated in the international system by accepting its rules and practices rather than trying to build a new one, and is now interacting positively for the world’s peace and stability.” In particular, Chinese media perceive the Gulf of Aden mission to date as a bright spot for greater cooperation between China and the international community: “Since its first naval escort mission four years ago, the Navy
of the Chinese People’s Liberation Army (PLA) has undertaken extensive and in-depth cooperation and exchanges with the naval escort forces of various countries through varied means including intelligence information sharing, mutual visits, joint naval drills and international naval escort seminar.”

That said, statements from high-ranking military officials, such as Vice Adm. Ding Yiping, suggest that China’s leaders see ample room for improvement. Ding remarked on China National Radio in July 2012, “Clearly, China will have to assume the duties of a responsible power.” He added, referring specifically to blue-water naval operations, “For a navy that aspires to reach farther, it must solve a series of problems, such as its capabilities in surveillance and early warning, secured communications, guiding and positioning, logistics and so on, in waters far away from home.”

It is clear that China’s leadership remains focused on using the piracy problem to bolster credibility with the Chinese public. Xu Zuyuan, China’s vice minister of transport, announced in June 2012 that “China will provide better security for its seafarers through international communication, and speed up the preparation work to ratify the Maritime Labor Convention established in 2006.”

Examining the PLAN’s dichotomy of choices between independent escorts and international cooperation, Li Ruijing used the April 2012 Iranian rescue of the Chinese-flagged Xianghuamen as a case in point. Li underscored the need to understand clearly the relationship between “independent undertakings” and “international cooperation.” Even if in the future China’s navy realizes a global presence, selfishly focused escorts in the way of “only sweeping one’s doorstep of snow” will inevitably result in many corners “beyond the reach of one’s power.” This time the Xianghuamen was hijacked, we also achieved successful rescue by contacting Iranian warships. Because of this, strengthening international cooperation in the field of international security is in line with China’s interests. Not only can we use the world’s “security resources,” [and thereby] lower the national burden, we can also build trust and reduce strategic misunderstandings while cooperating with other navies. Of course, international cooperation also implies duty, and China’s naval escorts in the Gulf of Aden are one show of carrying out international duties.

According to Modern Navy, China’s eleventh task force engaged in significant information sharing with other navies and commercial vessels throughout its deployment: “Through methods such as [employing] the Internet and even intership high-frequency correspondence, [the PLAN has] proactively established hotline connections with each navy and commercial vessel, formed a mechanism for regularized multinational maritime escort power information sharing and official meetings among commanders.”

People’s Daily provides details on this mechanism: “The escort task forces of the Chinese PLA Navy have established an effective information network with over fifty warships from more than twenty countries and organizations through information resource
sharing in the Gulf of Aden and the waters off the Somali coast. They also specially set up e-mail [inboxes] on the Internet to initiate hotline connections with navies and merchant ships from various countries and send circulars through their online mailbox and radio stations about suspected ships’ activities they mastered. This mechanism, combined with a “commander meeting mechanism,” suggests that China’s navy shares nonsensitive information systematically through routine daily channels, as well as through high-level exchanges with other navies in the region, including those represented in CTF-151, NATO, and EU NAVFOR.

From Washington’s perspective, Beijing’s willingness to interact with other naval forces in the region and constructively discuss the issue of subnational piracy is certainly a welcome sign. In some of the most positive language attributed to a U.S. government official to date in this regard, David Sedney, a former deputy chief of mission at the U.S. embassy in Beijing, has been quoted as stating, “The Chinese naval escort task force experts a lot of influences in the waters off the Somali coast. The Chinese naval sailors are in command of amazing tactics and in close cooperation with the navies of other countries including the U.S.”

That some Chinese scholars, like Huang Yingying, stress that China must provide more public goods, such as antipiracy resources for protecting SLOCs, commensurate with China’s great-power aspirations is also a positive development. This is especially the case for those who have criticized China for free riding on U.S.-provided public goods, such as stable SLOCs. Washington would like to see the PLAN play a substantial leadership role in antipiracy operations, so long as it respects international law and does not abuse the mission for ulterior purposes.

Opportunities for Sino-American Maritime Relations?

While on official visit to the United States in May 2011, Gen. Chen Bingde declared, “The Chinese and U.S. militaries will keep high-level contacts, institutionalized dialogues, and professional exchanges in addition to greater cooperation in nontraditional security fields including [humanitarian assistance / disaster relief] and counterpiracy.” He added, “Right now we are working together with each other very well, and we will continue to do so and make it better in the future. As I agreed with Admiral Mullen, the two navies will also hold a joint exercise in Gulf of Aden in order to boost our cooperation.”

Subsequently, during a visit to Beijing in 2011, Adm. Michael Mullen, then Chairman of the Joint Chiefs of Staff, and his counterpart, General Chen, agreed on several military exchange accords, including joint antipiracy drills. Mullen’s visit laid a foundation for expanding joint antipiracy operations; the two sides reportedly signed multiple collaboration agreements, despite fundamental differences with regard to South China Sea
issues. Further, in May 2012, during Liang Guanglie’s visit to the United States, the sides agreed to hold antipiracy joint exercises before the end of 2012. In mid-September 2012 Leon Panetta, then Secretary of Defense, engaged Chinese counterparts during a three-day visit to China. His trip coincided with the peak of Chinese and Japanese tension over the highly contentious Senkaku/Diaoyu Islands dispute. As if the U.S.-Chinese military meetings were not already sufficiently overshadowed, photos of a new Chinese stealth aircraft prototype appeared online just before the visit. Yet despite these obstacles, it was reported during Panetta’s visit that the United States and China finally conducted their first-ever joint antipiracy operations.

This historic joint evolution took place on 17 September 2012 in the midwestern section of the Gulf of Aden. The visit, board, search, and seizure exercise consisted of a U.S. naval ship, the guided-missile destroyer Winston S. Churchill (DDG 81), acting as a vessel overtaken by pirates. The Chinese missile frigate Yiyang also participated, and a team of American and Chinese crewmen carried out a simulated rescue mission. There was also a joint boarding for inspection. The U.S. Navy’s Fifth Fleet announced, “Executing the boarding side-by-side as a combined U.S.-Chinese team, the team successfully searched the vessel and provided assistance to the role-playing mariners.” People’s Navy reported that eighteen American special operations personnel boarded Yiyang to take part in the exercise, which in addition to boosting bilateral cooperation contained elements of spirited competitiveness.

Secretary Panetta lauded the exercise, saying, “We noted that the United States and China just this week participated in a very successful counterpiracy exercise in the Gulf of Aden. . . . These exercises enhance the abilities of our navies to confront the common threat of piracy.” Similarly, Xinhua described the exercise as “conducive to increasing mutual understanding and trust between the two navies.” The fact that this exercise occurred during heightened Chinese nationalism reflects the unusual opportunities that nontraditional maritime-security operations provide for cooperation amid competition. Referring to the larger issue of security, Panetta further remarked, “We won’t achieve security and prosperity in the twenty-first century without a constructive U.S.-China relationship, including a stronger military-to-military relationship.” Also during his visit, Panetta toured the North Sea Fleet missile frigate Yantai, which had recently returned from antipiracy duties in the Gulf of Aden.

Chinese commentators likewise lauded the secretary’s visit and the unprecedented U.S.-Chinese naval cooperation off the coast of Somalia. Ni Feng, deputy director of CASS’s Institute of North American Studies, declared, “With increased strategic game between China and the United States, communication and exchanges between the armed forces of the two countries should be conducted routinely; and topics such as how China and
the United States can undertake positive interactions in the Asia-Pacific region should be discussed with an open mind. This will help the two sides reduce misjudgments.63

Moreover, Secretary Panetta’s September 2012 China visit was highlighted by the announcement that the United States had invited the PLAN to send a warship to participate in the Rim of the Pacific (RIMPAC) 2014 exercises, the world’s largest joint naval exercises. “Our fundamental goal is to build a U.S.-China military-to-military relationship that is healthy, stable, reliable, continuous and transparent,” Panetta stated then. It was reported in late March 2013 that China had accepted the invitation and is set to join the U.S.-led exercises during summer 2014.64 Beijing had felt snubbed when excluded from RIMPAC 2012; Secretary Panetta’s announcement demonstrates American desire to improve maritime relations with China. “I hope that they bring a ship, and I hope that they bring a crew ready to learn and to be interoperable,” remarked Adm. Samuel Locklear, Commander, U.S. Pacific Command. “I think they will be welcomed by the rest of the international community in the Asia-Pacific as a productive security partner.”65 As Secretary Panetta emphasized during his visit, the United States does not want China to misunderstand the intentions of its Asia-Pacific rebalancing, which is in part “about creating a new model in the relationship of our two Pacific powers.”66 Shortly after the secretary’s official visit to Beijing, the United States and China held in Qingdao their annual meeting pursuant to the U.S.-Chinese Military Maritime Consultative Agreement. Both sides agreed to strengthen bilateral nontraditional security cooperation, including in the field of antipiracy operations.67

The wave of encouraging news continued in mid-October 2012 when Brig. Gen. Mark M. McLeod, U.S. Air Force, announced that the U.S. Navy and PLAN were considering sharing logistical resources—including fuel, food supplies, and possibly parts—when undertaking joint antipiracy and humanitarian operations.68 Rear Adm. Yang Jianyong deemed the American proposal to engage the PLAN on logistical cooperation “a good area for future discussion [and] cooperation.”69 McLeod noted that the Chinese were “reaching out and starting to perform . . . more joint missions . . . [so] we thought this was an opportunity for us to enter into an agreement with them to share resources.”70 Such an arrangement, if implemented broadly, consistently, and over time, would not only address the major logistical issues attached to the PLAN Far Seas operations discussed in this study but would also represent an unprecedented level of Sino-American military cooperation.

In November 2012, Secretary of the Navy Ray Mabus met with Minister of Defense Liang Guanglie in Beijing to discuss maritime security.71 This was the first visit by a Secretary of the Navy in twenty-eight years and occurred just two days after China’s navy successfully completed its first takeoffs and landings on the newly commissioned aircraft carrier Liaoning.72 Mabus and Liang discussed Sino-American antipiracy cooperation.73
The deputy director of the Navy Military Studies Research Institute, Zhang Junshe, perceived the treatment of Mabus during his visit as displaying “China’s sincerity to improve military ties with the US” and asserted that the arrangement made by China “reflects the increasing transparency of the Chinese navy, and its growing confidence.” Ultimately, Mabus’s visit proved another positive step in U.S.-Chinese antipiracy efforts, as both sides agreed to increase antipiracy cooperation and joint exercises.

Of course, while these announcements set an optimistic tone, they remain relatively small developments within a much more complex, multilayered U.S.-Chinese strategic maritime relationship. Nonetheless, in a speech in Washington at the close of a visit to the United States in February 2012, Vice President Xi Jinping described the U.S.-Chinese relationship as “an unstoppable river that keeps surging ahead.” Xi’s high-profile trip was interpreted by many as a preview of U.S.-Chinese relations under China’s next paramount leader. Indeed, U.S.-Chinese relations comprise closely intertwined social, economic, political, and military dimensions, all of them capable of impacting significantly many aspects of the bilateral relationship. Antipiracy cooperation on the Far Seas is merely part of a larger strategic dialogue between Washington and Beijing, and it will certainly not define U.S.-Chinese relations in the twenty-first century. Nevertheless, the level of successful cooperation attained by both sides in other layers of the U.S.-Chinese relationship will influence the degree to which the U.S. Navy and PLAN are able to cooperate meaningfully in the Gulf of Aden during antipiracy operations. The two sides will engage each other only to the extent that U.S.-Chinese cooperation is perceived as beneficial to their respective larger national-security objectives. That said, neither side should underestimate the significance of building habits of cooperation or the stabilizing power that such practices can bring, especially during periods of political change.

Indeed, in a 2012 article in MoFA’s official journal, Chen Zhirui and Wu Wencheng examine global governance cooperation in the context of international piracy. They conclude that the foundational importance of cooperation between great powers for addressing transnational security issues such as piracy is currently underestimated. However, Chen and Wu also contend that great-power cooperation alone is insufficient to eradicate nontraditional global-security problems. Participation by other nations, nongovernmental organizations, and multilateral institutions, they contend, is also indispensable for effective governance. Beijing’s perspective on great-power relationships is evolving alongside perpetually changing twenty-first-century security threats. Of course, Chinese leaders still recognize the centrality of major bilateral relationships, such as that between China and the United States, in addressing modern security challenges. In this regard, any cooperation against piracy is seen as beneficial in both Washington and Beijing. But China also increasingly values the efforts of other actors in the region,
efforts that it perceives as critical for maintaining international stability in today’s global society.\textsuperscript{79}

Notwithstanding the promise offered by high-level dialogues for what will be the most important bilateral military relationship in the early twenty-first century, events in 2012 provided somber reminders that Chinese cooperation concerning nontraditional and transnational security issues hinges on other areas of U.S.-Chinese relations. For example, Beijing canceled combined exercises with the U.S. Navy in the Gulf of Aden scheduled for late 2011 after Washington announced new arms sales to Taiwan in September.\textsuperscript{80} Furthermore, it was reported in late February 2012 that China had withdrawn from a two-day conference on piracy and associated maritime concerns in the Indian Ocean.\textsuperscript{81} While many states are eager to build strategic trust with China through antipiracy cooperation, this behavior reflects the fact that such operations are ultimately subordinate to Beijing’s larger national-security interests. Additionally, the PLAN’s somewhat cooperative practice in the Gulf of Aden has unfortunately not been mirrored in waters closer to China. Chronic flare-ups with Japan, Vietnam, and the Philippines, among others, in recent years suggest that Beijing values territorial and resource claims more than cooperation with neighboring states. It is readily apparent that Chinese maritime power must be viewed through the lens of distance. Beijing’s antipiracy experiences have not changed its concerns regarding American intentions, or even vis-à-vis the U.S. cooperative maritime strategy of 2008 or the “global maritime partnerships” envisioned therein. Indeed, on the whole, China still views a growing American presence in East Asia, highlighted by the announcement of a rebalancing toward the Asia-Pacific beginning in late 2011, as a pernicious grand strategy designed to contain China’s rise.\textsuperscript{82}

Nevertheless, progress in Far Seas cooperation might gradually translate into progress in the Near Seas. While helping its allies to resist Chinese pressure and coercion in the Near Seas and to maintain freedom of navigation there, Washington must endeavor to cooperate with Beijing in Far Seas nontraditional security operations. China reached out to ASEAN counterparts in mid-2011 when it offered to cooperate in escorting commercial ships of ASEAN states across the Gulf of Aden. China has a larger navy than any ASEAN state and would likely play a commanding role in these escort operations, of which “the ideal area of operation would be as far as Oman’s waters in the north, Madagascar’s waters in the south and all coastal areas in the western part of the Indian Ocean.”\textsuperscript{83} By reaching out to its ASEAN neighbors, Beijing revealed a belief that Far Seas operations can in fact pay dividends regionally and help to improve international relations in the Asia-Pacific.
Most Promising Areas for U.S.-Chinese Cooperation and Confidence Building

While there are certainly no indications that Beijing is planning naval expansion on a global scale anytime soon, the PLAN will encounter a mature U.S. military presence in any area that it attempts to enter in coming years. This includes the western Pacific, South China Sea, Indian Ocean, Middle East littorals, Caribbean Sea, and Arctic Ocean. Professor Liang Fang of Chinese National Defense University identifies the eastern Pacific, the northwestern Indian Ocean, and parts of the Atlantic Ocean as zones where China is likely to prioritize strategic maritime access in the future.\textsuperscript{84} If that is the case, mistrust between Washington and Beijing is likely to increase as the United States reorients its national security strategy toward the Asia-Pacific and as Chinese military development unfolds both regionally and internationally.\textsuperscript{85} In view of this strategic mistrust, it is absolutely critical that naval officials on both sides take maximum advantage of the window for military and strategic confidence building that antipiracy operations represent. American and Chinese naval officers would do well to establish proactively a bilateral mechanism that facilitates rapid communication in the event of a crisis or incident. It is conceivable that the Chinese and American naval forces operating in the Gulf of Aden could develop such an agreement and apply it to maritime East Asia once it becomes operable.

Finally, China and the United States concur that piracy stems from deficiencies in governance ashore. The biggest contribution that Washington and Beijing could make to a solution would be to establish dialogues with the objective of developing aligning approaches toward Somali reconstruction.

Notes

1. Xu Jingjing, “Why We Want to Escort.” Original text: “我认为这次中国派出军舰为我商船护航给我们带来了新概念：作为政府，为了保证我国船舶能在海外正常从事海上运输，面对一些突发性情况，应当参照国际通行的做法，采取更加有效的措施。这是一个思路上的转变。”

2. Ibid. Original text: “我国作为一个经济发展迅速的大国，要和其他国家打交道，进行贸易，从长远看，政府必须建立维护我国海外经济安全利益的长效机制。索马里护航不应当只是短时期的单独事件，而应该将这样的事件做长远考虑，常态考虑。”

3. In addition to antipiracy operations, China’s noncombat operational deployments include contributions to UN peacekeeping missions in Africa, where Chinese troop deployments outnumber those of any other nation. China has been investing heavily throughout Africa for decades, and the continent is officially perceived as a vital component of Beijing’s long-term energy security strategy. See Philippe D. Rogers, “China and United Nations Peacekeeping Operations in Africa,” Naval War College Review 60, no. 2 (Spring 2007), pp. 73–93.


5. Zeng Jia, “(十八大解读) 维护海洋权益 构建和谐海洋” [(Deciphering 18th CCP National Congress) Safeguard Maritime Rights and Interests, Build a “Harmonious Ocean”], 中国新闻网 [China News Service], 13 November 2012,


8. Ibid., p. 82.


11. Peng Chao [Peng Chao] and Qian Hong [Qian Hong], "Strengthening the Construction of Chinese Military's Capability for Overseas Military Operations Other than War: Exclusive Interview with Military Delegate to the National People's Congress and Former Deputy Commander of the East Sea Fleet Zhang Huachen, " People's Navy, 14 March 2012, p. 2.


14. Wang Hengcheng and Zhang Weiping, "Joy and Anxiety from Three Years of Escorts."

15. Ibid.


17. Wang Hengcheng and Zhang Weiping, "Joy and Anxiety from Three Years of Escorts."

18. Qian Xiaohu [Qian Xiaohu] and Mo Xiaolang [Mo Xiaolang], "Joy and Anxiety from Three Years of Escorts."


29. For an excellent overview, see Michael S. Chase, “Debating a Rising China’s Role in International Affairs,” Jamestown Foundation *China Brief* 12, no. 24 (14 December 2012), www.jamestown.org.


34. For example, the previously mentioned land-based shelling of suspected Somali piracy bases by EU NAVFOR forces in May 2012; Drury, “We’re Coming to Get You!”


42. Li Ruijing, “Borrowing from Escorts to Expand Blue-Water Navy.”


44. Cao Jinping and Mo Xiaoliang, “Review of Chinese Navy’s Escort Missions in Gulf of Aden in Past 4 Years.”

45. Huang Yingying, “How Can We Protect China’s Maritime Rights and Overseas Interests?”


55. Ibid.

56. Ibid.

57. USS Winston S. Churchill (DDG 81) Public Affairs Officer, "U.S. and China Team Up for Counterpiracy Exercise," Navy.mil, 18 September 2012. A Liberation Army Daily article documented the exercise in detail: 'Commanding officers from the two sides met on the 'Yiyang' frigate at 11:00, local time, and reached the consensus that the 'Winston S. Churchill' destroyer would act as a suspicious merchant ship code-named 'Churchill,' while two water-surface commandos made up of 18 special operation members from each side and commanded in turns by both sides should depart from the 'Yiyang' frigate on small boats for inspection raid on the 'Churchill' merchant ship. Meanwhile, the shipborne helicopter from the 'Yiyang' frigate would take charge of air alert. At 13:00, the 'Yiyang' frigate initiated the Level-1 antipiracy deployment as scheduled. The 36 Chinese and U.S. special operation members lined up into the firepower team, the control team and the verification team according to their boarding sequence and were fully-equipped for departure. At 13:30, the firepower team of the first water-surface commando arrived at the starboard side of the 'Churchill' merchant ship. Lieutenant Philips Cox, the commander on site, commanded three U.S. team members and three Chinese team members to alternately board the central part of the merchant ship. They immediately took control of the personnel in the wheelhouse. After the members of the second water-surface commando boarded the ship, they quickly took control of the main passages near the bridge and covered each other while launching a search through the compartments. The commandos found 4 suspicious crew members in the wheelhouse of the 'Churchill' merchant ship, and gathered and held them under custody of the control team while the verification team began to check the navigational documents, examine the situation of loaded supplies and verify the crew members' identifications. . . . During the post-drill reflection, observers from both sides held that the special operation members from both sides have their own advantages. Both sides also pledged to strengthen the international cooperation in the escort missions to jointly safeguard the peace and safety in the Gulf of Aden,' "Chinese and U.S. Navies Conduct First Joint Anti-piracy Drill," Liberation Army Daily, 19 September 2012, eng.mod.gov.cn/Photos/2012-09/19/content_4400581.htm.

58. Hou Rui [Hou Rui] and Yu Wenqiang, "$	ext{携手亚丁湾--中美两国海军首次联合反海盗演练侧记}\$" [Joining Hands in the Gulf of Aden: Elaborating on the Chinese and U.S. Navies’ First-Even Joint Antipiracy Exercises], People's Navy [Peoples Navy], 25 September 2012, p. 1. People's Navy elaborated: "It was shoulder-to-shoulder combat, and was also competition on the same stage. The first [PLAN] surface warfare commando teams brilliant performance made Li Zhenhua, captain of the second surface commando team, applaud to himself. But the meticulous Li Zhenhua discovered that several tall members of the first surface warfare commando team moved more slowly while scaling the commercial vessel, which affected overall speed. [During the] gap [between] starting [exercises], Li Zhenhua arranged [team members] according to speed, placing the quick first and slow last, making a small adjustment to the special forces team members' mounting order. [As a result, climbing of the commercial ship was considerably faster. . . . Li Zhenhua's seemingly tiny impromptu adjustment left American team members in unbridled admiration." Original text: "既是并肩战斗，也在同台竞技，第一水面突击队的精彩表现，让第二水面突击队队长、我方特战队员李振华暗自叫好。但细心的李振华发现，第一水面突击队队员攀爬商船时，由于前面几个身材高大的队员动作较慢，影响了整体速度。出发间隙，李振华按照攀爬速度先快后慢的顺序，对突击队队员登船顺序做了微调。结果，攀爬商船时果然快了不少，李振华看似微小的临机调整，让美方队员钦佩不已。"


60. Ibid.


62. Baldor, "Panetta Gets Rare Look at Chinese Naval Vessels."

63. "帕内塔访华有助于中美两军增进信任减少误判" [Panetta Visit Helps Enhance Sino-U.S. Military Trust, Dispel Doubts], Xinhua [Xinhua
Net], 17 September 2012, www.chinanews.com/mil/2012/09-17/4190367.shtml. In the same article, Professor Zhu Feng of Peking University's Institute of International Relations, referring to the U.S. rebalancing in the Asia-Pacific, comments, "This underscores the necessity for China and the United States to increase military exchanges. China-U.S. relations not only dictate the strategic pattern of the Asia-Pacific region but also concern world peace and stability in the twenty-first century. The two countries should proceed from the strategic height in properly handling the bilateral relations."


69. Ibid.

70. Ibid.


Conclusion: No Substitute for Experience

In dispatching fifteen antipiracy task forces to the Gulf of Aden from since December 2008, an uninterrupted period of nearly five years, China’s navy has discovered that there is truly no substitute for experience. Select PLAN personnel have sharpened their skills, improved coordination mechanisms, and tested new technologies and platforms. In four years of active Gulf of Aden antipiracy operations, China’s navy has accrued know-how and lessons that it could not have gained otherwise. It has implemented them, and thereby realized operational and procedural improvements, with impressive speed and resourcefulness. Addressing these issues is increasing PLAN capabilities and confidence.

The most important organizational impact of the mission has been to make the PLAN assume unprecedented responsibility and initiative in coordinating operations with such civilian agencies as the MoT. This marks a coming-of-age in which geographic and operational exigencies may increasingly allow the PLAN to emerge from under the PLA’s shadow and come into its own as China’s most externally focused military service and a growing tool for Chinese policy makers. Realizing the PLAN’s full potential in this regard will hinge in part on attendant improvements in real-time interservice, inter-agency, and civil-military coordination, none of which China’s governmental structure is optimized to support. Certainly the rapidity and scale of the PLAN’s rise in autonomy should not be exaggerated; the PLA’s bureaucratic apparatus remains ground force-dominated. Yet antipiracy and related operations can spur needed improvements and even serve as a test bed for their realization.

Operationally, a core contribution of these deployments may be imposing experience with unscripted, unpredictable situations on what might otherwise remain an unwieldy and risk-adverse service. They represent the PLAN’s most intense operational experience in recent years. PLAN forces in the Gulf of Aden continue to learn intangible operational lessons that enhance China’s broader naval competence. Viewed holistically, PLAN achievements in the Gulf of Aden represent far more than an amalgamation of antipiracy best practices. Beyond the Gulf of Aden and its surrounding bodies of water, they provide a broad foundation to support future capabilities. At the tactical level, many fundamental skills that the PLAN is learning from its antipiracy operations transcend naval-warfare domains and missions. The U.S. Navy refers to these as “mission-essential tasks”; for instance, a helicopter crew for a maritime special-forces mission must be proficient in taking off from and landing on a ship at night. The PLAN is developing core skills for Far Seas operations, many of which may prove to be applicable and useful
beyond the scope of antipiracy. Maintenance procedures and even ship design may be influenced as a result, with benefits that are already being applied in other areas, such as training in the Near Seas. A Modern Navy article encapsulates this dynamic:

China’s escort task force through . . . practice, [has] accumulated beneficial experience, optimized escort methods, [and] raised escort efficiency. In summary, for the Chinese navy, Gulf of Aden and Somali escorts are just the first step in facing continuously expanding national maritime interests. Under the framework of international law, protecting the safety of China’s strategic sea-lanes, carrying out protection and evacuation for overseas Chinese, participating in maritime arms control, [and] accepting the responsibilities of a great power will become the future focus areas for China's noncombat naval operations in the era of peace.

As this quotation suggests, China’s process of gaining Far Seas experience is not simply one of increasing operational naval capabilities—it is far broader. Antipiracy operations conveniently enable China both to respond to internal and external pressures to act on the international stage and to raise significantly the overall ability of its increasingly powerful navy. The Gulf of Aden has challenged Beijing to adjudicate among multifarious, often contradictory, domestic and international forces. As the first major window into China’s Far Seas operations and its approach thereto, it foreshadows how Beijing will take its place in the world as its interests expand and its actions impact others more strongly.

In this light, the PLAN’s experience in the Gulf of Aden should pay dividends for China’s leadership as Chinese overseas interests proliferate. As China’s economic interests sprawl further beyond its continental borders, the costs of security failure will grow, especially in a “fishbowl” environment where domestic and foreign audiences observe China’s behavior intently. Beijing’s leaders will likely need to make more decisions about how best to protect China’s national interests, and they can now use the PLAN’s Gulf of Aden mission as a foundational guide for how to address economic, political, and military factors simultaneously to solve complex challenges to the security of China’s overseas interests.

While PLAN antipiracy operations to date have succeeded operationally, at the strategic level they have also illuminated a growing gap between Chinese and Western perceptions of China as a “responsible stakeholder” in the international system. By contributing useful public goods the operations offer China increased global maritime influence; nevertheless, they remain insufficient in degree or scope to earn Beijing the status that it covets. As this study demonstrates, China, while conceding that there is ample room for improvement, portrays itself as an increasingly responsible actor in the global commons—yet some Western audiences are increasingly concerned about Beijing’s lack of integration into, and perhaps subtle rejection of, the existing international structure. Driven by both domestic and international interests, the Gulf of Aden mission brings
China into a more rewarding yet more difficult environment in which expectations are rising in both dimensions.

As China becomes a truly global stakeholder in coming years and seeks to protect its overseas interests more effectively, Chinese and American interests overseas will intersect to an unprecedented degree. Never before have the two great Pacific nations been powerful simultaneously. Substantive cooperation between the two sides will thus be indispensable not only for U.S.-Chinese relations but also for the stability of the global commons. An open and cooperative relationship will be required in a variety of maritime regions, particularly in areas where the U.S. and other militaries are already well positioned to restrict Chinese access and development. Just as China’s navy has found naval operational experience in the Gulf of Aden invaluable, China’s civilian leaders will find the same to be true about public goods generally as they seek to increase their nation’s global status and influence. The international and interconnected nature of such nontraditional security contributions makes cooperation with, and understanding the perspectives of, the United States and other participating nations essential for China. At the same time, the United States and other nations will have to understand better Beijing’s own equities and limitations, which are unlikely to change dramatically anytime soon. China’s evolving approach to antipiracy operations and larger maritime issues will likely take a tortuous, if increasingly positive, course in the Far Seas.

Note

1. Wu Chao and Li Daguang, "Maritime Shipping Lanes Related to China’s Development," pp. 50–52. Original text: "中国护航编队通过两年多的实践，积累了有益经验，优化了护航方式，提高了护航效率。总之，对中国海军而言，面对日益扩展的国家海上利益，亚丁湾，索马里护航仅仅是第一步。在国际法框架下，维护国家海上战略通道安全，实施护侨撤侨行动，参与海上军备控制，承担大国责任，将成为未来中国海军和平时期非战争运用的重点领域。”
## Appendix: Notional PLAN Order of Battle by Fleet

<table>
<thead>
<tr>
<th>Platform</th>
<th>North Sea Fleet</th>
<th>East Sea Fleet</th>
<th>South Sea Fleet</th>
<th>Total in Service 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuclear-powered ballistic-missile submarines</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Attack submarines (total)</td>
<td>21</td>
<td>35</td>
<td></td>
<td>56 (62)</td>
</tr>
<tr>
<td>Nuclear-powered attack submarines (SSNs)</td>
<td>3</td>
<td>2</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Diesel-powered attack submarines (SSs)</td>
<td>18 (23)</td>
<td></td>
<td>30 (16)</td>
<td>48 (57)</td>
</tr>
<tr>
<td>SSs for ballistic-missile testing, etc.</td>
<td>[2]</td>
<td>[2]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aircraft carriers</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Destroyers</td>
<td>10</td>
<td>8</td>
<td>8 [10\textsuperscript{a}]</td>
<td>26 [33\textsuperscript{a}]</td>
</tr>
<tr>
<td>Frigates</td>
<td>9 (15)</td>
<td>44</td>
<td></td>
<td>53 [65\textsuperscript{c}]</td>
</tr>
<tr>
<td></td>
<td>(26)</td>
<td>(24)</td>
<td></td>
<td>(62–65\textsuperscript{i})</td>
</tr>
<tr>
<td>Subtotal of above ships</td>
<td></td>
<td></td>
<td></td>
<td>140 (158)</td>
</tr>
<tr>
<td>Large amphibious ships</td>
<td>2</td>
<td>26</td>
<td></td>
<td>28 [30\textsuperscript{f}]</td>
</tr>
<tr>
<td>Medium amphibious ships\textsuperscript{f}</td>
<td>5 (9)</td>
<td>18</td>
<td></td>
<td>23 [87\textsuperscript{f}]</td>
</tr>
<tr>
<td>Small amphibious ships</td>
<td></td>
<td></td>
<td>[186]</td>
<td>[186]</td>
</tr>
<tr>
<td>Large missile patrol craft</td>
<td>19 (20)</td>
<td></td>
<td>67 (35)</td>
<td>86 [95\textsuperscript{e}]</td>
</tr>
<tr>
<td>Smaller fast-attack and patrol craft</td>
<td></td>
<td></td>
<td>[141]</td>
<td>[141\textsuperscript{e}]</td>
</tr>
<tr>
<td>Mine warfare ships</td>
<td>40</td>
<td></td>
<td></td>
<td>46</td>
</tr>
<tr>
<td>Major auxiliaries</td>
<td></td>
<td></td>
<td>50\textsuperscript{d}</td>
<td>50</td>
</tr>
<tr>
<td>Minor auxiliaries and service/support craft</td>
<td>250+</td>
<td></td>
<td></td>
<td>250+</td>
</tr>
</tbody>
</table>

### Notes:
- Parentheses indicate that data come from Institute for International Strategic Studies, *The Military Balance 2012* (London: Routledge, 2012). While not as authoritative as the baseline U.S. government sources listed above, it offers breakdowns by fleet that none of them have offered since the 2009 Office of Naval Intelligence report. Brackets indicate that data are compiled from Andrew Erickson, “China’s Modernization of Its Naval and Air Power Capabilities,” in Strategic Asia 2012–13, ed. Tellis and Tanner, pp. 98–111, and updated with selected latest Jane’s estimates.
- a. Figure excludes uncertain number of Romeo Type 033 SSs in process of being retired and includes twelve Type 041 submarines, all of which are apparently based in ESF. “Yuan Class (Type 041),” *Jane’s Fighting Ships*, 12 February 2013, www.janes.com/.
- b. Figure includes Golf (Type 031) test submarine and new “Qing (Type 043)” with large sail launched but apparently not yet commissioned.
- c. Aircraft carrier Liaoning was projected to become operational in 2012 and demonstrated its first public aircraft takeoff and landing in November 2012.
- d. Figure includes two 052D destroyers commissioned in January 2013 and based in SSF. “Luyang III (Type 052D) Class,” *Jane’s Fighting Ships*, 11 March 2013, www.janes.com/, and Qian Xiaohu, “‘Changchun’ Warship Commissioned to PLA Navy,” Liberation Army Daily, 4 February 2013, english.pladaily.com.cn.
- e. Figure includes four 056 corvettes. “Jiangdao (Type 056) Class,” *Jane’s Fighting Ships*, 12 February 2013, www.janes.com/.
- f. Figure includes LHDs and LSTs but not smaller LSMs, LCUs, and LCACs.
- g. *The Military Balance* uses the term “Medium Landing Ships” to designate this category.
- h. Figure includes LSMs but not LCUs or LCACs.
i. Figure includes smaller LSMs, LCU, and LCAC.

j. Figure does not include smaller 037-II, 037, 062C, 062/1, 037-I ships.

k. Figure includes smaller 037-II, 037, 062C, 062/1, 037-I ships, as well as three “unknown” ships on p. 104.

l. Five are fleet AORs.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASEAN</td>
<td>Association of Southeast Asian Nations</td>
</tr>
<tr>
<td>AU</td>
<td>African Union</td>
</tr>
<tr>
<td>C2</td>
<td>command and control</td>
</tr>
<tr>
<td>CASS</td>
<td>Chinese Academy of Social Sciences</td>
</tr>
<tr>
<td>CCP</td>
<td>Chinese Communist Party</td>
</tr>
<tr>
<td>CCWG</td>
<td>Convoy Coordination Working Group</td>
</tr>
<tr>
<td>CENTRIXS</td>
<td>Combined Enterprise Regional Information Exchange System</td>
</tr>
<tr>
<td>CMC</td>
<td>Central Military Commission</td>
</tr>
<tr>
<td>CMF</td>
<td>Coalition Maritime Forces</td>
</tr>
<tr>
<td>CNTV</td>
<td>China National Television</td>
</tr>
<tr>
<td>COSCO</td>
<td>China Ocean Shipping Company</td>
</tr>
<tr>
<td>CPPCC</td>
<td>Chinese People’s Political Consultative Conference</td>
</tr>
<tr>
<td>CSA</td>
<td>China Shipowners’ Association</td>
</tr>
<tr>
<td>CTF</td>
<td>Combined Task Force</td>
</tr>
<tr>
<td>CTTIC</td>
<td>China Transport Telecommunications and Information Center</td>
</tr>
<tr>
<td>DWT</td>
<td>dead weight tonnage</td>
</tr>
<tr>
<td>ESF</td>
<td>East Sea Fleet</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>EU NAVFOR</td>
<td>European Union Naval Forces Somalia (Operation ATALANTA)</td>
</tr>
<tr>
<td>GT</td>
<td>gross tonnage</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>IMO</td>
<td>International Maritime Organization</td>
</tr>
<tr>
<td>IOR</td>
<td>Indian Ocean region</td>
</tr>
<tr>
<td>IRTC</td>
<td>internationally recommended transit corridor</td>
</tr>
<tr>
<td>LHD</td>
<td>landing helicopter dock</td>
</tr>
<tr>
<td>LNG</td>
<td>liquefied natural gas</td>
</tr>
<tr>
<td>LPD</td>
<td>landing platform dock</td>
</tr>
<tr>
<td>MDA</td>
<td>maritime domain awareness</td>
</tr>
<tr>
<td>MoFA</td>
<td>Ministry of Foreign Affairs</td>
</tr>
<tr>
<td>MoT</td>
<td>Ministry of Transportation</td>
</tr>
<tr>
<td>MSCHOA</td>
<td>Maritime Security Centre–Horn of Africa</td>
</tr>
<tr>
<td>MV</td>
<td>motor vessel</td>
</tr>
<tr>
<td>NATO</td>
<td>North Atlantic Treaty Organization</td>
</tr>
<tr>
<td>NAVCENT</td>
<td>U.S. Naval Forces Central Command</td>
</tr>
<tr>
<td>NDU</td>
<td>National Defense University</td>
</tr>
<tr>
<td>NEO</td>
<td>noncombatant evacuation operation</td>
</tr>
<tr>
<td>NPC</td>
<td>National People’s Congress</td>
</tr>
<tr>
<td>NSF</td>
<td>North Sea Fleet</td>
</tr>
<tr>
<td>OAP</td>
<td>Operation Allied Protector</td>
</tr>
<tr>
<td>OOS</td>
<td>Operation Ocean Shield</td>
</tr>
<tr>
<td>PLA</td>
<td>People’s Liberation Army</td>
</tr>
<tr>
<td>PLAAF</td>
<td>People’s Liberation Army Air Force</td>
</tr>
<tr>
<td>PLAN</td>
<td>People’s Liberation Army Navy</td>
</tr>
<tr>
<td>PRC</td>
<td>People’s Republic of China</td>
</tr>
<tr>
<td>RAPPICC</td>
<td>Regional Anti-Piracy Prosecutions and Intelligence Co-ordination Centre</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>RIMPAC</td>
<td>Rim of the Pacific</td>
</tr>
<tr>
<td>ROE</td>
<td>rules of engagement</td>
</tr>
<tr>
<td>SASS</td>
<td>Shanghai Academy of Social Sciences</td>
</tr>
<tr>
<td>SHADE</td>
<td>Shared Awareness and Deconfliction</td>
</tr>
<tr>
<td>SLOC</td>
<td>sea line of communication</td>
</tr>
<tr>
<td>SOE</td>
<td>state-owned enterprise</td>
</tr>
<tr>
<td>SSF</td>
<td>South Sea Fleet</td>
</tr>
<tr>
<td>TFG</td>
<td>Transitional Federal Government (Somalia)</td>
</tr>
<tr>
<td>UAE</td>
<td>United Arab Emirates</td>
</tr>
<tr>
<td>UAV</td>
<td>unmanned aerial vehicle</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNSC</td>
<td>United Nations Security Council</td>
</tr>
<tr>
<td>UUV</td>
<td>unmanned underwater vehicle</td>
</tr>
<tr>
<td>VHF</td>
<td>very high frequency</td>
</tr>
</tbody>
</table>
About the Authors

Dr. Andrew S. Erickson is an associate professor in the Strategic Research Department at the Naval War College, in Newport, Rhode Island, and a core founding member of the department’s China Maritime Studies Institute (CMSI). He is an associate in research at Harvard University’s John King Fairbank Center for Chinese Studies (2008–). Erickson also serves as an expert contributor to the Wall Street Journal’s China Real Time Report. In 2013, he deployed as a Regional Security Education Program scholar in the USS Nimitz carrier strike group. Erickson is a term member of the Council on Foreign Relations. In 2012, the National Bureau of Asian Research awarded Erickson the inaugural Ellis Joffe Prize for PLA Studies. During academic year 2010–11 he was a fellow in the Princeton-Harvard China and the World Program in residence at Harvard’s Fairbank Center. From 2008 to 2011 Erickson was a fellow in the National Committee on U.S.-China Relations’ Public Intellectuals Program and served as a scholar escort on a five-member congressional trip to Beijing, Qingdao, Chengdu, and Shanghai. In addition to advising a wide range of student research, Erickson has taught courses at the Naval War College and Yonsei University and has lectured extensively at government, academic, and private-sector institutions throughout the United States and Asia. Proficient in Mandarin Chinese and Japanese, he has traveled extensively in Asia and has lived in China, Japan, and Korea. Erickson received his PhD and MA in international relations and comparative politics from Princeton University and graduated magna cum laude from Amherst College with a BA in history and political science. He has studied Mandarin in the Princeton in Beijing program at Beijing Normal University’s College of Chinese Language and Culture, as well as Japanese language, politics, and economics in the year-long Associated Kyoto Program at Doshisha University. Dr. Erickson’s research has been published widely in edited volumes and in such peer-reviewed journals as China Quarterly, Asian Security, and Journal of Strategic Studies. Erickson is coeditor of, and a contributor to, the five-volume Naval Institute Press book series Studies in Chinese Maritime Development, as well as the Naval War College Newport Papers Rebalancing the Force (forthcoming) and China’s Nuclear Force Modernization (2005). He is coauthor of the China Maritime Studies monograph Chinese Mine Warfare (2009). Dr. Erickson is cofounder of China SignPost™ (www.chinasignpost.com), a research newsletter and web portal that covers key developments in Greater China, with particular focus on strategic commodities, trade, and security factors. Links to this, and his other
publications, can be found at *China Analysis from Original Sources* (www.andrewerickson.com).

Mr. Austin Strange is a researcher at CMSI, with which he has been affiliated since May 2011. He is also a research associate at the Institute for the Theory and Practice of International Relations at the College of William & Mary, where he researches Chinese development finance. Currently he is a master’s student at Zhejiang University studying nontraditional security. Strange received a BA in economics and Chinese from the College of William & Mary in May 2012, graduating Phi Beta Kappa and with high honors. While an undergraduate, he studied at Tsinghua University and Peking University. His interests include Chinese foreign policy, military development, and security governance.