

Dragon Boats: Assessing China's Anti-Piracy Operations in the Gulf of Aden¹

*Erik Lin-Greenberg*²

United States Air Force, Goodfellow AFB, San Angelo Texas, 76908, USA

INTRODUCTION

Beijing's decision in late 2008 to deploy warships on an anti-piracy mission off the Somali coast generated significant media attention around the world. Chinese sources proudly announced the deployment of three modern naval vessels on China's first long-range mission since the fifteenth-century maritime expeditions of Admiral Zheng He, while many Western news outlets viewed the deployment as additional evidence of China's growing military power. Despite the initial press flurry, China's ongoing anti-piracy deployment has been largely forgotten. China's role in combating piracy and protecting ships in the Gulf of Aden and off the Horn of Africa is rarely covered in non-Chinese media and there has been little academic analysis of the mission.

China's deployment of People's Liberation Army Navy (PLAN) warships to protect commercial shipping in an operating area far from the Chinese periphery represents a significant shift in the use of Chinese military force. Coupled with increasing contributions of military observers and troops to United Nations peace operations, China's anti-piracy deployment signals a shift in Chinese foreign policy behavior toward an increased willingness to employ PLA forces in military operations other than war (MOOTW) in regions distant from China's borders ostensibly to secure Chinese interests. These missions stand in stark contrast to past operations, which rarely saw forces deployed beyond China's periphery.

In addition to revealing potential shifts in the calculus behind Beijing's use of military forces, the anti-piracy mission also provides a rare opportunity to examine Chinese naval capabilities. While protecting commercial vessels from weakly armed pirates is a far less stressing task than potential large-scale naval operations, the deployment provides analysts an opportunity to identify operational tactics and possible shortcomings in PLAN capabilities. Given the strategic policy relevance of China's military development and operations, this article attempts to provide a greater understanding of the motivations and capabilities of the PLAN by examining the current Chinese naval deployment.

The first section of the article examines the assets and tactics that China has employed on its anti-piracy operation. The second section assesses the strategic drivers behind China's employment of military forces by examining the motivations that led to the Chinese anti-piracy deployment. To do this, the article qualitatively tests three primary drivers behind China's deployment that have been described in existing literature. Was the Chinese deployment motivated solely by Beijing's desire to protect its economic and commercial interests? Did Beijing hope to demonstrate its increasing role as responsible global actor? Or was the mission intended to develop PLAN capabilities and provide an environment for real world training? Relying on media reports, academic publications and policy writings from Chinese and international sources, this article finds that China's anti-piracy mission was primarily motivated by Beijing's self-interested desire to portray itself as capable of protecting its shipping interests while enhancing its diplomatic position as a responsible state actor. The final section of the article uses operational revelations from the current anti-piracy mission, combined with analysis of unclassified Chinese military publications, to examine the PLAN's ability to execute a more complex sea lane of communication defense operation, a potential future mission.

MISSION BACKGROUND

China launched its anti-piracy mission in late December 2008 in response to an upsurge in piracy in the Gulf of Aden. Unlike many other nations that deployed anti-piracy taskforces, China initially chose to escort its merchant ships rather than establish what this article refers to as a "presence mission." Anti-piracy presence missions, like those launched by the United States, NATO, and the European Union (EU), concentrate on responding to distress calls and by patrolling established safe transit zones. These presence missions are often executed by multinational task forces and offer protection to ships regardless of their nation of ownership or registry by deterring acts of piracy in designated patrol zones. In contrast, escort missions are generally launched by individual states and provide armed escort primarily to vessels from the deploying state. In January 2010, China agreed to increased co-operation with international anti-piracy co-ordination efforts. The multinational Contact Group on Piracy off the Coast of Somalia announced that Beijing would "harmonize" its operations with the NATO and EU dominated presence mission in the Internationally Recognized Transit Corridor.³

During the initial escort missions the Chinese Ministry of Communications released escort plans to Chinese shipping companies, which could choose to request escorts via the Ministry of Communications and the PLAN.⁴ Merchant vessels that requested escorts rendezvoused with Chinese warships at designated waypoints and were led through the Gulf of Aden. Rear Admiral Xiao Xinnian, Deputy Chief of Staff of the PLAN, described the escort procedures, announcing that "Chinese naval vessels will generally adopt three methods when performing their escort mission: Upon finding suspicious ships at sea, the Chinese side will first send ship-borne helicopters to conduct reconnaissance before sending its naval vessels to approach them. Second, if pirates are engaged in robbery and if our conditions and capabilities permit us to stop them, the Chinese side will adopt appropriate measures in light of the circumstances. If

the Chinese side encounters unprovoked attacks by pirates, it will resolutely defend itself and ensure its own safety.”⁵ Admiral Xiao’s description of the operation focuses solely on locating and responding to specific pirate threats and makes no mention of the assets and tactics used by the task force, however, Chinese press and government reports shed additional light on the deployment.

The initial task force deployed to the Gulf of Aden consisted of three of the PLAN’s most advanced ships. The *Lanzhou*-class (Type 052C) guided missile destroyer *Haikou* (DDG-171) and the *Guangzhou*-class (Type 052B) destroyer *Wuhan* (DDG-169), among the PLAN’s newest destroyers, are indigenously produced and equipped with a variety of surface-to-air and anti-ship missiles, torpedoes and sensors.⁶ The *Haikou* reportedly has the capability to transmit information to other ships and aircraft via datalink or satellite communications, which would enhance the effectiveness of the mission by permitting rapid dissemination of information on pirate activity.⁷ Each destroyer is also equipped with a Russian-built Kamov Ka-28 helicopter, greatly expanding the surveillance and response coverage of the destroyers.⁸ The PLAN helicopters have been launched to respond to attacks and for vertical resupply missions that transfer goods between supply vessels and the destroyers while underway.⁹ Upon receiving distress calls from ships under attack, the task force scrambles helicopters carrying special-forces personnel to intercept the attacking pirates. Once arriving on scene, the Chinese helicopter fires warning shots or flares at the attacking pirates.¹⁰ At the time of writing, Chinese forces have not escalated the use of force beyond warning shots since attacking pirates generally flee after PLAN forces arrive. The two destroyers were accompanied by the *Fuchi*-class supply ship *Weishanhu*, the largest of its type in the PLAN fleet. During the deployment, the *Weishanhu* replenished its stores of fuel, water, and food in the Port of Aden, providing “a beneficial trial of logistics support mode by the Chinese Navy in performing military operations other than war abroad.”¹¹

In addition to the use of the PLAN’s most advanced equipment, the selection of a relatively senior and experienced PLAN officer to lead the mission emphasizes the operation’s importance to Beijing. On 26 December 2008, the PLAN appointed Rear Admiral Du Jingchen as the first commander of the anti-piracy mission. Prior to assuming command Du served as the Chief of Staff of the PLAN’s South Sea Fleet. He visited the United States as part of a military delegation in July 2008, making him one of a small number of senior Chinese military officers who have traveled to the United States.¹² He also has operational experience commanding a search and rescue operation in May 2002 following the crash of a China Northern Airlines flight near Dalian.¹³ This blend of past operational experience, interaction with foreign militaries, and leadership at the fleet headquarters level likely made Admiral Du an appealing candidate to command a mission where PLAN forces are engaged in a high tempo environment operating alongside international navies.

The deployment of warships from numerous states to the Gulf of Aden has created a unique operating environment for Chinese naval forces. Chinese analysts admit that there may be small disagreements and some “secretive reconnaissance,” but do not believe military forces in the region will engage in disputes.¹⁴ In fact, Beijing has vowed to co-operate with foreign navies operating in the region. The United States reportedly provided China with information concerning anti-piracy operations, and viewed the

mission as “a springboard for a resumption of dialogue between PLA forces and US Pacific Command forces.”¹⁵ The Japanese Maritime Self Defense Force and the PLAN are considering sharing intelligence on pirates, while the Korean military has agreed to assist the PLAN in emergencies during the anti-piracy operation. This marked the first instance of co-operation in international operations between the Chinese and South Korean militaries.¹⁶ These co-operative efforts enhance military transparency and help foster understanding and co-operation between Asia’s regional military powers.

EXPLAINING CHINA’S PARTICIPATION

Existing literature proposes various explanations for China’s anti-piracy deployment, which can be categorized as either “realist” or “idealist”. “Realist” drivers include a desire to protect Chinese shipping and economic interests, expand China’s political and diplomatic influence, and provide the PLAN with opportunities for realistic training in MOOTW.¹⁷ The “idealist” viewpoint suggests that China hopes to assume a role as a responsible state actor by promoting regional security and stability. The two categories of drivers are not mutually exclusive as the anti-piracy deployment allows China to ensure regional maritime stability, which in turn enhances security for China’s shipping interests and provides the PLAN with real-world training.

Protecting China’s diplomatic and economic interests

China tasked its anti-piracy force with the primary mission of protecting Chinese ships and crews transiting through the pirate-infested waters off the Horn of Africa.¹⁸ Wu Shengli, commander of the PLAN, described the mission as “the first time we go abroad to protect our strategic interests armed with military force.”¹⁹ Wu’s statements suggest that China is a realist actor protecting its economic and strategic interests with military force, supporting claims made in some circles that China is a mercantilist power, using state resources to ensure continued economic and commercial development.²⁰

The waters surrounding the Horn of Africa include vital Chinese sea lanes of communication, through which more than 1,200 Chinese ships, carrying nearly 40 percent of all goods and natural resources bound for China, travel each year.²¹ A lack of security in these sea lanes could disrupt trade flows critical to China’s economic growth. A significant amount of Chinese shipping through the region carries oil and other energy products to fuel China’s burgeoning economy. The Chinese government’s “Going Out” campaign, launched in 2002, encouraged Chinese firms to increase overseas investment in natural resource extraction to meet growing demand that could not be filled through domestic production.²² As the world’s second-largest importer of crude oil, China obtains roughly 46 percent of its crude imports from the Middle East and 32 percent from Africa.²³ Ships transporting oil from Angola and Iran, two of China’s top crude oil suppliers, can avoid transiting through the Gulf of Aden, but tankers departing from Saudi ports along the Red Sea must pass through the seas off the Horn of Africa.²⁴ Somali pirates have demonstrated their ability to seize and hold even the largest vessels transiting these areas, such as the very large crude carrier *Sirius Star* in

late 2008. The risk pirates pose to the sizeable Chinese trade and energy flows justifies China's desire to protect its shipping interests with a naval deployment.

Although the Chinese anti-piracy force allowed non-Chinese vessels to request escorts, the mission initially concentrated on protecting Chinese vessels passing through the Gulf of Aden. This excluded many non-Chinese ships that might be carrying goods to or from China, and Chinese ships traveling in other areas off the Horn of Africa.²⁵ One such vessel, a Turkish-owned freighter, was hijacked off the coast of Somalia in October 2008 while transporting iron ore from Canada to China.²⁶ The primary mission of protecting Chinese vessels, rather than vessels carrying key Chinese imports and exports, suggests that Beijing may be more interested in portraying itself as a robust power capable of protecting its own crews and ships than with securing critical supply lines. Admittedly, providing escorts to all ships carrying Chinese imports and exports would prove logistically difficult and beyond current PLAN capabilities.

Further evidence suggesting the argument that the anti-piracy operation is more focused on image building to both a domestic and international audience than with offering protection to trade and economic interests is the lack of protection for Chinese fishing vessels operating in the region near where PLAN forces are deployed. 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 2008.²⁷ Large numbers of fishing ships, including those operated by Chinese state-owned enterprises, routinely operate near the Somali coastline, a region known for its plentiful stocks of fish.²⁸ China may have decided against protecting its fishermen to avoid the appearance of sanctioning violations of Somalia's exclusive economic zone (EEZ). In 2005, the United Nations estimated that 700 foreign-owned vessels were engaged in unlicensed fishing in the Somali EEZ, and Somali pirates have used illegal fishing to justify their actions as defenders of Somalia's territorial waters.²⁹ China would appear hypocritical if it protected Chinese fishing vessels violating Somalia's EEZ, while at the same time remaining highly protective of its own EEZ, which it strictly enforces through military and diplomatic efforts.

China has also used the anti-piracy mission to pursue a diplomatic objective of exerting greater influence over Taiwan. China has extended its offer of protection to ships from Taiwan and the Special Administrative Regions (SAR) of Hong Kong and Macao. Protecting ships from Hong Kong and Macao generates no political concerns because the SARs are partially self-governing entities of the People's Republic of China that rely on Beijing for foreign policy and military-related issues. Escorting Taiwan-owned ships, however, has considerable political ramifications. If Taiwan formally authorized its merchant vessels to join PLAN convoys through the Gulf of Aden, its ships would appear to be under the sovereign protection and jurisdiction of mainland China.

To avoid appearing subordinate to the mainland, Taiwan declined to establish an official channel for Taiwan ships to request escort from the PLAN.³⁰ Despite the lack of any authorized mechanism for Taiwan ships to request China's protection, the *Formosa Product Cosmos*, a tanker owned by the Taiwan-based Formosa Plastics Marine Corpo-

ration was one of the first ships to benefit from a PLAN escort. Taiwan's Mainland Affairs Council, attempting to reinforce its position that Taiwan ships were not being protected by mainland forces, quickly announced that while the ship was owned by a Taiwan firm, it was registered in Liberia and rented to a South Korean company, and was therefore not considered a Taiwan ship.³¹

Instead of seeking PLAN escorts, Taiwan directed its merchant and fishing vessels to summon the nearest warships from any nation in the event of a pirate attack, which would likely be ships deployed on the various multinational presence missions.³² Shortly after Beijing launched its anti-piracy task force, Taiwan announced that it was considering launching its own mission.³³ Taipei would need to overcome significant logistical and diplomatic obstacles to deploy such a force. Taiwan is not recognized by any nations on the Gulf of Aden, potentially making port calls for resupply a challenge as Beijing could use its diplomatic influence to pressure states to block Taiwan's naval vessels from entering their ports.

Training

Deploying forces to protect Chinese shipping from Somali pirates affords the PLAN with valuable operational experience. Analysts describe China's anti-piracy operation as a training opportunity that serves a precursor to future long-range PLAN operations.³⁴ While the PLAN will undoubtedly gain significant experience from its first long-range operational deployment, it is unlikely that securing training opportunities was a key motivator behind China's decision to launch the anti-piracy task force. In fact, the Chinese military was allegedly reluctant to deploy vessels to Somalia and agreed only after two months of pressure from the Ministry of Foreign Affairs, revealing that civilian, and not military, leadership was the driving force behind the mission.³⁵

Even though the mission was not launched with training in mind, the deployment has surely allowed China to refine many of the tasks required to sustain long-range, blue water naval operations, such as underway replenishment, co-ordination with foreign navies, and communication.³⁶ A senior PLA officer at China's National Defense University announced that, "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."³⁷ The anti-piracy operation provides an ideal opportunity for the PLAN to practice and evaluate blue water tactics, techniques, and procedures in an environment far from the Chinese periphery, without generating significant political or military alarm. The implications of these lessons on future PLAN operations are addressed later in this article.

Becoming a responsible global actor

Beijing has gone to great lengths to characterize the mission as a demonstration of China's increasing participation as a responsible actor in the international system. Chinese officials claim that their participation in anti-piracy operations fulfills international obligations and have cited United Nations Resolutions to justify their deployment.³⁸ China announced its intention to deploy an anti-piracy force just days

after the UN Security Council passed Resolution 1851, which encouraged member states to take a more active role in fighting Somali pirates.³⁹

Although Security Council resolutions legitimize China's actions and help assuage the "China threat" concerns that would otherwise arise from a long-range Chinese military deployment, China's participation in anti-piracy operations alone does not guarantee that China is taking a more responsible and co-operative role in the international community. China has committed personnel and resources to combat piracy, an international threat, but has done so largely unilaterally. PLAN Rear Admiral Du Jingchen, the anti-piracy mission's first commander, made clear that China would not accept assignments from "other regional organizations or countries."⁴⁰ Combating piracy strengthens China's claims of accepting greater responsibility for protecting the high seas, however the PLAN's unambiguous declaration against submitting to non-Chinese command raises questions on China's actual willingness to co-operate with the international community.

In January 2010, China appeared to shift towards a position of greater international co-operation when it agreed to consider rotationally co-chairing the Shared Awareness and Deconfliction (SHADE) meetings, a multinational anti-piracy co-ordination effort that includes representatives from NATO, the European Union (EU), the maritime industry, law enforcement, and other nations involved in regional anti-piracy operations. Following the announcement of China's potential co-chairmanship, Chinese military officials stressed that the SHADE chairman exercised co-ordinating, rather than command or leadership, authority, capturing China's aversion to submitting its forces to foreign command.⁴¹ In addition to accepting a co-ordinating role, China agreed to shift its task force to patrolling designated areas of responsibility in the Internationally Recognized Transit Corridor, a patrolled passage between the Gulf of Aden and the Indian Ocean.⁴²

China's participation in a "presence" mission, rather than an "escort" mission that solely protected Chinese vessels, represented a significant departure from the task force's initial escort tactics. While China's increased role in SHADE represents a step toward enhanced international co-operation, PLAN anti-piracy forces still remain free of foreign command and co-operate only on a voluntary basis, patrolling set areas of responsibility co-ordinated by SHADE.⁴³ It is unclear why China chose to increase co-ordination with other anti-piracy actors more than a year after it deployed its first task force. China's recommendation for enhanced multinational efforts at the November 2009 SHADE meeting closely followed the hijacking of the Chinese bulk carrier *De Xin Hai* in October 2009, suggesting that China may have recognized the shortcomings of its independent task force in protecting Chinese shipping.⁴⁴ Regardless of China's motivations for increasing co-operation, the PLAN's participation in SHADE enhances China's image as a more active player in the international community.

China's reluctance to place its anti-piracy force under international command is a departure from its behavior in United Nations peacekeeping operations, the other major component of China's participation in international military operations other than war. China routinely authorizes its troops deployed on peacekeeping missions to fall under foreign command. At the time of writing, a Chinese officer has only commanded one of the 22 missions where China has contributed personnel.⁴⁵ No

publicly-available Chinese government information explains Beijing's rationale for joining multinational peacekeeping missions but not anti-piracy operations; however, differences between the operations suggest two potential explanations.

First, the current multinational anti-piracy task forces are led by western governments or organizations of which China is not a member. The United States established Combined Task Force 151 (CTF-151) and contributes a bulk of forces assigned to the task force, NATO heads Operation Allied Protector, and the EU organized Operation Atalanta. Not being either a NATO or EU member likely precludes China from participating in the EU and NATO missions, while domestic Chinese concerns about ceding control to foreign command make it unlikely that China will contribute forces to an operation rotationally commanded by an American admiral (CTF-151). Unlike Western-led anti-piracy missions, the peacekeeping operations where China has contributed personnel are managed by the UN. China's membership of the UN enables its forces to participate in these missions, while its position as a permanent member of the Security Council provides Beijing with significant influence over mission mandates and planning. The power to shape peace operation mandates likely outweighs the importance of having a Chinese commander on the ground.

A second potential explanation for China's avoidance of multinational anti-piracy task forces stems from the secret nature of China's military affairs. China has a long strategic culture emphasizing secrecy that has endured into the current security environment.⁴⁶ As described earlier, the destroyers initially deployed were among the most modern in the PLAN fleet. Submitting these vessels to foreign command could reveal information about command and control, tactics, and capabilities or shortcomings of the advanced warships. China's contributions to UN peace operations do not include advanced equipment and have been limited to military observers, police officers, and relatively low-tech medical, engineering, and transportation units, possibly to avoid revealing Chinese capabilities.⁴⁷

The anti-piracy missions launched by other state actors, notably smaller Asian states, India, and China's UN Security Council counterparts, may have also motivated China's participation. China was the last of the five permanent members of the UN Security Council to commit forces to combat pirates off the Horn of Africa, and India deployed a warship to the Gulf of Aden to protect its shipping interests in October 2008. Prior to deploying its own anti-piracy force, China relied on other navies to rescue Chinese vessels in distress, clearly not helping China's portrayal of itself as capable of protecting its national interests. For instance, the Malaysian Navy rescued the Chinese owned *Zhenhua 4* cargo ship and its 30-member crew after it was boarded by pirates.⁴⁸ China may have felt obliged to deploy forces in order to prevent itself from being criticized as a free-rider and to maintain its status as a rising global actor capable of protecting its shipping.

While China's anti-piracy deployment may not fully qualify Beijing as an idealist actor promoting global security, China has taken three significant steps to enhance openness and co-operation with the international community. First, in a demonstration of its commitment to the 1982 UN Convention on the Law of the Sea, the PLAN flotilla has responded to distress calls from non-Chinese vessels under pirate attack in the Gulf of Aden and has escorted several non-Chinese ships. The Convention proposes that

“All States shall co-operate to the fullest possible extent in the repression of piracy on the high seas or in any other place outside the jurisdiction of any State”.⁴⁹

Second, China co-ordinated information sharing with other anti-piracy actors, including the United States and Japan.⁵⁰ This represents some progress towards greater Chinese co-operation in multilateral military operations. Third, China demonstrated increased transparency in military affairs by establishing a regularly updated English language website that provides information on its anti-piracy operations.⁵¹ The PLAN has also embedded journalists from seven media organizations, including a representative from the Hong Kong-based Phoenix TV, on board the deployed ships. This marks the first time a non-state-run media outlet has been invited to accompany a PLAN mission.⁵² This openness stands in stark contrast to other realms of the Chinese military, where information is unavailable or highly limited.

While the “realist” motivation of protecting Chinese shipping interests, or at least portraying itself as being capable of doing so, is likely to be the key driver behind China’s anti-piracy mission, other factors described above may have also informed China’s decision-making process. The mix of protecting China’s diplomatic and commercial interests and enhancing China’s image as a responsible global actor by promoting international stability is largely in line with China’s policy of peaceful development, which was first proclaimed in 2003. Under peaceful development, China will avoid the tension often associated with the growth of a rising state, while striving to create a stable global environment that facilitates China’s continued development as an economic and diplomatic power.⁵³

ASSESSING CHINA'S NAVAL CAPABILITIES

China’s deployment to the Gulf of Aden has led to speculation that the PLAN’s mission is shifting from territorial defense to the protection of strategic sea lanes of communication.⁵⁴ While China’s anti-piracy deployment represents a new type of mission for the PLAN and signals an increased willingness to use military force to protect Chinese interests, a mission shift will be a gradual process as the PLAN develops new technology and doctrine. Given China’s current strategic principle of winning local wars in conditions of “informationization”, the bulk of China’s naval operations in the short term will likely remain concentrated in China’s periphery.⁵⁵

In its description of “the high-tech local wars that China may face in the future,” the Chinese Academy of Military Science’s 2005 text, *The Science of Military Strategy*, lists potential crises stemming from ethnic extremism in China’s border regions, conflicts over resources and territory in the Yellow Sea, the East China Sea, and the South China Sea, and from the “key issue” of Taiwan.⁵⁶ Even potential great power conflicts are discussed in the context of local area wars. The text describes China as being geographically located in a region where the “strategic interests of big powers meet.”⁵⁷ *The Science of Military Strategy* briefly mentions the protection of strategic energy supply channels, but addresses the topic in a chapter on local wars and China’s “ecological and oceanic resources” suggesting that the authors were referring to protecting resource extraction and shipping in the South China Sea, rather than a long-range mission.⁵⁸

Despite a current focus on safeguarding Chinese territory, recent Chinese military

publications hint at a growing desire for a long-range role that feature a broad spectrum of missions in addition to territorial defense. China's desire to develop its naval capabilities is described in *China's National Defense in 2008*, a government-published white paper, which states, the "Navy has been striving to improve in an all-round way its capabilities of integrated offshore operations . . . and to gradually develop its capabilities of conducting cooperation in distant waters and countering non-traditional security threats[.]"⁵⁹ This shift in attention from conventional conflicts to emerging security issues is emphasized by Beijing's interest in military operations other than war (MOOTW). The Chinese government "takes MOOTW as an important form of applying national military forces, and scientifically makes and executes plans for the development of MOOTW capabilities."⁶⁰ While Chinese MOOTW operations are limited in nature, they represent a shift away from the traditional territorial defense role of the PLA.

China's anti-piracy mission in the Gulf of Aden afforded China the opportunity to test naval techniques and evaluate some of its newest equipment in a blue-water MOOTW environment far from the PLAN's traditional operating area. Lessons learned on sustaining long-range deployments, co-ordinating military operations in a multinational environment, and equipment operations skills will undoubtedly help shape and improve the PLAN's MOOTW development. Indeed, the PLAN viewed the escort mission as "a test of the achievements of the PLAN in preparation for combats [*sic*]."⁶¹ Upon his return to China in April 2009, Rear Admiral Du Jingchen, the Commander of the first Chinese naval escort task force, remarked that the operation was a learning experience that revealed gaps in China's naval capabilities in areas such as combat readiness training, organization, equipment development, comprehensive support, and laws and regulations.⁶² Du argued that the shortcomings should motivate an increased pace in naval development, stating that, "the escort mission can impel us to further update our concept and probe into new ways and new methods in naval building."⁶³

The experience gained in its anti-piracy deployment may represent some of the PLAN's best and most realistic training in conducting offshore campaigns and MOOTW, but its importance should not be overstated. Aside from the great distance between China and the Gulf of Aden, the anti-piracy operation is a relatively uncomplicated mission compared to other contingencies the PLAN could face. The PLAN is operating in a low-risk threat environment, free from hostile aircraft, surface ships, and submarines, and is participating in an operation that has international support. A potential conflict with Taiwan or a war over territorial claims in the South China Sea would require a far larger force and more sophisticated tactics and planning.

The conditions surrounding the current mission are unique and not likely replicable in any other region of the world, but China's participation offers valuable insight into the operational capabilities of the PLAN.⁶⁴ Analysis of the current operation combined with examination of unclassified Chinese military publications, allows us to assess China's ability to carry out future naval operations, particularly the protection of strategic sea lanes of communication (SLOCs). Analysts have suggested that China's increasing dependence on foreign energy sources will make the nation vulnerable to operations designed to impede its access to oil and fuel.⁶⁵ As a result the PLA may

develop its capabilities to protect China's energy supply lines.

Mission analysis: SLOC protection

China's participation in its Gulf of Aden anti-piracy operation offers a valuable window on its naval capabilities. Although the PLAN is tasked with a variety of missions ranging from coastal defense to strategic deterrence, this article analyzes only the PLAN's ability to carry out SLOC defense.⁶⁶ Using evidence from China's anti-piracy deployment to assess the PLAN's ability to conduct other potential operations, such as amphibious landings, would offer little analytical value due to the significant differences in the techniques, force requirements, and tactics.

As described earlier, China's initial technique for protecting its shipping interests relied on a maritime convoy system where warships escort convoys of merchant ships through high-risk regions. Chinese warships served largely as a deterrent against would-be pirates, firing warning shots and launching helicopters to fend off suspected attackers. In some cases, Chinese special forces personnel reportedly boarded merchant vessels in the front, middle, and rear of the convoy formation to act as "onboard guards."⁶⁷ These techniques are well suited for protecting ships against untrained, poorly armed, non-state actors, but would be unable to defend Chinese shipping from a more advanced adversary trying to block Chinese trade or energy supply flows.

In a hostile environment, an adversary could target Chinese warships and the ships they escort, with weapons far more advanced than the rocket-propelled grenades and rifles carried by Somali pirates. Thus, a Chinese defensive escort force would need to serve more than just a deterrent purpose. PLAN surface ships, submarines, and aircraft would need to operate collectively to protect the SLOC by locating and attacking or avoiding potential threats. The current mission has offered China the opportunity to practice only basic elements of a long-range escort operation. Executing a SLOC protection mission in a non-permissive environment requires significantly more training and equipment.

In 2000, the National Defense University in Beijing published *On Military Campaigns*. The text offers a comprehensive study of operational-level campaigns and provides general guidelines for executing various types of military operations. The authors describe "sea transportation defense" as a potential naval operation designed to safeguard sea lanes of communication by defending against enemy attacks on ports and shipping vessels, and by breaking an enemy blockade against ports and water channels.⁶⁸ *On Military Campaigns* lists four distinct phases of a SLOC defense mission.⁶⁹ First, ships must be defended as they are loaded in a port of origin. Next, a regional military task force consisting of aviation, surface, and submarine assets must ensure control of the sky and sea surrounding the SLOC. Then an additional "escort group" is assigned to protect ships transiting through the SLOC. The escort group differs from the regional task force as it focuses on protecting transiting ships, instead of maintaining regional air and sea superiority. Finally, the destination ports must be defended as the ships are unloaded.⁷⁰

While much can be learned from the current anti-piracy operation, it differs signifi-

cantly from a traditional SLOC protection campaign. In its current deployment, the PLAN must only provide an escort group to protect ships from pirates as they transit through the Gulf of Aden. Given the localized and low-tech nature of Somali pirates, there is no need to protect Chinese shipping from air or subsurface threats, or defend most origin and destination ports. An SLOC defense campaign in a more hostile environment would greatly widen the scope of the mission, requiring protection of Chinese shipping interests in all phases of a ship's journey from the point of origin until the ship is offloaded.

On Military Campaigns describes the need to protect against both conventional attack and sabotage, beginning with loading in the port of origin.⁷¹ In a large-scale conflict, it is unlikely that an adversary will use conventional attacks against non-Chinese ports where energy resources are loaded onto China-bound vessels, as these facilities are generally used by multiple nations, and not exclusively by China. Chinese military planners would need to focus their attention on developing measures to prevent sabotage by covert or special operations forces against Chinese vessels. Stationing an armed security force in ports, as advocated by *On Military Campaigns*, may not be feasible in a non-Chinese port of origin due to political or logistical concerns associated with deploying forces to a foreign country. Thus, China may need to coordinate with local governments for in-port protection or station security teams onboard vessels in port, which may prove to be both logistically and labor intensive.

Once a vessel leaves port, it will potentially face the adversary's aviation, undersea, and surface assets. Since these threats are absent in the current anti-piracy operation, China is able to protect its vessels with a minimal deployment of forces. In a higher risk environment, China could not simply escort convoys of ships, but would also be required to search for adversary submarines, mines, aircraft, and surface ships, a potentially massive undertaking depending on the blockading power and the size of the operating area. Maintaining sea and air control over the area of operations would also be a considerable challenge for China given the PLAN's limited experience in combined arms operations and the lack of forward operating bases and aircraft carriers, which would likely be required to sustain large-scale, long-range operations. Although China's current deployment can technically be considered a combined arms operation, because of its use of aviation assets, special forces, and surface combatants, the combined nature of the operation is minimal. The utility helicopters and few dozen special forces personnel currently deployed act largely as extensions of the warships, responding to reports of suspected pirate activity, and have not provided China with the opportunity to practice true combined arms operations, which require the full integration and application of two or more elements of one military service into an operation.

Shortcomings

China's participation in the anti-piracy mission highlighted shortcomings that would likely hamper a more complicated mission. One such deficiency is a shortage of underway replenishment capabilities. To sustain long-duration, long-range operations, warships must refuel and replenish their stores of ammunition, food, and other supplies. While these needs can be satisfied through port calls, docking in foreign ports

takes warships away from their mission and can expose crews to hazards, as demonstrated by the 2000 terrorist attack against the USS *Cole* as it pulled into Aden for a routine refueling.⁷² To eliminate the need for port calls solely for replenishment and refueling, many modern navies rely on underway replenishment, a practice of transferring fuel and goods from one ship to another.⁷³ In most cases, purpose-built auxiliary ships designed to resupply surface vessels are tasked with underway replenishment. The *Weishanhu* multi-product replenishment ship, which deployed as part of the anti-piracy task force, is one of five replenishment ships in the PLAN's fleet with blue water capabilities; most of China's other replenishment ships are designed for coastal use and lack the endurance to conduct long-distance operations.⁷⁴ In comparison, the United States operates 39 ocean-going auxiliary vessels capable of resupplying a variety of goods, with dozens more in the National Defense Reserve Fleet and Ready Reserve Fleet that could be quickly activated in the event of a crisis.⁷⁵

The dearth of ocean-going auxiliary ships in the PLAN may have influenced the force structure of China's anti-piracy mission and will limit future naval operations if the fleet size is not increased. The additional PLAN surface combatants deployed in a more stressing, hostile environment would certainly require more auxiliary ships. Additionally, Chinese military planners need to consider the loss of auxiliary vessels due to enemy attack or equipment failure as a result of a high operations tempo. China could use civilian cargo vessels to fill some of the underway replenishment capabilities gap, something the Chinese anti-piracy force has already done.⁷⁶

A large distance between China and a potential operating area would further complicate logistics associated with sustaining a future sea lane protection operation. In the current anti-piracy mission, China has been able to use civilian cargo vessels to supplement naval resupply ships and has loaded additional fuel, water, and food onto the *Weishanhu* in the Port of Aden.⁷⁷ In a hostile environment, the long logistical tail required to support operations would be an attractive target for an adversary. Unarmed civilian ships carrying supplies to deployed Chinese naval forces would require escorts, placing additional demands on PLAN resources. Additionally, the practice of commercially purchasing fuel and supplies in the area of operations may not be feasible in a hostile environment. The PLAN currently arranges "commercialized material procurement" in the Port of Aden through co-ordination with the Chinese Ministry of Foreign Affairs and the Chinese Overseas Shipping Company.⁷⁸ During port calls, the *Weishanhu* was loaded with fuel, water, and food, while some crew members took shore leave.⁷⁹ On the current deployment, China was able to replenish in a foreign port because anti-piracy operations have received support from the international community and are legitimized by UN Security Council Resolutions.

If China became involved with a conflict that led to an SLOC defense operation, Beijing may find itself unable to access foreign port facilities. This may be especially true if the SLOC defense mission is a component of a broader war between China and a large military power, like the United States. In such a conflict, the United States may attempt to block China's access to energy resources and other materials that could aid China's war effort by establishing a blockade far from the shores of China, away from the traditional operating areas of China's denial assets like submarines and anti-ship missiles.⁸⁰ An adversary could also use its influence to encourage states to bar Chinese

warships and merchant vessels from entering their ports, through coercive diplomacy or by offering economic or diplomatic incentives.

Future strategic conditions may require China to carry out SLOC defense missions; however, the PLAN must first make significant advancements in training and expand its naval force structure. A comprehensive SLOC defense mission, like the one described in *On Military Campaigns*, requires proficiency in combined arms operations, a force structure capable of gaining and maintaining regional air and sea superiority, and sustainment of forces through underway replenishment. The current mission provides a limited degree of exposure to the fundamental concepts required for such an SLOC defense operation, however, without improving training and acquiring auxiliary vessels, protecting SLOCs against an organized adversary is beyond the reach of the Chinese military.

CONCLUSION

As China continues to develop economically, it will increasingly rely on international markets and foreign suppliers for goods and resources. China's leadership, anxious to assure its population and businesses of its ability to protect commercial interests, may attempt to secure the critical arteries through which trade and resources flow using military force. At the same time, China will seek to be viewed as a more responsible and co-operative global actor committed to ensuring global stability. These "idealist" and "realist" objectives have already manifested themselves in a shifting Chinese foreign policy that appears increasingly willing to employ military forces to further China's interests while simultaneously enhancing its image as a responsible state actor.

China's current anti-piracy deployment serves as a prime example of China's evolving use of military force. While the small number of vessels deployed to the Horn of Africa surely fails to protect all Chinese shipping through the region, it is a symbolic deployment that represents China's commitment to portraying itself as an actor capable of protecting its commercial interests. As China becomes increasingly connected with global markets, the PLA may find itself pressured by the Ministry of Foreign Affairs and domestic commercial actors into launching a variety of new missions that require its forces to travel further from Chinese shores. However, without significant advancements in training and equipment, China's ability to carry out these new tasks will be limited by logistical and technological shortcomings.

NOTES

1. The opinions and conclusions expressed in this article are solely those of the author and do not necessarily represent the views of the United States Air Force, the Department of Defense, or any other US government agency.
2. The author wishes to thank M. Taylor Fravel and an anonymous reviewer for their valuable feedback on earlier drafts. Any remaining errors are solely my own.
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