Chapter 10
China’s Anti-Piracy Mission in the Gulf of Aden: Implications for Anti-Piracy in the South China Sea
Andrew Erickson and Austin M. Strange

The dramatic rise of piracy in the waters off of Somalia in 2008, combined with United Nations Security Council (UNSC) resolutions designed to empower other nations to fight that piracy, presented China with an historic opportunity to deploy a naval force to the Gulf of Aden. This chapter examines the People’s Liberation Army Navy (PLAN)’s Gulf of Aden mission and its implications for counter-piracy operations in the South China Sea.

The chapter has four substantial sections. It first examines the Gulf of Aden mission itself, mainly in terms of the PLAN’s anti-piracy capacity, rules of engagement, anti-piracy methods, situational awareness and control, logistics support, and cooperation with other navies. The second section then addresses the drivers behind China’s decision to send and sustain a naval force to fight piracy in Gulf of Aden, focusing primarily on the economic, political and strategic motivations for the PLAN’s deployment. Third, it discusses the PLAN’s lessons learned and areas for improvement with regards to anti-piracy. The final section explores the broad implications of the Gulf of Aden mission for counter-piracy in the South China Sea by highlighting differences and similarities in major areas such as levels of piracy threat to shipping, regional capacity, and prospects for international cooperation.

1 Gulf of Aden Counter-piracy Mission

For the first time in its modern history, China has deployed naval forces operationally (as opposed to representationally) beyond its immediate maritime borders to protect merchant vessels from pirates in the Gulf of Aden for extended durations of time. PLAN anti-piracy escort taskforces, typically composed of one or more guided missile frigates and destroyers and a supply ship, have escorted ships from China and other nations in armed convoys since the inaugural escort taskforce was first departed from China in December 2008. PLAN taskforces have now escorted over 5,000 ships, and on July 7, 2013, the 14th escort taskforce
conducted the PLAN’s 600th escort mission. While there have been ostensible signals of an end to the prolonged deployments, PLAN anti-piracy operations in the Gulf of Aden, at the time of this publication, have continued uninterrupted for nearly five years.

Capacity

On December 26, 2008, China deployed two South Sea Fleet destroyers – Wuhan (DDG-169 052B Luyang) and Haikou (DDG-171 Type 052C Luyang-II) – and the supply ship Weishanhu (#887 Qiandaohu/Fuchi class) 10,000 kilometers (km) from their homeport in Sanya, Hainan Province. After about three months, the destroyer Shenzhen and frigate Huangshan were dispatched to replace them, while the supply ship Weishanhu remained on station. This second escort fleet conducted operations for about 112 days before being relieved by a third escort fleet composed of the frigates Zhoushan and Xuzhou and another supply ship, Qiandaohu. Three months later, frigates Ma’anshan and Wenzhou relieved their predecessors and joined Qiandaohu in the Gulf of Aden.

The initial ships deployed to the Gulf of Aden reflect a desire by the PLAN to choose some of its newest, most advanced and indigenously constructed vessels, and most experienced officers and crew, to carry out this mission. This pattern has persisted during the 13 additional taskforces deployed off the coast of East Africa: as of July 2013, the PLAN had dispatched over 20 unique naval ships for a total of 37 times to the Gulf of Aden to perform anti-piracy duties, nearly three quarters of which are either Luyang-class destroyer and Jiangkai-class frigates. This shows that China is serious about testing some of its foremost systems and gaining modern seafaring experience in what Beijing terms the “Far Seas” while contributing to the international fight against modern piracy.

Rotational anti-piracy deployments among the PLAN’s three regional fleets further suggest that the lessons learned from anti-piracy operations are being spread throughout the ranks. For the first two deployments, the PLAN selected vessels from the South Sea Fleet, which is marginally closer geographically to the area of operations. The next two deployments came from the East Sea Fleet, and subsequent taskforce deployments have drawn on surface ships and personnel from the North (NSF), East (ESF) and South Sea Fleets (SSF). China has sent major combatant vessels so far from home for four stated reasons: to withstand difficult sea states; to compensate for lack of overseas military bases; to preclude a mistaken bombing of China’s assets such as its embassy in Belgrade in 1999; and to preempt perceptions of subsequent deployment escalation if they had to

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3 This statistic is based on the authors’ estimate.
send major vessels in the future.\textsuperscript{4} In doing so, the PLAN has exposed many of
its surface platforms and auxiliary units to unprecedented challenges in training,
operations, logistics and ideology.

The inaugural deployment exemplifies this unprecedented and valuable
experience. The flagship Wuhan, and even the newer Haikou (completed in 2003)
had never been dispatched this far from China. Each destroyer displaces 7,000
tons, has a maximum speed of 30 knots, and supports a helicopter for patrol and
surveillance operations.\textsuperscript{5} Wuhan and Haikou embarked a Ka-28 Helix from the
ESF piloted by Senior Colonels with several thousand hours of flight experience.\textsuperscript{6}
The selection of ESF helicopters to accompany warships from the SSF on the
initial deployment was probably done because the Helix is superior platform to
the Chinese built Z-9, though it also reflected the interoperability of anti-piracy
resources among different fleets.\textsuperscript{7} The 23,000-ton Fuchi-class Weishanhu, China’s
largest supply ship, has a maximum speed of 19 knots, supports two helicopters,
and can hold 130 crewmembers. It was China’s most experienced replenishment
ship at the time, and previously participated in exercises such as the Sino-British
Friendship 2007 near the English Channel and Sino-French Friendship 2007 in the
Mediterranean Sea.\textsuperscript{8}

Subsequent deployments have sent combinations of guided missile frigates,
destroyers, landing ships and supply ships. As of July 2013 a total of seven
destroyers had been deployed in at least one anti-piracy taskforce to the Gulf of
Aden, five hailing from the SSF and two from the NSF.\textsuperscript{9} Thirteen frigates, ten of
which are Jiangkai-II class, have served in at least one taskforce: Seven from ESF,
five from SSF, and one from NSF. Finally, four supply ships and one landing ship
have served the PLAN in the Gulf of Aden.

Rules of Engagement (ROE)

Both China’s initial foray into anti-piracy operations in the Gulf of Aden
and its day-to-day operations over fourteen deployments are undergirded by
international law and explicit rules. The United Nations Convention on the
Law of the Sea of 10 December 1982 clearly authorizes foreign navies to fight

\textsuperscript{4} 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 Seas Sword], (Guangzhou: 中山大学出版社出

\textsuperscript{5} “Chinese Navy Sends Most Sophisticated Ships on Escort Mission off
content_10565179.htm.

\textsuperscript{6} Sr. Col. Sun Ziwu, pilot of the Ka-28 on Wuhan, has participated in many foreign
visits and military exercises. In the 2004 Sino-French naval exercise, he landed on the
French ship. See Huang Li, pp. 211.

\textsuperscript{7} “Chinese Navy Sends Most Sophisticated Ships”.

\textsuperscript{8} Huang Li, pp. 214–16.

\textsuperscript{9} Unless otherwise noted, authors’ estimates are the source for all data in this paragraph.
piracy outside a coastal state’s territorial sea. The UNSC has passed four relevant resolutions under Chapter VII of the UN Charter (authorizing states to take “all necessary measures”): 1816, 1838, 1846 (on December 2, 2008), and 1851 (on December 16). In particular, UNSC resolution 1846 authorizes participating states to engage pirates within the 12-nautical mile territorial waters off the coast of Somalia, thereby legitimizing the actions of the PLAN and other navies in the fight against piracy.

Moreover, Resolution 1851 authorizes international navies to pursue pirates from the Gulf of Aden to the shores of Somalia and – if conditions warrant – to engage in related activities “in Somalia” itself. In addition to these UNSC-approved resolutions, China also voted in favor of Resolution 1816. This accord authorizes states in the international community to “enter the territorial waters of Somalia for the purpose of repressing acts of piracy and armed robbery at sea”. Both before and during its initial deployment China has proceeded with great care: it first obtained an explicit invitation to participate in anti-piracy operations near Somalia from Mogadishu’s ambassador to China, Ahmed Awil, and subsequently emphasized that international assistance “should be based on the wishes of the [Somali] Government”. Combined, these hard assurances constitute the legal mortar of the PLAN’s continued anti-piracy operations off the coast of Somalia.

The PLAN itself has pledged a cautious approach limited to defense of its ships and any vessels under their escort, though its anti-piracy operations have gradually become more innovative in practice. The explicit objective is not to actively search for pirates and engage in combat with them, but rather to escort ships and thus deter pirates from attacking them in the first place. While initially PLAN taskforces escorted only Chinese-, Hong Kong- and Taiwan-flagged merchant vessels, China has become increasingly willing to provide recourse for foreign-flagged ships and approximately one half of the 5000+ escorted vessels to date have in fact been foreign-flagged. PLAN forces will not “take the initiative to search for captured

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12 “Resolution 1851 (2008)”; Adopted by the Security Council at its 6046th Meeting, December 16, 2008. Resolution 1851 also encouraged creation of a multinational Contact Group on Piracy off the Coast of Somalia. This group of more than twenty nations met for the first time in January 2009. See also Kraska, pp. 141.
14 Huang Li, pp. 169.
15 Ibid.
vessels and personnel at sea and carry out armed rescues. Senior Captain Ma Loping, director of the Navy Operational Bureau of the PLA General Staff, stated that PLAN forces will not “normally” enter another nation’s national territorial seas (within the internationally recognized 12 nautical-miles limit) to chase pirates. While the PLAN anti-piracy forces have subsequently ventured into Somali waters and even briefly landed on Somali shores to rescue hostages, there is no explicit evidence that the PLAN has failed to honor this statement. Upon the initial deployment in December 2008, South Sea Fleet Chief of Staff Rear Admiral Du Jingcheng, then escort taskforce commander, stated that PLAN ships would “independently conduct escort missions” and avoid landing on Somali shores. Another senior Chinese military official remarked: “For us to use force is a very complex matter... it is not just a simple question based on an operational requirement”. “There are political questions—and these are not issues dealt with by military commanders alone. Our warships off Somalia are very well aware of this. We are fully prepared to use force, but we do not take that step lightly.”

Cautious rules of engagement imposed on the PLAN starting with its first Gulf of Aden deployment reflect China’s desire to act within the boundaries of the UN. They demonstrate Beijing’s minimization of risks associated with political and legal issues as a result of engaging suspected pirates. A lack of viable legal options and the possibility of negative political ramifications, particularly in the Muslim world, disincentivize China to deal directly with pirates. Additionally, killing pirates could put an unwanted target on the backs of PLAN vessels or Chinese-flagged commercial ships if pirates sought revenge.

Of course, caution does not necessarily equate to low impact. In recent years PLAN anti-piracy task forces in the Gulf of Aden have adapted to the needs of specific situations while still technically operating within the operational confines depicted above. For example, in November 2010 China Overseas Shipping Company (COSCO)-owned vessel Taiankou was pirated by four Somalis. The twenty-one crewmen on board evaded capture by hiding in the security cabin. Special Forces from destroyer Xizhou, in the region for anti-piracy missions, were dispatched via helicopter and speedboat. PLAN anti-piracy forces appeared ready to engage as they prepared snipers and launched flares, flash-bangs and

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19 Greg Torode, “For PLA, Firing on Pirates is a Political Issue”, South China Morning Post.

20 Huang Li, pp. 258–62.
percussion grenades to warn any potential pirates still on board. After searching the ship thoroughly, the PLAN forces found pirates present and subsequently freed the sailors. Moreover, in 2012 frigate Changzhou of the 12th escort taskforce dispatched Special Forces soldiers who briefly landed on Somali shores to extract freed hostages from Taiwanese fishing vessel Shiuh Fu. Put simply, despite somewhat rigid rules of engagement, the above instances reflect an emphasis on reacting effectively to relatively unscripted situations. This emphasis is also ever-present in PLAN anti-piracy training, which recently has focused on raising the ability of PLAN crewmen to react to unforeseen circumstances.

The PLAN is thus finding ways to improve operationally within its given rules of engagement. However, this is not to say that PLAN leaders are on balance completely satisfied with anti-piracy operations in the Gulf of Aden. For example, key legal deficiencies still persist that prevent China, as well as other international navies, from more effectively dealing with the problem of piracy. One issue is that of detaining suspected pirates. China’s anti-piracy operations, despite being the largest of any independent deployer in the Gulf of Aden, have never detained a suspected pirate criminal and serve only to deter pirates. China and other navies face formidable obstacles in this regard, such as accurately identifying pirates at sea, obtaining photographic evidence, securing witnesses to piracy crimes, and collecting evidence from victimized ships. More broadly, China and states committed to eradicating piracy frequently emphasize that the true fight is not on the econ com Stafl effect land man (TFC sprin


23 李德, 李根成 [Li De and Li Gengchen], “‘假戏’该如何真作? 海军第九批护航编队赴海盗综合演练通讯录” [How to Make “Fake Axe” a Reality? Recording Perceptions and Thoughts in the Navy 9th Escort Fleet’s Comprehensive Antipiracy Drill], 人民海军 [People’s Navy], August 29, 2011, pp. 3.

24 It should be noted that it is possible that PLAN anti-piracy forces, as well as those of other navies, could be following the rules of engagement more loosely in practice where it is more difficult for domestic and international audiences to observe.


the water but on Somali soil, where persistently failed governance and abysmal economic prospects lead otherwise helpless Somalis, many of whom were initially commercial fishermen, to engage in piracy activities. Then-PLA General Chief of Staff Chen Bingde suggested in 2011 that “For counter-piracy campaigns to be effective, we should probably move beyond the ocean and crush their bases on the land”.27 That said, there are certainly no indications that China, without the explicit mandate of the UN or support of the Somali Transitional Federal Government (TFG), is comfortable with measures similar to air raids by EU NAVFOR in spring 2013 designed to uproot piracy on land.

Anti-piracy Methods

In its routine operations, the PLAN continues to offer three primary methods of protection against pirates: “area patrol”, “accompanying escort”, and “on-ship protection”. Different services are provided depending on several situational variables, such as escorted vessels’ schedules and physical features, as well as the degree to which escorting PLAN vessels have been able to recuperate in advance.28 Area patrol, the method least used, involves monitoring relevant zones. PLAN has maintained two rendezvous points 550–600 nautical miles apart at 100 nautical miles north of Yemen’s Socotra Island and 75 nautical miles southwest of Port Aden and seven patrol zones along the main shipping route in the sea area east of the Gulf of Aden.29 The PLAN is known primarily for its role as an independent, escort-centric anti-piracy taskforce, in contrast to multilateral coalitions such as CTF-151 and EU NAVFOR that have traditionally emphasized area patrol-based services.

Accompanying escort, in which PLAN ships travel next to or near groups of commercial vessels, is by far the most-used method and has been streamlined by the PLAN with each successive taskforce deployment. Originally Beijing only accepted applications from ship-owners in mainland China, Hong Kong, Macau, and Taiwan through the China Ship Owners Association for the PLAN to escort their vulnerable ships through the Gulf of Aden.30 Foreign ships could apply on a case-by-case basis. As previously stated, however, this policy has changed and now it is commonplace for a given PLAN escort convoy to contain mostly foreign-flagged ships. The Ministry of Transportation (MoT) processes the applications,

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determines ship-specific requirements, and suggests a method of escort to the PLAN. After the PLAN determines the proper plan, the MoT then guides the ships to be escorted to the predetermined location where they are to meet the relevant PLAN vessel(s). China has traditionally escorted ships in an area west of longitude 57 degrees and east and south of latitude 15 degrees north. Even in the first deployment, Wuhan and Haikou worked around the clock and could escort multiple ships simultaneously in opposite directions. Moreover, while China operates its escort services independently, it has shown a willingness to cooperate through the mechanism Shared Awareness and Deconfliction (SHADE) not only by actively participating in quarterly meetings and aligning its escort schedule with other independent navies, but also by adjusting its escort corridor several nautical miles to avoid operational overlap with other forces in the region.

In response to initial problems with commercial ships not adhering to the details of escort procedures during the first month, the PLAN now offers pre-scheduled group escorts. Starting after the 2009 Spring Festival, escort was offered based on marine traffic conditions, as determined by PLAN and MoT research. Now this has become routinized, like a “train schedule”. Announcements posted on the China Ship Owners’ Association’s website before the 15th of each month announce “fixed escort times” (e.g., weekly) and merchant ships must make arrangements accordingly. The PLAN must be notified a week in advance regarding ships which are slower than 10 knots/hour or have other special requirements.

The configuration of the escort formation is generally determined by the number of merchant ships to be escorted as well as the quantity and characteristics of PLAN vessels available for escorts. Convoys are usually divided into one or two columns, organized to facilitate communication, and separated at a standard distance, though adaptive practices such as tri-columns have reportedly been used in some cases. And while the PLAN has institutionalized escort routines,
it has also learned that unexpected situations often arise. In one instance during March 2012, the eleventh escort taskforce – originally slated to accompany three merchant vessels in one convoy – split into two groups when it received word that COSCO-owned vessel Fu Yuan would arrive late at the designated rendezvous area. Accordingly, destroyer Qingdao escorted the two faster vessels while frigate Yantai waited an additional three hours and provided a separate escort for Fu Yuan.37

Similarly, more than one escort style can be integrated for hybrid-style escort convoys: one escort operation carried out by the third taskforce used four distinct escort methods and was able to safely provide escort for twenty-five merchant ships.38 For single-column escort, the PLAN warship(s) will maintain similar speed and course from a position outside the column. For double-column escort, a single warship would operate on the inside, whereas two warships would each take one side. Occasionally, one ship will be relieved by another coming in the opposite direction, as in a “relay race”. Relay-style operations typically employ the services of PLAN helicopters that provide aerial surveillance during switchovers. Frequent naval commentator and Rear Admiral (retired) Yin Zhuo asserted that PLAN escort convoys included up to twenty or thirty commercial vessels during 2011 and 2012.39 Indeed, People’s Navy reported in early 2012 that the fourth escort taskforce had, at the time, set a new record for vessels escorted in one escort operation at thirty-one.40

To save fuel and wear and tear on PLAN vessels on routes that are less traveled, with ships that travel fast enough to better evade pirates, the PLAN relies on embarked Special Forces and helicopter operations. These teams have greatly improved PLAN escort efficiency over the fast four-plus years. On-ship protection involves stationing Special Forces personnel on one or more vessels in a group of civilian ships. Here the PLAN draws on its 70–90 highly trained Marine Corps Special Operations Forces. Building on earlier land-based training, during transit to the Gulf of Aden, members of a special force unit aboard the warships carry out anti-piracy training with a ship-borne helicopter, from which they rappel onto the deck to simulate landing on hijacked or pirate vessels. The helicopters also practice nighttime landing operations at sea, a new area for the PLAN. After over four years of deployments, many Special Forces personnel have served multiple

38 李杰 [Li Jie] and 梁春晖 [Liang Chunhui], “中国海军舰艇编队护航佳绩令人瞩目--对我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] (January 2010), pp. 8–13.
39 “Conversation with Yin Zhuo”, p. 22.
tours of duty in the Gulf of Aden, allowing the PLAN to gradually foster an elite group of anti-piracy veterans. At the start of 2012, over 700 Special Forces soldiers had participated in at least one Gulf of Aden deployment.41

With regard to specific escort operations, the Special Forces are usually sufficient to protect at least 7 convoys of merchant ships simultaneously. Typically, helicopters embark 5–7 Special Forces on the first and last ships of a convoy. With a range of up to 2,000 m, their deck-mounted grenade launchers enable them to destroy pirate boats before the pirates could threaten them. They are also equipped with a variety of shorter-range weapons, including Type-56 assault rifles, QBZ-95 automatic rifles, QBU-88 sniper rifles, and infrared night-vision equipment that can effectively deter potential pirates. In emergencies, civilian crewmembers may be allowed to use some of the weapons.42 The PLAN has even made efforts to train civilian seamen, such as in 2011 when the PLAN carried out integrated training with civilian counterparts, requiring them to adapt makeshift weapons to combat a hypothetical pirate attack.43

While the PLAN has sought to avoid engaging directly with pirates in any of its anti-piracy operations, it has encountered confirmed and suspected pirates on various occasions throughout its nearly five-year presence in the Gulf of Aden. The nature and scope of these interactions has varied widely: in one case PLAN crewmen aboard destroyer Zhoushan identified a ten-meter skiff suspected to be a pirate vessel only to discover forty-five unarmed stowaways seeking refuge.44 During one less benign instance in 2009, destroyer Shenzhen encountered 18 speedboats rapidly closing in on its escort convoy.45 PLAN helicopters, given their relative agility and ability to threaten pirates with an array of tools, have often played important roles in such interactions. While each encounter is unique, PLAN responses to pirates often involve the shooting of signal flares, flash bombs and stun grenades from surface platforms and helicopters. PLAN platforms also use devices to verbally project their presence to suspected pirates.46 In late 2010 replenishment ship Weishanhu fired live warning shots towards a reported 130 suspected small pirate boats that were approaching it and escorted vessel MV

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42 Unless otherwise specified, all data in this section from Huang Li, pp. 226–36.
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Zhenhua 9.47 One year later PLAN forces used surface and aerial pressure to drive away five suspicious vessels harassing merchant ships in a PLAN convoy.48 After the Chinese New Year in February 2011, helicopters sent from Xizhou used warning shots to scare away pirate skiffs that were chasing a South Korean merchant ship and called on Xizhou in distress.49 Then, in April 2012, an escort convoy was surrounded by twenty-two suspect pirate skiffs. PLAN units from the 11th taskforce fired stun grenades after pirates were defiant towards PLAN helicopters.50 Prior to this specific incident several small groups of suspected pirates neared eleventh task force convoys but were driven away by helicopter pursuit and warning flares.51 The following month a reported seventy suspected pirate skiffs swiftly approached a PLAN escort convoy on both sides.52 Special operations personnel on Qingdao fired stun grenades and flash bombs, initially to no avail.53 Special Forces then fired machine gun rounds in front of the skiffs, and their colleagues fired warning shots from helicopters. It took approximately four hours for the group of suspected pirates to retreat.54

Situational Awareness and Control

Innovative use of satellite communications has been a major highlight of China’s deployment to enhance situational awareness and control. Telecommunications have been emphasized throughout China’s Gulf of Aden deployment, beginning with pre-departure preparation in late 2008. Prior to the inaugural deployment, PLAN Commander Admiral Wu Sheng Li and PLAN political commissar Admiral Liu Xiaojiang called for “comprehensive coverage, all-time linkage, and full-course support” of the PLAN’s anti-piracy missions.55 During an insightful interview in January 2009, Ju Chengzhi, Director-General of the MoT’s International

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49 李高健, 方立华 [Li Gaojian and Fang Lihua], “我护航编队成功解救遭海盗袭击韩国商船” [China's Escort Fleet Successfully Rescues South Korean Merchant Ship Chased by Pirates], 人民海军 [People's Navy], February 14, 2011, pp. 1.
50 “PLAN Navy’s 11th Escort Formation Successfully Chases Away 22 Suspect Boats”, 军事报道 [Military Report], CCTV-7 (Mandarin), 1130 GMT, April 1, 2012.
51 “PLAN Navy’s 11th Escort Formation Successfully Chases Off Several Batches of Suspicious Vessels”, 军事报道 [Military Report], CCTV-7 (Mandarin), 1130 GMT, March 27, 2012.
53 Ibid.
54 Ibid.
Cooperation Department, stated that the MoT is able to instantly track vessels as well as connect with them via video through maritime satellite ground stations. The anti-piracy comprehensive communications platform is jointly supported by the PLAN Political Department, PLAN Headquarters Communications Department, and the State Information Center.56

Additionally, the MoT’s China Search and Rescue Center and the PLAN Control Center are able to track Chinese merchant ships in the area, all of which have tracking devices installed on deck which support complete, constant tracking and video-based correspondence.57 The China Ship Reporting (CHISREP) system requires all Chinese-registered ships exceeding 300 tons gross displacement traversing international shipping lanes to report their positions daily to the Shanghai Maritime Safety Administration, and also facilitates greater tracking for China’s anti-piracy planners.58 China Transport Telecommunications and Information Center (CTTIC), a company formed twenty-five years ago by various government agencies and now considered a “first-level organization unit” (一级事业单位) of the MoT, helps implement the country’s maritime satellites and has collaborated intimately with the PLAN throughout the Gulf of Aden deployment.59 Moreover, in June 2012 then-taskforce Commander Yang Junfei stated that PLAN communication systems enable taskforces and commercial ships in escort convoys to directly exchange information. Escort flotillas rely increasingly on satellite communications in the areas of “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).60

PLAN anti-piracy forces have increasingly utilized China’s Beidou satellite network that facilitates real-time positioning of vessels and inter-ship communication. Zhao Huashu, observation and communications chief of destroyer Qingdao, stated, “The Beidou System is highly secure, sends messages rapidly … can satisfy general message and communications needs [and] has greatly reduced our communications time”.61 PLAN vessels support command and coordination

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56 Xu, “COSCO Vessels Only Encounter Pirate Attacks 63 Times”.
57 Zhang Qingbao, “We Should Protect Our Overseas Economic Interests”, p. 4; Xu, “COSCO Vessels Only Encounter Pirate Attacks 63 Times”.
59 Information in this and the following paragraph is based on content directly from CTTIC’s website, www.cttic.cn/zxgk/zxgk.aspx, as well as from relevant sections of the Ministry of Transportation’s website, www.mot.gov.cn/html/ReleasePage/wlk-dwj/s.html.
during escort missions by “releasing for use high-frequency Chinese and English channels”, and maintain constant communication with escorted vessels “through emails and satellite faxes”.62

Logistics Support

*At-Sea Replenishment.* Securing the necessary logistical support for sustaining extended anti-piracy operations off Africa was a major concern for Chinese planners prior to the inaugural deployment. How to optimize logistical practices given imposing restraints, such as a lack of fixed overseas bases or supply points, has remained an important question for the PLAN. Refueling and replenishment of the PLAN’s anti-piracy assets in the Gulf of Aden continues to challenge China’s naval forces previously untested in extended Far Seas deployments while also yielding substantial fruits, from strengthening the PLAN’s logistical acumen to increasing the range of its diplomatic activities. Generally speaking, PLAN anti-piracy task forces rely on both underway replenishment at sea and port calls at foreign harbors. Dependence on the latter replenishment method has increased gradually with each successive escort task force: While it was reported that during the inaugural escort task force only supply ship *Weishanhu* called briefly in port twice,63 both the warships and replenishment ships in the most recent task force regularly berth several times before returning home. Since 2011 foreign port calls have quickly undergone “normalization” (常态化) as a PLAN Far Seas logistical practice, and task forces over the past three years have docked in foreign ports roughly once every month for five days at a time.64 This trend is largely due to two factors: the extended average duration of PLAN anti-piracy deployments from three or four months to over six months, and the diversification of the nature of PLAN port calls that have expanded from purely replenishment to encompass friendly visits and joint exercises. Table 10.1 (overleaf) lists the port calls by PLAN anti-piracy forces in foreign countries since the onset of China’s Gulf of Aden mission in December 2008.

Far Sea logistics goes far beyond ship refueling and maintenance, and the PLAN has had to place growing priority other unsung but essential aspects of the Gulf of Aden deployment such as human health. Extended deployments overseas for months at a time with little respite is physically and mentally taxing on sailors who often work eight to ten hours daily, especially those of the PLAN who

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62 Huang Li, pp. 243.
64 姚力江 [Yao Yijiang], et al., “中国海外基地的现实与梦想” [Dreams and Reality of Chinese Overseas Bases], 南方周末 [Southern Weekend], August 8, 2012, [http://www.infzm.com/content/61702](http://www.infzm.com/content/61702).
Table 10.1  Selected international port visits by PLAN anti-piracy forces

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<td>• July 26–30, 2010, Friendly Visit</td>
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<td>Taranto</td>
<td>• August 2–7, 2010, Joint Drills and Friendly Visit</td>
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<td>Shuwaikh</td>
<td>• November 27–December 1, 2011, Friendly Visit</td>
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<td>Port Klang</td>
<td>• December 6, 2009, Friendly Visit</td>
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November 7–10, 2011, Replenish/Overhaul
February 21–24, 2012, Replenish/Overhaul
July 1–3, 2012, Replenish/Overhaul
July 9, 2012, Replenish/Overhaul
March 28–29, 2013, Replenish/Overhaul

PAKISTAN
Karachi
• August 5–8, 2009, Joint Drills and Friendly Visit
• March 7–13, 2010, Joint Drills and Friendly Visit
• March 13, 2011, Joint Drills
• September 8, 2012, Replenish/Overhaul

PHILIPPINES
Manilla
• April 13–17, 2010, Friendly Visit

PORTUGAL
Lisbon
• April 13–19, 2013, Friendly Visit

QATAR
Doha
August 2–7, 2011, Friendly Visit

ROMANIA
Constanta
• July 31–August 3, 2012, Friendly Visit

SAUDI ARABIA
Jiddah
• November 27–31, 2010, Friendly Visit
• September 3, 2011, Replenish/Overhaul
• June 17, 2012, Replenish/Overhaul
• January 1–6, 2013, Replenish/Overhaul
• April 25–28, 2013, Replenish/Overhaul

SEYCHELLES
Port of Victoria
• April 14, 2011, Friendly Visit
• June 16–20, 2013, Friendly Visit

SINGAPORE
Changi
• September 5–7, 2010, Replenish/Overhaul and Joint Drills

• December 18–20, 2011, Replenish/Overhaul and Friendly Visit

SOUTH AFRICA
Durban
• April 4–8, 2011, Friendly Visit

TANZANIA
Dar es Salaam
• March 26–30, 2011, Joint Drills and Friendly Visit

SRI LANKA
Colombo
• January 5–7, 2010, Friendly Visit
• December 7–12, 2010, Friendly Visit

THAILAND
Sattahip
• August 16–21, 2011, Joint Drills and Friendly Visit
• April 21–25, 2012, Friendly Visit

TURKEY
Istanbul
• August 5–8, 2012, Friendly Visit

UKRAINE
Sevastopol
• July 31–August 3, 2012, Friendly Visit

UNITED ARAB EMIRATES
Abu Dhabi
• March 24–28, 2010, Friendly Visit

VIETNAM
Ho Chi Minh City
• January 13, 2013, Friendly Visit

YEMEN
Aden
• February 21, 2009, Replenish/Overhaul
• April 25, 2009, Replenish/Overhaul
• July 23, 2009, Replenish/Overhaul
• September 28, 2009, Replenish/Overhaul
• February 5, 2010, Replenish/Overhaul
• May 16, 2010, Replenish/Overhaul
• July 26, 2010, Replenish/Overhaul
• October 1, 2010, Replenish/Overhaul
previously had little experience outside of the Asia-Pacific region. “Getting salty” in this regard has challenged the PLAN to improve its human supply-side logistics, including adapting more effective water and food storage and conservation technologies and methods as well paying more attention to common maritime health issues such as seasickness and low morale. PLAN sailors have access to Tencent QQ, other Internet applications, satellite television and European coffee. Aside from resources available on deck such as exercise rooms, game rooms and medical facilities, the PLAN has coordinated with various partners back in China. For example, PLA Hospital No. 425 has supported on-duty PLAN anti-piracy personnel through teleconferencing.\footnote{Chinese Navy Uses Telemedicine in Major Missions, \textit{People’s Daily Online}, January 7, 2013, http://english.peopledaily.com.cn/90786/8080783.html.}

Chinese planners have recognized the weighty costs imposed by Far Seas logistics particularly absent overseas basing or other arrangements that would guarantee Chinese ships fixed support points. Direct costs include fuel, food stores, health equipment, ammunition and training equipment, and the costs of depreciation. Opportunity costs are also a factor as PLAN official must consider whether its newest vessels are best used in the Gulf of Aden or in waters closer to home. PLA Chief of General Staff Chen Bingde hinted in 2011 that a cessation of the PLAN’s anti-piracy operations was imminent given these costs, stating, “if the situation continues like this, it will create great difficulties for us to continue with such operations ... Then we have this dilemma: on the one hand, if we continue to build new ships we will have constraints of 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.”\footnote{Chen, “Speech Presented at the U.S. National Defense University”.} However, over two years after Chen’s statements, the PLAN’s contributions to fighting piracy off Somalia have no official end in sight.

After nearly five years of lessons learned it is certainly conceivable that the PLAN’s learning curve has flattened considerably over the successful deployment of fourteen escort taskforces. The 14th taskforce dispatched slightly older surface combatants than those featured in previous deployments, which could potentially signal recognition of a depleted cost-benefit curve or a scaling down of operations. Of course, the PLAN could view its costs and benefit scheme in an entirely different way: perhaps its prefers to continue dispersing both tangible operational gains and the intangible lessons derived from Far Seas experience across its ranks. PLAN surface platforms continue to make operational breakthroughs in their own right: \textit{Weishanhu}, for example, has set several replenishment records while serving in the Gulf of Aden that have innovated the PLAN’s logistical methods.\footnote{PLA Navy’s \textit{Weishanhu} Ship Breaks Several Records in the History of Escort Operations, 军事报道 [Military Report], \textit{CCTV-7} (Mandarin), 1130 GMT, May 25, 2012.} Similarly, the
PLAN has been able to get more out of its anti-piracy operations by incrementally innovating them, such as by expanding the range of helicopter functions in the Gulf of Aden.\textsuperscript{68} Besides hard platforms, the PLAN has used extensive training to improve the operational capacity of anti-piracy sailors and Special Forces, frequently training in choppy weather conditions with poor lighting.\textsuperscript{69}

Finally, although difficult to quantify, the continued prestige that PLAN anti-piracy forces are garnering in the Gulf of Aden is a rare chance for China to showcase its naval ability on an international scale. Guo Xichun, deputy commander of the Seaborne Aircraft Division of the seventh escort task force, aptly summarized this sentiment with regards to PLAN aerial performance: "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'.\textsuperscript{70}

\textit{Cooperation with Other Militaries}

The majority of international navies contributing to the fight against Somali piracy do so under the command of multilateral mechanisms, while other navies such as China, India and Russia coordinate with others in the regions but operate autonomously. The primary multilateral anti-piracy forces in the region are known as "The Three Forces", and include Combined Maritime Forces (CMF) Combined Task Force (CTF)-151 led by the U.S., North Atlantic Treaty Organization (NATO)-led Operation Ocean Shield (OOS; previously Operation Allied Protector), and European Union (EU)-commanded NAVFOR (Operation Atalanta). While each of the multilateral forces operate independently, "The Three Forces" collectively place an average of nine naval vessels in the Gulf of Aden simultaneously and conduct a combined average of 90 maritime patrol and reconnaissance aircraft (MPRA) sorties every month.\textsuperscript{71}

From the outset, while it and other independent navies conduct operations fundamentally different than those of "The Three Forces", China has been "ready to exchange information and cooperate with the warships of other countries in fighting Somali pirates".\textsuperscript{72} At the time of the first deployment, deployment

\begin{thebibliography}{9}
\item \textsuperscript{68} “Conversation with Yin Zhuo”, pp. 22.
\item \textsuperscript{69} For example, see 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 8th Escort Task Force Guo Xichun], \textit{Aviation World} (January 2012).
\item \textsuperscript{70} \textit{Ibid.}, pp. 30-33.
\item \textsuperscript{71} “Counterpiracy Operational Update”, Presented by CTF151, 27th SHADE meeting, March 2013.
\end{thebibliography}
commander Admiral Du Jingcheng stated that the PLAN would “not accept the command of other countries or regional organizations”, but was willing to “facilitate exchanges of information with escort naval vessels from other countries”.

This statement has held true and there has been gradual increase in communications with vessels from the U.S. and over 20 other countries and several shipboard exchanges of commanding officers and CTF 151 staff. In recent years a voluntary, multinational anti-piracy coordination mechanism known as Shared Awareness and Deconfliction (SHADE) has facilitated tighter integration of the anti-piracy operations of multinational and independent naval actors, including China, who continues to make meaningful contributions to SHADE. SHADE was founded and is chaired on a rotational basis by CTF-151, NATO and EU NAVFOR, who at the time of creating SHADE desired for the international community to reap the benefits of a loose confederation of the willing. Quarterly SHADE meetings held in Bahrain throughout regularly host naval and industry leaders from dozens of countries.

To date, the willingness by China and other independent navies to synchronize their anti-piracy operations through the SHADE mechanism has been a bright spot for the international fight against piracy. While it was denied chairmanship of SHADE in 2009, both the international community and China have proactively sought to enhance the PLAN’s role in the mechanism. Specifically, China participates in SHADE’s Convoy Coordination Working Group (CCWG), which coordinates escort schedules between navies such as China, India, Japan and South Korea.

SHADE is ultimately chaired by Western-centric naval forces; however, China likely prefers to cooperate with it due to its voluntary and multilateral nature, whereas other multilateral forces such as CTF-151 are commanded by the U.S. And as there are potential security barriers to more direct integration between China and traditional navies in the region, SHADE thus provides an innovative, low-sensitivity platform that has facilitated important breakthroughs in maritime non-traditional security cooperation between China and Western states. There are indeed signs of growing teamwork and cooperation: reportedly the PLAN deployed anti-piracy forces south of the Bab al- Mandeib to help fill gaps in patrol left by “The Three Forces”. In summary, while SHADE highlights the major


75 Unless otherwise specified, the insights in this paragraph are from the meeting minutes of the 24th and 25th SHADE meetings.