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Crossing Interagency Lines

Enhancing Navy-Coast Guard Cooperation to Combat Gray Zone Conflicts of East Asia

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Abstract

Coast guard and navies, despite their varying missions, doctrine, and asset composition, share the responsibility of monitoring and defending coastal States from intrusions by foreign vessels into territorial waters. This shared responsibility has taken on added significance over the last decade due to the increasing challenge posed by gray zone actions by maritime actors in East Asia. States now desire greater coast guard-naval cooperation to address such actions, especially near disputed territory where policy-makers seek to contain the challenge using law enforcement, not military means. Yet for most States, the nature of this delineation has not been adequately addressed or is still being determined. Using the region of East Asia as a case study, and drawing upon interoperability linkages with the United States Coast Guard (USCGG) and United States Navy, this paper proposes that greater coordination and interoperability between navies and coast guards should be pursued among States in the region as one prescription to address gray zone challenges. While significant investments in training, C4I (Command, Control, Communications, Computers and Intelligence) and legal authorities are necessary in the long term to achieve true interoperability, this paper proposes steps that states can take to enhance existing linkages.

Keywords

coast guards - navies - East Asia - gray zones - maritime security

I Background

Several countries, notably Japan and the United States, have identified gray zone threats as posing one the greatest challenges to maritime sovereignty and global norms.¹ The recently-released National Defense Strategy (NDS) and National Security Strategy (NSS) highlights for the first time the extent of the challenge. The NSS notes that "many actors have become skilled at operating below the threshold of military conflict—challenging the United States, our allies, and our partners with hostile actions cloaked in deniability."² The NDS agrees that "Both revisionist powers and rogue regimes are competing across all dimensions of power. They have increased efforts short of armed conflict by expanding coercion to new fronts, violating principles of sovereignty, exploiting ambiguity, and deliberately blurring the lines between civil and military goals."³

For the purposes of analysis, therefore, this paper defines the "gray zone" as "destabilizing actions designed to alter the status quo of a dispute but that intentionally fall below a threshold that would prompt a conventional military response, or actions by actors that blur the distinction between civilian and military operations."⁴ In the context of East and Southeast Asia, such actions largely occur using civilian actors, such as fishing vessels or maritime militia, or government vessels, such as coast guards, to assert administrative control over disputed island features and the maritime zones that those features create. The country that employs such tactics most frequently in the region is China, although other countries are increasingly turning to such tactics to assert administrative control. The focus of this article will focus primarily on China's gray zone challenges and regional responses.

2 The White House, National Security Strategy of the United States of America, December 2017, 3.

¹ For Japan, see "National Defense Program Guidelines for FY 2014 and Beyond," Ministry of Defense (Japan), December 17, 2013; for the United States, see U.S. Special Operations Command (U.S. SOCOM), "The Gray Zone," white paper, 9 September 2015, and "Report on Gray Zone Conflict," International Security Advisory Board, United States Department of State, 3 January 2017.

³ U.S. Department of Defense, Summary of the 2018 National Defense Strategy of the United States of America: Sharpening the American Military's Competitive Edge, 4.

⁴ For other definitions and comprehensive analyses of gray zones, see Michael J. Mazarr, *Mastering the Gray Zone: Understanding a Changing Era of Conflict* (Carlisle, PA: Strategic Studies Institute, 2015); Frank Hofman, "The Contemporary Spectrum of Conflict," in 2016 Index of U.S. Military Strength, ed. Dakota L. Wood (Washington, DC: Heritage Foundation, 2015); Antulio J. Echevarria, "How Should We Think about 'Gray-Zone' Wars?," *Infinity Journal* 5, no. 1 (Fall 2015): 16–20; and 17; and Nadia Schadlow, "Peace and War: The Space Between," War on the Rocks, 18 August 2014.

Chinese employment of non-military capabilities in its maritime territorial disputes with Japan in the East China Sea and with several countries, including Vietnam and the Philippines, in the South China Sea, have increased over the past few years.⁵ For example, China has employed maritime law enforcement (MLE) vessels to assert its claims to the disputed Senkaku/Diaoyu Islands, which are administered by Japan but claimed by China and Taiwan. Beijing has also consolidated administrative control within its "nine-dash line" in the South China Sea using MLE assets, and, more recently, "maritime militia" which are fisherman wearing civilian clothing but who receive military training and coordinate their actions under State and military guidance - to harass and coerce rival claimants in Southeast Asia.⁶ Chinese fisherman and maritime militia have become increasingly brazen in challenging attempts by Japanese and South Korean coast guard officers from boarding and inspecting fishing vessels operating in their territorial waters. In 2011, a South Korean coast guard officer was stabbed and killed by a Chinese fisherman while attempting to board a Chinese fishing trawler near the Northern Limit Line (NLL) separating North and South Korea.7 Chinese fisherman have also been shot and killed while resisting arrest in 2012 and 2014 in the area.8

China appears to calculate that relying on MLE vessels, maritime militia and other non-military capabilities, while keeping PLA Navy (PLAN) surface ships largely in the background, will enable it to achieve its sovereignty goals while minimizing the risk of further escalation. It has arguably been successful in this strategy.⁹ China has greatly improved its position and administrative control over much of the disputed territory in the East and South China Sea, and done

⁵ Lyle J. Morris, "Blunt Defenders of Sovereignty: The Rise of Coast Guards in East and Southeast Asia," *Naval War College Review*, Vol. 70, No. 2 (Spring 2017), 78, 103.

⁶ For detailed background on these forces see Jonathan G. Odom, Guerrillas in the Sea Mist China's Maritime Militia and International Law Asia-Pacific Journal of Ocean Law and Policy, Volume 3, Issue 1, 2018, 31–94; Conor M. Kennedy and Andrew S. Erickson, "China's Third Sea Force—The People's Armed Forces Maritime Militia: Tethered to the PLA," *China Maritime Report* No. 1, *China Maritime Studies Institute*, U.S. Naval War College, March 2017; Erickson and Kennedy, "Trailblazers in Warfighting: The Maritime Militia of Danzhou," *Center for International Maritime Security*, 1 February 2016; Erickson and Kennedy, "Irregular Forces at Sea: Not 'Merely Fishermen'—Shedding Light on China's Maritime Militia," *Center for International Maritime Security*, 2 November 2015; and Christopher P. Cavas, "China's 'Little Blue Men' Take Navy's Place in Disputes," *Defense News*, 2 November 2015.

⁷ Paula Hancocks,"S. Korea: Chinese fisherman kill coast guard member," *CNN*, 12 December 2011.

⁸ Malcom Moore, "Mackerel war between China and South Korea sees fisherman shot dead," *The Telegraph*, 10 October 2014.

⁹ Tobias Burgers and Scott N. Romaniuk, "Hybrid Warriors: China's Unmanned, Guerilla-Style Warfare in Asia's Littorals," *The Diplomat*, 16 February 2017.

so at minimal material or diplomatic cost. China has also been successful at "civilianizing" the optics of the threat, and in so doing, ensuring that if one of its rivals responds with navy ships, that country will appear to be the party engaging in escalatory behavior, rather than China. Moreover, employing naval assets in reaction to provocative Chinese MLE or other non-military activities risks creating an opportunity for China to respond in kind, thus escalating the conflict to a level where it enjoys conventional naval superiority.¹⁰

By inhabiting the seams between civilian and military jurisdiction and responses, China's gray zone actions confront countries in the region with a series of policy and strategy challenges. The first challenge is developing approaches that will better enable them to deter Chinese non-military, but coercive actions. Another challenge is deciding how to respond when such actions are ineffective in deterring China from using its non-military maritime capabilities for coercive purposes. These challenges are compounded by the fact that many countries in the region, like Japan and South Korea, perceive gray zone challenges as domestic law enforcement matters and therefore seek to employ maritime law enforcement actors, such as coast guards, as the primary actor to meet the challenge, with navies playing a support role.¹¹ Japan's sovereignty patrols over the Senkaku/Diaoyu Islands and South Korea's governance of Socotra/Ieodo and Takeshima /Dokdo Islands by coast guard vessels are examples of this.

By construing the challenge in domestic law enforcement terms, countries not only place tremendous responsibility on their constabulary forces, but also place interoperability requirements on their coast guards and navies to coordinate operations should law enforcement actions alone fail. The problem, as this paper will illustrate, is that for many countries in the region, interoperability exists in name and intent only and little effort has put forth to address the legal, doctrinal, and operational components of joint operations between navies and coast guards.

The following sections of this paper will seek to overview the delineations between coast guard and naval forces, what kinds of gray zone challenges scenarios might confront countries in East Asia, the current state of coast guard-navy interoperability that exists in these States, and conclude with an

¹⁰ Lyle J Morris, "The Era of Coast Guards in the Asia Pacific is Upon Us," Asia Maritime Transparency Initiative (AMTI), CSIS, 8 March 2017; Lyle J Morris, "Indonesia-China Tensions in the Natuna Sea: Evidence of Naval Efficacy Over Coast Guards?" The Diplomat, 5 July 2016.

¹¹ Lyle J Morris, "The New "Normal" in the East China Sea," *The Diplomat Magazine*, March 2017; Satoshi Ogawa, "Lessons learned from Senkaku war games," *The Japan Times*, 7 May 2017.

examination of the USCG as a model for how the two services can better establish linkages to promote coordination to combat gray zone threats.

11 The Roles and Missions of Maritime Security Forces in Gray Zones

In the book "Navies and Foreign Policy," naval historian and scholar Ken Booth provided a helpful typology for understanding the basic roles of navies instruments of maritime security (Figure 1). Although written over four decades ago, Booth's model of the basic functions of navies remains no less relevant today. Booth finds that navies were designed to fulfill three general roles: (1) military/war-fighting; (2) diplomatic; and (3) constabulary/policing.¹² All three roles work in concert to protect what can be described as "maritime security missions" – that is the employment of maritime assets at sea to serve the national security goals of a State.

The "military" role involves the employment of warships, and threat or use of military force, to defend or protect national sovereignty. The "diplomatic" role involves the use of naval assets to influence – either negatively, through intimidation or deterrence posturing, or positively, through reassurance of an ally or partner - other States' perceptions of State foreign policy preferences or commitment. Finally, the constabulary or "policing" role governs most non-war activities associated with maritime sovereignty protection and the enforcement of national laws at sea. Specific tasks might include maritime surveillance and enforcement, counter-IUU (illegal, unreported, and unregulated) fisheries protection, search and rescue (SAR), countering drug smuggling and piracy, and controlling illegal immigration.



¹² Ken Booth, Navies and Foreign Policy, Croom Helm Publishing, (London, 1977), 15–16.

Up until the last few decades, the management, regulation, and enforcement of domestic and international maritime laws and conventions fell largely under the purview of navies for most States. Navies have often been viewed as the preferred asset for EEZ enforcement because of their capacity to operate at long range and under medium to high sea state conditions. Some naval officials in the Asia-Pacific region also promote the view that navies offer a more effective deterrent than their civilian maritime law enforcement counterparts, especially when confronted with very capable and large coast guard vessels of other States.¹³ Moreover, navies, like all bureaucratic actors, seek relevance and funding, and thus seek status as the vanguard of a nation capable of safeguarding all forms of peacetime and wartime threats in the maritime domain. Thus, Booth makes little reference to the role of coast guards as replacements for

Yet from a doctrinal perspective, the platforms, personnel, and rules of engagement (RoE) of navies are sufficiently distinct from coast guards and generally inappropriate to meet the wide array of law enforcement duties required by modern maritime States, unless the State simply does not have sufficient constabulary forces to patrol their own waters. To train, equip and maintain a warship designed to prosecute war in kinetic environments against increasingly lethal and sophisticated adversaries is a hugely expensive undertaking for a State. To be effective, navies must maintain a high state or readiness for wartime contingencies. Furthermore, to deploy a warship to arrest fishermen, for example, may unnecessarily convey lethality and intimidation. This dynamic is exacerbated when navies attempt to employ firepower to disable noncompliant vessels leading to causalities, or when navies stumble into crises involving civilian or government actors in territorial disputes.¹⁴

navies in fulfilling the "policing" function of his naval triad construct.

Coast guards, on the other hand, present a less escalatory and more flexible face of State power than navies. Their status as a civil maritime law enforcement agency and clearly visible bright white hulls signal intent on the part of the State that the enforcement measure is under domestic, civilian authority, not military force. Furthermore, coast guard cutters, with lighter hull structures armed with light weaponry, are better tailored for civilian and search and rescue missions. Finally, coast guard officers are typically trained and skilled to conduct a wider array of non-lethal means of enforcement, such as tactics for

¹³ Lyle J Morris, "Indonesia-China Tensions in the Natuna Sea: Evidence of Naval Efficacy Over Coast Guards?" *The Diplomat*, July 5, 2016.

¹⁴ Lyle J Morris, "Indonesia-China Tensions in the Natuna Sea: Evidence of Naval Efficacy Over Coast Guards?" *The Diplomat*, July 5, 2016.

non-compliant boardings that avoid casualties, that dampen the potential for inadvertent escalation to war in disputed territory.¹⁵

Recent developments have spurred countries in the region to create, consolidate, or enhance their coast guard forces.¹⁶ For one, decades of over-fishing have depleted fish stocks, a vital industry for many maritime economies. Moreover, countries in the region increasingly see the advantages of a dedicated civilian maritime police authority to carry out nontraditional maritime missions such as search and rescue, port security, environmental protection, and counterpiracy. But a third factor appears to be prompting States to build up their coast guards: as a means to counter gray zone activities that challenge sovereignty claims in East Asia. Countries like Japan and South Korea are demonstrating a preference for deploying coast guard ships and personnel in sensitive situations at sea rather than naval ships and personnel, such as near the disputed Senkaku/Diaoyu islands in the East China Sea or near the Takeshima/ Dokdo islands in the Sea of Japan.

Employing coast guards to contain gray zone challenges posed by China and other countries within a "law enforcement" authority is logical from the perspective of policy–makers in the region. Doing so communicates to the perpetrator that the gray zone action falls within domestic policing authority and administrative control, effectively "downgrading" the dispute to a civilian matter under the purview of domestic law. It also places great responsibility and burden on the capacity and skills of the coast guard force to handle various types of gray zone challenges adequately without escalation that might involve naval support. What are these challenges, and how are the coast guard and naval fleets in countries like Japan and South Korea able to coordinate actions to disrupt such challenges? The following sections will address these questions.

III Types of Gray Zone Scenarios in East Asia

While gray zone challenges inhabit many forms, the following five scenarios below represent the most likely in the context of East Asia.

"Swarm" Tactic Using Fishing, Maritime Militia and Coast Guard Vessels Near Disputed Island: This tactic was employed by China near the Senkaku Islands in early August 2016. During the incident, China deployed several hundred

¹⁵ George E. Krietemeyer, The Coast Guardsman's Manual, (Naval Institute Press) (8th ed. 1991).

¹⁶ See, for example, Lyle J. Morris, "Blunt Defenders of Sovereignty: The Rise of Coast Guards in East and Southeast Asia," *Naval War College Review*, Spring 2017, Vol. 70, No. 2, 76–112.

fishing and maritime militia vessels disguised as fishing vessels, accompanied by over a dozen coast guard vessels, to penetrate and loiter inside the contiguous zone and territorial seas of the Senkaku Islands¹⁷ The incident constituted the first time that China employed a "swarm" tactic by inundating the disputed waters and greatly challenging the Japan Coast Guard's (JCG) capacity to respond. While no rammings, arrests, or island seizures occurred, the scenario offered a sober lesson for the ICG, which struggled to bring sufficient assets to the scene. In this instance, the Japan Maritime Self Defense Force (IMSDF) was not deployed. However, what makes this particular tactic challenging is that were a Chinese civilian or coast guard ship to ram a ICG ship during a noncompliant boarding operation, the JCG might feel compelled to request backup from the IMSDF. Once the IMSDF responds, the scenario instantly becomes "militarized" and may provide an opening for China to respond in kind with military force. Another challenge in this scenario is differentiating between civilian, government and military personnel. In the August 2016 case, the JCG later reported that they believed some of the personnel manning the fishing vessels were wearing military uniforms, suggesting maritime militia, not civilian personnel on board.18

In the context of gray zone challenges for South Korea, while the abovementioned tactic has not been employed by China near disputed Ieodo Rock or by Japan near disputed Dokdo Island, such actions could always be undertaken, were bilateral relations to deteriorate or the dispute to flare up over certain unilateral actions by civilian actors to challenge the sovereignty of the claimant exercising administrative control.

Non-Compliant Fisherman: In recent years, Chinese fisherman and maritime militia fishing in South Korean and Japanese waters have shown greater willingness to aggressively resist boarding or arrest by coast guard authorities. Such resistance has in some cases led to deaths of coast guard and fisherman.¹⁹ In particular, IUU and overfishing by Chinese vessels in an area in the Yellow Sea called the Provisional Measures Zone (PMZ) – an zone that allows shared fishing activities under a joint fisheries agreement between China and South Korea – has caused several clashes between Chinese fisherman and the Korean

[&]quot;Tokyo trying to draw attention to mass China ship incursions off Senkakus," *Japan Times*, 17 August 2016.

¹⁸ Lyle J Morris, "The New 'Normal' in the East China Sea," *The Diplomat Magazine*, March 2017.

¹⁹ Paula Hancocks,"S. Korea: Chinese fisherman kill coast guard member," CNN, 12 December 2011; Malcom Moore, "Mackerel war between China and South Korea sees fisherman shot dead," *The Telegraph*, 10 October 2014.

Coast Guard (KCG).²⁰ In many cases, KCG officers were confronted by Chinese fisherman wielding steel pipes, hammers and sticks attempting to repel KCG officers from boarding their vessels.²¹ In October 2016, a Chinese fisherman was killed during a scuffle with the KCG 90 miles west of Wangdeungdo Island.²² In September of that year, three Chinese fishermen died trying to evade arrest after KCG officials fired flares and non-lethal stun grenades into the vessel's wheel-house where Chinese fishermen had locked themselves in an attempt to evade arrest.²³ In December of 2010, a Chinese fisherman died while attempting to repel KCG officers from boarding their fishing vessel.²⁴ Finally, since 2008, two KCG officers have been killed by Chinese fishermen and 73 injured during attempted arrests of Chinese fishing vessels in Korea's EEZ.²⁵ Such tactics prompted the KCG in November of 2016 to pass law to allow KCG personnel to carry semi-automatic, military-grade firearms for use against non-compliant crewmembers on fishing vessels.²⁶

Violence resulting from attempts to stop and board non-compliant Chinese fishing vessels have also occurred with Japan, most notably in 2010 when a Chinese fishing trawler rammed a JCG cutter near the Senkakus.²⁷

²⁰ For a helpful map on the PMZ, see Julia Xue, Bilateral Fisheries Agreements for the Cooperative Management of the Shared Resources of the China Seas: A Note," Ocean Development and International Law · October 2005.

^{21 &}quot;Chinese trawler clashes with South Korean coast guard," Al Jazeera English Channel, *You-Tube*, 18 December 2010, available at https://www.youtube.com/watch?v=eEiMHtTUTbU; In another case, a Chinese vessel reportedly installed barbed and mesh wires on both sides of its hull to prevent boardings. See "中어선에 M-60 goo발 쏴 70여척 퇴치…을 들어 첫 무기사용" *Yonhap News* (in Korean) 17 February 2017. http://www.yonhapnews .co.kr/bulletin/2017/02/17/020000000AKR20170217067100004.HTML.

²² Zachary Keck, "Chinese Fisherman Killed By South Korea's Coast Guard," *The Diplomat*, 10 October 2014.

^{23 &}quot;Chinese fisherman killed in S Korea coastguard clash," BBC News, 30 September 2016.

^{24 &}quot;Chinese trawler clashes with South Korean coast guard," Al Jazeera English Channel, *You-Tube*, 18 December 2010.

²⁵ Lyle J Morris, "South Korea Cracks Down on Illegal Chinese Fishing, with Violent Results," *The Diplomat*, November 4, 2016.

^{26 &}quot;인천앞바다지켜라...'서해5도특별경비단'내달 4일출범" Incheon Daily News (in Korean) 15 March 2017. http://www.incheonilbo.com/news/articleView.html?idxno= 755064#08hF; "실전능가 훈련'...총기무장 해경,불법어선 단속 훈련" Yonhap News (in Korean), 6 March 2017, http://www.yonhapnews.co.kr/bulletin/2017/03/06/0200 000000AKR20170306142700054.HTML In the past, KCG officers carried pistols for only for use in self-defense.

²⁷ Justin McCurry, "Japan-China row escalates over fishing boat collision" *The Guardian*, 9 September 2010.

While most instances of violent clashes between fishing and coast guard vessels do not prompt calls for support from the navy, there is nonetheless the possibility of naval vessels being called to aid particularly violent clashes against coast guard counterparts. As the next section will highlight, the fact that the ICG and KCG have begun conducting joint exercises with their navies specifically to combat non-compliant and violent fishing vessels, suggests that this is one contingency that policy makers in the region are increasingly concerned about.

North Korean Spy Ships: Japan and Korea have had dangerous run-ins with large North Korea spy ships intruding into their waters. In these confrontations, the coast guards of both countries have encountered non-compliant North Korean vessels armed with large guns capable of inflicting damage to the civilian coast guard cutters. Clashes against heavily-armed vessels mounted with "military-grade armaments" - in particular one in 1999 between the JCG and a North Korean vessel in which the JMSDF was called in support of the JCG and opened fire against the vessel – prompted the JCG to pass a law in 2001 allowing use of force against civilian vessels for self-defense.²⁸ That same year, the JCG engaged in Japan's first use of deadly force, firing in self-defense on an unmarked North Korean spy vessel in Japanese waters after the vessel fired on the JCG vessel using "military-type guns and rockets." The clash, which became known as the battle of Amami-T-shima, resulted in the sinking of the North Korean vessel and the deaths of fifteen North Korean crewmembers.²⁹ South Korea's navy and coast guard also routinely encounter North Korean spy ships masked as civilian cargo or fishing vessels crossing the NLL. Thus, the issue of how to handle such confrontations, and how to coordinate coast guard and naval response to the threat, remains an issue of concern for countries in East Asia.

Island Landing: This scenario involves a case of private citizens, fishermen or maritime militia entering Japanese or South Korea territorial waters and landing on an uninhabited island. Such a scenario has played out several times in the case of the Senkakus, where private Japanese, Taiwanese and Chinese activists attempted to land on the islands, and when thwarted by the ICG, jumped into the water and swam ashore.³⁰ An abstraction of this scenario see the JCG

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²⁸ Lyle J. Morris, "Blunt Defenders of Sovereignty: The Rise of Coast Guards in East and Southeast Asia," Naval War College Review, Spring 2017, Vol. 70, No. 2, 76-112.

James Brooke, "Japan Says a Mystery Boat Fired Rockets at Its Ships," The New York Times, 29 25 December 2001.

[&]quot;Japanese Activists Land on Senkaku Islands," The Guardian, 19 August 2012; Malcom 30 Moore, "China provokes Japan as activists land on disputed island chain," The Telegraph,



IMAGE 1 JCG Impedes Attempt by Chinese Vessel to Land on Senkakus. SOURCE: ASSOCIATED PRESS, FROM "HONG KONG AFTER ISLAND LANDING: WHO YOU CALLING UNPATRIOTIC?" THE WALL STREET JOURNAL, 12 AUGUST 2012.

first attempting to stop the vessel from landing on the island through various coercive tactics (Image 1), and in the event of an activist attempting to swim to the island, arrest the intruders with the help of the Japanese police.

The JMSDF, at the request of the JCG or the prime minister's office, could be deployed if law enforcement is unable to arrest the vessel(s), or if China decides to deploy a large number of coast guard or naval vessels to intervene. In the event that the activists or fisherman were armed, this would serve to compound the potential for escalation in this scenario.

The scenario depicted above is the "nightmare scenario" for Japan and South Korea due to the potential to overwhelm the ability of law enforcement to contain the crisis. The possibility of this scenario escalating to a military conflict is ever-present and bound to elicit strong nationalist calls amongst domestic populations to show strength in the defense of national interests, particularly in a region where mutual distrust runs deep. The high stakes involved and potential fallout from losing control of the situation would have lasting domestic repercussions for Japan and South Korea.

Use of Government Survey Ships in Disputed Waters: The deployment of government research ships to conduct scientific surveys or to assess the existence of underwater resource reserves in disputed waters is the final gray zone tactic that States in East Asia have employed in the past. The most noteworthy

¹⁵ August 2012; "Taiwanese Activists Evade Cordon, Land on Disputed Islands," *Chicago Tribune*, 7 October 1996.

example of this scenario occurred in May 2006 when the JCG announced plans to send two survey vessels to conduct a hydrographic assessment of the seabed near the disputed Takeshima/Dokdo Islands. In response, the Korean government sent 20 KCG vessels and aviation assets to cordon off the area.³¹ The JCG eventually called off the operation, but in June of that year, Korea sent its own survey vessels near the disputed waters to conduct a survey, and was intercepted by JCG vessels warning Korea to stop. While the two sides did not come into direct conflict in either scenario, such stand-offs highlight the escalation potential of coast guards attempting to deter other nations' coast guard vessels from undertaking scientific survey operations in disputed waters. The fact that that South Korean government in this case threatened to "seize the [JCG] ships if they intruded into South Korea's EZZ"³² significantly raised the stakes of the

conflict and begged the question of what South Korea would have been willing to do if Japan had followed through with its survey plan.

IV The Current State of Interoperability Between Coast Guards and Navies in East Asia

Due to the aforementioned gray zone scenarios that exist in East Asia, what is the current state of interoperability between coast guards and navies in Japan and South Korea? The section seeks to provide a preliminary assessment of this question.

In theory, peacetime law enforcement missions can by conducted by navies of Japan and South Korea. In particular, the principle of graduated force has application in the exercise of approaching, stopping, boarding, searching and seizing foreign merchant and fishing vessels. General approaches to rules of engagement and special procedures, such as non-lethal use of force, are regularly rehearsed and exercised. Where a coast guard or other MLE agency is employed in these roles, it too will, or should, be guided by the same universal principles and rules. Moreover, in time of armed conflict these maritime forces are likely to be integrated into a gray zone contingency and, if necessary, war effort, and their crews must be capable of swift adaptation to traditional naval roles.

³¹ South Korea, Japan, Raise Tension over Islet Group, *The Washington Post*, April 19, 2006. See also Takeshita Yoshiro, "167 Sleepless nights by only two survey vessels—South Korea was shuddered by Japan's "Hydrographic survey" around Takeshima," http://teikoku -denmo.jp/en/history/takeshima3.html.

³² Lee, Brian. "Diplomacy, and threats, over Dokdo". JoongAng Daily (April 20, 2006), http:// joongangdaily.joins.com/200604/19/200604192221314879900090409041.html.

The cross fertilization of experience between roles, and between the forces employed in those roles with Japan and South Korea, ought to be consciously encouraged in times of peace. Very little information is available in open sources on the technical issues related to coast guard-naval interoperability within most countries around the world, let alone Japan and South Korea. This is perhaps not surprising, given the sensitivity of the issue. However, a recently published conference proceeding by the S. Rajaratnam School of International Studies (RSIS) offers valuable insight into the current state of interoperability in these two countries. An analysis of that report in conjunction with other open source media reports and academic articles reveal that while Japan and South Korea have invested and modernized their coast guard fleets for the capacity to patrol the their coasts and work with their navy in a limited capacity, navy-coast guard linkages are in general under-developed to meet most gray zone threats. The following sections highlight some of the impediments to cooperation within the two countries.

Japan

There are currently two mechanisms for JCG-JMSDF cooperation – a Defense Action Order (DAO) and a Maritime Security Order (MSO). Both must receive permission from the office of the Japanese Prime Minister to implement. The DAO can be ordered only under extraordinary circumstances, such as during an armed attack, whereby the JMSDF can conduct military operations and all or a part of the JCG will fall under the command of the Minister of Defense through the Commandant of the JCG. Such legal authorities are outlined in Article 80 of the Japan Self-Defense Law. In Japan's post World War two history, a DAO has never been ordered.

However, no legal basis currently regulates the relations between the two institutions in peacetime, despite various attempts at creating a legal arrangement that would delineate responsibilities of the JCG and JSDF when dealing with gray zone scenarios. The was a push by the Abe government in 2014 to formulate a law to refine JCG and JMSDF roles and agree on standard operating procedures, but negotiations failed at passing comprehensive legislation, due in part to competition between agencies over roles and missions.³³ The closest approximation to a peacetime cooperative arrangement comes in form of the MSO, which can be executed on an ad-hoc basis when a gray zone situation

³³ Celine Pajon, "Japan's Coast Guard and Maritime Self-Defense Force in the East China Sea: Can a Black-and-White System Adapt to a Gray-Zone Reality?" Asia Policy, Number 23 (January 2017), 119.

escalates beyond the control or capability of the JCG to respond.³⁴ When the MSO is executed, the JMSDF in theory conducts the mission of the JCG based on JCG law. Thus, any use of force by the JMSDF or JCG under the MSO is considered a "law enforcement action," not a "military action."³⁵ However, there are no detailed command agreements or standard operating procedures between the two forces during such contingencies.³⁶ The Japanese Government has executed MSO a of total three times in the past: during the aforementioned North Korean spy ship incident in 1999, after a penetration of a Chinese nuclear submarine into Japanese territorial waters, and during anti-piracy operations in the Gulf of Aden.³⁷

In addition to legal issues, there is little uniformity across C4I platforms, to include a common operating picture (COP), enterprise systems for data processing, radar types, and intelligence fusion centers that would promote interoperability between the two agencies. This is not a unique problem to Japan, of course. Most coast guards are under civilian control, and thus are not equipped with the same data sharing and sensor platforms that would enable efficient, secure information sharing with navies. In fact classified channels of intelligence sharing remains one of the biggest constraints for most coast guards around the world, who rely on unclassified channels of communication to conduct operations. In the case of Japan, the lack of data links means that no real-time information can be digitally exchanged with JMSDF units, greatly limiting coordination during contingencies.³⁸ The lack of systems and real-time data sharing is being addressed to some extent. For example, the two agencies reportedly adopted an information-sharing protocol that has

Japan's 2014 defense white paper provides the following guidance: "In the event that it is deemed extremely di cult or impossible for the Japan Coast Guard to respond to a situation, an order for maritime security operations will be issued promptly and the SDF will respond to the situation in cooperation with the Japan Coast Guard." Ministry of Defense (Japan), Defense of Japan 2014 (Tokyo, 2014), 225.

³⁵ Celine Pajon, "Japan's Coast Guard and Maritime Self-Defense Force in the East China Sea: Can a Black-and-White System Adapt to a Gray-Zone Reality?" Asia Policy, Number 23 (January 2017), 122.

³⁶ Ian Bowers and Collin Koh, "Navies, Coast Guards, The Maritime Community and International Stability" March 2017, Policy Brief, S. Rajaratnam School of International Studies (RSiS), 32.

³⁷ Ian Bowers and Collin Koh, "Navies, Coast Guards, The Maritime Community and International Stability" March 2017, Policy Brief, S. Rajaratnam School of International Studies (RSiS), 32.

³⁸ Ian Bowers and Collin Koh, "Navies, Coast Guards, The Maritime Community and International Stability" March 2017, Policy Brief, S. Rajaratnam School of International Studies (RSiS), 32.

facilitated daily exchange of information, and they are also working to create frameworks for coordination between regional commands.³⁹

Another important impediment to coordination between the JMSDF and JCG is due to differences in doctrinal culture. The JCG sees itself purely in the mold of a civilian police role with no military function. The JMSDF sees itself as the defender of armed aggression or attack against Japan. Despite motivation at the executive governmental level to merge the two to combat a common and increasingly formidable threat of gray zone operations, there is little appetite for major change to bridge the divide.

Other issues hinder joint operations. The two services use different fuel types and JMSDF oilers, for example, cannot refuel JCG ships.⁴⁰ This is not an inconsequential issue. For scenarios involving the continued presence and posture of vessels to deter drawn-out gray zone standoffs far ashore, the ability for both forces' to refuel each other is of utmost importance.

There are positive developments, however, that are worth pointing out. After the North Korean incidents of 1999 and 2001, a manual was reportedly created on procedures for joint JCG-JMSDF operations and responses, and periodic joint training and exercises between the JSDF and the JCG has occurred since then. The two forces have recently initiated joint exercises specifically to combat gray zone threats. In June of 2015, The JCG and JMSDF conducted a first-ever joint civil-military "gray zone" exercise that lasted ten days.⁴¹ In 2016, the JMSDF and JCG conducted joint exercises against "suspicious boats" as well as "counter-terrorism situation involving nuclear power plants" in February and October of that year. Finally, in November 2016, the two services conducted a gray zone exercises with the Japanese Police based on a scenario in which armed fisherman landed on an isolated island.

South Korea

The Republic of Korea Navy (ROKN) and Korean Coast Guard (KCG) suffer from the same institutional and doctrinal cleavages that constrain JMSDF-JCG cooperation. However recent initiatives by the Korean government have sought to bring the two services in closer alignment to combat gray zone challenges.

³⁹ Celine Pajon, "Japan's Coast Guard and Maritime Self-Defense Force in the East China Sea: Can a Black-and-White System Adapt to a Gray-Zone Reality?" Asia Policy, Number 23 (January 2017), 122.

⁴⁰ Ian Bowers and Collin Koh, "Navies, Coast Guards, The Maritime Community and International Stability" March 2017, Policy Brief, S. Rajaratnam School of International Studies (RSiS), 32.

 [&]quot;Gray Zone Situation' Joint Training MSDF and the JCG for the First Time" [in Japanese], Asahi News Channel, July 11, 2015.

Most notably, the two agencies signed a landmark policy agreement in July 2016 to "strengthen national maritime power" to promote operational exchanges and interoperability. The two forces have also engaged in frequent joint exercises to overcome differences in technical and operational procedures, to include use of force. Despites these efforts, there exist little cross-over in culture, doctrine, and C4I, which hinders true operational cohesion.

The ROKN and KCG, for all intents and purposes, exist in different operational worlds. The ROKN is one of three military services under the Ministry of National Defense (MND) whose role is to defend and protect South Korea from armed attack. The KCG was a civilian law enforcement agency under the Ministry of Maritime Affairs and Fisheries, but was disbanded in 2014 and placed under the newly established Ministry of Public Safety and Security (MPSS) – a demotion due to the failed rescue operation during the sinking of the Sewol ferry earlier that year.⁴² Due to their administrative roles, there is little uniformity in missions, operations, and tactics between the two. The ROKN is armed for war-fighting operations, while the KCG is only lightly armed and normally interacts with unarmed vessels.

For the most part, C4I systems for the ROKN reside on classified networks and are tailored for combat operations, while KCG systems are geared towards navigation and search and rescue and reside on unclassified networks. However, the two sides have forged closer C4I links in recent years. First, the Korea Navy Tactical Data System (similar to Link-11 system within the U.S. Navy) have been installed in some KCG vessels, giving the KCG real time tactical feeds of the ROKN.⁴³ Certain KCG vessels are also able to view ROKN tactical feeds through ROKN liaison officers stationed in KCG headquarters.⁴⁴ Second, starting in April 2016, a "joint operational chat" mechanism was established on board certain ROKN and KCG vessels. The channel allows personnel from both sides to share real time situation information and coordinate operations.⁴⁵ The

⁴² Steven Denney, "South Korea's Caost Guard is Here to Stay," *The Diplomat*, 20 October 2014.

⁴³ Interview with ROKN naval officer, August 7, 2018; See also "Rules of Operation of Maritime Safety Office [May. 7, 2008], Marine Police Agency Directive No. 659, revised on May 7, 2008 [해상치안상황실운영규칙(해양경찰청훈령 제659호, 2008.5.7., 일부개 정) -> 제3장 근무 -> 제15조(통신망및시스템구성) -> 8. 해군전술지휘시스템 (KNTDS), http://www.law.go.kr/admRulInfoP.do?admRulSeq=5595, accessed August 17, 2018.

⁴⁴ Interview with ROKN naval officer, August 7, 2018.

^{45 &}quot;Software Bundled for Navy and Coast Guard Cooperation," [독자마당] 해군과해 경을하나로묶어준소프트웨어] Defense Daily [국방일보] June 7, 2016, http:// kookbang.dema.mil.kr/kookbangWeb/m/view.do?ntt_writ_date=20160608&bbs_ id=BBSMSTR_00000000131&parent_no=1, accessed August 17, 2018.



IMAGE 2 2016 "Navy-to-Sea Conference" SOURCE: HTTP://WWW.GDNEWS.KR/NEWS/ARTICLE.HTML?NO=3711

 $\label{eq:kcg} \ensuremath{\mbox{KCG}}\xspace{1.5} is able to send video streams to the ROKN through this channel. Finally, liaison officers from the ROKN and KCG are permanently stationed at the head-quarters of both services and can be called upon to coordinate when needed. \ensuremath{^{46}}\xspace{1.5}$

The two services have also forged closer institutional ties. For example, the Korean government took an important step towards bridging inter-service gaps in July 2016 by holding a first ever "Navy-to-Sea Conference" ('제 1차 해 군 對 해 경 회 의') at the Gyeongdong Naval Headquarters, in which the KCG and ROKN signed a 'Memorandum of Agreement between the Navy Headquarters and Maritime Security Headquarters for strengthening naval power' (해 군 본 부 - 해 양 경 비 안 전 본 부 간 국 가 해 양 력 강 화 를 위 한 정 책 협 약서) as part of a "joint maritime strategy" (공 동 해 양 전 략 개 념) (Image 2 of conference above).⁴⁷

This conference and the MOA agreement was to improve interoperability between the naval and maritime law enforcement organizations in accordance with the Presidential Directive No. 28 (대통령훈령28호) of the "Integrated Defense Directive" (개정된통합방위지침), amended in 2015, to improve

⁴⁶ Interview with ROKN naval officer, August 7, 2018.

⁴⁷ 국방안보뉴스팀 "한국해군과해경, 합동작전펼친다" GD News (in Korean), 7 July 2016, available at: http://www.gdnews.kr/news/article.html?no=3711.

interoperability for integrated defense-related operations such as command and control equipment and ship design.⁴⁸

The Chiefs of KCG and ROKN services attended the conference. The two sides agreed to continue to develop joint training and doctrine development to "protect the marine sovereignty activities, and develop partnerships to crack down on illegal operations such as fishing, intrusions into territorial seas, marine pollution, and search and rescue." ⁴⁹ The agreement will reportedly build on existing joint mechanisms between the two agencies, such as curriculums, seminars, and operations under uniform radio frequency identification (RFID). One additional line of effort that year was the creation of a "real-time information network coordination system" between the KCG and ROKN to ensure "efficient information sharing" when combating illegal Chinese fishing near the NLL.⁵⁰ Among other priorities, the threat from Chinese gray zone operations involving illegal fishing is most likely driving efforts to build interoperability linkages.

It should be pointed out, however, that the July MOA represents a statement of intent, not a change to the overall legal status establishing, for example, a formal "joint civ-mil task force" with command and control responsibilities between the two services. The two remain strictly divided as civilian and military organizations. Therefore, similar to Japan, there is still a gap in legal authority between the KCG and ROKN for peace or wartime command and control.

Nonetheless, building on the framework of the July agreement, momentum gathered for building institutional learning and joint training. The first ever ROKN-KCG staff talks were held on September 12, 2016, for example, during which joint maritime security drills, training, education, and logistical support, was discussed.⁵¹ Years 2016–17 saw three notable joint exercises:

 On March 24, 2016 the East Sea Coast Guard Bureau conducted a joint search and rescue exercise off the coast of Samcheok city with ROKN 1st Fleet, Samcheok Fire Safety Bureau, local fisheries department, and 15 other private

⁴⁸ 국방안보뉴스팀 "한국해군과해경, 합동작전펼친다" GD News (in Korean), 7 July 2016, available at: http://www.gdnews.kr/news/article.html?no=3711.

⁴⁹ 국방안보뉴스팀 "한국해군과해경, 합동작전펼친다" GD News (in Korean), 7 July 2016, available at: http://www.gdnews.kr/news/article.html?no=3711.

⁵⁰ 국방안보뉴스팀 "한국해군과해경, 합동작전펼친다" GD News (in Korean), 7 July 2016, available at: http://www.gdnews.kr/news/article.html?no=3711.

⁵¹ Ian Bowers and Collin Koh, "Navies, Coast Guards, The Maritime Community and International Stability" March 2017, Policy Brief, S. Rajaratnam School of International Studies (RSiS), 34.

maritime rescue organizations. The exercise involved a tsunami scenario and tested civil-military cooperation both on land and at sea.⁵²

- In December 2016, the KCG participated in a joint KCG-ROKN training that involved three cutters, one high-speed assault ship, one naval ship and one naval radar station near Sokcho Seaport. The exercises involved the detection of vessel of interest near Balanam Port that departs and is apprehended near the NLL, and hones skills in "real-time information exchange between naval and coast guard assets." ⁵³
- In April 2017, the ксс participated in its first-ever joint counter-terrorism exercise with the ROKN. The exercise reportedly lasted 26 days.⁵⁴

Furthermore, Chinese maritime militia tactics prompted the κ_{CG} in November of 2016 to reform its standard operation procedures to allow κ_{CG} personnel greater latitude to use guns in self-defense or against non-compliant vessels and prompting an increase in joint operations between the κ_{CG} and Navy.⁵⁵

As one retired ROKN official has observed, however, the KCG has shown reluctance to support steps toward establishing formal linkages with the ROKN. For one, the KCG "fears that the ROKN is adopting the concept of a hybrid ROKN-KCG maritime security partnership, like the USN- USCG partnership, to maintain and justify its dominant role." ⁵⁶ Moreover, unless a "single authority

- 53 "(보도자료_경비구조과)해경-해군합동월북차단훈련실시" Korea Ministry of Public Safety and Security Homepage (in Korean), 26 December 2016, available at: http:// cms.mpss.go.kr/rcgh/sokChoCgs/notice/?boardId=bbs_000000000000058&mode=view &cntId=379&category=%EC%86%8D%EC%B4%88&pageIdx=16.
- 54 "동해해양경비안전서" Post from 27 April 2016, *Facebook* (in Korean), available at: https://www.facebook.com/donghaekcg/photos/pcb.1801714116537270/1801714069870608 /?type=3.
- 55 "인천앞바다지켜라...'서해5도특별경비단'내달 4일출범" Incheon Daily News (in Korean) 15 March 2017, available at: http://www.incheonilbo.com/news/articleView .html?idxno=755064#08hF; "실전능가훈련'...총기무장해경,불법어선단속훈련" Yonhap News (in Korean), 6 March 2017, http://www.yonhapnews.co.kr/bulletin/2017/03/ 06/020000000AKR20170306142700054.HTML.
- 56 Ian Bowers and Collin Koh, "Navies, Coast Guards, The Maritime Community and International Stability" March 2017, Policy Brief, S. Rajaratnam School of International Studies (RSiS), 34.

^{52 &}quot;동해해경본부,지진해일대응민관군합동훈련실시" Korea Ministry of Public Safety and Security Homepage (in Korean), 14 April 2016, available at: http://www.mpss .go.kr/board/board.do;jsessionid=gSwYSokIsBKdhtrX3bcWYuY4.node71?mode=list&boa rdId=bbs_00000000000036&category=&searchCondition=all&searchKeyword=&page Idx=24.

is established between the MND and the MPSS to conduct joint maritime security operations, the author points out that there are "obvious structural difficulties in coordinating two separate responsible ministries."⁵⁷ Therefore, as with all partnerships with distinct identities and chain of command, challenges remain in merging the two organizations together.

Finally, according to one retired ROKN official, the KCG and ROKN share "fundamental doctrines, operational rules of engagement (RoE), and logistic support."⁵⁸ There are strong reasons to suspect, therefore, that in fact operational mechanisms and linkages are under-developed. The two organizations were born and exist in organizationally and doctrinally distinct domains – one military and one civilian. While recent agreements, such as the July 2016 MOA, and joint exercises represent a step in the right direction, more work is needed before the two services can work together seamlessly during contingencies.

v Policy Recommendations: Work towards a "Joint Civil-Military Maritime Force" for Gray Zones

While progress has been achieved in Japan and South Korea in establishing informal linkages between civilian coast guards and navies to combat gray zone challenges in East Asia, there is nonetheless room for improvement. Given its rich history of relatively sophisticated interoperability linkages, cooperation between the United States Coast Guard (USCG) and United States Navy (USN) provides a useful case study to improve coordination between the two services. In particular, three broad recommendations are suggested below, based on the USCG model, as capabilities that should be pursued by coast guards in East Asia.

1 Establish Joint Task Force (JFT)-type Command Structure between Civilian and Military Authorities

The USCG has the benefit of being a military service that falls under the Department of Defense during wartime and a civilian maritime law enforcement organization under the Department of Homeland Security (DHS) in peacetime

⁵⁷ Ian Bowers and Collin Koh, "Navies, Coast Guards, The Maritime Community and International Stability" March 2017, Policy Brief, S. Rajaratnam School of International Studies (RSiS), 34.

⁵⁸ Ian Bowers and Collin Koh, "Navies, Coast Guards, The Maritime Community and International Stability" March 2017, Policy Brief, S. Rajaratnam School of International Studies (RSiS), 34.

for law enforcement operations. This model is ideal for offering maximum flexibility in honing interoperability capabilities with the USN as well as enabling it to contribute to the joint planning and operations process under the Joint Task Force (JTF) construct.⁵⁹

Cognizant of the fact that most coast guards do not enjoy a dual-hatted role, a hybrid JTF model for maritime operations that merges civilian and military personnel at operational commands should be considered as one approach to address gray zone challenges in Japan and the ROK.

Under the U.S. JTF construct, military services are organized with a combination of service and functional component commands and subordinate task forces (TFs) with operational responsibilities. In a maritime context, the JTF normally designates the forces and maritime assets that will be made available for tasking through a joint force maritime component commander (JFMCC), who assigns the appropriate attached forces to complete a mission. Generally, these forces and maritime assets include navies, marines/naval infantries, special operations forces (SOF), and in some cases, coast guards.⁶⁰ A JFMCC commander is given broad authority to conduct a joint maritime operation based on missions set forth by civilian or military planners beforehand. The JFMCC commander is stationed at a command center and works with forward deployed maritime force packages, which can include a combination of a carrier strike groups (CSGs) or destroyer squadron (DESRON), and other assets such as an amphibious ready groups (ARGs) with an embarked Marine expeditionary unit or coast guard cutters to execute an operation. Normally, the units that are deployed for the mission will have trained together prior to deployment, and contingency planning, standard operating procedures (SOPS), to include use of force, and concept of operations (CONOPS) will all be understood and practiced beforehand.

For the purpose of USN-USCG cooperation, two existing JTF-type mechanisms offer relevance for how other countries may consider coast guard-navy cooperation in gray zone. The first is Combined Task Force (CTF)152. CTF-152 is one of three U.S. task forces and is charged with promoting maritime security throughout the Arabian Gulf under United States Theatre Security Cooperation (TSC) activities around the world.⁶¹ The USCG role within CTF-152 is

⁵⁹ Command and Control for Joint Maritime Operations, Joint Pub 3–32, United States Department of Defense, 7 August 2013.

⁶⁰ Command and Control for Joint Maritime Operations, Joint Pub 3–32, United States Department of Defense, 7 August 2013, vii–ix.

⁶¹ Combined Maritime Forces, CTF 152: Gulf Maritime Security, available at https://combin edmaritimeforces.com/ctf-152-gulf-security-cooperation/, accessed September 20, 2017.

called Coast Guard Patrol Forces Southwest Asia (PATFORSWA). PATFORSWA is conducted within a Command Task Group (CTG) under USN command, but with surface assets of both services working side-by-side and relaying information and communications to a Combined Task Group Maritime Operations Center on land near the area of operations (AOR).⁶² Command of CTF-152 also rotates between other participating nations and has forged a high degree of interoperability and mutual trust between the USN, USCG and partner nation coast guards and navies. As one USCG officer notes, the PATFORSWA mission, while not without flaws, offers an important model for how coast guard and navies can coordinate operations, use of force doctrine, and training across two agencies that are not generally accustomed to operating side-by-side in a hostile environment and against an adversary who employs unconventional and hybrid tactics, such as the Iranian Revolutionary Guard Corps Navy (IRGCN).⁶³

The other example of a USN-USCG JTF model is the Joint Interagency Task Force (JIATF) construct. In particular, JIAFT-South, based in Key West, Florida, is an intelligence fusion center with a communications network that allows for the collection and dissemination of maritime intelligence activities, using both DoD and USCG networks, and pushing the data to USN and USCG assets for interdiction operations. Its primary purpose is to monitor illicit drug smuggling from the Caribbean and South America, and predominantly uses USN vessels with USCG officers on board as the asset that performs the interdiction. A unique attribute of JIAFT-South is that it provides robust military C4I capabilities and access to intelligence not available to civilian law enforcement, with officers from dozens of US law enforcement working directly with their USN counterparts to combat maritime threats.⁶⁴

Based on these two U.S. JTF-models, it is suggested that South Korea and Japan consider the adoption of a permanent "Combined Task Force Operations Center" (CTFOC) for gray zones that combines operational planning, command and control (C2), and service interoperability between navies and coast guards. Such a model would involve permanent billets of officers from both services manning a joint command and intelligence fusion center, which when called upon, would serve as a real-time joint operations center with

⁶² Craig Allen Jr., "White Hulls Must Prepare for Gray Zone Challenges," U.S. Naval Institute, Proceedings, Vol. 142, November 2016.

⁶³ Craig Allen Jr., "White Hulls Must Prepare for Gray Zone Challenges," U.S. Naval Institute, Proceedings, Vol. 142, November 2016.

⁶⁴ Evan Munsing and Christopher J. Lamb, "Joint Interagency Task Force—South: The Best Known, Least Understood Interagency Success," Strategic Perspectives 5, Institute for Strategic Studies, National Defense University, June 2011.

commanders from both services present and directing a mission. A rotating forward deployed surface asset task force from both services would work with personnel in the CTFOC to train around a set of different types of gray zone missions, based on common doctrine, procedures and tactics that would be honed during peacetime.

The key to success of a CTFOC would be the practice of switching command authorities from law enforcement to military and back again. Which agency (coast guard versus navy) assumes command over the CTFOC would ultimately depend upon the type of contingency confronting South Korea and Japan. It is recommended, however, that the CTFOC be headed by a civilian coast guard authority, given the desire by South Korea and Japan for gray zones operations to fall under a domestic law enforcement mission.

Developing dual command authorities would admittedly be a very difficult endeavor and take time to mature. However, the increasing stakes and scale of the gray zone threat in East Asia compels changes to how operations have been conducted up to this point.

2 Standardize C4I (Command, Control, Communications, Computers and Intelligence)

In addition to creating new legal and command authorities that would bridge gaps in operations between coast guards and navies, creating a common C4I (Command, Control, Communications, Computers and Intelligence) architecture will be vital between coast guards and navies. Designing standardized data sharing platforms to feed into a common operational picture (COP) amongst civilian and military facilities and surface assets will be an important first step in this endeavor. This is by no means an easy task. Most coast guards utilize unclassified data sharing networks. This is assumed to be the case for most cutters within the JCG and KCG. Unclassified networks greatly hinder the ability of most coast guards to share a domain awareness picture as well as communicate over secure networks with a military service like a navy in real time, thereby constraining the ability of JTF commanders to efficiently coordinate actions. Therefore, policy-makers interested in integrating coast guard and naval operations should consider establishing one unified and secure C4I network in which both services can tap into during gray zone contingencies or crises.

The USCG is examined here as a case study in how coast guards in East Asia may consider developing a shared network architecture along the lines outlined above. Due to its statutory role as a military service, the USCG must meet certain criteria for accessing secure communications with the USN in addition to its day-to-day unclassified system. Two systems that offer integration with classified systems include the USCG's SeaWatch and SeaCommander systems, which offer different degrees of network-compatible platforms with USN systems.

"SeaWatch" is the USCG's shipboard navigation and C2 system installed across ten unique cutter classes that collects, correlates, and presents information into a single COP interface. Sensor input is integrated and synchronized across three, otherwise independent, applications: Coast Guard Electronic Chart Display and Information System (CG-ECDIS); the Defense Information Systems Agency (DISA)'s Global Command and Control System (GCCS) display and track management, and a radar software.⁶⁵ This integrated system provides the operational user with a common maritime domain picture. The system also has a classified SIPRNET interface that allows users to share secure communication with the USN and other users. The function of the GCCS here is important to highlight. GCCS is an intelligence fusion network that integrates C4I and combat support data from national technical means to provide common picture to operators in the field. The important function of GCCS is that it can feed intelligence on foreign vessels of interest to both the USCG, through SeaWatch system, and the USN, so that both services are receiving the same operation and tactical data within one COP.⁶⁶

One step higher on the interoperability C4I ladder is the "SeaCommander" system, installed on USCG National Security Cutters (NSCS), the largest cutter in the USCG fleet. "SeaCommander" is a real-time tactical data processing combat system that interfaces with the USN AEGIS Combat System to transmit multi-mode radar and vessel targeting information, among other functions.⁶⁷ "SeaCommander" also interfaces with the GCCS, and offers a data migration path to Link-16, which is one of the most common classified tactical communications mode used by NATO and the USN for tactical combat data sharing. "SeaCommander," therefore, allows the NSC to integrate deeper into the tactical combat picture of the USN in a wartime situation and be able to effectively share in the joint warfighter C2 mission.

The benefit of systems such as "SeaWatch" and "SeaCommander" is that they provide a coast guard and its surface vessels with the tools to share classified data and speak the same operational language with its naval counterpart.

⁶⁵ George I. Seffers, "Coast Guard Develops Indigenous Technologies for Cutters," *Signal Magazine*, 1 March 2014; "SeaWatch" Brochure, United States Coast Guard, Command, Control, and Communications Engineering Center, undated.

^{66 &}quot;Global Command and Control System-Joint (GCCS-J)," United States Department of Defense Information Systems Agency (DISA), undated.

^{67 &}quot;SeaCommander," Lockheed Martin Products, http://www.lockheedmartin.com/us/prod ucts/seacommander.html, accessed 27 July 2017.

This is particularly beneficial during gray zone contingencies. The ability, for example, to provide "blue tracking" – the identification of friendly or hostile vessels operating in an AOR (typically referred to as Identification, friend or foe (IFF)), can prevent mishaps at sea, such as a navy or coast guard vessel mistaking his own navy or coast guard vessel as hostile. Paring systems such as those mentioned above with ground-based intelligence fusion centers, such as the GCCS, that can push a common intelligence picture into a COP shared by coast guards and navies, could further improve the joint domain awareness environment. If coast guards were to adopt the CTFOC advocated previously, then a ground station such as the GCCS would be crucial to fulfilling a joint data sharing architecture. Absent a shared classified system, vessels operating in gray zones would be vulnerable to intelligence leaks to adversary naval vessels undoubtedly operating nearby.

3 Create Common Enforcement Procedures

In the arena of multi-service law enforcement in gray zones, equity demands that services harmonize their enforcement procedures. In delineating authorities and domestic legislation, coast guards and navies should strive for consistent provisions in areas such as use of force, boarding procedures, the rights of alleged offenders, and detention provisions, among other tasks. While some diversity is inevitable in enforcement procedures between navies and coast guards and prosecutions are executed under different legal and operational systems, an attempt should be made to synchronize modalities of enforcement in order to avoid unintended accidents.

The creation of a "joint law enforcement manual" that could be adopted by both services, therefore, is an essential step. It is presumed that states in East Asia such as Japan and South Korea desire to preserve gray zone-type contingencies under the command of a law enforcement agency as long as possible for reasons of signaling that the dispute is a domestic policing function as well as to dampen escalation dynamics. Thus, a set of standard operating procedures (SOP) and tactics to guide law enforcement and naval personnel in nonlethal use of force procedures, and, if necessary, lethal force in self-defense, should be adopted.

The navy's study and adoption of an SOP manual is arguably more important in this regard. The use of non-lethal use of force is not ingrained in the training, doctrine and culture of navies as much as it is for coast guards. To arrest non-compliant vessels and subdue unruly suspects at sea while avoiding causalities is a skill accumulated over decades of hands-on experience. It is crucial for naval officers to understand and train along the continuum of graduated use of force actions in order to feel comfortable undertaking such missions. Upon completion, such a manual should be carried aboard the naval and coast guard fleets for reference during gray zone scenarios.

Finally, coast guards of South Korea and Japan should consider the training of a limited number of "special boarding teams," similar to USCG law enforcement detachments (LEDETS), who are trained and equipped with boarding and interdiction skills against potentially hostile vessels and are deployed on both naval and coast guard ships. U.S. LEDETS exist due to U.S. legal constraints under "Posse Comitatus Act" that prohibits DoD personnel from directly engaging in domestic law enforcement activities. The U.S. LEDET model is most clearly visible in counter-narcotics operations. When u.s. naval vessels receive actionable intelligence and interdict a suspected drug smuggler, the naval ship will shift its tactical control to the USCG, hoist the Coast Guard ensign to signify law enforcement authority, and deploy its LEDET on a rigid-hulled inflatable boat (RHIB) to carry out the law enforcement boarding. The USN can also provide assistance in compelling a vessel to stop through the use of disabling fire, but the law requires that these actions occur with a USCG officer present.⁶⁸ The benefit of the LEDET, besides its basis as a law enforcement detachment, not a military unit, is that the personnel are specialists in vessel boardings and inspections against non-compliant vessels and skilled in non-lethal use of force tactics

4 Train and Exercise Together

The final piece necessary to achieve interoperability between navies and coast guards in gray zones in East Asia is to train amongst each other. As mentioned earlier, joint exercises have begun to take place in Japan and South Korea. However, such training does not take place often enough and has not become institutionalized. Joint training must occur much more frequently to test interoperability in communicating and operating in a joint civil-military operational environment.

Training should start on land in joint operations training centers that include both naval and coast guard officers training side-by-side in law enforcement tactics, and involve joint use of force tactics manual mentioned earlier as the basis for study. The at-sea component would involve coast guard and naval vessels encountering all of the four gray zone type scenarios mentioned earlier,

⁶⁸ U.S. Code, Title 14, Part I, Chapter 17, § 637, Stopping vessels; indemnity for firing at or into vessel.

to include fishing swarm tactics, island landing attempts, non-compliant boardings of hostile fisherman, and a North Korea spy vessel operation. Training should be conducted under "law enforcement" authority involving coast guards on the front line of operations, and create circumstances whereby coast guards become involved in a crisis that requires the aid of the navy. When the navy becomes involved, it is imperative that naval personal practice non-lethal use of force tactics alongside coast guard personnel. Joint training should include situations that require a quick transition from assuming use of force (UoF) under a law enforcement mission to rules of engagement (RoE) under a military authority. While it is important for coast guard personnel to train in lethal RoE tactics, the emphasis of training should be tailored to non-lethal use of force for naval personnel. This is because it is assumed at a certain point of gray zone escalation when navies take over (operational control OPCON), that the gray zone contingency will become a military operation and coast guards will step aside. Nevertheless, the point of such joint exercises and training is to practice SOPs and run through the decision-making processes in ambiguous gray zone scenarios where the level of threat and path of escalation is not known beforehand and potential for strategic miscalculation high.

VI Conclusion

The prevalence of gray zone threats in East Asia is increasing in complexity and scope and compelling countries to seek solutions to neutralize the threat while at the same time containing escalation to a manageable level. One solution to combat the challenge is to promote naval-coast guard coordination. While strategic and policy coordination between Navy and Coast Guards exist at certain levels among the coast guards examined, the current level of tactical interoperability between the two services is inadequate to effectively operate within the gray zone environment. This is due to the nature of coast guards and navies as serving different missions and falling under different administrative authorities. Such bifurcated structures create different operations, tactics and technologies, to include varying use of force doctrine and C4I. This duality of roles and missions can only be overcome by concerted efforts to forge interoperability, which will take decades of joint training and information sharing architectures to achieve. The creation of a joint task force (JFT)-type construct currently adopted by the United States could provide a model for countries such as South Korea and Japan to consider to bring the two services in closer alignment.

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References

- Andrew S. Erickson and Conor M. Kennedy, "Irregular Forces at Sea: Not 'Merely Fishermen'—Shedding Light on China's Maritime Militia," Center for International Maritime Security, 2 November 2015.
- Andrew S. Erickson and Conor M. Kennedy, "Trailblazers in Warfighting: The Maritime Militia of Danzhou," Center for International Maritime Security, 1 February 2016.
- Antulio J. Echevarria, "How Should We Think about 'Gray-Zone' Wars?," Infinity Journal 5, no. 1 (Fall 2015): 16–20; and 17.
- Asahi News Channel, "Gray Zone Situation' Joint Training MSDF and the JCG for the First Time (in Japanese)," July 11, 2015.
- BBC News, "Chinese fisherman killed in S Korea coastguard clash," 30 September 2016.
- Celine Pajon, "Japan's Coast Guard and Maritime Self-Defense Force in the East China Sea: Can a Black-and-White System Adapt to a Gray-Zone Reality?" Asia Policy, Number 23 (January 2017), 119.
- Chicago Tribune, "Taiwanese Activists Evade Cordon, Land on Disputed Islands," 7 October 1996.
- Christopher P. Cavas, "China's 'Little Blue Men' Take Navy's Place in Disputes," Defense News, 2 November 2015.
- Conor M. Kennedy and Andrew S. Erickson, "China's Third Sea Force—The People's Armed Forces Maritime Militia: Tethered to the PLA," China Maritime Report No. 1, China Maritime Studies Institute, U.S. Naval War College, March 2017.
- Craig Allen Jr., "White Hulls Must Prepare for Gray Zone Challenges," United States Naval Institute, Proceedings, Vol. 142, November 2016.
- Evan Munsing and Christopher J. Lamb, "Joint Interagency Task Force—South: The Best Known, Least Understood Interagency Success," Strategic Perspectives 5, Institute for Strategic Studies, National Defense University, June 2011.

- Facebook (in Korean), "동해해양경비안전서" Post from 27 April 2016, available at: https://www.facebook.com/donghaekcg/photos/pcb.1801714116537270/18017140698 70608/?type=3.
- Frank Hofman, "The Contemporary Spectrum of Conflict," in 2016 Index of U.S. Military Strength, ed. Dakota L. Wood (Washington, DC: Heritage Foundation, 2015).
- GD News (in Korean), "한국해군과해경, 합동작전펼친다" 7 July 2016, available at: http://www.gdnews.kr/news/article.html?no=3711.
- George E. Krietemeyer, The Coast Guardsman's Manual, (Naval Institute Press) (8th ed. 1991).
- George I. Seffers, "Coast Guard Develops Indigenous Technologies for Cutters," Signal Magazine, 1 March 2014.
- Incheon Daily News (in Korean), "인천앞바다지켜라…'서해5도특별경비단' 내 달 4일출범"15 March 2017, available at: http://www.incheonilbo.com/news/article View.html?idxno=755064#08hF.
- Ian Bowers and Collin Koh, "Navies, Coast Guards, The Maritime Community and International Stability" March 2017, Policy Brief, S. Rajaratnam School of International Studies (RSiS).
- James Brooke, "Japan Says a Mystery Boat Fired Rockets at Its Ships," The New York Times, 25 December 2001.
- Japan Times, "Tokyo trying to draw attention to mass China ship incursions off Senkakus," 17 August 2016.
- Justin McCurry, "Japan-China row escalates over fishing boat collision" The Guardian, 9 September 2010.
- Ken Booth, Navies and Foreign Policy, Croom Helm Publishing, (London, 1977), 15-16.
- Korea Ministry of Public Safety and Security Homepage (in Korean), "(보도자료_경 비구조과) 해경-해군합동월북차단훈련실시" 26 December 2016, available at: http://cms.mpss.go.kr/rcgh/sokChoCgs/notice/?boardId=bbs_000000000000000008 &mode=view&cntId=379&category=%EC%86%8D%EC%B4%88&pageIdx=16.
- Korea Ministry of Public Safety and Security Homepage (in Korean), "동 해 해 경 본 부,지 진 해 일 대 응 민 관 군 합 동 훈 련 실 시" 14 April 2016, available at: http://www .mpss.go.kr/board/board.do;jsessionid=gSwYSokIsBKdhtrX3bcWYuY4.node71? mode=list&boardId=bbs_0000000000036&category=&searchCondition=all& searchKeyword=&pageIdx=24.
- Lockheed Martin Products, "SeaCommander," available at: http://www.lockheedmartin .com/us/products/seacommander.html.
- Lyle J Morris, "Indonesia-China Tensions in the Natuna Sea: Evidence of Naval Efficacy Over Coast Guards?" The Diplomat, 5 July 2016.
- Lyle J Morris, "South Korea Cracks Down on Illegal Chinese Fishing, with Violent Results," The Diplomat, November 4, 2016.
- Lyle J Morris, "The Era of Coast Guards in the Asia Pacific is Upon Us," Asia Maritime Transparency Initiative (AMTI), CSIS, 8 March 2017.

- Lyle J Morris, "The New "Normal" in the East China Sea," The Diplomat Magazine, March 2017.
- Lyle J. Morris, "Blunt Defenders of Sovereignty: The Rise of Coast Guards in East and Southeast Asia," Naval War College Review, Vol. 70, No. 2 (Spring 2017), 78, 103.
- Malcom Moore, "China provokes Japan as activists land on disputed island chain," The Telegraph, 15 August 2012.
- Malcom Moore, "Mackerel war between China and South Korea sees fisherman shot dead," The Telegraph, 10 October 2014.
- Malcom Moore, "Mackerel war between China and South Korea sees fisherman shot dead," The Telegraph, 10 October 2014.
- Michael J. Mazarr, Mastering the Gray Zone: Understanding a Changing Era of Conflict (Carlisle, PA: Strategic Studies Institute, 2015).
- Ministry of Defense (Japan), Defense of Japan 2014 (Tokyo, 2014), 225.
- Ministry of Defense (Japan), "National Defense Program Guidelines for FY 2014 and Beyond," December 17, 2013.
- Nadia Schadlow, "Peace and War: The Space Between," War on the Rocks, 18 August 2014.
- Paula Hancocks,"S. Korea: Chinese fisherman kill coast guard member," CNN, 12 December 2011.
- Satoshi Ogawa, "Lessons learned from Senkaku war games," The Japan Times, 7 May 2017.
- Steven Denney, "South Korea's Caost Guard is Here to Stay," The Diplomat, 20 October 2014.
- The Guardian, "Japanese Activists Land on Senkaku Islands," 19 August 2012.
- Tobias Burgers and Scott N. Romaniuk, "Hybrid Warriors: China's Unmanned, Guerilla-Style Warfare in Asia's Littorals," The Diplomat, 16 February 2017.
- u.s. Special Operations Command (u.s. socom), "The Gray Zone," white paper, 9 September 2015.
- United States Code, Title 14, Part I, Chapter 17, § 637, Stopping vessels; indemnity for firing at or into vessel.
- United States Department of Defense, Command and Control for Joint Maritime Operations, Joint Pub 3–32, 7 August 2013.
- United States Department of Defense Information Systems Agency (DISA), "Global Command and Control System-Joint (GCCS-J)," undated.
- United States Department of State, "Report on Gray Zone Conflict," International Security Advisory Board, 3 January 2017.
- United States Coast Guard, "SeaWatch" Brochure, Command, Control, and Communications Engineering Center, undated.
- The Wall Street Journal, "Hong Kong After Island Landing: Who You Calling Unpatriotic?" 12 August 2012.

- Yonhap News (in Korean), "실전능가훈련'…총기무장해경,불법어선단속훈련" 6 March 2017, available at: http://www.yonhapnews.co.kr/bulletin/2017/03/06/0200 000000AKR20170306142700054.HTML.
- Yonhap News (in Korean), "中어선에 M-60 900 발와 70 여척퇴치...올들어첫무기 사용" 17 February 2017, available at: http://www.yonhapnews.co.kr/bulletin/2017/0 2/17/020000000AKR20170217067100004.HTML.
- YouTube, "Chinese trawler clashes with South Korean coast guard," Al Jazeera English Channel, 18 December 2010, available at https://www.youtube.com/watch?v=eE1MHtTUTbU.
- Zachary Keck, "Chinese Fisherman Killed By South Korea's Coast Guard," The Diplomat, 10 October 2014.