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14. ABSTRACT China is in the midst of a protracted struggle to seize control of the South China Sea (SCS). In order to counter China's aggression in the SCS, the United States needs to expand its current legal approach to a broader information warfare (IW) approach, in conjunction with the Philippines and other regional partners when appropriate and unilaterally through covert means as required. This paper focuses on justifying and developing an IW approach capable of offsetting China's successes. First, the United States requires a more robust response to China in order to deter future aggression and maintain US influence in the Pacific. Second, IW is the best method of response, because it is powerful enough to deter aggression while being restrained enough to avoid major escalation. Third, an IW approach should build upon the United States' current legal strategy by incorporating bilateral actions with the Philippines, including coordinated public affairs, defensive cyber, and attributable electronic attack, and covert unilateral actions, including psychological warfare, offensive cyber, and non-attributable electronic attack.					
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Information Warfare: Turning the Tide in the South China Sea

Daniel William Ruecking

A paper submitted to the Faculty of the United States Naval War College Newport, RI in partial satisfaction of the requirements of the Department of Joint Military Operations.

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INTRODUCTION

China is in the midst of a protracted struggle to seize control of the South China Sea (SCS). If China were using traditional military forces to wrest this area from its neighbors, the targets of this aggression and the United States would feel compelled to respond. Instead, China is primarily relying on non-military means, including its Coast Guard, “maritime militia,” fishing fleet, information operations, economic coercion, and aggressive diplomacy to purposefully avoid the traditional thresholds of armed conflict, while keeping proper military forces in reserve.¹ This use of nontraditional forces and methods designed explicitly not to provoke a conventional response is a prime example of a “gray zone” strategy.²

Despite China’s gray zone approach, the resulting effects are no less startling than if achieved through conventional means. Having established de facto control of the Paracel Islands and Scarborough Shoal and embarked on an ambitious island and military outpost building push in the Spratlys, China is now the primary power in the SCS.³ To counter Chinese aggression, the United States has largely relied on a legal strategy focused on universal adherence to established norms, despite China’s clear signaling that it has no intention of complying with international rules with which it does not agree.⁴ In the face of China’s provocation, many SCS claimant countries have been reluctant to aggressively defend their claims, likely deterred by the dangers of escalation and the strength of China’s traditional and nontraditional maritime forces. In short, neither the United States nor regional countries have mounted an effective response to China’s aggression to date.

¹ Michael Green et al., *Countering Coercion in Maritime Asia: The Theory and Practice of Gray Zone Deterrence* (Washington DC: Center for Strategic and International Studies, May 2017), 12-13.

² Michael J. Mazarr, *Mastering the Gray Zone: Understanding a Changing Era of Conflict* (Carlisle Barracks: Strategic Studies Institute and United States Army War College Press, December 2015), 2.

³ Michael McDevitt, *The South China Sea: Assessing US Policy and Options for the Future* (Arlington, VA: CNA, November 2014), p. iv; Green et al., *Countering Coercion in Maritime Asia*, 257-263. McDevitt outlines which islands are under China’s control. Green summarizes the infrastructure on those islands.

⁴ McDevitt, *The South China Sea*, 5-6 and 33.

Without a significant change of course, the international community will soon be forced to acknowledge that the SCS is China's domain.

While some dismiss this as a squabble over a few "rocks," the United States and international community need to be concerned given the SCS's role as the transit route for five trillion dollars in annual commercial traffic and the dangers of allowing China's attacks on other sovereign nations to go unchecked.⁵ The world must focus on the effects China is achieving and not be distracted by its gray zone approach.⁶ The United States, its allies, and partners must develop, resource, and implement methods to turn the tide against China and to demonstrate that attacks on other nations have consequences. In order to counter China's aggression in the SCS, the United States needs to expand its current legal approach to a broader information warfare (IW) approach, in conjunction with the Philippines and other regional partners when appropriate and unilaterally through covert means as required.

As numerous references already outline gray zone and deterrence theory, the validity of various maritime legal claims, and the current state of affairs, this paper will focus on justifying and developing an IW approach capable of offsetting China's successes. First, the United States requires a more robust response to China in order to deter future aggression and maintain US influence in the Pacific. Second, IW is the best method of response, because it is powerful enough to deter aggression while being restrained enough to avoid major escalation. Third, an IW approach should build upon the United States' current legal strategy by incorporating bilateral actions with the Philippines, including coordinated public

⁵ Green et al., *Countering Coercion in Maritime Asia*, 48-49; McDevitt, *The South China Sea*, 19. Green discusses "rocks" viewpoint. McDevitt provides five trillion dollar statistic.

⁶ Ben Lowsen, "China's Maritime Operation: The 'Gray Zone' in Black and White," *The Diplomat*, May 18, 2017, <http://thediplomat.com/2017/05/chinas-maritime-operation-the-gray-zone-in-black-and-white/>.

affairs, defensive cyber, and attributable electronic attack, and covert unilateral actions, including psychological warfare, offensive cyber, and non-attributable electronic attack.

JUSTIFYING A MORE ROBUST RESPONSE

China is successfully using a gray zone approach to achieve strategic objectives in the SCS. The gray zone is a “broad class of events involving nonwar yet conflictual interactions” to achieve political objectives, through methods including avoidance of “red lines,” use of proxies, and achieving *faits accomplis*.⁷ While the gray zone is far from new as the “space between war and peace” has never been “empty,” this approach has recently attracted interest due to the ways that many countries, including China, Russia, Iran, and North Korea have been able to exploit this space to the United States’ detriment.⁸

China has endangered US naval and air forces with its aggressive conduct; wrested control of Scarborough Shoal from the Philippines with nontraditional and traditional forces, economic warfare, and aggressive diplomacy; intercepted and harassed Philippine supply missions at Second Thomas Shoal; conducted a major artificial island building program in the Spratlys, including construction of military infrastructure; and conducted cyber attacks on the Philippines during crises.⁹ China has reinforced these actions with a broader “Three Warfares” approach, including “psychological warfare, public opinion / media warfare, and legal warfare (or lawfare).”¹⁰ Collectively, these methods have “slowly shift[ed] the status

⁷ Van Jackson, “Tactics of Strategic Competition: Grey Zones, Redlines, and Conflicts Before War,” *Naval War College Review* Vol. 70 No. 3 (Summer 2017): 39.

⁸ Nadia Schadlow, “Peace and War: The Space Between,” *War on the Rocks*, August 18, 2014, <https://warontherocks.com/2014/08/peace-and-war-the-space-between/>.

⁹ Green et al, *Countering Coercion in Maritime Asia*, Ch. 3; Anni Piiparinen, “Phishing in the South China Sea: Cyber and Hybrid Warfare,” *China-US Focus*, July 12, 2017, <http://www.chinausfocus.com/peace-security/phishing-in-the-south-china-sea-cyber-operations-and-hybrid-warfare-in-the-troubled-waters>. Green’s case studies detail China’s SCS activities. Piiparinen discusses China’s accompanying cyber actions.

¹⁰ Richard M. Crowell, *War in the Information Age: A Primer for Information Operations and Cyberspace Operations in 21st Century Warfare* (Newport RI: US Naval War College, January 2016), 27.

quo” in the SCS while stressing, but not breaking, overall relationships with the United States and regional claimants.¹¹

As mentioned, the United States has primarily relied on a legal strategy, centered on adherence to the United Nations Convention on the Law of the Sea (UNCLOS), to counter China’s dubious territorial and Economic Exclusion Zone claims, which would secure the region’s rich resources and limit activities allowed under customary international law.¹² The United States presents its military activities in the region, including freedom of navigation and air operations, as methods of reinforcing international legal norms.¹³ Consistent with this approach, the United States has been careful to maintain neutrality regarding competing maritime claims, likely due to their complexity and a desire to not damage the overall US–China relationship, of which the SCS is just one aspect.¹⁴

Similarly, the Philippines and other countries in the region have been cautious. While committed to maintaining its sovereignty, the Philippines, as illustrated by the 2012 Scarborough Shoal incident, has often displayed restraint during crises in order to avoid escalation and maintain its relations with China, one of its major trading partners.¹⁵ In recent months, Philippines President Rodrigo Duterte has gone so far as to essentially set aside the 2016 Permanent Court of Arbitration in The Hague’s ruling, which was overwhelmingly in favor of his country, in hopes of gaining favor with Beijing.¹⁶ While the rationale for this

¹¹ Green et al., *Countering Coercion in Maritime Asia*, 4.

¹² McDevitt, *The South China Sea*, 3-6 and 19-22.

¹³ Harry B. Harris, Jr., “United States Pacific Command (USPACOM) Guidance,” Camp H.M. Smith, HI, August 12, 2016.

¹⁴ Julian Ku, “Why the United States can’t take sides in South China Sea Disputes, even against China,” *Lawfare*, June 19, 2017, <https://www.lawfareblog.com/why-us-cant-take-sides-south-china-sea-sovereignty-disputes-even-against-china>; McDevitt, *The South China Sea*, iv. Ku outlines current US neutrality policy. McDevitt contends that the SCS is important to but not central in the overall US–China relationship.

¹⁵ Green et al., *Countering Coercion in Maritime Asia*, 95-124.

¹⁶ Ankit Panda, “International Court Issues Unanimous Award in *Philippines v. China* Case on South China Sea,” *The Diplomat*, July 12, 2016, <http://thediplomat.com/2016/07/international-court-issues-unanimous-award-in-philippines-v-china-case-on-south-china-sea/>; Richard Javad Heydarian, “Duterte’s First Year: A

cautious approach is not entirely clear, it may be the result of somber assessment – little that the Philippines has done to date offers a reasonable chance of success against China’s considerable capabilities and gray zone approach.

While predictable and defensible, a cautious approach may ultimately do great harm to the United States and its standing as a Pacific power. International law and restraint are minimally effective when facing an adversary who is willing to use a wide range of paramilitary, military, informational, economic, and diplomatic coercive activities. A US SCS neutrality policy essentially concedes the area to China, allowing it to intimidate and overwhelm its neighbors. Furthermore, regardless of whether China views its SCS nine-dash line claims as its ultimate objective or as the first step of a more ambitious agenda, the United States needs to counter Chinese ambitions that violate international norms, because easy victories could inspire increased aggression.¹⁷ The United States cannot count on China to “act indefinitely with more humility than any other rising power in history.”¹⁸

Additionally, gray zone conflict is likely to be decisive in the United States’ competition with China. As General Votel, current commander of US Central Command and former commander of US Special Operations Command, has noted, the “very concept of ‘winning’ must be fundamentally reexamined in the context of a future environment where we will likely not commit large military formations in decisive engagements against similarly armed foes.”¹⁹ US–China economic ties make traditional war unlikely, and even if it were to occur, nuclear arsenals would likely limit any conflict’s scope and intensity.²⁰ And, of

Strategic Roller Coaster,” *China-US Focus*, July 10, 2017, <http://www.chinausfocus.com/peace-security/dutertes-first-year-a-strategic-roller-coaster>.

¹⁷ Green et al., *Countering Coercion in Maritime Asia*, 9.

¹⁸ Richard K. Betts, “The Lost Logic of Deterrence: What the Strategy that Won the Cold War Can – and Can’t – Do Now,” *Foreign Affairs* (March/April 2013): 96.

¹⁹ Joseph L. Votel et al., “Unconventional Warfare in the Gray Zone,” *Joint Forces Quarterly* 80 (1st Quarter 2016): 108.

²⁰ Michael J. Mazarr, “Struggle in the Gray Zone and World Order,” *War on the Rocks*, December 22, 2015, <https://warontherocks.com/2015/12/struggle-in-the-gray-zone-and-world-order/>.

course, as long as China continues to progress towards its ultimate SCS objectives, it has no rationale to escalate.

In the face of this challenge, the United States must determine how to counter China's approach to maintain its reputation as the regional partner of choice and as a prudent hedge against a worst-case limited war scenario. Continued Chinese success in the SCS will cast doubt on American capabilities and commitments, making it less likely that countries will align themselves with the United States. Additionally, being adept at countering China's current gray zone activities is relevant to higher intensity war, as China would likely employ hybrid tactics with an armada of maritime militia and fishing vessels locating, surveilling, impeding, and perhaps even directly attacking the US Navy in support of more traditional People's Liberation Army Navy activities.²¹ The United States needs to develop capabilities and methods to counter China now and for worst case scenarios.

Those concerned that a more robust response will critically damage US–China relations are underestimating the resiliency of the relationship. Relations have survived despite a long line of major irritants, including China's SCS behavior, US support for Taiwan, economic trade and currency disputes, humanitarian issues, and finger pointing regarding North Korea's behavior. While China would be unhappy with more a robust US approach to the SCS, past experiences indicate that the larger relationship could remain stable.

RATIONALE FOR INFORMATION WARFARE

If one accepts that a more robust response is required to compel China to adhere to international norms, the next step is to determine the characteristics of that response.

²¹ James Stavridis, "Maritime Hybrid Warfare is Coming," *Proceedings Magazine* Vol. 142/12/1,366 (December 2016), <https://www.usni.org/magazines/proceedings/2016-12-0/maritime-hybrid-warfare-coming>.

Obviously, a major conventional response would be disproportionate and a nonstarter in the realm of international and domestic public opinion. Any US response must seek to avoid fundamentally damaging the overall relationship and acknowledge US and regional partner limitations. China has clear advantages in the SCS, in that it is able to deploy, supply, and reinforce forces far faster than the United States and in far greater quantities than other regional claimants.²² The US response should also account for an asymmetry in interest levels, as the SCS is clearly more important to China and its public than to the United States and its populace.

While these are challenging limitations, gray zone theory offers ideas. China's gray zone approach seeks to limit the scale and scope of hostilities through techniques such as avoidance of clear "red lines," use of Coast Guard, maritime militia, and fishermen proxies, and *faits accomplis*.²³ Obviously, the United States could not and should not copy this approach exactly. It may be possible, however, to design a gray zone response that avoids major escalation thresholds, while leveraging the United States' greatest advantage, a large number of like-minded allies and partners, including the Philippines, who could become willing collaborators and intermediaries. This would allow the United States to minimize direct confrontation and would make attribution more difficult. Additionally, China's "Three Warfares" approach, with its emphasis on psychological, public opinion / media, and legal warfare, offers ideas worth exploring.²⁴ While US implementation would differ from China's due to America's "inherent distaste for producing anything at the strategic level that

²² Peter A. Dutton, "Conceptualizing China's Maritime Gray Zone Operations," (Newport RI: US Naval War College paper), 4.

²³ Jackson, "Tactics of Strategic Competition," 51.

²⁴ Crowell, *War in the Information Age*, 27.

resembles propaganda,” these types of tools warrant consideration given their effectiveness.²⁵

These desired characteristics and China’s current approach highlight the advantages of an IW response. It is not a large-scale conventional reaction. It is not reliant on large numbers of forces far away from US shores where China enjoys localized advantages and does not depend on widespread galvanized US domestic public opinion. It can leverage the Philippines and other US allies and partners to compound effects, impede attribution, and complicate potential responses. For instance, if China suffered a cyber attack each time it violated international norms in international waters, it would be difficult to retaliate against a particular party when the perpetrator could be the United States or any South or East China Sea claimant, including the Philippines, Vietnam, Taiwan, Malaysia, Indonesia, Brunei, Japan, or Korea. Additionally, as with other gray zone approaches, IW is likely not incendiary enough to provoke a major conventional response or a fundamental break in US–China relations, even if attributed.

Most importantly, if conducted aggressively as part of a comprehensive US strategy, IW can impose significant costs that have the potential to deter future aggression. Given the importance of the SCS to China, an effective response must either force China to question whether it is capable of continuing to dominate this region or impose costs high enough to force its leaders to reassess whether doing so is worthwhile. IW offers methods to both enhance defense against Chinese maritime aggression and to provide asymmetric responses against vital Chinese interests, including internal information control within China proper, which would surely capture Beijing’s attention.

²⁵ Rod Thornton, “The Changing Nature of Modern Warfare: Responding to Russian Information Warfare,” *The Rusi Journal* Vol. 160 No. 4 (August / September 2015): 45.

INFORMATION WARFARE APPROACH

To bring this discussion out of the hypothetical, this paper will now focus on what a SCS IW approach might look like in practice, focusing on a likely flashpoint – the defense of Philippine claims in the Spratly Islands. As mentioned, this would build upon the current US legal approach and include both bilateral overt actions and unilateral covert actions as reflected in the figure below.

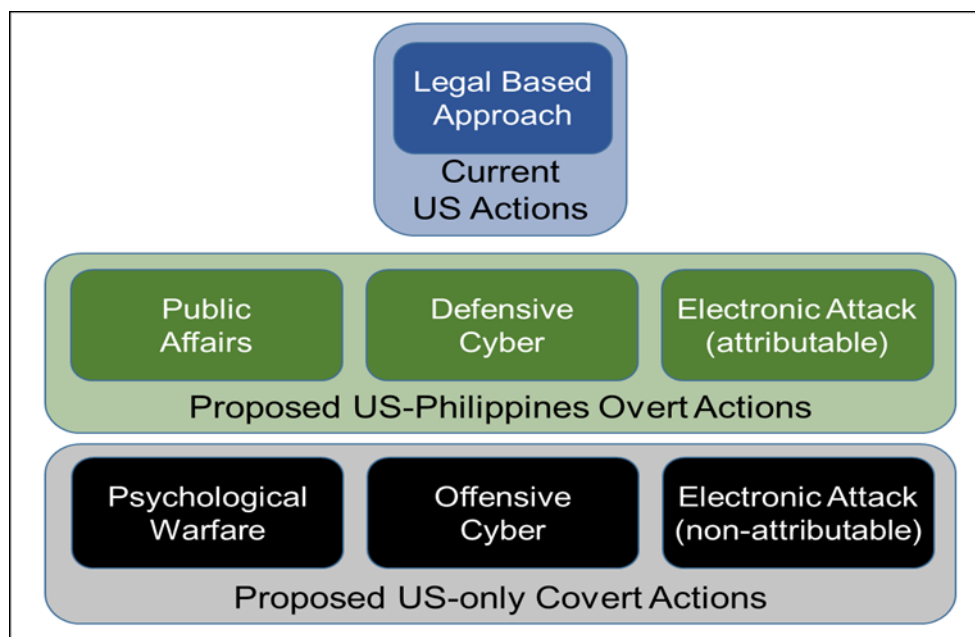


Figure 1. Information Warfare Approach

IW, for the purposes of this paper, is the “struggle to control and exploit the information environment.”²⁶ Of note, the US military has removed “information warfare” from joint doctrine in recent years in favor of “information operations.” Yet, this paper purposefully uses this term and others not in military doctrine deliberately to convey a level of aggressiveness that is simply not expressed by “information operations.” Additionally, IW is intended to be more expansive than the US military’s definition of information operations. IW requires both military and whole-of-government capabilities. It also involves targeting a

²⁶ Daniel T. Kuehl, *Working Paper No. 332, Strategic Information Warfare: A Concept* (Canberra: Strategic & Defence Studies Centre, February 1999), 3.

wide range of actors far beyond military command and control, including national leadership, regional and local governments, the coast guard, maritime militia, commercial fisherman, and the energy executives who all play roles in China's gray zone approach.

US–PHILIPPINES ACTIONS

The United States would need to closely coordinate IW efforts with the Philippines prior to and during any Spratly Islands defense scenario. As clearly illustrated by the 2014 Second Thomas Shoal incident, the two countries were most successful in countering Chinese aggression when their efforts were integrated.²⁷ Yet, President Duterte, perhaps unimpressed with the United States' current SCS approach, has moved in the opposite direction since assuming office in June 2016, seeking closer collaboration with the Chinese while disparaging his American allies.²⁸ While President Duterte's direction undermines US–Philippines cooperation, there remains potential for influence at lower levels. Domestic politics, including popular opinion and minority lawmakers, will likely limit Duterte's ability to partner with China.²⁹ Additionally, US–Philippines military-to-military cooperation remains strong, and the military remains highly influential with over 50 former military and police officers holding key administration positions.³⁰ A degree of collaboration remains possible, although US expectations should remain modest given Duterte's rhetoric.

As the cornerstone of its IW approach, the United States must first coordinate public affairs messaging with the Philippines in order to pressure China to stop hostilities. While Duterte's policies might limit cooperation at present, the Philippines will inevitably seek US support during its next standoff with China in the Spratly Islands. When that happens, the

²⁷ Green et al., *Countering Coercion in Maritime Asia*, 275.

²⁸ Manuel Mogato, "Philippines says China agrees on no new expansion in the South China Sea," *Reuters*, August 15, 2017, <https://www.reuters.com/article/us-southchinasea-philippines-china/philippines-says-china-agrees-on-no-new-expansion-in-south-china-sea-idUSKCN1AV0VJ>.

²⁹ *Ibid.*

³⁰ Heydarian, "Duterte's First Year."

United States must be prepared to work with the Philippines to forcefully counter China's dubious historic claims and legal analysis, while exploiting China's use of illicit tactics and other public messaging vulnerabilities. Helping Filipino, Chinese, and other foreign audiences understand the SCS's history, importance, legal disputes, and ongoing conflict in a comprehensive and truthful manner would be an exceptionally powerful tool in influencing international and domestic opinions. The United States must be prepared to work with the Philippines to spread this narrative through all means available, including official government statements and television, radio, internet, and social media content in Mandarin, Cantonese, and Filipino. Additionally, the United States must help the Philippines by facilitating the type of robust on-site media coverage which helped modulate Chinese behavior during the 2014 Second Thomas Shoal incident.³¹ Collectively, this bilateral public affairs effort could undercut the legitimacy of China's actions and increase the political costs of continued aggression.

Through military-to-military coordination, the United States could also help the Philippines improve its deterrence posture by increasing its cyber defense capabilities. Given the potency of cyber threats, the Philippines would likely welcome US assistance in this critical realm even as it seeks closer relations with China. All the same, improved cyber defenses would reduce China's ability to target Philippines' government and military networks during crises.³² In addition to traditional cyber defense of networks, the United States and the Philippines could work together during crises to counter China's online narrative, achieved through its army of online social media "trolls" and the potential use of "bots," lessening China's ability to drown out dissenting viewpoints.³³

³¹ Green et al., *Countering Coercion in Maritime Asia*, 195.

³² Piiparinen, "Phishing in the South China Sea."

³³ Kaveh Waddell, "Look, a Bird!: Trolling by Distraction," *The Atlantic*, January 27, 2017, <https://www.theatlantic.com/technology/archive/2017/01/trolling-by-distraction/514589/>.

Finally, the United States should continue to train and assist the Philippines military to best use and further develop its electronic attack capability, including recently acquired fighter jets with electronic warfare capabilities.³⁴ Given the centralized nature of Chinese decision making and the People's Liberation Army's control of the maritime militia, the United States could assist the Philippines in using electronic attack to disrupt the Chinese fleet's internal and external communications during a crisis, hampering its ability to coordinate, mass, and receive instructions from Beijing.³⁵ Given the distances that Chinese maritime militia and fishing vessels travel from Hainan province to the Spratly Islands, the United States could assist the Philippines in developing its ability to jam or spoof Chinese navigation devices. These tactics, coupled with public affairs and defensive cyber efforts, could make China's aggression more costly and less attractive, while likely remaining below critical Chinese response thresholds.

COVERT US ACTIONS

There are also IW actions, focused against key Chinese interests in the SCS and in mainland China, which the United States could take unilaterally and covertly, including psychological warfare, offensive cyber, and non-attributable electronic attack to force decision makers to reassess the value of future aggression. While these actions need to be covert to provide a degree of plausible deniability, they are intended to be affordable and easily replicable by the Philippines and other regional actors. If proven effective, these covert actions could ultimately be "crowdsourced" independently by other countries resulting in powerful reinforcing effects. To this end, US methods should not be viruses like Stuxnet with four zero day exploits serving as telltale signs of an exceptionally sophisticated

³⁴ Bilal Khan, "Philippines Looks to Greatly Expand Airpower Capabilities," October 2, 2016, <http://quwa.org/2016/10/02/philippines-looks-greatly-expand-airpower-capabilities/>.

³⁵ 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 (March 2017), 1.

architect..³⁶ The United States should rely on the tools of the weak, including commercially available technologies, “trolls,” “bots,” and “hackers.” Given their covert nature, these actions could be more aggressive than the attributable bilateral actions already described.

First, and most importantly, the United States could execute psychological warfare to directly influence China’s domestic population and undermine the Communist Party’s authority during a SCS standoff. This would reinforce bilateral public affairs efforts discussed in the previous section. This could include anonymous widespread propagation of virtual private network (VPN) tools and techniques to bypass the “Great Fire Wall of China” to provide citizens with unfiltered media coverage. To influence Chinese domestic opinion more directly, the United States could borrow from Russia’s playbook by anonymously financing “trolls” and propagating “bots” to post, tweet, and blog on Chinese language forums about how China’s SCS actions are risking relations with its largest trading partners and ultimately the country’s overall economic growth..³⁷ The United States could also consider anonymously transmitting millions of messages with derogatory information (e.g. Panama Papers type materials) through social media, texts, and e-mails directly to Chinese citizens focusing on defense or coast guard officials from Hainan province, the launch point for many of China’s SCS forces..³⁸ These actions, and others like them, have the potential to both shape public opinion and deter Chinese leaders from future aggressive behavior.

Offensive cyber is another powerful tool that the United States could use in response to Chinese aggression. US offensive cyber could mimic the China-based malware attacks on The Hague that occurred during its 2015 SCS arbitration hearings or the breaching of Philippines’ military and government networks and widespread distributed denial of service

³⁶ “The Stuxnet Outbreak: A worm in the centrifuge,” *Economist*, September 30, 2010, <http://www.economist.com/node/17147818>.

³⁷ Keir Giles, “Putin’s Troll Factories,” *The World Today* (August & September 2015): 19.

³⁸ Green et al., *Countering Coercion in Maritime Asia*, 174.

(DDoS) attacks associated with the 2012 Scarborough Shoal incident and the 2016 arbitration ruling respectively.³⁹ As China relies heavily on its maritime militia and fishing fleet, cyber attacks could specifically focus on slowing, damaging, or installing “ransomware” on fishing and commercial shipping related information technology systems in Danzhou city, the home port for civilian and maritime militia vessels that execute annual en masse voyages to the Spratly Islands.⁴⁰ With high corruption among Chinese government officials, the United States could also conduct targeted attacks to erase illicit money in the personal accounts of Hainan province defense, coast guard, or maritime militia officials. Stealing illicit money has an additional benefit – rather than rushing to confront potential thieves, Chinese leaders would likely want to hide these incidents altogether.

Finally, the United States could execute non-attributable electronic attacks to complement the bilateral efforts discussed in the previous section. Rather than using military equipment, the United States could execute covert electronic attack using commercially available air and submersible drones and jammers to degrade Chinese outposts across the Spratly Islands, including the radar facilities located at Subi, Fiery Cross, Gaven, Hughes, and Johnson South reefs.⁴¹ Other potential electronic attack targets include sensitive hydrocarbon exploration equipment, fishing sonars, and the ship communications and navigation systems previously discussed. While this paper focuses on using air and submersible drones as part of an IW campaign, their widespread introduction into the SCS could easily lead countries to envision other roles for these anonymous vehicles to China’s

³⁹ Piiparinen, “Phishing in the South China Sea.”

⁴⁰ Green et al., *Countering Coercion in Maritime Asia*, 174.

⁴¹ Tobias J. Burgers and Scott N. Romaniuk, “Hybrid Warfare in the South China Sea: The US ‘Little Grey (Un)Men’,” *The Diplomat*, December 31, 2016, <http://thediplomat.com/2016/12/hybrid-warfare-in-the-south-china-sea-the-united-states-little-grey-unmen/>; Green et al., *Countering Coercion in Maritime Asia*, 257-263. Burgers and Romaniuk discuss using unmanned systems to conduct non-attributable operations. Green et al. provides locations of Spratly Islands radar facilities.

detriment, including the harassment or disablement of maritime militia or fishing vessels if tensions were to further escalate.

Importantly, as these proposed actions would all be covertly executed, it would be critical to help Chinese leaders understand that these actions are in direct response to their SCS behavior. This is difficult as it is hard to have a quid pro quo dialogue about covert actions. However, if these actions were repeatedly targeted at entities associated with China's maritime capabilities, conducted in a timely manner following Chinese actions, and increased proportionately based on the level of aggression, China's leaders would likely understand the potential quid pro quo, even if not explicitly communicated. Additionally, the United States would probably be well-served to initially focus on low and mid-level targets. This would mitigate escalation risks, while serving as a warning to senior Chinese leaders that they could be targeted next if the situation continued to escalate. After all, it is not past actions, but the threat of future pain that most affects an adversary's behavior.⁴²

Admittedly, significant analysis and conceptual development of each of these proposed actions is required to better understand potential unintended consequences, assess technical feasibility, and ensure proper integration within the full range of US diplomatic, informational, military, and economic activities. Additionally, the United States would need to continuously reassess each of these proposals before and during execution to understand the likelihood of undesired escalation based on actual conditions at the time of execution.

CONCLUSION

In sum, IW, including both bilateral overt and unilateral covert actions, is a substantial and potentially effective policy tool that could augment the current US legal approach. For precisely this reason, it is reasonable to have significant concerns about

⁴² Thomas Schelling, *Arms and Influence* (New Haven and London: Yale University Press, 2008), 3.

whether IW is the best way ahead. For those who question the requirement for a more robust response, this paper has described the importance of the SCS, the ineffectiveness of the current approach, and the dangers of allowing Chinese aggression to go unchecked. For those who question whether IW is the best option, this paper has outlined its appropriateness, its potential to deter future aggression, and its ability to leverage gray zone ambiguities to minimize the likelihood of major escalation.

Ultimately, US policy makers concerned about taking a more aggressive approach should remember that China has vast incentives to maintain good relations with its neighbors and the United States. While the SCS is undoubtedly very important, China's leaders would be reluctant to risk the Communist Party's hold on the country, domestic stability, or continued economic growth. Counterintuitively, this indicates that additional US risk-taking could result in Chinese restraint as its leaders are forced to focus on protecting the country's core national interests.

Accordingly, the United States, the Philippines, and other regional allies and partners, can and must adopt more robust ways to curb China's behavior. IW is a necessary addition to the current US approach, because it is powerful enough to cause China's leadership to question whether continued SCS aggression is worthwhile but is unlikely to damage the overall US-China relationship beyond repair. With further development, adequate resourcing, and determined implementation, IW, including both bilateral overt and unilateral covert actions, could become the tool that turns the tide in the SCS.

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